

# **ASR-6000 Series**

4.5/6/9/12/13.5/18/24/30/36 kVA High-Performance AC/DC Power Supply

# **FEATURES**

- Adopts Third-generation Semiconductor Silicon Carbide (SiC) Technology to Create a 4 U 6 kVA High-performance AC/DC Power Source with High Power Density
- AC Input Supports Single-phase and Three-phase, Phase Voltage 200 V to 240 V±10% (Delta or Y Connection)\*
- 10 output Modes: Including External Input Signal Frequency and Mains Synchronization(SYNC), External Voltage Controlled Internal Amplifier Output (VCA)
- Multi-channel Output Function
- Supports AC 1P2W, 1P3W, 3P4W Output
- AC Maximum Output Phase Voltage: 350 Vrms Line Voltage: 700 Vrms
- AC Balanced and Unbalanced Three-phase, Phase Failure Output Functions
- Programmable Output Impedance Adjustment\*
- Dual-channel Voltage/Current Output Monitoring Function
- Voltage Output Rise Time Can be Adjusted in Three Ranges\*
- Supports Sequence Editing and Emulation Output Mode
- Powerful Arbitrary Waveform Editing and Output Function, Built-in Over 253 Types of Arbitrary Waveform Outputs
- Advanced Web Server Control to Support Data Acquisition and Data Logger Both Functions
- 100th Order Harmonic Measurement Function
- Support Parallel Connection Type Up to 36 kVA Maximum
- Interfaces: RS-232C, USB, LAN; Opt: CAN BUS, DeviceNet, GPIB



From the very moment Alpha Go defeated the human chess champion with its ultra-high-speed computing capability, artificial intelligence technology (AI) has developed rapidly around the world. Today, servers with advanced AI functions process tremendous amounts of data under the high-speed computing architecture of 2 CPUs + 8 GPUs. servers require a huge amount of power to maintain high-speed computing! In order to meet this demand, the power, density and efficiency of server power supplies have been greatly improved. High-power server power modules require high-efficiency conversion and saving of power consumption. AC single-phase input, HVDC 400 V input or increased DC voltage output designs can be utilized to achieve this purpose. In order to ensure power stability when high-power servers are operating, power modules with hot-swappable redundant power supply specifications (such as CRPS) have been widely applied in server racks. Power modules with redundant functions require testing of multiple power modules at a time to ensure that all modules can maintain normal operation during high power output. Due to the rapid changes in the development of server power supplies GW Instek developed the brand new flagship model ASR-6000 series to meet customer needs. ASR-6000 series series has two models - ASR-6450 AC/DC 4.5 kVA and ASR-6600 series AC/DC 6 kVA.

ASR-6000 series is the first stand-alone unit from GW Instek that supports AC single/three-phase input and output, and has rated DC power output. The series employs third-generation semiconductor silicon carbide (SiC) technology to create a 4U 6 kVA high power density and high-performance AC/DC power source ASR-6000 series has the ability to emulate more diverse power environment changes, such as balanced three-phase and unbalanced three-phase, phase failure, and features multi-channel output function in three-phase output mode, programmable output impedance adjustment, and up to tens of thousands of arbitrary waveform outputs. The invincible launch of GW Instek flagship model ASR-6000 series demonstrates that GW Instek can provide a complete test solution for high-power AC sources. ASR-6000 series is the MVP of GW Instek power sources.

### PANEL INTRODUCTION



Model	ASR-6450	ASR-6600	ASR-6450-09	ASR-6450-13.5	ASR-6600-12	ASR-6600-18	ASR-6600-24	ASR-6600-30	ASR-6600-36
AC Input Voltage		Phase 200 Vac to ac ±10 %	200 Vac to 240 Vac ±10 % (Phase Voltage) / 380 to 415 Vac ± 10 % (Line Voltage)						
AC Output Voltage				Phase Voltage 0 V	to 350.0 V/Line Vol	tage 0 V to 700 V			
	1P2W 45 A/22.5 A	1P2W 60 A/30 A	1P2W 90 A/45 A	1P2W 135 A/67.5 A	1P2W 120 A/60 A	1P2W 180 A/90 A	1P2W 240 A/120 A	1P2W, 300 A/150 A	1P2W, 360 A/180 A
AC Output Current	1P3W, 3P4W	1P3W, 3P4W	1P3W, 3P4W	1P3W, 3P4W	1P3W, 3P4W	1P3W, 3P4W	1P3W, 3P4W	1P3W, 3P4W	1P3W, 3P4W
	15 A/7.5 A	20 A/10 A	30 A/15 A	45 A/22.5 A	40 A/20 A	60 A/30 A	80 A/40 A	100 A/50 A	120 A/60 A
Output Frequency	2000 Hz	2000 Hz	1000 Hz	1000 Hz	1000 Hz	1000 Hz	550 Hz	550 Hz	550 Hz
AC Output Capacity	4.5 kVA	6 kVA	9 kVA	13.5 kVA	12 kVA	18 kVA	24 kVA	30 kVA	36 kVA
DC Output Voltage				-250.0 V to	+250.0 V/-500.0 V to	+500.0 V			
DC Output Capacity	4.5 kW	6 kW	9 kW	13.5 kW	12 kW	18 kW	24 kW	30 kW	36 kW

### SINGLE UNIT PROVIDES AC SINGLE/THREE-PHASE INPUT FUNCTION Α.





The ASR-6000 series is GW Instek's first programmable AC/DC power source that supports AC single/three-phase input.

AC three-phase input supports delta (Delta) and star (Y) wiring methods Advantages:

a. ASR-6000 can use mains in most countries around the world (ex. Mainland China, Southeast. Asia, India, Europe...)AC single-phase 220 V input can help test software development engineers work with the ASR-6000 on mains in the office. No additional three-phase power source is required.

### Β. **10 OUTPUT MODES**



ASR-6000 Has 10 Output Modes







AC Three-phase Input (Delta Connection)



AC Three-phase Input (Y Connection)

b. ASR-6000 can be used immediately in various regions around the world and is not affected by differences in power grids in different countries.

Note: 1. The AC input three-phase Y connection method must be connected to the N wire, otherwise the ASR-6000 cannot be turned on. 2. ASR-6000 AC voltage input range AC 200 V ~ AC 240 V.

Output Phase	Output Mode			Signal Source		
		INT	EXT	ADD	Sync.	VCA
1P	AC+DC	AC+DC-INT	AC+DC-EXT	AC+DC-ADD	AC+DC-Sync.	N/A
	AC	AC-INT	AC-EXT	AC-ADD	AC-Sync.	AC-VCA
	DC	DC-INT	N/A	N/A	N/A	N/A
1P3W	AC+DC	AC+DC-INT	AC+DC-EXT	AC+DC-ADD	AC+DC-Sync.	N/A
	AC	AC-INT	AC-EXT	AC-ADD	AC-Sync.	AC-VCA
	DC	DC-INT	N/A	N/A	N/A	N/A
3P	AC+DC	AC+DC-INT	AC+DC-EXT	AC+DC-ADD	AC+DC-Sync.	N/A
	AC	AC-INT	AC-EXT	AC-ADD	AC-Sync.	AC-VCA
	DC	DC-INT	N/A	N/A	N/A	N/A

AC+DC-INT AC & DC Internal output

- AC-INT AC Internal output
- AC+DC-ADD AC & DC Additional output AC-ADD AC Additional output
  - AC+DC-Sync AC & DC Synchronal output
     AC-Sync AC Synchronal output
  - AC-VCA AC Voltage Control Amplifier output
- DC-INT DC Internal output
- AC+DC-EXT AC & DC External output
- AC-EXT AC External output

A high-performance AC power source = amplifier + signal source It has: internal output + external input signal to control internal output + amplify external input signal. and output, and other diversified output functions.

ASR-6000 has up to 10 output modes, including :

1.Internal output (INT)

2.External input controls internal output (EXT)

3.Sum output of external and internal signal sources (ADD)

4. Mains frequency synchronous output (SYNC)

5. External DC signal controls internal AC amplitude (VCA)

### AC SINGLE/THREE-PHASE OUTPUT + MULTI-CHANNEL OUTPUT FUNCTION

08 2007	Shik	BHS IPK	SPAW 🚠 LAN	DISPL
L1 SIN	L2 SIN	L3 SN	PHASE UI	_
350.0	350.0	350.0	MODE AC+DC-INT ACV 350.0 Vrms	122
4.29	4.29	4.29	DCV +0.00 Vdc	Wina
1500.	1500.	1500.	IRMS 7.88 A	Irma
1.000	1.000	1.000	Unbalance	P
May 350.0 vins	350.0 \\	350.0 \\		PF Each
PCV 0.00 vik	0.00 👐	0.00 👐		[114]
FREQ 2000.0 ==	2000.0 ==	2000.0 **		(RUN) HOLD

The ASR-6000 series has diverse output functions, including three modes: 1P2W, 1P3W and 3P4W. The maximum output for phase voltage is 350 Vrms and the maximum output for line voltage is 700 Vrms.

In AC three-phase output (3P4W) mode, each phase supports independent output settings. Taking ASR-6600 as an example, The maximum output of each phase reaches 2 kVA, supporting power supply testing of up to three DUTs to meet the needs of server power modules, Testing requirements for high-power AC power products such as electric vehicle chargers and uninterruptible power supply systems. independent output settings. Taking ASR-6600 as an example, The maximum output of each phase reaches 2 kVA, supporting power supply testing of up to three DUTs to meet the needs of server power modules, Testing requirements for high-power AC power products such as electric vehicle chargers and uninterruptible power supply systems.

### AC BALANCED/UNBALANCED THREE-PHASE OUTPUT MODES D



AC Balanced Three-phase

The ASR-6000 series has unbalanced and balanced three-phase output modes. In the AC three-phase output mode, users can set the phase angles of L1, L2 and L3 for control.

### AC Unbalanced Three-phase

Main applications: Three-phase input power supply products, when emulating unbalanced three-phase input and phase loss, the ability of three-phase power input products to restore balanced three-phase.

ASR-6000 has an output impedance adjustment function, which is mainly used to change the output inductance value and output impedance value of each phase to emulate the output voltage drop of each phase due to line loss. The adjustable range of the output impedance of ASR-6000 is as follows:

L1, L2, L3 Output Inductance	<b>0.0 ~ 2000</b> μH
L1, L2, L3 Output Resistance	<b>0.0 ~ 1</b> Ω

Note: This function only supports stand-alone applications. This function is automatically turned off in external parallel connection.

OUTPUT VOLTAGE RISE TIME IS ADJUSTABLE

### VOLTAGE AND CURRENT OUTPUT MONITORING FUNCTIONS



ASR-6000 provides dual-channel voltage and current monitoring, allowing instant output of voltage and current signals of each phase to an oscilloscope for measurement.



In order to meet the test requirements of different DUT output voltages, it is necessary to adjust the rise time of different output voltages. The ASR-6000 offers users up to three adjustable settings: typical values are fast (50 microseconds), medium (100 microseconds) and slow (300 microseconds). ASR-6000 is initially set to medium speed. Note: When using 1P2W output, impedance adjustment or external parallel connection, the fast range setting will be automatically turned off. Application: It can output high-speed arbitrary waveforms to emulate various changes in the power system caused by transient high-speed rising voltage, etc.

0.01... 0.15. 0.0

\* Set/Operate ASR-6000

\* Data logger function

\* Sequence Function/Simulate Function/Edit Waveform

### H. ADVANCED WEB SERVER CONTROL FEATURES



ASR-6000 provides a full range of web control functions, including: \* View system and information, and network configuration

- view system and information, and network con
- \* Monitor measurements

## DIVERSE WAVEFORM OUTPUT FUNCTION



ASR-6000 provides more than 40 built-in waveforms, including: TRI, STAIR, CLIP, CF-1, CF-2, SURGE, DST01-22, RIPPLE, DIP, LF-RING. Each waveform also provides a change setting function, which can modulate thousands of combined waveforms and quickly emulate different AC output environments.

Users can adjust the required waveform type through the panel (the screen is displayed simultaneously), then load it into the ARB 1 to 16 waveform register through the access step, and return to the main menu output mode to perform ARB Waveform output. Users can also edit waveform through ASR-6000 software and then import it into ASR-6000 for execution.

			ASR-6450 ASR-6600 Single-phase ; Three-phase, Delta or Y connection selectable						
Input Ratings			L Challedone Theorem Delivery Version 1 + 11						
Power type			Single-phase ; Three-phase, Del	ta or Y connection selectable					
Voltage range <sup>*1</sup>			200 Vac to 240 Vac ±10 % phase						
requency range			47 Hz to 63 Hz						
Power factor <sup>*2</sup>			0.95 or higher (typ.)						
fficiency <sup>*2</sup>			80 % or higher						
Aaximum power cons	sumption		6 kVA or lower		8 kVA or lower				
C Output									
Multi-phase outpu	ıt		Single-phase output	Polyphase output	Single-phase output	Polyphase output			
Output capacity			4.5 kVA	1P3W: 3 kVA ; 3P4W: 4.5 kVA	6 kVA	1P3W: 4 kVA ; 3P4W: 6 kVA			
/lode			1P2W	1P3W ; 3P4W (Y-connection)	1P2W	1P3W ; 3P4W (Y-connection			
etting mode <sup>*3</sup>			Independ, Balanced Independ, Balanced						
hase voltage	Se	etting Range <sup>*4</sup>	0.00 V to 175.0 V / 0.0 V to 350.0 V (sine and square wave), Setting Resolution: 0.01 V / 0.1 V 0.00 Vpp to 500.0 Vpp / 0.00 Vpp to 1000 Vpp (triangle and arbitrary wave), Setting Resolution: 0.01 Vpp / 0.1 Vpp / 1 Vpp						
	Ad	ccuracy <sup>≈5</sup>	±(0.3 % of set + 0.5 V / 1 V)						
Line voltage setting range <sup>6</sup>				1P3W: 0.00 V to 350.0 V / 0.00 V to 700.0 V 3P4W: 0.00 V to 303.1 V / 0.00 V to 606.2 V (sine wave only) Setting Resolution: 0.01 V / 0.1 V		1P3W: 0.00 V to 350.0 V / 0.00 V to 700.0 V 3P4W: 0.00 V to 303.1 V / 0.00 V to 606.2 V (sine wave only) Setting Resolution: 0.01 V / 0.1 V			
Aaximum current*7			45 A / 22.5 A	15 A / 7.5 A	60 A / 30 A	20 A / 10 A			
laximum peak currer	nt <sup>*8</sup>		Four times of the maximum RM						
oad power factor <sup>*9</sup>			0 to 1 (leading phase or lagging						
	Se	etting range		z, AC+DC Mode: 1.00 Hz to 2000.0 Hz,	Setting resolution: 0.01 Hz / 0.	1 Hz			
requency		ccuracy	± 0.01% of set						
		tability <sup>*10</sup>	± 0.005%						
output on phase setti				x selectable), 0.1° (1 Hz to 500 Hz), 1°	500 Hz to 2000 Hz)				
utput off phase setti				x selectable), 0.1° (1 Hz to 500 Hz), 1°					
etting range of the pł	0 0			3P4W: L2 phase: 0° to 359.9° L3 phase: 0° to 359.9° Setting Resolution: 0.1°		3P4W: L2 phase: 0° to 359.5 L3 phase: 0° to 359.5 Setting Resolution: 0.			
Phase angle accuracy <sup>*</sup>	13			45 Hz to 65 Hz: ±1.0° 15 Hz to 2000 Hz: ±2.0°		45 Hz to 65 Hz: ±1.0° 15 Hz to 2000 Hz: ±2.0°			
DC offset <sup>*14</sup>			± 20 mV (typ.)						
OC Output (Only Si	ngle Phase Output)								
Output capacity			4	5 kW		6 kW			
Iode			4. Floating output, the N terminal			U KW			
noue	- I-	otting Down		can be grounded o +500.0 V, Setting Resolution: 0.01 V /	01V				
oltage		etting Range	±( 0.3 % of set  + 0.3 V / 0.6 V)		V.1 ¥				
Aaximum current <sup>*16</sup>	Ad	ccuracy <sup>*15</sup>			60 A / 30 A				
Aaximum current Aaximum peak currer	at <sup>*17</sup>		45 A / 22.5 A 60 A / 30 A Four times of the maximum current						
· ·	tal Harmonic Distorti	on, Output Vo	Itage Rising Time and Ripple No	lse					
ine regulation			±0.1% or less (Phase voltage)						
oad regulation <sup>*18</sup>			$\pm 0.1 \text{ V} / \pm 0.2 \text{ V}$ , @DC (only single-phase output) $\pm 0.1 \text{ V} / \pm 0.2 \text{ V}$ , @45 Hz to 65 Hz (phase voltage, 0 to 100%, via output terminal) $\pm 0.5 \text{ V} / \pm 1.0 \text{ V}$ , @all other frequencies (phase voltage, 0 to 100%, via output terminal)						
Distortion of Output <sup>*1</sup>	9			@100.1 Hz to 500 Hz, <1 % @500.1 H					
Distortion of Output Dutput voltage respon			Fast: 50 µs (typ.) ; Middle: 100 µ	-					
			0.5 Vrms / 1 Vrms (TYP)						
	phase five-wire Dolta com-		at maximum output current, 45 Hz to 65	Hz and sine wave output only					
*1 Y connection is three, *2. In the case of AC-INT *2. Can be only set in 3P. *4. For phase voltage set *5. For an output voltage *6. Line voltage only can or 400 Hz or higher, a *0. With respect to the ca *9. External power injetzi *10. For 45 Hz to 65 Hz; *13. For an output voltage *13. For an output voltage *14. In the case of the AC *15. For an output voltage *16. If the output voltage *17. Instantaneous eithin *18. For an output voltage *19. Kor an output voltage *19. Sor an output voltage *19. Sor an output voltage *19. Sor an output voltage *19. So % or higher of the *20. For an output voltage *19. So % or higher of the *20. For an output voltage *19. So % or higher of the *20. For an output voltage *19. Sor % on topped voltage *10. Sor % on output voltage *19. Sor % on topped voltage *10. Sor % on output voltage *19. Sor % on topped voltage *10. Sor % on output voltage *19. Sor % on topped voltage *10. Sor % on output voltage *10. Sor % on output voltage *10. Sor % on output voltage *10. Sor % on output voltage *10. Sor % on output voltage *10. Sor % on output voltage *10. Sor % on output voltage *10. Sor % on output voltage *10. Sor % on output voltage *10. Sor % on output voltage *10. Sor % on output voltage *10. Sor % on output voltage *10. Sor % on output voltage *10. Sor % on output voltage *10. Sor % on output voltage *10. Sor % on output voltage *10. Sor % on output voltage *10. Sor % on output voltage *10. Sor % on output	4W mode. ting in polyphase output. In : of 10 V to 175 V / 20 V to 3: be set in balance mode. Is higher than rated value, th and that the ambient temper apacitor-input rectifying load ion or regeneration which is the rated output voltage, no can be set independ not in oblyphase ge of 520 V or higher, sine wav C mode and output voltage, so ge of 250 V to $100$ V, $100$ V to is higher than rated value, I mperature is 40 degree or high a ms, limited by the maxim ge of 75 V to 175 V, 150 V to to rated output voltage, the	ge, resistance load balance mode all p 50 V, sine wave, an is is limited to sati rature is 40 degree 41. Limited by the m over short reverse load and the resis e output. e, same load and v setting to V, 32°C e, same load and v setting to V, 32°C short by 0, 23°C short by 0, 23°	sfy the power capacity. If there is the DC st or higher, the maximum current may decrea aximum current. power flow capacity is not available. tance load for the maximum current, and t polyphase output. oltage condition for all phase. := 5°C > 20 V, +20 V to +500 V, no load, AC voltag tisfy the power capacity. If there is the AC s o urrent may decrease. d output voltage. d output voltag. er factor of 1, stepwise change from an out r lower, AC and AC+DC modes, THDP-N. F. th respect to stepwise from an out	mode each phases are individually set. ad, DC voltage setting OV (AC+DC mode) and uperimmposition, the active current of AC+DC ase.	satisfies the maximum current. In the satisfies the maximum current. In the satisfies the maximum current.	e case of 40 Hz or lower			
*1 Y connection is three, *2. In the case of AC-INT *2. Can be only set in 3P. *4. For phase voltage set *5. For an output voltage *6. Line voltage only can *7. If the output voltage *8. With respect to the ca *9. External power injecti *10. For 45 Hz to 65 Hz; *12. Can be set only with *13. For an output voltage *14. In the case of the AC *15. For an output voltage *16. If the output voltage *16. If the output voltage *17. Instantaneous eithin *18. For an output voltage *19. So % or higher of the *20. For an output voltage *21. For 5 Hz to 1 MHz ca *21. For 5 Hz to 1	r mode, the rate output volta 4W mode. it ing in polyphase output. In is of 10 V to 175 V / 20 V to 35 be set in balance mode. is higher than rated value, that and that the ambient temper apacitor-input rectifying load ion or regeneration which is the rated output voltage, no can be set independ at independ at inde- pend mode in polyphase g of 50V or higher, sine wave. C mode and output voltage set g of 50V or higher, sine wave. C mode and 0 degree or high a 3 ms, limited by the maxim g of 75V to 175 V / 150 V to te rated output voltage, the re g of 100 V in 200 V, al oad po components in DC mode usi	ge, resistance load balance mode all p 50 V, sine wave, an is is limited to sati rature is 40 degree 4. Limited by the m over short reverse load and the resis e output. e, same load and v setting to V, 32°C e, same load and v setting to V, 32°C short by 0, 23°C short by 0, 23°C	output frequency of 45 Hz to 65 Hz, no lo sify the power capacity. If there is the DC st or higher, the maximum current may decre aximum current. power flow capacity is not available. tance load for the maximum current, and t polyphase output. oltage condition for all phase. $:=5^{\circ}C$ > 20 V, +20 V to +500 V, no load, AC voltagtisfy the power capacity. If there is the AC sourrent may decrease.d output voltage.er factor of 1, stepwise change from an oulr lower, AC and AC+DC modes, THDP-N. F.th respect to stepwise from an out	mode each phases are individually set. ad, DC voltage setting 0V (AC+DC mode) and uperimmposition, the active current of AC+DC case. the operating temperature range. the operating temperature range. the set to 0V (AC+DC mode) and 23°C ± 5°C isoperimmposition, the active current of AC+D tput current of 0 A to maximum current (or its for the polyphase output, it is a specification fo out current of 0 A to the maximum current (or	satisfies the maximum current. In the satisfies the maximum current. In the satisfies the maximum current.	e case of 40 Hz or lower			
<sup>11</sup> Y connection is three, <sup>22</sup> In the case of AC-INT <sup>23</sup> . Can be only set in 3P. <sup>24</sup> . For phase voltage set <sup>25</sup> . For an output voltage <sup>26</sup> . Line voltage only can <sup>29</sup> . If the output voltage <sup>29</sup> . Line voltage only can <sup>29</sup> . External power injecti <sup>20</sup> . For 45 Hz to 65 Hz, <sup>21</sup> . Li, L2 and L3 phase <sup>21</sup> . L, L2 and L3 phase <sup>21</sup> . Can on output voltage <sup>21</sup> . For an output voltage <sup>21</sup> . For an output voltage <sup>21</sup> . For an output voltage <sup>21</sup> . Ror an output voltage <sup>21</sup> . Ror an output voltage <sup>21</sup> . So for an output voltage <sup>21</sup> . So for an output voltage <sup>21</sup> . So for an output voltage <sup>22</sup> . For an output voltage <sup>22</sup> . For a 5 Hz to 1 MHz co <sup>22</sup> . For a 5 Hz to 1 MHz co <sup>22</sup> . For an output voltage <sup>22</sup> . For 5 Hz to 1 MHz co <sup>22</sup> . For an output voltage <sup>22</sup> . For 3 FHz to 1 MHz co <sup>23</sup> . For an output voltage <sup>23</sup> . For 5 Hz to 1 MHz co <sup>24</sup> . For 5	mode, the rate output volta 4W mode. titing in polyphase output. In c = 010 V to 175 V / 20 V to 33 be set in balance mode. is higher than rated value, th and that the ambient temper apacitor-input rectifying load for or regeneration which is the rated output voltage, no can be set independ at independ at independ mode in polyphas ge of 50V or higher, sine wave C mode and output voltage s ge of 50V or higher, sine wave C mode and output voltage s ge of 50V or higher, sine wave c mode and output voltage, the rate output voltage, the ra- ge of 100 V / 200 V, a load po components in DC mode usis	ge, resistance load balance mode all p 50 V, sine wave, an is is limited to sati rature is 40 degree 4. Limited by the m over short reverse load and the resis e output. e, same load and v setting to V, 32°C e, same load and v setting to V, 32°C short by 0, 23°C short by 0, 23°C	output frequency of 45 Hz to 65 Hz, no lo ssfy the power capacity. If there is the DC st or higher, the maximum current may decre aximum current, and to power flow capacity is not available. tance load for the maximum current, and t polyphase output. oltage condition for all phase. ± 5°C 20 V to +500 V, no load, AC voltag tisfy the power capacity. If there is the AC s o unput voltage. at the power capacity. If there is the AC s output voltage. at the power capacity of there is the AC s output voltage. at the power capacity of the and an out inal on the rear panel.  ent function is indicated for 23 ° Single-ph	mode each phases are individually set. ad, DC voltage setting 0V (AC+DC mode) and uperimmposition, the active current of AC+DC case. the operating temperature range. the operating temperature range. the set to 0V (AC+DC mode) and 23°C ± 5°C isoperimmposition, the active current of AC+D tput current of 0 A to maximum current (or its for the polyphase output, it is a specification fo out current of 0 A to the maximum current (or	satisfies the maximum current. In th C satisfies the maximum current. reverse), using the output terminal of r phase voltage setting. its reverse). 10% ~ 90% of output vo	e case of 40 Hz or lower			
<sup>11</sup> Y connection is three, <sup>22</sup> In the case of AC-INT <sup>23</sup> . Can be only set in 3P. <sup>24</sup> . For phase voltage set <sup>25</sup> . For an output voltage <sup>26</sup> . Line voltage only can <sup>29</sup> . If the output voltage <sup>29</sup> . Line voltage only can <sup>29</sup> . External power injecti <sup>20</sup> . For 45 Hz to 65 Hz, <sup>21</sup> . Li, L2 and L3 phase <sup>21</sup> . L, L2 and L3 phase <sup>21</sup> . Can on output voltage <sup>21</sup> . For an output voltage <sup>21</sup> . For an output voltage <sup>21</sup> . For an output voltage <sup>21</sup> . Ror an output voltage <sup>21</sup> . Ror an output voltage <sup>21</sup> . So for an output voltage <sup>21</sup> . So for an output voltage <sup>21</sup> . So for an output voltage <sup>22</sup> . For an output voltage <sup>22</sup> . For a 5 Hz to 1 MHz co <sup>22</sup> . For a 5 Hz to 1 MHz co <sup>22</sup> . For an output voltage <sup>22</sup> . For 5 Hz to 1 MHz co <sup>22</sup> . For an output voltage <sup>22</sup> . For 3 FHz to 1 MHz co <sup>23</sup> . For an output voltage <sup>23</sup> . For 5 Hz to 1 MHz co <sup>24</sup> . For 5	r mode, the rate output volta 4W mode. it ing in polyphase output. In is of 10 V to 175 V / 20 V to 35 be set in balance mode. is higher than rated value, that and that the ambient temper apacitor-input rectifying load ion or regeneration which is the rated output voltage, no can be set independ at independ at inde- pend mode in polyphase g of 50V or higher, sine wave. C mode and output voltage set g of 50V or higher, sine wave. C mode and 0 degree or high a 3 ms, limited by the maxim g of 75V to 175 V / 150 V to te rated output voltage, the re g of 100 V in 200 V, al oad po components in DC mode usi	ge, resistance load balance mode all p 50 V, sine wave, an is is limited to sati rature is 40 degree 4. Limited by the m over short reverse load and the resis e output. e, same load and v setting to V, 32°C e, same load and v setting to V, 32°C short by 0, 23°C short by 0, 23°C	output frequency of 45 Hz to 65 Hz, no lo sfy the power capacity. If there is the DC st or higher, the maximum current may decrea aximum current, tance load for the maximum current, and t polyphase output. oltage condition for all phase. ± 5°C > 20 V, ±20 V to ±500 V, no load, AC voltag tisfy the power capacity. If there is the AC s o current may decrease. d output voltage. er factor of 1, stepwise change from an outp inal on the rear panel. <b>ent function is indicated for 23</b> ° <b>Single-pf</b> 0.01 V / 0.1 V	mode each phases are individually set. ad, DC voltage setting 0V (AC+DC mode) and aperimmposition, the active current of AC+DC tase. The operating temperature range. The operating temperature range. The set to 0V (AC+DC mode) and 23°C ± 5°C tuperimmposition, the active current of AC+D tput current of 0 A to maximum current (or the polyphase output, it is a specification for out current of 0 A to the maximum current (or C±5 °C.) Tase output	Satisfies the maximum current. In the satisfies the maximum current. In the satisfies the maximum current. reverse), using the output terminal of r phase voltage setting. Its reverse), 10% ~ 90% of output vo Polyp	n the rear panel. hase output <sup>°6</sup>			
AI Y connection is three, #2 In the case of AC-INT #3. Can be only set in 3P. #4. For phase voltage set #5. For an output voltage #6. Line voltage only can #6. Line voltage only can #3. If the output voltage #0. For 45 1 Let 06 5Hz, #10. For 45 Hz to 65 Hz, #11. Lin, L2 and L3 phase #14. In the case of the AC #15. For an output voltage #16. If the output voltage #16. If the output voltage #16. If the output voltage #16. If the output voltage #18. For an output voltage #19. S0% or higher of the #20. For an output voltage #21. For 5 Hz to 1 MHz c Acases and the analysis of the AC Acases and the analysis of the AC Acases and the Acases and the AC Acases and the AC Acases and the Acases and the Acases and the Acases and the Acases and the Acases and the Acases and the Acases and the Acases and the Acase	mode, the rate output volta 4W mode. titing in polyphase output. In c = 010 V to 175 V / 20 V to 33 be set in balance mode. is higher than rated value, th and that the ambient temper apacitor-input rectifying load for or regeneration which is the rated output voltage, no can be set independ at independ at independ mode in polyphas ge of 50V or higher, sine wave C mode and output voltage s ge of 50V or higher, sine wave C mode and output voltage s ge of 50V or higher, sine wave c mode and output voltage, the rate output voltage, the ra- ge of 100 V / 200 V, a load po components in DC mode usis	ge, resistance load balance mode all p 50 V, sine wave, an is is limited to sati rature is 40 degree d. Limited by the m over short reverse load and the resis pend mode in the se output. e, same load and v setting to V, 32°C spler, the maximum num current at rate 350 V, a load pow maximum current o 310 v swer factor of 1, withing the measurem	output frequency of 45 Hz to 65 Hz, no lo sify the power capacity. If there is the DC st or higher, the maximum current may decre aximum current. power flow capacity is not available. tance load for the maximum current, and t polyphase output. oltage condition for all phase. $\pm$ 5°C > 20 V, +20 V to +500 V, no load, AC voltag tis 5'th ep power capacity. If there is the AC s o current may decrease. If current may decrease. If output voltage. er factor of 1, stepwise change from an outp ininal on the rear panel. ent function is indicated for 23 ° Single-pt 0.01 V / 0.1 V 45 Hz to 65 Hz and DC: ± (0.5 9	mode each phases are individually set. ad, DC voltage setting 0V (AC+DC mode) and uperimmposition, the active current of AC+DC ase. the operating temperature range. the operating temperature range.	2 satisfies the maximum current. In the satisfies the maximum current. In the satisfies the maximum current. reverse), using the output terminal of r phase voltage setting. Its reverse), 10% – 90% of output vo Polyp 45 Hz to 65 Hz: ± (0.5 % of	the case of 40 Hz or lower on the rear panel. Itage. hase output <sup>%6</sup>			
11 Y connection is three, 12 Y connection is three, 22. In the case of AC-INT 32. Can be only set in 3P. 44. For phase voltage set 55. For an output voltage 65. Lire voltage only can 75. If the output voltage 95. With respect to the ca 99. External power inject 10. For 45 Hz to 65 Hz, 410. For 45 Hz to 65 Hz, 411. Lit 2 and 13 phase 416. If the output voltage 416. If the output voltage 416. If the output voltage 416. If the output voltage 416. If the output voltage 419. So an output voltage 420. For an output voltage 420. For an output voltage 421. For 5 Hz to 1 MHz c <b>Adeasured Value Dis</b>	mode, the rate output volta 4W mode. iting in polyphase output. In is of 10 Vto 175 V / 20 Vto 32 be set in balance mode. is higher than rated value, th and that the ambient temper apacitor-input rectifying load ion or regeneration which is the rated output voltage. on ic can be set independ at inde independ mode independ at inde independ mode independ at inde e of 50V or higher, sine wave C mode and output voltage. Si ge of 250 V to 10V, +10 Vt is higher than rated value, the rege of 20V or 10V, +10 Vt e rated output voltage, then ge of 10V or 10V, 410 vt e of 10V or 10V, 410 vt Resolution RMS value accuracy	ge, resistance load balance mode all p si 0, V, sine wave, an si 0, visi si limited to sati rature is 40 degree 1, limited by the m over short reverse load and the resis epend mode in the se output. e, same load and v setting to 0, 23°C speed, 100 V, 23°C spee	output frequency of 45 Hz to 65 Hz, no lo sfy the power capacity. If there is the DC st or higher, the maximum current may decre aximum current. power flow capacity is not available. tance load for the maximum current, and t polyphase output. oltage condition for all phase. $\pm$ 5°C > 20 V, +20 V to +500 V, no load, AC voltag tis fy the power capacity. If there is the AC s o current may decrease. If output voltage. er factor of 1, stepwise change from an outp inal on the rear panel. ent function is indicated for 23 ° Single-pf 0.01 V / 0.1 V 45 Hz to 65 Hz and DC: ± (0.5 % 15 Hz to 2000 Hz: ± (0.7 % of rc	mode each phases are individually set. ad, DC voltage setting 0V (AC+DC mode) and uperimmposition, the active current of AC+DC ase. the operating temperature range. the operating temperature range ran	2 satisfies the maximum current. In the satisfies the maximum current. In the satisfies the maximum current. reverse), using the output terminal of r phase voltage setting. Its reverse). 10% – 90% of output voltage setting. Polyp 45 Hz to 65 Hz: ± (0.5 % of 15 Hz to 2000 Hz: ± (0.7 %	the case of 40 Hz or lower the case of 40 Hz or lower the case of 40 Hz or lower the rear panel. Itage. <b>hase output</b> $^{\circ 6}$ rdg + 0.5 V / 1 V) of rdg + 1 V / 2 V)			
<ol> <li>Y connection is three;</li> <li>In the case of AC-INT</li> <li>Can be only set in 3P-4.</li> <li>For phase voltage set is 5P-4.</li> <li>For an output voltage is 5P-67 an output voltage is 6P-7.</li> <li>If the output voltage is 4P-7.</li> <li>With respect to the case of the AP-7.</li> <li>For an output voltage is 12.</li> <li>Can be set to 6B-7.</li> <li>Can be set only with 13.</li> <li>For an output voltage is 14.</li> <li>In the case of the AP-7.</li> <li>For an output voltage is 14.</li> <li>In the case of the AP-7.</li> <li>For an output voltage is 14.</li> <li>For an output voltage is 20.</li> <li>For an output</li></ol>	mode, the rate output volta 4W mode. iting in polyphase output. In is of 10 Vto 175 V / 20 Vto 35 be set in balance mode. is higher than rated value, that hand that the ambient temper apacitor-input rectifying load ion or regeneration which is the rated output voltage, no can be set independ at independ at inde pend and output voltage. g of 50V or higher, sine waw C mode and output voltage se g of 50V or higher, sine waw C mode and output voltage. g of 50V of higher, sine waw E of 50V of higher, sine waw E of 50V of higher, sine waw g of 50V of higher, sine waw g of 50V of 10V, 410 Vto is higher than rated value, t merature is 40 degree or high g of 75 Vto 175 V, 150 Vto components in DC mode usi splay (All accuracy of t Resolution RMS value accuracy	ge, resistance load balance mode all p 50 V, sine wave, an is is limited to sati rature is 40 degree 1 Limited by the m over short reverse load and the resis pend mode in the se output. e, same load and v setting to V, 23°C e, same load and v setting to V, 23°C e, same load and v setting to V, 23°C sourcent at rate sourcent at rate sourcent at rate sourcent at rate sourcent at rate maximum current o slow f actor of 1, withing the measurem y	output frequency of 45 Hz to 65 Hz, no lo sify the power capacity. If there is the DC si or higher, the maximum current may decrea aximum current, tance load for the maximum current, and t polyphase output. oltage condition for all phase. :+ 5°C :- 20 V: to +500 V, no load, AC voltage tisfy the power capacity if there is the AC si outrent may decrease. d output voltage. er factor of 1, stepwise change from an outp inal on the rear panel. <b>ent function is indicated for 23 °</b> <b>Single-pH</b> 0.01 V / 0.1 V 45 Hz to 65 Hz and DC: ± (0.5 ° 15 Hz to 2000 Hz: ± (0.7 % of rcdg  + 0.5 V / 1	mode each phases are individually set. ad, DC voltage setting 0V (AC+DC mode) and uperimmposition, the active current of AC+DC case. the operating temperature range. the operature range temperature range. The operating temperature	C satisfies the maximum current. In the constraint of the current current. In the current current, which is the current current is reverse), using the output terminal of r phase voltage setting. Its reverse). 10% - 90% of output voltar voltage setting. Its reverse). 10% - 90% of output voltage setting. Its reverse is the current current current current current. Its reverse is the current current current current. Its reverse is the current current current current current. Its reverse is the current current. Its reverse is the current cur	hase output <sup>*6</sup> rdg + 0.5 V / 1 V) of rdg + 1 V / 2 V)			
<ol> <li>Y connection is three;</li> <li>In the case of AC-INT</li> <li>Can be only set in 3P-4.</li> <li>For phase voltage set is 5P-4.</li> <li>For an output voltage is 5P-67 an output voltage is 6P-7.</li> <li>If the output voltage is 4P-7.</li> <li>With respect to the case of the AP-7.</li> <li>For an output voltage is 12.</li> <li>Can be set to 6B-7.</li> <li>Can be set only with 13.</li> <li>For an output voltage is 14.</li> <li>In the case of the AP-7.</li> <li>For an output voltage is 14.</li> <li>In the case of the AP-7.</li> <li>For an output voltage is 14.</li> <li>For an output voltage is 20.</li> <li>For an output</li></ol>	mode, the rate output volta 4W mode. et img in polyphase output. In e of 10 Vto 175 V / 20 Vto 33 be set in balance mode. is higher than rated value, that and that the ambient temper apacitor-input rectifying load ion or regeneration which is the rated output voltage, no can be set independ at independ at inde- pend and output voltage. g of 50V or higher, sine wave. C mode and output voltage set g of 50V or higher, sine wave. The output voltage set g of 50V or higher, sine wave. The output voltage set g of 50V or higher, sine wave. the rated output voltage, then g of 75V to 175 V / 150 Vto the rated output voltage, then g of 100 V i 200 V, al oad po components in DC mode usis splay (All accuracy of to AVG value accuracy PEAK value accuracy PEAK value accuracy	ge, resistance load balance mode all p 50 V, sine wave, an is is limited to sati rature is 40 degree 1 Limited by the m over short reverse load and the resis pend mode in the se output. e, same load and v setting to V, 23°C e, same load and v setting to V, 23°C e, same load and v setting to V, 23°C sourcent at rate sourcent at rate sourcent at rate sourcent at rate sourcent at rate maximum current o slow f actor of 1, withing the measurem y	output frequency of 45 Hz to 65 Hz, no lo soft the power capacity. If there is the DC su or higher, the maximum current may decrea aximum current, tance load for the maximum current, and t polyphase output. oltage condition for all phase. := 5°C := 20 V: to +500 V, no load, AC voltage tisfy the power capacity. If there is the AC si current may decrease. d output voltage. er factor of 1, stepwise change from an outprinal on the rear panel. ent function is indicated for 23 ° Single-pf 0.01 V / 0.1 V 45 Hz to 65 Hz and DC: ± (0.5 % DC: ± (0.5 % of rdg] + 0.5 V / 1 45 Hz to 65 Hz and DC: ± (0.2 %)	mode each phases are individually set. ad, DC voltage setting 0V (AC+DC mode) and uperimmposition, the active current of AC+DC case. the operating temperature range. the operature range temperature range. The operating temperature	2 satisfies the maximum current. In the satisfies the maximum current. In the satisfies the maximum current. reverse), using the output terminal of r phase voltage setting. Its reverse). 10% – 90% of output voltage setting. Polyp 45 Hz to 65 Hz: ± (0.5 % of 15 Hz to 2000 Hz: ± (0.7 %	hase output <sup>*6</sup> rdg + 0.5 V / 1 V) of rdg + 1 V / 2 V)			
11 Y connection is three, 12 Y connection is three, 22. In the case of AC-INT 32. Can be only set in 3P. 44. For phase voltage set 55. For an output voltage 65. Lire voltage only can 75. If the output voltage 95. With respect to the ca 99. External power inject 10. For 45 Hz to 65 Hz, 410. For 45 Hz to 65 Hz, 411. Lit 2 and 13 phase 416. If the output voltage 416. If the output voltage 416. If the output voltage 416. If the output voltage 416. If the output voltage 419. So an output voltage 420. For an output voltage 420. For an output voltage 421. For 5 Hz to 1 MHz c <b>Adeasured Value Dis</b>	mode, the rate output volta 4W mode. iting in polyphase output. In is of 10 Vto 175 V / 20 Vto 35 be set in balance mode. is higher than rated value, that hand that the ambient temper apacitor-input rectifying load ion or regeneration which is the rated output voltage, no can be set independ at independ at inde pend and output voltage. g of 50V or higher, sine waw C mode and output voltage se g of 50V or higher, sine waw C mode and output voltage. g of 50V of higher, sine waw E of 50V of higher, sine waw E of 50V of higher, sine waw g of 50V of higher, sine waw g of 50V of 10V, 410 Vto is higher than rated value, t merature is 40 degree or high g of 75 Vto 175 V, 150 Vto components in DC mode usi splay (All accuracy of t Resolution RMS value accuracy	ge, resistance load balance mode all p 50 V, sine wave, an is is limited to sati rature is 40 degree 1 Limited by the m over short reverse load and the resis pend mode in the se output. e, same load and v setting to V, 23°C e, same load and v setting to V, 23°C e, same load and v setting to V, 23°C sourcent at rate sourcent at rate sourcent at rate sourcent at rate sourcent at rate maximum current o slow f actor of 1, withing the measurem y	output frequency of 45 Hz to 65 Hz, no lo sfy the power capacity. If there is the DC st or higher, the maximum current may decrea aximum current, power flow capacity is not available. tance load for the maximum current, and t polyphase output. oltage condition for all phase. :± 55° :0 20 V; +20 V to +500 V; no load, AC voltag its fy the power capacity. If there is the AC s current may decrease. d output voltage. er factor of 1, stepwise change from an outp inal on the rear panel. ent function is indicated for 23 ° Single-pf 0.01 V / 0.1 V 45 Hz to 65 Hz and DC; ± (0.5 % 15 Hz to 2000 Hz; ± (0.7 % of rc DC; ± (0.5 % of rcdg   +0.5 V / 1 45 Hz to 65 Hz and DC; ± (12 % 0.01 A / 0.1 A	mode each phases are individually set. ad, DC voltage setting 0V (AC+DC mode) and uperimmposition, the active current of AC+DC rase. The operating temperature range. The operating temperature range. The operating temperature range. The operating temperature range of the operation of the active current of AC+DC tuperimmposition, the active current of AC+DC to the polyphase output, it is a specification for to the polyphase output, it is a specification for the tuperimmost of 0 A to the maximum current (or the polyphase output, it is a specification for the polyphase output is a specification for the polyphase output is a specification for the polyphase output is a specification for the polyphase output is a specification for the polyphase output is a specification for the po	Satisfies the maximum current. In the satisfies the maximum current. In the satisfies the maximum current. reverse), using the output terminal of r phase voltage setting. its reverse). 10% ~ 90% of output vo Polyp 45 Hz to 65 Hz: ± (0.5 % of 15 Hz to 2000 Hz: ± (0.7 % DC: ± (0.5 % of rdg] + 0.5 \dd 25 Hz; ± (0.7 %)	on the rear panel. Itage. hase output <sup>*6</sup> rdg + 0.5 V / 1 V) of rdg + 1 V / 2 V) // 1 V) lg  + 1 V / 2 V)			
<ul> <li>A Y connection is three,</li> <li>Y connection is three,</li> <li>In the case of AC-INT</li> <li>Tab eo hyse tin 3P.</li> <li>Ara be only set in 3P.</li> <li>Ara be only utvoltage set</li> <li>For an output voltage only can</li> <li>For an output voltage is an annow of the only only of the only of the only only only only only only only only</li></ul>	mode, the rate output volta 4W mode. iting in polyphase output. In is of 10 Vio 175 V / 20 Vio 32 be set in balance mode. is higher than rated value, that and that the ambient temper apacitor-input rectifying load ion or regeneration which is the rated output voltage, no can be set independ at independ at inde pend and output voltage set of 50V or higher, sine wave C mode and output voltage set of 50V or higher, sine wave zer of 20V or 10V v, 10 vet the rated output voltage, the ng zer 0100 V (200 V, al load po components in DC mode usi splay (All accuracy of the Resolution RMS value accuracy PEAK value accuracy Resolution	ge, resistance load balance mode all p 50 V, sine wave, an is is limited to sati rature is 40 degree 1 limited by the m over short reverse load and the resis load and the resis pend mode in the se output. e, same load and v setting to V, 23°C e, same load and v setting to V, 23°C short by the measurem the size of the satisfier size of the satisfier the measurem y y cy <sup>e3</sup>	output frequency of 45 Hz to 65 Hz, no lo sfy the power capacity. If there is the DC su or higher, the maximum current may decrea aximum current, not capacity is not available. tance load for the maximum current, and t polyphase output. oltage condition for all phase. $\pm 5^{\rm CC}$ $-20$ V, $\pm 20$ V to $\pm 500$ V, no load, AC voltag its fy the power capacity. If there is the AC s output voltage. er factor of 1, stepwise change from an outp inal on the rear panel. <b>ent function is indicated for 23</b> ° <b>Contex of Sector 10</b> Single-pt 0.01 V / 0.1 V 45 Hz to 65 Hz and DC: $\pm$ (0.5 % 15 Hz to 2000 Hz: $\pm$ (0.7 % of rcd DC: $\pm$ (10.5 % of rdg] + 0.5 V / 1 45 Hz to 65 Hz and DC: $\pm$ (12 %) 0.01 A / 0.1 A	mode each phases are individually set. ad, DC voltage setting 0V (AC+DC mode) and uperimmposition, the active current of AC+DC tase. The operating temperature range. The operating temperature range. The operating temperature range are as a set of 0 (AC+DC mode) and 23°C $\pm$ 5°C uperimmposition, the active current of AC+DC to the polyphase output, it is a specification for to turrent of 0 A to maximum current (or its for the polyphase output, it is a specification to turrent of 0 A to the maximum current (or <b>C<math>\pm</math>5 °C. )</b> <b>Tase output</b> 6 of rdg + 0.5 V / 1 V) to f rdg + 1 V / 2 V) 5 of rdg + 0.1 A / 0.05 A)	E satisfies the maximum current. In the satisfies the maximum current. Its reverse), using the output terminal of phase voltage setting. Its reverse), 10% – 90% of output voltage setting. Its reverse), 10% – 90% of output voltage setting. Its reverse), 10% – 90% of output voltage setting. Its reverse), 10% – 90% of output voltage setting. Its reverse), 10% – 90% of output voltage setting. Its reverse), 10% – 90% of output voltage setting. Its reverse, 10% – 90% of output voltage setting. Its reverse, 10% – 90% of output voltage setting. Its reverse, 10% – 90% of output voltage setting. Its reverse, 10% – 90% of output voltage setting. Its reverse, 10% – 90% of output voltage setting. Its reverse, 10% – 90% of output voltage setting. Its reverse, 10% – 90% of output voltage setting. Its reverse, 10% – 90% of output voltage setting. Its reverse, 10% – 90% of output voltage setting. Its reverse, 10% – 90% of output voltage setting. Its reverse, 10% – 90% of output voltage setting. Its reverse, 10% – 90% of output voltage setting. Its reverse, 10% – 90% of red ge setting. Its reverse, 10% of red ge setting. Its reverse, 10% of red ge setting. Its reverse, 10% of rev	the case of 40 Hz or lower the case of 40 Hz or lower tage. hase output <sup>*6</sup> rdg + 0.5 V / 1 V) of rdg + 1 V / 2 V) (/ 1 V) dg   + 1 V / 2 V) rdg + 0.05 A / 0.03 A)			
<ul> <li>1 Y connection is three,</li> <li>2. In the case of AC-INT</li> <li>2. Can be only set in 3P.</li> <li>4. For phase voltage set in 5P.</li> <li>4. For phase voltage set in 5P.</li> <li>5. For an output voltage in 4P.</li> <li>6. Line voltage conly can be voltage set in 5P.</li> <li>6. Mith respect to the case of the AT.</li> <li>10. For 43 F to 65 Hz,</li> <li>11. L1, L2 and L3 phase of the AT.</li> <li>12. Can be set of the AT.</li> <li>13. For an output voltage in 41. In the case of the AT.</li> <li>15. For an output voltage in 5P. Set on the voltage of the AT.</li> <li>19. S0% or higher of the intervences eithin 19. S0% or higher of the 20. For an output voltage in 5P. Set on the AT.</li> <li>14. In the case of the AT.</li> <li>15. For an output voltage in 5P. Set on the AT.</li> <li>19. S0% or higher of the intervences eithin 20. For an output voltage in 5P. Set on the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>10. S0% or higher of the AT.</li> <li>10.</li></ul>	mode, the rate output volta 4W mode. iting in polyphase output. In is of 10 Vto 175 V / 20 Vto 33 be set in balance mode. is higher than rated value, that and that the ambient temper apacitor-input rectifying load in or regeneration which is the rated output voltage. or can be set independ at inde independ mode in polyphase geof 30V or higher, sine wave C mode and output voltage. So geof 250 Vto 10V, +10 Vt is higher than rated value, the performation of degree or high geof 75 Vto 175 V / 150 Vto geof 10V / 200 V, al load po- components in DC mode usi splay (All accuracy of the Resolution RMS value accuracy PEAK value accuracy Resolution RMS value accuracy	ge, resistance load balance mode all p sol V, sine wave, an is is limited to sati rature is 40 degree load and the resis epend mode in the se output. I blad and the resis epend mode in the se output. e, same load and v setting to V, 33°C spent maximum current or 4250 V / 300 V to this is limited to as given, the maximum current of 1, while ing the output terr the measurem y y y	output frequency of 45 Hz to 65 Hz, no lo sfy the power capacity. If there is the DC su or higher, the maximum current may decre aximum current. power flow capacity is not available. tance load for the maximum current, and t polyphase output. oltage condition for all phase. $\pm$ 5°C - 20 V, ±20 V to +500 V, no load, AC voltage tis 5°C - 20 V, ±20 V to +500 V, no load, AC voltage tis 5°C to the state capacity. If there is the AC so output voltage. er factor of 1, stepwise change from an outp inal on the rear panel. ent function is indicated for 23 ° Single-pt 0.01 V / 0.1 V 45 Hz to 65 Hz and DC: $\pm$ (0.5 % 15 Hz to 2000 Hz: $\pm$ (0.7 % of rc DC: $\pm$ (0.1 A - 0.01 A / 0.1 A 45 Hz to 65 Hz and DC: $\pm$ (0.2 % 0.01 A / 0.1 A	mode each phases are individually set. ad, DC voltage setting 0V (AC+DC mode) and uperimmposition, the active current of AC+DC ase. the operating temperature range. the operature range and the operating temperature range. The operature range and the operature range	C satisfies the maximum current. In the satisfies the maximum current. In the satisfies the maximum current.  reverse), using the output terminal of r phase voltage setting. Its reverse). 10% – 90% of output voltage setting.  45 Hz to 65 Hz: ± (0.5 % of 15 Hz to 2000 Hz: ± (0.7 % Of 15 Hz to 65 Hz: ± (12 % of red) + 0.5 V d5 Hz to 65 Hz: ± (12 % of red) + 0.5 V d5 Hz to 65 Hz: ± (0.7 % of 15 Hz to 2000 Hz; ± (0.7 % of 15 Hz to 2000 Hz; ± (0.7 \% to	the case of 40 Hz or lower the case of 40 Hz or lower thase output $\frac{6}{6}$ rdg + 0.5 V / 1 V) of rdg + 1 V / 2 V) (/ 1 V) rdg + 1 V / 2 V) rdg + 0.05 A / 0.03 A) of rdg + 0.1 A / 0.05 A)			
<ul> <li>1 Y connection is three,</li> <li>2. In the case of AC-INT</li> <li>2. Can be only set in 3P.</li> <li>4. For phase voltage set in 5P.</li> <li>4. For phase voltage set in 5P.</li> <li>5. For an output voltage in 4P.</li> <li>6. Line voltage conly can be voltage set in 5P.</li> <li>6. Mith respect to the case of the AT.</li> <li>10. For 43 F to 65 Hz,</li> <li>11. L1, L2 and L3 phase of the AT.</li> <li>12. Can be set of the AT.</li> <li>13. For an output voltage in 41. In the case of the AT.</li> <li>15. For an output voltage in 5P. Set on the voltage of the AT.</li> <li>19. S0% or higher of the intervences eithin 19. S0% or higher of the 20. For an output voltage in 5P. Set on the AT.</li> <li>14. In the case of the AT.</li> <li>15. For an output voltage in 5P. Set on the AT.</li> <li>19. S0% or higher of the intervences eithin 20. For an output voltage in 5P. Set on the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>10. S0% or higher of the AT.</li> <li>10.</li></ul>	rode, the rate output volta 4W mode. of 10 Vto 175 V / 20 Vto 32 be set in balance mode. is higher than rated value, that and that the ambient temper apacitor-input rectifying load ion or regeneration which is the rated output voltage, no can be set independ at independ at inde pend and output voltage. of 50V or higher, sine wave C mode and output voltage set of 50V or higher, sine wave constant of the set set of site of higher, sine wave constant of the set of site of the set set of site of set is higher than rated value, the re of 50V or higher, sine wave set of 50V or higher than rated value, the re of 50V or higher than a set set output voltage, the re set of 10V or 10V v, 10V to set of 10V (200 v, al oad po components in DC mode usi set of 20V or value accuracy PEAK value accuracy AVG value accuracy AVG value accuracy AVG value accuracy AVG value accuracy AVG value accuracy	ge, resistance load balance mode all p 50 V, sine wave, an is is limited to sati rature is 40 degree 1 limited by the m over short reverse load and the resis load and the resis load and the resis load and the resis load and the resis se output. e, same load and v setting to V, 23°C +250 V /-500 V t this is limited to sa job v, 250 V /-500 V t this is limited to sa since the setting to V, 23°C so v, 250 V /-500 V t this is limited to sa since the setting to V, 23°C so v, 250 V /-500 V t this is limited to sa since the setting to V, 23°C so v, 250 V /-500 V t the measurem y y y y y	output frequency of 45 Hz to 65 Hz, no lo soft the power capacity. If there is the DC su or higher, the maximum current may decrea aximum current, tance load for the maximum current, and t polyphase output. oltage condition for all phase. := 5°C := 0°C := 0°C := 0°C := 0°C := 0°C output voltage. er factor 0°1, stepwise change from an outp inal on the rear panel. ent function is indicated for 23° Single-pH 0.01 V / 0.1 V 45 Hz to 65 Hz and DC: ± (0.5 % 15 Hz to 65 Hz and DC: ± (0.5 % 0.01 A / 0.1 A 45 Hz to 65 Hz and DC: ± (2 % 0.01 A / 0.1 A 45 Hz to 65 Hz and DC: ± (0.5 % 0.01 A / 0.1 A 45 Hz to 65 Hz and DC: ± (0.7 % of rd DC: ± (0.5 % of rdg  + 0.5 V / 1 45 Hz to 65 Hz and DC: ± (0.7 % of rd DC: ± (0.5 % of rdg  + 0.2 A / 0.	mode each phases are individually set. ad, DC voltage setting 0V (AC+DC mode) and uperimmposition, the active current of AC+DC case. the operating temperature range. the operature range temperature range. The operating temperature range temperature range temperature range temperature range temperature range temperature range. T	The satisfies the maximum current. In the satisfies the maximum current. In the satisfies the maximum current. The satisfies the satis	the case of 40 Hz or lower the case of 40 Hz or lower hase output $^{66}$ rdg + 0.5 V / 1 V) of rdg + 1 V / 2 V) (/ 1 V) lg   + 1 V / 2 V) rdg + 0.05 A / 0.03 A) of rdg + 0.1 A / 0.05 A) (/ 0.05 A)			
<ul> <li>1 Y connection is three,</li> <li>2. In the case of AC-INT</li> <li>2. Can be only set in 3P.</li> <li>4. For phase voltage set in 5P.</li> <li>4. For phase voltage set in 5P.</li> <li>5. For an output voltage in 4P.</li> <li>6. Line voltage conly can be voltage set in 5P.</li> <li>6. Mith respect to the case of the AT.</li> <li>10. For 43 F to 65 Hz,</li> <li>11. L1, L2 and L3 phase of the AT.</li> <li>12. Can be set of the AT.</li> <li>13. For an output voltage in 41. In the case of the AT.</li> <li>15. For an output voltage in 5P. Set on the voltage of the AT.</li> <li>19. S0% or higher of the intervences eithin 19. S0% or higher of the 20. For an output voltage in 5P. Set on the AT.</li> <li>14. In the case of the AT.</li> <li>15. For an output voltage in 5P. Set on the AT.</li> <li>19. S0% or higher of the intervences eithin 20. For an output voltage in 5P. Set on the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>19. S0% or higher of the intervence of the AT.</li> <li>10. S0% or higher of the AT.</li> <li>10.</li></ul>	mode, the rate output volta 4W mode. iting in polyphase output. In is of 10 Vto 175 V / 20 Vto 33 be set in balance mode. is higher than rated value, that and that the ambient temper apacitor-input rectifying load in or regeneration which is the rated output voltage. or can be set independ at inde independ mode in polyphase geof 30V or higher, sine wave C mode and output voltage. So geof 250 Vto 10V, +10 Vt is higher than rated value, the performation of degree or high geof 75 Vto 175 V / 150 Vto geof 10V / 200 V, al load po- components in DC mode usi splay (All accuracy of the Resolution RMS value accuracy PEAK value accuracy Resolution RMS value accuracy	ge, resistance load balance mode all p 50 V, sine wave, an is is limited to sati rature is 40 degree 1 limited by the m over short reverse load and the resis load and the resis load and the resis load and the resis load and the resis se output. e, same load and v setting to V, 23°C +250 V /-500 V t this is limited to sa job v, 250 V /-500 V t this is limited to sa since the setting to V, 23°C so v, 250 V /-500 V t this is limited to sa since the setting to V, 23°C so v, 250 V /-500 V t this is limited to sa since the setting to V, 23°C so v, 250 V /-500 V t the measurem y y y y y	output frequency of 45 Hz to 65 Hz, no lo sfy the power capacity. If there is the DC su or higher, the maximum current may decrea aximum current, tance load for the maximum current, and t polyphase output. oltage condition for all phase. := 5°C := 0°C output voltage. = 00 + 20 V to +500 V, no load, AC voltage tief, the power capacity. If there is the AC si output voltage. = r factor of 1, stepwise change from an outp inial on the rear panel. ent function is indicated for 23 ° Single-pf 0.01 V / 0.1 V 45 Hz to 65 Hz and DC: ± (0.5 % 15 Hz to 2000 Hz: ± (0.7 % of rd DC: ± (0.5 % of rdg] + 0.5 V / 11 45 Hz to 65 Hz and DC: ± (0.5 % 0.01 A / 0.1 A 45 Hz to 65 Hz and DC: ± (0.5 % 0.01 A / 0.1 A 45 Hz to 65 Hz and DC: ± (0.5 % 0.01 A / 0.1 A 45 Hz to 65 Hz and DC: ± (0.5 % 0.01 A / 0.1 A 45 Hz to 65 Hz and DC: ± (0.5 % 0 C rdg] + 0.2 A / 0.0 DC: ± (0.5 % of rdg] + 0.2 A / 0.0 45 Hz to 65 Hz and DC: ± (0.5 %	mode each phases are individually set. ad, DC voltage setting 0V (AC+DC mode) and uperimmposition, the active current of AC+DC case. the operating temperature range. the operature range temperature range. The operating temperature range temperature range temperature range temperature range temperature range temperature range. T	C satisfies the maximum current. In the satisfies the maximum current. In the satisfies the maximum current.  reverse), using the output terminal of r phase voltage setting. Its reverse). 10% – 90% of output voltage setting.  45 Hz to 65 Hz: ± (0.5 % of 15 Hz to 2000 Hz: ± (0.7 % Of 15 Hz to 65 Hz: ± (12 % of red) + 0.5 V d5 Hz to 65 Hz: ± (12 % of red) + 0.5 V d5 Hz to 65 Hz: ± (0.7 % of 15 Hz to 2000 Hz; ± (0.7 % of 15 Hz to 2000 Hz; ± (0.7 \% to	the case of 40 Hz or lower the case of 40 Hz or lower hase output $^{66}$ rdg + 0.5 V / 1 V) of rdg + 1 V / 2 V) (/ 1 V) lg   + 1 V / 2 V) rdg + 0.05 A / 0.03 A) of rdg + 0.1 A / 0.05 A) (/ 0.05 A)			
<ul> <li>I'Y connection is three,</li> <li>I'Y connection is three,</li> <li>I's can be only set in 3P.</li> <li>An be only set in 3P.</li> <li>An be only set in 3P.</li> <li>An be only and the only only only only only only only only</li></ul>	mode, the rate output volta 4W mode. iting in polyphase output. In is of 10 Vio 175 V / 20 Vio 32 be set in balance mode. is higher than rated value, that and that the ambient temper apactor-input rectifying load ion or regeneration which is the rated output voltage. On i can be set independ at inde- independ mode in polyphas geof 50V or higher, sine wave. C mode and output voltage side geof 50V or higher, sine wave. C mode and output voltage. Side geof 50V or higher, sine wave. The set independ at output voltage. geof 250 Vio Voltage. Side of 250 Vio Vio Vio Vio Vio solve and output voltage. geof 75 Vio 175 V / 150 Vio splay (All accuracy of the Resolution RMS value accuracy PEAK value acc	ge, resistance load balance mode all p 50 V, sine wave, an is is limited to sati rature is 40 degree 1 limited by the m over short reverse load and the resis load and the resis load and the resis load and the resis load and the resis se output. e, same load and v setting to V, 23°C +250 V /-500 V t this is limited to sa job v, 250 V /-500 V t this is limited to sa since the setting to V, 23°C so v, 250 V /-500 V t this is limited to sa since the setting to V, 23°C so v, 250 V /-500 V t this is limited to sa since the setting to V, 23°C so v, 250 V /-500 V t the measurem y y y y y	output frequency of 45 Hz to 65 Hz, no lo soft the power capacity. If there is the DC su or higher, the maximum current may decrea aximum current, tance load for the maximum current, and t polyphase output. oltage condition for all phase. := 5°C := 0°C := 0°C := 0°C := 0°C := 0°C output voltage. er factor 0°1, stepwise change from an outp inal on the rear panel. ent function is indicated for 23° Single-pH 0.01 V / 0.1 V 45 Hz to 65 Hz and DC: ± (0.5 % 15 Hz to 65 Hz and DC: ± (0.5 % 0.01 A / 0.1 A 45 Hz to 65 Hz and DC: ± (2 % 0.01 A / 0.1 A 45 Hz to 65 Hz and DC: ± (0.5 % 0.01 A / 0.1 A 45 Hz to 65 Hz and DC: ± (0.7 % of rd DC: ± (0.5 % of rdg  + 0.5 V / 1 45 Hz to 65 Hz and DC: ± (0.7 % of rd DC: ± (0.5 % of rdg  + 0.2 A / 0.	mode each phases are individually set. ad, DC voltage setting 0V (AC+DC mode) and uperimmposition, the active current of AC+DC case. the operating temperature range. the operature range temperature range. The operating temperature range temperature range temperature range temperature range temperature range temperature range. T	The satisfies the maximum current. In the satisfies the maximum current. In the satisfies the maximum current. The satisfies the satis	the case of 40 Hz or lower the case of 40 Hz or lower hase output $^{66}$ rdg + 0.5 V / 1 V) of rdg + 1 V / 2 V) (/ 1 V) lg   + 1 V / 2 V) rdg + 0.05 A / 0.03 A) of rdg + 0.1 A / 0.05 A) (/ 0.05 A)			
<ul> <li>A Y connection is three,</li> <li>Y connection is three,</li> <li>Z. In the case of AC-INT</li> <li>S. Can be only set in 3P.</li> <li>A. For on yout voltage set</li> <li>S. For an output voltage (a set of the set of the</li></ul>	r mode, the rate output volta 4W mode. et img in polyphase output. In e of 10 Vto 175 V / 20 Vto 33 be set in balance mode. is higher than rated value, th and that the ambient temper apacitor-input rectifying load ion or regeneration which is the rated output voltage, no can be set independ at independ at inde- pend and output voltage. e of 50V or higher, sine wave c mode and output voltage set e of 50V or higher, sine wave c mode and output voltage. e of 50V or higher, sine wave reg of 50V or higher, sine wave e of 50V or higher, sine wave g of 50V or higher, sine wave g of 50V or higher, sine wave g of 50V or higher. Sine wave g of 50V or higher than rated value, the reg of 50V or high of degree or high software of the set of the set of the set set of the set of the set of the set set of the set of the set of the set set of the set of the set of the set Resolution RMS value accuraccy PEAK value accuraccy PEAK value accuraccy PEAK value accuraccy PEAK value accuraccy PEAK value accuraccy PEAK value accurace Active (W)	ge, resistance load balance mode all p 50 V, sine wave, an is is limited to sati rature is 40 degree 4. Limited by the m over short reverse load and the resis e output. e, same load and v setting to V, 3 <sup>27</sup> C, e, same load and v setting to V, 3 <sup>27</sup> C, short by this is limited to sa finited to sa site v and the resis ger, the maximum current or 350 V, a load pow maximum current of 1, withing the measurem the measurem y y y cy <sup>55</sup>	output frequency of 45 Hz to 65 Hz, no lo sfy the power capacity. If there is the DC su or higher, the maximum current may decrea aximum current, tance load for the maximum current, and t polyphase output. oltage condition for all phase. := 5°C := 0°C output voltage. = 00 + 20 V to +500 V, no load, AC voltage tief, the power capacity. If there is the AC si output voltage. = r factor of 1, stepwise change from an outp inial on the rear panel. ent function is indicated for 23 ° Single-pf 0.01 V / 0.1 V 45 Hz to 65 Hz and DC: ± (0.5 % 15 Hz to 2000 Hz: ± (0.7 % of rd DC: ± (0.5 % of rdg] + 0.5 V / 11 45 Hz to 65 Hz and DC: ± (0.5 % 0.01 A / 0.1 A 45 Hz to 65 Hz and DC: ± (0.5 % 0.01 A / 0.1 A 45 Hz to 65 Hz and DC: ± (0.5 % 0.01 A / 0.1 A 45 Hz to 65 Hz and DC: ± (0.5 % 0.01 A / 0.1 A 45 Hz to 65 Hz and DC: ± (0.5 % 0 C rdg] + 0.2 A / 0.0 DC: ± (0.5 % of rdg] + 0.2 A / 0.0 45 Hz to 65 Hz and DC: ± (0.5 %	mode each phases are individually set. ad, DC voltage setting 0V (AC+DC mode) and uperimmposition, the active current of AC+DC case. the operating temperature range. the operature range temperature range. The operating temperature range temperature range temperature range temperature range temperature range temperature range. T	The satisfies the maximum current. In the satisfies the maximum current. In the satisfies the maximum current. The satisfies the satis	the case of 40 Hz or lower the case of 40 Hz or lower hase output $^{66}$ rdg + 0.5 V / 1 V) of rdg + 1 V / 2 V) (/ 1 V) lg   + 1 V / 2 V) rdg + 0.05 A / 0.03 A) of rdg + 0.1 A / 0.05 A) (/ 0.05 A)			
<ul> <li>A Y connection is three,</li> <li>Y connection is three,</li> <li>In the case of AC-INT</li> <li>An be only set in 3P.</li> <li>Ar be only set in 3P.</li> <li>For an output voltage set</li> <li>For an output voltage is an output voltage is an output voltage is an output voltage in a set only with respect to the AI S. For an output voltage in 1.1, 1, 2 and 12 phase</li> <li>Ar and a set of the AI and the output voltage in the case of the AI.</li> <li>For an output voltage is an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output voltage in the case of the AI.</li> <li>For an output volt</li></ul>	rode, the rate output volta 4W mode. of 10 Vto 175 V / 20 Vto 35 be set in balance mode. is higher than rated value, that apacitor-input rectifying load ion or regeneration which is the rated output voltage, no can be set independ at independ at inde- pend and output voltage. of 50V on higher, sine wave c mode and output voltage set of 50V on higher, sine wave c for output voltage. the rated output voltage set of 50V on higher, sine wave c mode and output voltage. set of 50V on higher, sine wave c for output voltage. the rated output voltage. set of 50V on higher, sine wave set of 50V on higher. State output voltage. the rated output voltage. set of 50V on 10V + 10V tt Resolution RMS value accuracy PEAK value	ge, resistance load balance mode all p 50 V, sine wave, an it is limited to sati rature is 40 degree 4. Limited by the m second the resis- load and the resis- ter the resistance and the resistan	output frequency of 45 Hz to 65 Hz, no lo sfy the power capacity. If there is the DC su or higher, the maximum current may decrea aximum current, tance load for the maximum current, and t polyphase output. oltage condition for all phase. := 5°C := 0 + 20 V + 20 V to +500 V, no load, AC voltage tisfy the power capacity. If there is the AC s output voltage. er factor of 1, stepwise change from an outp inal on the rear panel. ent function is indicated for 23 ° Single-pF 0.01 V / 0.1 V 45 Hz to 65 Hz and DC; ± (0.5 % 15 Hz to 2000 Hz: ± (0.7 % of rcd DC: ± (0.5 % of rdg   + 0.5 V / 1 45 Hz to 65 Hz and DC: ± (12 % 0.01 A / 0.1 A 45 Hz to 65 Hz and DC: ± (0.5 % 15 Hz to 2000 Hz: ± (0.7 % of rd DC: ± (0.5 % of rdg   + 0.2 A / 0 45 Hz to 65 Hz and DC: ± (2 % 0.1 W / 1 W	mode each phases are individually set. ad, DC voltage setting 0V (AC+DC mode) and uperimmposition, the active current of AC+DC case. the operating temperature range. the operature range temperature range. The operating temperature range temperature range temperature range temperature range temperature range temperature range. T	Satisfies the maximum current. In the satisfies the maximum current.         reverse), using the output terminal of phase voltage setting.         transformed by the setting.         the setting. <td>the case of 40 Hz or lower the case of 40 Hz or lower hase output <math>^{6}</math> rdg + 0.5 V / 1 V) of rdg + 1 V / 2 V) (/ 1 V) rdg + 0.05 A / 0.03 A) of rdg + 0.1 A / 0.05 A) (/ 0.05 A)</td>	the case of 40 Hz or lower the case of 40 Hz or lower hase output $^{6}$ rdg + 0.5 V / 1 V) of rdg + 1 V / 2 V) (/ 1 V) rdg + 0.05 A / 0.03 A) of rdg + 0.1 A / 0.05 A) (/ 0.05 A)			
*1 Y connection is three- *2. In the case of AC-INT *3. Can be only set in 3P- *4. For phase voltage set *5. For an output voltage of the voltage only can *7. If the output voltage *8. With respect to the ca *8. With respect to the ca *9. External power inject *10. For 45 Hz to 65 Hz, *11. L1, L2 and L3 phase *12. Can be set only with *13. For an output voltage *14. In the case of the AC *15. For an output voltage *16. If the output voltage *17. Instantaneous eithir *18. For an output voltage *19. 50 % or higher of the *20. For an output voltage *21. For 5 Hz to 1 MHz c Measured Value Dis Voltage *1*2 Current *4	mode, the rate output volta 4W mode. iting in polyphase output. In is of 10 Vio 175 V / 20 Vio 32 be set in balance mode. is higher than rated value, that and that the ambient temper apactor-input rectifying load ion or regeneration which is the rated output voltage. On independ mode in polyphas ge of 250 V or higher, sine wave the rated output voltage. On independ mode in polyphas ge of 250 V or higher, sine wave the rated output voltage. If ge of 250 V or higher, sine wave ge of 250 V or higher, sine wave ge of 250 V or 10 V, +10 V te is higher than rated value, the ge of 250 V or 10 V, +10 V te ge of 150 V 157 V / 150 V to components in DC mode usi <b>Splay (All accuracy of t</b> <b>Resolution</b> <b>RMS value accuracy</b> <b>PEAK value </b>	ge, resistance load balance mode all p 50 V, sine wave, an is is limited to satis- rature is 40 degree L. Limited by the m user short reverse load and the resis- pend mode in the se output. e, same load and v setting to 0 V, 32°C e, same load and v setting to 0 V, 32°C short this is limited to as 350 V, a load pow maximum current to the measurem the measurem y y y cy <sup>e5</sup> esolution ccuracy <sup>e9</sup>	output frequency of 45 Hz to 65 Hz, no lo sfy the power capacity. If there is the DC su or higher, the maximum current may decrea aximum current, power flow capacity is not available. tance load for the maximum current, and t polyphase output. oltage condition for all phase. $\pm$ 5°C $20, V_{20}$ V to +500 V, no load, AC voltage its fy the power capacity. If there is the AC s current may decrease. d output voltage. er factor of 1, stepwise change from an outp inal on the rear panel. <b>ent function is indicated for 23</b> ° <b>Single-pf</b> 0.01 V / 0.1 V 45 Hz to 65 Hz and DC: $\pm$ (0.5 % 15 Hz to 2000 Hz: $\pm$ (0.7 % of rcd DC: $\pm$ (10.5 % of rdg] + 0.5 V / 1 45 Hz to 65 Hz and DC: $\pm$ (2% 0.011 A / 0.1 A 45 Hz to 65 Hz and DC: $\pm$ (0.7 % of rd DC: $\pm$ (0.5 % of rdg] + 0.2 A / 0. 45 Hz to 65 Hz and DC: $\pm$ (0.7 % of rd DC: $\pm$ (0.5 % of rdg] + 0.2 A / 0. 45 Hz to 65 Hz and DC: $\pm$ (0.7 % of rd DC: $\pm$ (0.5 % of rdg] + 0.2 A / 0. 45 Hz to 65 Hz and DC: $\pm$ (0.7 % of rd DC: $\pm$ (0.5 % of rdg] + 0.2 A / 0. 45 Hz to 65 Hz and DC: $\pm$ (0.7 % of rd DC: $\pm$ (0.5 % of rdg] + 0.2 A / 0. 45 Hz to 65 Hz and DC: $\pm$ (0.7 % of rd DC: $\pm$ (0.5 % of rdg] + 0.2 A / 0. 45 Hz to 65 Hz and DC: $\pm$ (0.7 % of rd DC: $\pm$ (0.7 % of rdg] + 0.2 A / 0. 45 Hz to 65 Hz and DC: $\pm$ (0.7 % of rd DC: $\pm$ (0.7 % of rdg] + 0.2 A / 0. 45 Hz to 65 Hz and DC: $\pm$ (0.7 % of rd DC: $\pm$ (0.7 % of rdg] + 0.2 A / 0. 45 Hz to 65 Hz and DC: $\pm$ (0.7 % of rd DC: $\pm$ (0.7 % of rdg] + 0.2 A / 0. 45 Hz to 65 Hz and DC: $\pm$ (0.7 % of rd DC: $\pm$ (0.7 % of rd g] + 0.2 A / 0. 45 Hz to 65 Hz and DC: $\pm$ (0.7 % of rd DC: $\pm$ (0.7 % of rd g] + 0.2 A / 0. 45 Hz to 65 Hz and DC: $\pm$ (0.7 % of rd DC: $\pm$ (0.7 % of rd g] + 0.2 A / 0. 45 Hz to 65 Hz and DC: $\pm$ (0.7 % of rd DC: $\pm$ (0.7 % of rd g] + 0.2 A / 0. 45 Hz to 65 Hz and DC: $\pm$ (0.7 % of rd DC: $\pm$ (0.7 % of rd g] + 0.2 A / 0. 45 Hz to 65 Hz and DC: $\pm$ (0.7 % of rd DC: $\pm$ (0.7 % of rd g] + 0.2 N / 0. (DC: DC: DC: DC: DC: DC: DC: DC: DC: DC:	mode each phases are individually set. ad, DC voltage setting 0V (AC+DC mode) and uperimmposition, the active current of AC+DC case. the operating temperature range. the operature range temperature range. The operating temperature range temperature range temperature range temperature range temperature range temperature range. T	Satisfies the maximum current. In the satisfies the maximum current.         reverse), using the output terminal of phase voltage setting.         transformed by the setting.         the setting. <td>the case of 40 Hz or lower the case of 40 Hz or lower hase output <math>^{6}</math> rdg + 0.5 V / 1 V) of rdg + 1 V / 2 V) (/ 1 V) rdg + 0.05 A / 0.03 A) of rdg + 0.1 A / 0.05 A) (/ 0.05 A)</td>	the case of 40 Hz or lower the case of 40 Hz or lower hase output $^{6}$ rdg + 0.5 V / 1 V) of rdg + 1 V / 2 V) (/ 1 V) rdg + 0.05 A / 0.03 A) of rdg + 0.1 A / 0.05 A) (/ 0.05 A)			
*2. In the case of AC-INT *3. Can be only set in 3P- *4. For phase voltage set *5. For an output voltage of Line voltage only can *1. If the output voltage in event of the set only can *8. With respect to the cc *9. External power injecti *10. For 45 Hz to 65 Hz, *11. L1, L2 and L3 phase *12. Can be set only with *13. For an output voltage *14. In the case of the AC *15. For an output voltage And the ambient ten *17. Instantaneous eithir *18. For an output voltage And the ambient ten *17. Instantaneous eithir *18. For an output voltage And the ambient ten *17. Instantaneous eithir *20. For an output voltage *21. For 5 Hz to 1 MHz c	r mode, the rate output volta 4W mode. soft DV to 175 V / 20 V to 35 be set in balance mode. is higher than rated value, that and that the ambient temper apactor-input rectifying load ion or regeneration which is the rated output voltage. or go f 30V on higher, sine wave C mode and output voltage. Sing go f 320 V nigher, sine wave C mode and output voltage. Sing go f 320 V nigher, sine wave C mode and output voltage. Sing go f 320 V nigher, sine wave go f 30V on higher, sine wave c mode and output voltage. Sing go f 32 V night Sing soft Sing Resolution RMS value accuracy PEAK value accuracy PEAK value accuracy PEAK value accuracy PEAK value accuracy PEAK value accuracy Active (W) Ard Apparent (VA) Ra Ard Apparent (VA)	ge, resistance load balance mode all p sol V, sine wave, an is is limited to sati rature is 40 degree load and the resis spend mode in the se output. e, same lo dand the resis spend mode in the se output. e, same lo dand the resis spend mode in the se output. e, same load and the resis spend mode in the se output. e, same load and the resis spend mode in the se output. e output. Spend the resis spend mode in the se output. Spend the resis spend mode in the se output. Spend the resis spend	output frequency of 45 Hz to 65 Hz, no lo sfy the power capacity. If there is the DC su or higher, the maximum current may decrea aximum current, power flow capacity is not available. tance load for the maximum current, and t polyphase output. oltage condition for all phase. $\pm 5^{\circ}C$ $-20$ V, $\pm 20$ V to $\pm 500$ V, no load, AC voltage tis for the ower capacity. If there is the AC s output voltage. er factor of 1, stepwise change from an outp inal on the rear panel. <b>ent function is indicated for 23</b> °. <b>Single-pf</b> 0.01 V / 0.1 V $45$ Hz to 65 Hz and DC: $\pm (0.5 \%)$ $15$ Hz to 2000 Hz: $\pm (0.7 \%)$ of rcd DC: $\pm (0.5 \%)$ of rdg $  + 0.5 V / 1$ $45$ Hz to 65 Hz and DC: $\pm (2 \%)$ $15$ Hz to 65 Hz and DC: $\pm (0.5 \%)$ $15$ Hz to 65 Hz and DC: $\pm (0.5 \%)$ $15$ Hz to 65 Hz and DC: $\pm (0.7 \%)$ of rd DC: $\pm (0.5 \%)$ of rdg $  + 0.5 V / 1$ $45$ Hz to 65 Hz and DC: $\pm (0.7 \%)$ of rd DC: $\pm (0.5 \%)$ of rdg $  + 0.5 V / 1$ $45$ Hz to 65 Hz and DC: $\pm (0.7 \%)$ of rd DC: $\pm (0.5 \%)$ of rdg $  + 0.2 A / 0.$ $45$ Hz to 65 Hz and DC: $\pm (0.2 \%)$ $15$ Hz to 2000 Hz: $\pm (0.7 \%)$ of rd DC: $\pm (0.5 \%)$ of rdg $  + 0.2 A / 0.$ $45$ Hz to 65 Hz and DC: $\pm (12 \%)$ 0.1 W / 1 W $\pm (1 \%)$ of rdg $+ 3 W)$ 0.1 VA / 1 VA	mode each phases are individually set. ad, DC voltage setting 0V (AC+DC mode) and uperimmposition, the active current of AC+DC case. the operating temperature range. the operature range temperature range. The operating temperature range temperature range temperature range temperature range temperature range temperature range. T	satisfies the maximum current. In the statisfies the maximum current. In the statisfies the maximum current. reverse), using the output terminal of r phase voltage setting. Its reverse). $10\% - 90\%$ of output voltage setting. ts reverse). $10\% - 90\%$ of output voltage setting. 45 Hz to 65 Hz: $\pm (0.5\% \text{ of } rdg  + 0.5\% \text{ of } 15$ Hz to 65 Hz: $\pm (0.7\% \text{ of } rdg  + 0.5\% \text{ of } 15$ Hz to 65 Hz: $\pm (0.5\% \text{ of } rdg  + 0.5\% \text{ of } 15$ Hz to 65 Hz: $\pm (0.7\% \text{ of } rdg  + 0.1\% \text{ of } 15$ Hz to 65 Hz: $\pm (0.7\% \text{ of } rdg  + 0.1\% \text{ of } rdg  + 0.1\% \text{ of } rdg  + 0.1\% \text{ of } rdg  + 1 W)$	the case of 40 Hz or lower the case of 40 Hz or lower thase output $^{6}$ hase output $^{6}$ rdg + 0.5 V / 1 V) of rdg + 1 V / 2 V) (/ 1 V) rdg + 0.05 A / 0.03 A) of rdg + 0.1 A / 0.05 A) (/ 0.05 A)			

SPECIFICATIONS								
Model			ASR-6450		ASR-6600			
		Range	0.000 to 1.000 0.001					
Power factor		Resolution						
		Range	Up to 100th order of the fundamental wave					
Harmonic voltage Effect	ive	Full Scale	200 V / 400 V, 100%	·				
value (rms) Percent (%)		Resolution	0.01 V /0.1 V, 0.1%					
(AC-INT and 50/60 Hz o	nly)^''	Accuracy <sup>*12</sup>	Up to 20th: ±(0.2 % of rdg + 0.5 V / 1 V) ; 20	th to 100th: + (0.3 % of rdg.	+ 0.5 V / 1 V)			
		Range	Up to 100th order of the fundamental wave					
Harmonic current Figertive value (rms)			63 A / 31.5 A, 100% 21 A / 10.5 A, 100%					
Effective value (rms) Full Scale Percent (%) Resolution		0.01 A / 0.1 A, 0.1%						
	. 911		Up to 20th: ±(1 % of rdg + 1.5 A / 0.75 A)		Up to 20th: ±(1 % of rdg + 0.5 A / 0.25 A)			
(AC-INT and 50/60 Hz only) <sup>°11</sup> Accuracy <sup>°13</sup>		Accuracy <sup>*13</sup>	20th to 100th: $\pm(1.5\% \text{ of rdg} + 1.5\%  of $	A)	20th to 100th: $\pm$ (1.5 % of rdg + 0.5 A / 0.25 A)			
*2. Accuracy values are in t *3. The accuracy is for outp *4. Accuracy values are in t *5. The accuracy is for outp *6. In the polyphase outpul *7. For an output voltage o DC or an output freque	he case that the outp out waveform DC or s he case that the outp out waveform DC or s t, these are the specif f 50 V or greater, an o	ut voltage is within vol ine wave only. ut current is 5% to 100 ine wave only. cations for each phase utput current in the ra	tage setting range. *9 *1] % of the maximum current. *1 *1	. For the load with the power fac 0. For the load with the power fa 1. The measurement does not co 2. For an output voltage of 10 V	ctor 0.5 or lower. Inform to the IEC or other standard. Phase Voltage and Phase Current.			
Others								
Protections			UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak	and RMS Current Limit				
Parallel function			Up to 4 units					
Display			TFT-LCD, 7 inch					
Memory function			Store and recall settings, Basic settings: 10	)				
	Number of men	nories	253 (nonvolatile)					
Arbitrary Wave	Waveform lengt	h	4096 words					
	Amplitude resol	ution	16 bits					
General Specifications	5							
		USB	Type A: Host, Type B: Slave, Speed: 1.1/2.0	), USB-CDC / USB-TMC				
		LAN	MAC Address, DNS IP Address, User Pass	,	Instrument IP Address, Subnet Mask			
	Standard	External	External Signal Input ; External Control I/O	, ,	·			
Interface		RS-232C	Complies with the EIA-RS-232 specification					
	Optional 1	GPIB	SCPI-1993, IEEE 488.2 compliant interface					
	Optional 2	CAN Bus	Complies with CAN 2.0A or 2.0B based protocol					
	Optional 3	DeviceNet	Complies with CAN 2.0A or 2.0B based pro	otocol				
Insulation resistance	- · ·	d chassis, output	DC 500 V, 30 MΩ or more					
Withstand voltage	Between input an and chassis, inpu	d chassis, output t and output	AC 1500 V or DC 2130 V , 1 minute					
EMC			EN 61326-1 (Class A) EN 61326-2-1/-2-2 (Class A) EN 61000-3-2/-3-12 (Class A, Group 1) EN 61000-3-3/-3-11 (Class A, Group 1) EN 61000-4-2/-4-3/-4-5/-4-6/-4-8/-4-11, (Class A, Group 1) EN 55011 (Class A, Group1)	/-4-34				
Safety			EN 61010-1					
Vibration, Shock and Tra	nsportation Integ	ity	ISTA 2A Test Procedure					
Environment	Operating envir	onment	Indoor use, Overvoltage Category II					
	Operating temp	erature range	0 °C to 40 °C					
	Storage tempera	ature range	-10 °C to 70 °C					
	Operating hum	, ,	20 %rh to 80 % RH (no condensation)					
	Storage humidit	y range	90 % RH or less (no condensation)					
	Altitude		Up to 2000 m					
Dimensions (mm)			430(W)×176(H)×590(D) (not including pro	otrusions)				
Weight			Approx. 40 kg					
A value with the accuracy i A value without the accura	s the guaranteed valu cy is the nominal valu	e of the specification. le or representative va	However, an accuracy noted as reference value shows t ue (shown as typ.). Product specifications are subject t	the supplemental data for reference o change without notice.	ce when the product is used, and is not under the guarantee.			





# GRA-451-E Rack Mount Kit (EIA)



SPECIFICATIONS							
Model		ASR-6450-09 ASR-6600-12					
Input Ratings							
Power type			ta connection, Three-phase Four-wire Y con	nection			
Voltage range <sup>®1</sup>			/oltage), 380 Vac to 460 Vac (Line Voltage)				
Frequency range Power factor <sup>*2</sup>		47 Hz to 63 Hz 0.95 or higher (typ.)					
Efficiency <sup>2</sup>		80 % or higher					
Maximum power consumptio	n	12 kVA or lower		16 kVA or lower			
AC output							
Multi-phase output		Single-phase output	Polyphase output	Single-phase output	Polyphase output		
Output capacity		9 kVA	1P3W: 6 kVA 3P4W: 9 kVA	12 kVA	1P3W: 8 kVA 3P4W: 12 kVA		
Mode		1P2W         1P3W         1P2W         1P3W           3P4W (Y-connection)         1P2W         3P4W (Y-connection)					
Setting mode <sup>3</sup>		Unbalance, Balanced          Unbalance, Balanced           0.00 V to 175.0 V / 0.0 V to 350.0 V (sine and square wave), Setting Resolution: 0.01 V / 0.1 V         Unbalance, Balanced					
Phase voltage Setting Range <sup>*4</sup>		0.00 Vpp to 500.0 Vpp / 0.00 Vpp to 1000 Vpp (triangle and arbitrary wave), Setting Resolution: 0.01 Vpp / 0.1 Vpp / 1 Vpp					
Accuracy <sup>*5</sup>		±(0.3 % of set + 0.5 V / 1 V)	1P3W: 0.00 V to 350.0 V / 0.00 V to 700.0 V 3P4W: 0.00 V to 303.1 V / 0.00 V to 606.2 V (sine wave only) Setting Resolution: 0.01 V / 0.1 V		1P3W: 0.00 V to 350.0 V / 0.00 V to 700.0 V 3P4W: 0.00 V to 303.1 V / 0.00 V to 606.2 V (sine wave only) Setting Resolution: 0.01 V / 0.1 V		
Maximum current <sup>*7</sup>		90 A / 45 A	30 A / 15 A	120 A / 60 A	40 A / 20 A		
Maximum peak current <sup>*8</sup>		Four times of the maximum					
Load power factor <sup>*9</sup> Frequency	Setting range Accuracy	0 to 1 (leading phase or lagg AC Mode: 15.00 Hz to 1000. ± 0.01% of set	ging phase, 45 Hz to 65Hz) .0 Hz, AC+DC Mode: 1.00 Hz to 1000.0 Hz,	Setting resolution: 0.01 Hz / 0.1 I	Hz		
	Stability <sup>*10</sup>	± 0.005%		500 LL + 3000 LL >			
Output on phase setting rang Output off phase setting rang			/ Fix selectable), 0.1° (1 Hz to 500 Hz), 1° ( / Fix selectable), 0.1° (1 Hz to 500 Hz), 1° (		1		
Setting range of the phase any			3P4W: L2 phase: 0° to 359.9° L3 phase: 0° to 359.9° Setting Resolution: 0.1° 45 Hz to 65 Hz: ±1.0°		3P4W: L2 phase: 0° to 359.9° L3 phase: 0° to 359.9° Setting Resolution: 0.1° 45 Hz to 65 Hz: ±1.0°		
Phase angle accuracy <sup>*13</sup>			15 Hz to 1000 Hz: ±2.0°		15 Hz to 1000 Hz: ±2.0°		
DC offset <sup>*14</sup>		± 20 mV (typ.)					
DC output (only single pha	ase output)		9 kW		12 kW		
Output capacity Mode		Floating output, the N term			12 RW		
	Setting Range		0 V to +500.0 V, Setting Resolution: 0.01 V /	0.1 V			
Voltage	Accuracy <sup>*15</sup>	±( 0.3 % of set  + 0.3 V / 0.6					
Maximum current <sup>*16</sup>		90 A / 45 A	-	120 A / 60 A			
Maximum peak current <sup>°17</sup>	in Distantion Output where state	Four times of the maximum	current				
Line regulation	nic Distortion, Output voltage risin	±0.1% or less (Phase voltag	e)				
Load regulation <sup>*18</sup>			ge, 0 to 100%, via output terminal)				
Distortion of Output <sup>*19</sup>			.5 % @100.1 Hz to 500 Hz, <1 % @500.1 H	Hz to 1000 Hz			
Output voltage response time Ripple noise <sup>*21</sup>	<sup>20</sup>	Middle: 100 µs (typ.); Slow: 0.5 Vrms / 1 Vrms (TYP)	300 µs (typ.)				
*1 Y connection is three-phase, *2. In the case of AC-INT mode *3. Can be only set in 3P4W me *4. For phase voltage setting in *5. For an output voltage of 10 *6. Line voltage only can be set *7. If the output voltage is high or 400 Hz or higher, and this *8. With respect to the capacitu *9. External power injection or *10. For 45 Hz to 65 Hz, the rat *11. L1, L2 and L3 phase can bb *12. Can be set only with indeg *13. For an output voltage of 52 *14. In the case of the AC modu *15. For an output voltage of *2 *16. If the output voltage of 52 *16. If the output voltage of 52 *17. Instantaneous eithin 3 ms, *18. For an output voltage of 12 *20. For an output voltage of 12 *21. For 5 Hz to 1 MHz compo Measured Value Display (A R	polyphase output. In balance mode all p V to 175 V / 20 V to 350 V, sine wave, an in balance mode. er than rated value, this is limited to sati at the ambient temperature is 40 degree set output voltage, no load and the regeneration which is over short reverse ted output voltage, no load and the reset est independ at independ mode in the end mode in polyphase output. DV or higher, sine wave, same load and v and output voltage setting to 0 V, 23°C 500 V to 10 V, +10 V to +250 V / -500 V th her than rated value, this is limited to sa ure is 40 degree or higher, the maximum , limited by the maximum current at rate 5 V to 175 V / 150 V to 350 V, a load power doutput voltage, the maximum current in DC mode using the output tern <b>All accuracy of the measurement</b> <b>esolution</b>	ie, four-wire. at maximum output current, 45 Hz to whase are collectively set and in unbala output frequency of 45 Hz to 65 Hz, n sfy the power capacity. If there is the D or higher, the maximum current may d aximum current. power flow capacity is not available. tance load for the maximum current, a polyphase output. oltage condition for all phase. $\pm 5^{\circ}$ C 20 V, +20 V to +500 V, no load, AC vo tisfy the power capacity. If there is the , current may decrease. d output voltage. er factor of 1, stepwise change from an inal on the rear panel. <b>function is indicated for 23 °C</b>	nce mode each phases are individually set. In load, DC voltage setting OV (AC+DC mode) and IC superimmposition, the active current of AC+D lecrease. Ind the operating temperature range. Ind temperature ran	C satisfies the maximum current. In th C satisfies the maximum current. S reverse), using the output terminal c for phase voltage setting. its reverse). 10% – 90% of output vo	in the rear panel. Itage.		
Voltage <sup>*1*2</sup>	MS value accuracy	45 Hz to 65 Hz and DC: ± (0 15 Hz to 1000 Hz: ± (0.7 %		45 Hz to 65 Hz: ± (0.5 % of 15 Hz to 1000 Hz: ± (0.7 %			
	VG value accuracy	DC: ± ( 0.5 % of rdg  + 0.5 V		DC: ± ( 0.5 % of rdg  + 0.5 \			
	EAK value accuracy <sup>3</sup>	45 Hz to 65 Hz and DC: ±(		45 Hz to 65 Hz: ±( 2 % of r			
R	esolution	0.01 A / 0.1 A 45 Hz to 65 Hz and DC: ±(0		45 Hz to 65 Hz: ±(0.5 % of			
Current <sup>**</sup>		15 Hz to 1000 Hz: ±(0.7 % o		15 Hz to 1000 Hz: ±(0.7 %			
	VG value accuracy	DC: ± ( 0.5 % of rdg  + 0.4 A	( / U.Z A)	DC: ± ( 0.5 % of rdg  + 0.2 A / 0.1 A)			
	EAK value accuracy <sup>5</sup>	45 Hz to 65 Hz and DC: ±()	2 % of rdgl + 2 A / 1 A)	45 Hz to 65 Hz: ±( 2 % of re			

			ASR-6450-09	ASR-6600-12			
	Active (W)	Resolution	0.1 W / 1 W / 10 W	(0.0) ( ) 0.000			
		Accuracy <sup>39</sup>	$\pm$ (2 % of rdg + 6 W)	±(2 % of rdg + 2 W)			
Power <sup>*7*8</sup>	Apparent (VA)	Resolution	0.1 VA / 1 VA / 10VA +(2 % of rdg + 9 VA) +(2 % of rdg + 3 VA)				
		Accuracy	±(2 % of rdg + 9 VA) ±(2 % of rdg + 3 VA)				
	Reactive (VAR)	Resolution	0.1 VAR / 1 VAR / 10VAR				
		Accuracy <sup>*10</sup>	±(2 % of rdg + 9 VAR)	±(2 % of rdg + 3 VAR)			
Power factor		Range	0.000 to 1.000				
ower factor		Resolution	0.001				
		Range	Up to 100th order of the fundamental wave				
Harmonic voltage		Full Scale	200 V / 400 V, 100%				
ffective value (rms)		Resolution	0.01 V /0.1 V, 0.1%				
Percent (%)			Up to 20th: ±(0.2 % of rdg + 0.5 V / 1 V)				
(AC-INT and 50/60 Hz only) <sup>*11</sup>		Accuracy <sup>*12</sup>	21th to 100th: $\pm (0.3 \% \text{ of rdg} + 0.5 \vee / 1 \vee)$				
		Demos	Up to 100th order of the fundamental wave				
Harmonic current		Range		42.4.7.21.4.1000/			
Effective value (rms)		Full Scale	126 A / 63 A, 100%	42 A / 21 A, 100%			
Percent (%)		Resolution	0.01 A / 0.1 A, 0.1%				
AC-INT and 50/60 Hz o	vnlv) <sup>*11</sup>	Accuracy <sup>*13</sup>	Up to 20th: ±(1 % of rdg + 3 A / 1.5 A)	Up to 20th: ±(1 % of rdg + 1 A / 0.5 A)			
	,,)	Accuracy	21th to 100th: ±(1.5 % of rdg + 3 A / 1.5 A)	21th to 100th: ±(1.5 % of rdg + 1 A / 0.5 A)			
*8. The apparent and rea *9. For the load with the *10. For the load with the *11. The measurement d	active powers are not dis power factor 0.5 or high e power factor 0.5 or low does not conform to the	, played in the DC mode er. IEC or other standard.	ge of 10 % to 100 % of the maximum current, DC or an output frequency of 45 Phase Voltage and Phase Current.				
	ge of 10 V to 175 V / 20 V		urant				
*13. An output current in			irrent.				
*13. An output current in			irrent.				
*13. An output current in Others			urrent. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir	nît			
*13. An output current in Others Protections				nit			
*13. An output current in Others Protections Display			UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir TFT-LCD, 7 inch	nit			
*13. An output current in Others Protections Display		9% of the maximum cu	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir TFT-LCD, 7 inch Store and recall settings, Basic settings: 10	nit			
*13. An output current in Others Protections Display Memory function	n the range of 5 % to 100	9% of the maximum cu	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile)	nit			
*13. An output current in Others Protections Display Memory function	Number of memory waveform length	9% of the maximum cu	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words	nit			
*13. An output current in Others Protections Display Memory function	Number of memory Waveform length Amplitude resolution	9% of the maximum cu	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile)	nit			
*13. An output current in Others Protections Display Memory function Arbitrary wave	Number of memory Waveform length Amplitude resolution	% of the maximum cu	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits	nit			
*13. An output current in Others Protections Display Memory function	Number of memory Waveform length Amplitude resolution	vries	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC				
*13. An output current in Others Protections Display Memory function	Number of memory Waveform length Amplitude resolution	vries	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Gateway IP Addr				
*13. An output current in Others Protections Display Memory function Arbitrary wave General Specifications	Number of mem Waveform length Amplitude resolu S	% of the maximum cu ories tion USB LAN External	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Gateway IP Addr External Signal Input; External Control I/O; V/I Monitor Output				
*13. An output current in Others Protections Display Memory function Arbitrary wave General Specifications	Number of memory waveform length Amplitude resolutions Standard	% of the maximum cu ories USB LAN External RS-232C	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Gateway IP Addr External Signal Input; External Control I/O; V/I Monitor Output Complies with the EIA-RS-232 specifications				
*13. An output current in Others Protections Display Memory function Arbitrary wave General Specifications	Number of memor Waveform length Amplitude resolut S Standard Optional 1	% of the maximum cu ories tion USB LAN External RS-232C GPIB	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Cateway IP Addl External Signal Input; External Control I/O; V/I Monitor Output Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface				
*13. An output current in Others Protections Display Memory function Arbitrary wave General Specifications	Number of memor Waveform length Amplitude resolut S Standard Optional 1 Optional 2	% of the maximum cu bries tion USB LAN External RS-232CC CPIB CAN Bus	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lin TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Gateway IP Address, USE Paddress, USER Password, Gateway IP Address, Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface Complies with CAN 2.0A or 2.0B based protocol				
*13. An output current in Dthers Protections Display Memory function Arbitrary wave General Specifications	Number of memory Waveform length Amplitude resolu S Standard Optional 1 Optional 2 Optional 3	% of the maximum cu ories tion USB LAN External RS-232C GPIB CAN Bus Device Net	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Cateway IP Addl External Signal Input; External Control I/O; V/I Monitor Output Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface				
*13. An output current in Dthers Protections Display Memory function Arbitrary wave General Specifications nterface	Number of mem Waveform length Amplitude resolu s Standard Optional 1 Optional 2 Optional 3 Between input an	% of the maximum cu ories Lion USB LAN External RS-232C GPIB CAN Bus Device Net d chassis, output	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Cateway IP Add External Signal Input; External Control I/O; V/I Monitor Output Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface Complies with CAN 2.0A or 2.0B based protocol Complies with CAN 2.0A or 2.0B based protocol				
	Number of memor Waveform length Amplitude resolur S Standard Optional 1 Optional 2 Optional 3 Between input an and chassis, inpu Between input an	% of the maximum cu ories tion USB LAN External RS-232C CAN Bus Device Net d chassis, output t and output d chassis, output	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lin TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Gateway IP Address, USE Paddress, USER Password, Gateway IP Address, Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface Complies with CAN 2.0A or 2.0B based protocol				
*13. An output current in Others Protections Display Memory function Arbitrary wave General Specifications Interface	Number of memo Waveform length Amplitude resolu S Standard Optional 1 Optional 2 Optional 3 Between input an and chassis, inpu	% of the maximum cu ories tion USB LAN External RS-232C CAN Bus Device Net d chassis, output t and output d chassis, output	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Gateway IP Address, External Signal Input; External Control I/O; V/I Monitor Output Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface Complies with CAN 2.0A or 2.0B based protocol Complies with CAN 2.0A or 2.0B based protocol DC 500 V, 30 MΩ or more AC 1500 V or DC 2130 V, 1 minute EN 61326-1 (Class A) EN 61326-1 (Class A, Group 1) EN 61000-3-3 (Class A, Group 1)				
*13. An output current in Dthers Protections Display Memory function Arbitrary wave General Specifications Interface Insulation resistance Withstand voltage	Number of memor Waveform length Amplitude resolur S Standard Optional 1 Optional 2 Optional 3 Between input an and chassis, inpu Between input an	% of the maximum cu ories tion USB LAN External RS-232C CAN Bus Device Net d chassis, output t and output d chassis, output	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir TFT-LCD, 7 inch Store and recall settings, Basic settings; 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Cateway IP Addl External Signal Input; External Control I/O; V/I Monitor Output Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface Complies with CAN 2.0A or 2.0B based protocol Complies with CAN 2.0A or 2.0B based protocol DC 500 V, 30 MΩ or more AC 1500 V or DC 2130 V, 1 minute EN 61326-1 (Class A) EN 61326-2-1/-2-2 (Class A) EN 61000-3-2 (Class A, Group 1)				
*13. An output current in Dthers Protections Display Memory function Arbitrary wave General Specifications Interface Insulation resistance Withstand voltage EMC	Number of memor Waveform length Amplitude resolur S Standard Optional 1 Optional 2 Optional 3 Between input an and chassis, inpu Between input an	% of the maximum cu ories tion USB LAN External RS-232C CAN Bus Device Net d chassis, output t and output d chassis, output	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Gateway IP Address, External Signal Input; External Control I/O: V/I Monitor Output Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface Complies with CAN 2.0A or 2.0B based protocol Complies with CAN 2.0A or 2.0B based protocol DC 500 V, 30 MΩ or more AC 1500 V or DC 2130 V, 1 minute EN 61326-1 (Class A) EN 61000-3-2 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1)				
*13. An output current in Dthers Protections Display Aemory function urbitrary wave General Specifications Interface Interface Withstand voltage EMC Eafety	Number of memor Waveform length Amplitude resolur S Standard Optional 1 Optional 2 Optional 3 Between input an and chassis, inpu Between input an	% of the maximum cu ories tion USB LAN External RS-232C CPIB CAN Bus Device Net d chassis, output t and output d chassis, output t and output	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Cateway IP Address, DSB P Address, User Password, Cateway IP Address, User Password, Sateway IP Address, User Password, Schreise, S				
*13. An output current in Dthers Protections Display Aemory function urbitrary wave General Specifications Interface Interface Withstand voltage EMC Eafety	Number of memory Waveform length Amplitude resolut S Standard Optional 1 Optional 2 Optional 3 Between input an and chassis, inpu Between input an	% of the maximum cu ories tion USB LAN External RS-232C GPIB CAN Bus Device Net d chassis, output t and output t and output	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir         TFT-LCD, 7 inch         Store and recall settings, Basic settings: 10         253 (nonvolatile)         4096 words         16 bits         Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC         MAC Address, DNS IP Address, User Password, Cateway IP Add         External Signal Input; External Control I/O; V/I Monitor Output         Complies with the EIA-RS-232 specifications         SCPI-1993, IEEE 488.2 compliant interface         Complies with CAN 2.0A or 2.0B based protocol         Complies with CAN 2.0A or 2.0B based protocol         DC 500 V, 30 MΩ or more         AC 1500 V or DC 2130 V, 1 minute         EN 61326-21/-22 (Class A)         EN 61326-21/-24 (Class A, Group 1)         EN 61000-3-2 (Class A, Group 1)         EN 61000-3-2 (Class A, Group 1)         EN 61000-4-2/-4-3/-4-4/-4-5/-4-6/-4-8/-4-11 (Class A, Group 1)         EN 61000-1				
*13. An output current in Dthers Protections Display Memory function Arbitrary wave General Specifications Interface Insulation resistance Withstand voltage EMC Safety	Number of meme Waveform length Amplitude resolur s Standard Optional 1 Optional 2 Optional 3 Between input an and chassis, inpu Between input an and chassis, inpu	% of the maximum cu         ories         tion         USB         LAN         External         RS-232C         CPIB         CAN Bus         Device Net         d chassis, output         t and output         d chassis, output         t and output         mment         rature range	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Gateway IP Address, External Signal Input; External Control I/O; V/I Monitor Output Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface Complies with CAN 2.0A or 2.0B based protocol Complies with CAN 2.0A or 2.0B based protocol DC 500 V, 30 MΩ or more AC 1500 V or DC 2130 V, 1 minute EN 61326-1 (Class A) EN 61326-2.1/-2.2 (Class A) EN 61300-3.3 (Class A, Group 1) EN 61000-3.4 (Class A, Group 1) EN 61000-3.4 (Class A, Group 1) EN 61000-4.2/-4.3/-4.4/-4.5/-4.6/-4.8/-4.11 (Class A, Group 1) EN 61000-1 Indoor use, Overvoltage Category II 0 °C to 40 °C				
*13. An output current in Dthers Protections Display Memory function Arbitrary wave General Specifications Interface Insulation resistance Withstand voltage EMC Safety	Number of mem Waveform length Amplitude resolur s Standard Optional 1 Optional 2 Optional 3 Between input an and chassis, inpu Between input an and chassis, inpu	% of the maximum cu         ories         ition         USB         LAN         External         RS-232C         GPIB         CAN Bus         Device Net         d chassis, output         t and output         d chassis, output         t and output         mment         rature range         ure range	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir         TFT-LCD, 7 inch         Store and recall settings, Basic settings: 10         253 (nonvolatile)         4096 words         16 bits         Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC         MAC Address, DNS IP Address, User Password, Cateway IP Address, User Password, Complex with CAN 2.0A or 2.0B based protocol         Complies with CAN 2.0A or 2.0B based protocol         DC 500 V, 30 MΩ or more         AC 1500 V or DC 2130 V, 1 minute         EN 61326-1 (Class A)         EN 61326-2 (Class A, Group 1)         EN 61000-3-2 (Class A, Group 1)         EN 61000-3-3 (Class A, Group 1)         EN 61000-3-1         Indoor use, Overvoltage Category II         0° C to 40 °C         -10 °C to 70 °C				
*13. An output current in Dthers Protections Display Aemory function urbitrary wave General Specifications Interface Interface Withstand voltage EMC Eafety	Number of s % to 100 Number of memor Waveform length Amplitude resolur S Standard Optional 1 Optional 2 Optional 3 Between input an and chassis, inpu Between input an and chassis, inpu Operating enviroo Operating enviroo Operating temperat Operat	% of the maximum cu         ories         tion         USB         LAN         External         RS-232C         CAN Bus         Device Net         d chassis, output         t and output         d chassis, output         t and output         mment         rure range         ure range         ity range	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir         TFT-LCD, 7 inch         Store and recall settings, Basic settings: 10         253 (nonvolatile)         4096 words         16 bits         Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC         MAC Address, DNS IP Address, User Password, Cateway IP Addi         External Signal Input; External Control I/O; V/I Monitor Output         Complies with the EIA-RS-232 specifications         SCPI-1993, IEEE 488.2 compliant interface         Complies with CAN 2.0A or 2.0B based protocol         Complies with CAN 2.0A or 2.0B based protocol         DC 500 V, 30 MΩ or more         AC 1500 V or DC 2130 V, 1 minute         EN 61326-21/-2: (Class A)         EN 61326-21/-2: (Class A, Group 1)         EN 61000-3-2 (Class A, Group 1)         EN 61000-4:2/-4:3/-4:4/-4:5/-4:6/-4:8/-4:11 (Class A, Group 1)         EN 61000-4:2/-4:3/-4:4/-4:5/-4:6/-4:8/-4:11 (Class A, Group 1)         EN 61010-1         Indoor use, Overvoltage Category II         0 °C to 40 °C         -10 °C to 70 °C         20 %rh to 80 % RH (no condensation)				
*13. An output current in Dthers Protections Display Memory function Arbitrary wave General Specifications Interface Insulation resistance Withstand voltage	Number of memory Waveform length Amplitude resolur S Standard Optional 1 Optional 2 Optional 3 Between input an and chassis, inpu Between input an and chassis, inpu	% of the maximum cu         ories         tion         USB         LAN         External         RS-232C         CAN Bus         Device Net         d chassis, output         t and output         d chassis, output         t and output         mment         rure range         ure range         ity range	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Gateway IP Add External Signal Input; External Control I/O; V/I Monitor Output Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface Complies with CAN 2.0A or 2.0B based protocol Comples with CAN 2.0A or 2.0B based protocol DC 500 V, 30 MΩ or more AC 1500 V or DC 2130 V, 1 minute EN 61326-1 (Class A) EN 61000-3-2 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1) EN 5011 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1) EN 61000-4-2 (-4-3/-4-4/-4-5/-4-8/-4-11 (Class A, Group 1) EN 6100-1 Indoor use, Overvoltage Category II 0 °C to 40 °C -10 °C to 70 °C 20 %rht o 80 % RH (no condensation) 90 % RH or less (no condensation)				
*13. An output current in Dthers Protections Display Memory function Arbitrary wave General Specifications Interface Insulation resistance Withstand voltage EMC Safety Environment	Number of s % to 100 Number of memor Waveform length Amplitude resolur S Standard Optional 1 Optional 2 Optional 3 Between input an and chassis, inpu Between input an and chassis, inpu Operating enviroo Operating enviroo Operating temperat Operat	% of the maximum cu         ories         tion         USB         LAN         External         RS-232C         CAN Bus         Device Net         d chassis, output         t and output         d chassis, output         t and output         mment         rure range         ure range         ity range	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Gateway IP Add External Signal Input; External Control I/O; V/I Monitor Output Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface Complies with CAN 2.0A or 2.0B based protocol Complies with CAN 2.0A or 2.0B based protocol DC 500 V, 30 MΩ or more AC 1500 V or DC 2130 V, 1 minute EN 61326-21/-2-2 (Class A) EN 61300-3-3 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1) EN 61000-1 Indoor use, Overvoltage Category II 0 °C to 40 °C -10 °C to 70 °C 20 %rh to 80 % RH (no condensation) 90 % RH kor less (no condensation) Up to 2000 m				
*13. An output current in Dthers Protections Display Memory function Arbitrary wave General Specifications Interface Insulation resistance Withstand voltage EMC Safety	Number of memory Waveform length Amplitude resolur S Standard Optional 1 Optional 2 Optional 3 Between input an and chassis, inpu Between input an and chassis, inpu	% of the maximum cu         ories         tion         USB         LAN         External         RS-232C         CAN Bus         Device Net         d chassis, output         t and output         d chassis, output         t and output         mment         rure range         ure range         ity range	UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lir TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Gateway IP Add External Signal Input; External Control I/O; V/I Monitor Output Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface Complies with CAN 2.0A or 2.0B based protocol Comples with CAN 2.0A or 2.0B based protocol DC 500 V, 30 MΩ or more AC 1500 V or DC 2130 V, 1 minute EN 61326-1 (Class A) EN 61000-3-2 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1) EN 5011 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1) EN 61000-4-2 (-4-3/-4-4/-4-5/-4-8/-4-11 (Class A, Group 1) EN 6100-1 Indoor use, Overvoltage Category II 0 °C to 40 °C -10 °C to 70 °C 20 %rht o 80 % RH (no condensation) 90 % RH or less (no condensation)				

Product specifications are subject to change without notice.

Model							
		ASR-6450-13.5 ASR-6600-18 Three-phase Three-wire Delta connection, Three-phase Four-wire Y connection					
nput Ratings		200 Vac to 240 Vac (Phase Voltage), 380 Vac to 460 Vac (Line Voltage)					
ower type				nection			
oltage range <sup>"1</sup> requency range		47 Hz to 63 Hz					
ower factor <sup>*2</sup>		0.95 or higher (typ.)					
fficiency <sup>*2</sup>		80 % or higher					
Aaximum power consumption		18 kVA or lower		24 kVA or lower			
C Output Iulti-phase output		Single phase output	Polyphase output	Single phase output	Polyphase output		
		Single-phase output         Polyphase output           13.5 kVA         1P3W: 9 kVA           3P4W: 13.5 kVA         3P4W: 13.5 kVA		1P3W/-12 kVA			
Dutput capacity		13.5 kVA	3P4W: 13.5 kVA	18 kVA	3P4W: 18 kVA		
Mode Setting mode*3		1P2W	1P3W 3P4W (Y-connection)	1P2W	1P3W 3P4W (Y-connection)		
Setting Pange <sup>*4</sup>		Unbalance, Balanced Unbalance, Balanced 0.00 V to 175.0 V / 0.0 V to 350.0 V (sine and square wave), Setting Resolution: 0.01 V / 0.1 V					
Phase voltage Setting Range <sup>*4</sup>		0.00 V to 175.0 V / 0.0 V to 350.0 V (sine and square wave), Setting Resolution: 0.01 V / 0.1 V 0.00 Vpp to 500.0 Vpp / 0.00 Vpp to 1000 Vpp (triangle and arbitrary wave), Setting Resolution: 0.01 Vpp / 0.1 Vpp / 1 Vpp					
	Accuracy*5	±(0.3 % of set + 0.5 V / 1 V)					
ine voltage setting range <sup>*6</sup>			1P3W: 0.00 V to 350.0 V / 0.00 V to 700.0 V 3P4W: 0.00 V to 303.1 V / 0.00 V to 606.2 V (sine wave only) Setting Resolution: 0.01 V / 0.1 V		1P3W: 0.00 V to 350.0 V / 0.00 V to 700.0 V 3P4W: 0.00 V to 303.1 V / 0.00 V to 606.2 V (sine wave only) Setting Resolution: 0.01 V / 0.1 V		
Maximum current <sup>*7</sup>		135 A / 67.5 A	45 A / 22.5 A	180 A / 90 A	60 A / 30 A		
Maximum peak current <sup>*8</sup>		Four times of the maximum RMS					
oad power factor <sup>*9</sup>	Setting range	0 to 1 (leading phase or lagging p AC Mode: 15 00 Hz to 1000 0 Hz	hase, 45 Hz to 65Hz) AC+DC Mode: 1.00 Hz to 1000.0 Hz,	Setting resolution: 0.01 Hz / 0.1 H	7		
requency	Accuracy	± 0.01% of set					
	Stability <sup>*10</sup>	± 0.005%					
Dutput on phase setting range <sup>*11</sup>		( )	selectable), 0.1° (1 Hz to 500 Hz), 1° (	,			
Dutput off phase setting range <sup>°11</sup>		U.UT to 359.9T variable (Free / Fix :	selectable), 0.1° (1 Hz to 500 Hz), 1° (	SUU HZ to TUUU HZ)	20.01		
Setting range of the phase angle <sup>°12</sup>			3P4W: L2 phase: 0° to 359.9° L3 phase: 0° to 359.9° Setting Resolution: 0.1°		3P4W: L2 phase: 0° to 359.9° L3 phase: 0° to 359.9° Setting Resolution: 0.1°		
Phase angle accuracy <sup>*13</sup>		•	45 Hz to 65 Hz: ±1.0° 15 Hz to 1000 Hz: ±2.0°		45 Hz to 65 Hz: ±1.0° 15 Hz to 1000 Hz: ±2.0°		
DC Offset <sup>*14</sup>		± 20 mV (typ.)					
DC output (only single phase outp	out)						
Output Capacity		13.5			18 kW		
Mode	Setting Range	Floating output, the N terminal c	+500.0 V, Setting Resolution: 0.01 V /	01V			
/oltage	Accuracy <sup>*15</sup>	±([0.3 % of set] + 0.3 V / 0.6 V)	roote v, setting resolution. o.or v j	0.1 V			
Maximum current <sup>°16</sup>		135 A / 67.5 A		180 A / 90 A			
Maximum peak current <sup>*17</sup>		Four times of the maximum curre	nt				
	Distortion, Output volta	0 0 11					
1 //		±0.1% or less (Phase voltage)					
ine regulation	-	±0.5 V / ±1.0 V (phase voltage, 0 to 100%, via output terminal) <0.3 % @1Hz to 100Hz, <0.5 % @100.1 Hz to 500 Hz, <1 % @500.1 Hz to 1000 Hz					
ine regulation *18				Iz to 1000 Hz			
Line regulation <sup>*18</sup> Load regulation <sup>*18</sup> Distortion of Output <sup>*19</sup>			@100.1 Hz to 500 Hz, <1 % @500.1 H	Iz to 1000 Hz			
Output Stability, Total Harmonic I Line regulation Load regulation <sup>°18</sup> Distortion of Output <sup>°19</sup> Output voltage response time <sup>°20</sup> Ripple noise <sup>°21</sup> °1 Y connection is three-phase, five-wire,	, Delta connection is three-oha	<0.3 % @1Hz to 100Hz, <0.5 % ( Middle: 100 µs (typ.); Slow: 300 µ 0.5 Vrms / 1 Vrms (TYP)	@100.1 Hz to 500 Hz, <1 % @500.1 H	iz to 1000 Hz			
Line regulation Load regulation <sup>*18</sup> Distortion of Output <sup>*19</sup> Output voltage response time <sup>*29</sup> Ripple noise <sup>*21</sup> *1 Y connection is three-phase, five-wire, *2. In the case of AC-INT mode, the rate *3. Can be only set in 3P4W mode. *4. For phase voltage setting in polyphas *5. For an output voltage of 10 V to 175 V *6. Line voltage only can be set in balanc *7. If the output voltage is higher than ra or 400 Hz or higher, and that the aml *8. With respect to the capacitor-input re *9. External power injection or regenerat *10. For 45 Hz to 65 Hz, the rated outpu *11. L1, L2 and L3 phase can be set inde *13. For an output voltage of 50V or high *14. In the case of the AC mode and outpu *15. For an output voltage is higher than r And the ambient temperature is 40 *17. Instantaneous eithin 3 ms, limited b *18. For an output voltage of 75 V to 175 *19. 50% or higher of the rated output * *19. Soft on the the rated output voltage of 75 V to 175 *19. 50% or higher of the rated output * *19. Soft on the rated output voltage of 75 V to 175 *19. 50% or higher of the rated output voltage of 50 V to 175 *19. 50% or higher of the rated output voltage of the rated output voltage of 50 V to 175 *19. 50% or higher of the rated output voltage of 75 V to 175	output voltage, resistance loa is output. In balance mode all V / 20 V to 350 V, sine wave, ar is mode. It was a straight of the straight of the straight bient temperature is 40 degree citifying load. Limited by the m ion which is over short reverse t voltage, no load and the resi- pend at independ mode in the ien polyhase output. The straight of the straight of the straight put voltage setting to 0 V, 23° 10 V, +10 V to +250 V / -500 V / rated value, this is limited to si degree or higher, the maximum ty the maximum current at raik V / 150 V to 350 V, a load pow roltage, the maximum current.	<0.3 % @1Hz to 100Hz, <0.5 % ( Middle: 100 µs (typ.); Slow: 300 µ 0.5 Vrms / 1 Vrms (TYP) use, four-wire. d at maximum output current, 45 Hz to 65 H: phase are collectively set and in unbalance m n output frequency of 45 Hz to 65 Hz, no load tisfy the power capacity. If there is the DC sup or higher, the maximum current may decrease nature to a for the maximum current, and the polyphase output. voltage condition for all phase. C = 5°C to :20 V, +20 V to +500 V, no load, AC voltage atisfy the power capacity. If there is the AC sup n current may decrease. ed output voltage. ver factor of 1, stepwise change from an outpu ro lever, AC and AC+DC modes, THD+N. For th respect to stepwise change from an outpu	①100.1 Hz to 500 Hz, <1 % ②500.1 Hz s (typ.) c and sine wave output only. ode each phases are individually set. , DC voltage setting 0V (AC+DC mode) and erimmposition, the active current of AC+Dire. c operating temperature range. set to 0V (AC+DC mode) and 23°C ± 5°C perimmposition, the active current of AC+ED to UV (AC+DC mode) and 23°C ± 5°C perimmposition, the active current of AC+ED at current of 0 A to maximum current (or it the polyphase output, it is a specification in the active current of a set of the polyphase output, it is a specification	d 23°C ± 5°C. For phase voltage setting C satisfies the maximum current. In the OC satisfies the maximum current. S reverse), using the output terminal or for phase voltage setting.	case of 40 Hz or lower		
Line regulation Load regulation <sup>618</sup> Distortion of Output <sup>619</sup> Dutput voltage response time <sup>620</sup> Ripple noise <sup>621</sup> *1 Y connection is three-phase, five-wire, *2. In the case of AC-INT mode, the rate *3. Can be only set in 3P4W mode. *4. For phase voltage setting in polyphas *5. For an output voltage of 10 V to 175 M *6. Line voltage only can be set in balanc *7. If the output voltage in bigher than ra- or 400 Hz or higher, and that the amt *8. With respect to the capacitor-input re *9. External power injection or regenerat *10. For 45 Hz to 65 Hz, the rated outpu *11. L1, L2 and L3 phase can be set inde *13. For an output voltage of 50V or high *14. In the case of the AC mode and output *15. For an output voltage of -250 V to 1 *16. If the output voltage of 75 V to 175 *19. 50% or higher of the rated output *19. So Ye on higher of the rated output *19. So Ye on higher of the rated output *19. So Ye on higher of the rated output *20. For an output voltage of 100 V 107 *20. For an output voltage of 100 V / 200 *21. For 5 Hz to 1 MHz components in [	output voltage, resistance loa se output. In balance mode all V / 20 V to 350 V, sine wave, ar re mode. Letted value, this is limited to sat bient temperature is 40 degree excitifying load. Limited by the mi ion which is over short reverse the voltage, no load and the resi- pend at independ mode in the ein polyphase output. Letter, sine wave, same load and put voltage setting to V, 237 tated value, this is limited to si- degree or higher, the maximur y the maximum current at rat V / 150 V to 350 V, a load power foldage, the maximum current. V, a load power factor of 1, wi DC mode using the output ter	<0.3 % @1Hz to 100Hz, <0.5 % ( Middle: 100 µs (typ.); Slow: 300 µ 0.5 Vrms / 1 Vrms (TYP) see, four-wire. d at maximum output current, 45 Hz to 65 H: phase are collectively set and in unbalance m n output frequency of 45 Hz to 65 Hz, no load tisfy the power capacity. If there is the DC sup or higher, the maximum current may decreas taxene load for the maximum current, and the power flow capacity is not available. stance load for the maximum current, and the polyphase output. voltage condition for all phase. C ± 5°C to ±20 V; 20 V to +500 V, no load, AC voltage atisfy the power capacity. If there is the AC sup n current may decrease. ed output voltage. wer factor of 1, stepwise change from an outpu ro lower, AC and AC+DC modes, THD+N. For th respect to stepwise change from an outpu minal on the rear panel. t function is indicated for 23 °C±5 °C	①10.1 Hz to 500 Hz, <1 % @500.1 F s (typ.) z and sine wave output only. ode each phases are individually set. , DC voltage setting 0V (AC+DC mode) and erimmposition, the active current of AC+D ie. coperating temperature range. set to 0V (AC+DC mode) and 23°C ± 5°C perimmposition, the active current of AC+D int current of 0 A to maximum current (or it the polyphase output, it is a specification I current of 0 A to the maximum current (o	d 23°C ± 5°C. For phase voltage setting C satisfies the maximum current. In the PC satisfies the maximum current. S reverse), using the output terminal or for phase voltage setting. rits reverse), 10% ~ 90% of output volt	t case of 40 Hz or lower the rear panel. age.		
ine regulation coad regulation <sup>*18</sup> Distortion of Output <sup>*19</sup> Dutput voltage response time <sup>*20</sup> Ripple noise <sup>*21</sup> *1 Y connection is three-phase, five-wire, *2. In the case of AC-INT mode, the rate *3. Can be only set in 3P4W mode. *4. For phase voltage setting in polyphas *5. For an output voltage of 10 V to 175 *6. Line voltage only can be set in balanc *7. If the output voltage is higher than ra or 400 Hz or higher, and that the amil *8. With respect to the capacitor-input re *9. External power injection or regenerati *10. For 45 Hz to 65 Hz, the rated outpu *11. L1, L2 and L3 phase can be set inde *13. For an output voltage of 520 V to 1 *15. For an output voltage of 520 V to 1 *16. If the output voltage of 520 V to 1 *17. Instananeous eithin 3m, limited be *18. For an output voltage of 75 V to 175 *19. 50% or higher of the rated output v *20. For an output voltage of 100 V / 200 *21. For 5 Hz to 1 MHz components in IC <b>Measured Value Display (All accum</b>	output voltage, resistance load is output. In balance mode all V / 20 V to 350 V, sine wave, are re mode. The wave of the sine limited to satisfie the value, this is limited to satisfie the value, this is limited by the mode on which is over short reverse to voltage, no load and the resispend at independ mode in the in polyphase output. The voltage setting to $0.4, 23^{\circ 4}$ ( $0.4, 100 V + 250 V - 550 V + 250 V - 550 V + 100 $	<0.3 % @1Hz to 100Hz, <0.5 % ( Middle: 100 µs (typ.); Slow: 300 µ 0.5 Vrms / 1 Vrms (TYP) use, four-wire. d at maximum output current, 45 Hz to 65 H: phase are collectively set and in unbalance m n output frequency of 45 Hz to 65 Hz, no load tisfy the power capacity. If there is the DC sup or higher, the maximum current may decrease naximum current. power flow capacity is not available. stance load for the maximum current, and the polyphase output. voltage condition for all phase. C = 5°C to 20 V, +20 V to +500 V, no load, AC voltage atisfy the power capacity. If there is the AC sup n current may decrease. ed output voltage. ver factor of 1, stepwise change from an outpu minal on the rear panel. th respect to stepwise change from an outpu minal on the rear panel.	①10.1 Hz to 500 Hz, <1 % @500.1 F s (typ.) z and sine wave output only. ode each phases are individually set. , DC voltage setting 0V (AC+DC mode) and erimmposition, the active current of AC+D ie. coperating temperature range. set to 0V (AC+DC mode) and 23°C ± 5°C perimmposition, the active current of AC+D int current of 0 A to maximum current (or it the polyphase output, it is a specification I current of 0 A to the maximum current (o	d 23°C ± 5°C. For phase voltage setting C satisfies the maximum current. In the PC satisfies the maximum current. S reverse), using the output terminal or for phase voltage setting. rits reverse), 10% ~ 90% of output volt	case of 40 Hz or lower		
ine regulation oad regulation <sup>918</sup> Distortion of Output <sup>919</sup> Dutput voltage response time <sup>929</sup> lipple noise <sup>211</sup> *1 Y connection is three-phase, five-wire, *2. In the case of AC-INT mode, the rate *3. Can be only set in 3P4W mode. *4. For phase voltage setting in polyphas *5. For an output voltage of 10 V to 175 M *6. Line voltage only can be set in balanc *7. If the output voltage of 10 V to 175 M *6. Line voltage only can be set in balanc *7. If the output voltage is higher than ra or 400 Hz or higher, and that the aml *8. With respect to the capacitor-input re *9. External power injection or regenerati *10. For 45 Hz to 65 Hz, the rated outpu *11. L1, L2 and L3 phase can be set inde *13. For an output voltage of 50V or high *14. In the case of the AC mode and outpu *15. For an output voltage of 520 V to -1 *16. If the output voltage is higher than r And the ambient temperature is 40. *17. Instantaneous eithin 3 ms, limited *18. For an output voltage of 100 V / 200 *21. For 5 Hz to 1 MHz components in 10 Measured Value Display (All accur	output voltage, resistance loa se output. In balance mode all V / 20 V to 350 V, sine wave, ar re mode. Letted value, this is limited to sat bient temperature is 40 degree excitifying load. Limited by the mi ion which is over short reverse twoltage, no load and the resi- pend at independ mode in the ein polyphase output. Letter, sine wave, same load and y put voltage setting to V, 237 tated value, this is limited to si degree on higher, the maximur py the maximum current at rat V / 150 V to 350 V, a load pow oftage, the maximum current. V, a load power factor of 1, wi DC mode using the output terr raccy of the measuremen	<0.3 % @1Hz to 100Hz, <0.5 % ( Middle: 100 µs (typ.); Slow: 300 µ 0.5 Vrms / 1 Vrms (TYP) ase, four-wire. d at maximum output current, 45 Hz to 65 Hz hase are collectively set and in unbalance m n output frequency of 45 Hz to 65 Hz, no load is or higher, the maximum current may decreas aximum current. prover flow capacity. If there is the DC sup- is or higher, the maximum current may decreas taimimum current. prover flow capacity is not available. stance load for the maximum current, and the polyphase output. voltage condition for all phase. C ± 5°C to 20 420 V to +500 V, no load, AC voltage an current may decrease. ed output voltage. or factor 01, stepwise change from an outpu or lower, AC and AC+DC modes, THD+N. For thr respect to stepwise change from an outpu minal on the rear panel. <b>t function is indicated for 23 °C±5 °C</b> Single-phase 0.01 V / 0.1 V 45 Hz to 65 Hz and DC: ± (0.5 %	@ 100.1 Hz to 500 Hz, <1 % @ 500.1 F s (typ.) c and sine wave output only. ode each phases are individually set. I, DC voltage setting 0V (AC+DC mode) and erimmposition, the active current of AC+DD e. c operating temperature range. set to 0V (AC+DC mode) and 23°C ± 5°C perimmposition, the active current of AC+DD is operating temperature range. set to 0V (AC+DC mode) and 23°C ± 5°C perimmposition, the active current of AC+DD is operating temperature range. set to 0V (AC+DC mode) and 23°C ± 5°C serimmposition, the active current of AC+DD the polyphase output, it is a specification of t current of 0 A to maximum current (or it current of 0 A to the maximum current (or c.) see output of rdg + 0.5 V / 1 V)	d 23°C ± 5°C. For phase voltage setting C satisfies the maximum current. In the OC satisfies the maximum current. S reverse), using the output terminal or for phase voltage setting. rits reverse), 10% – 90% of output volt <b>Polyph</b> 45 Hz to 65 Hz: ± (0.5 % of 1	t case of 40 Hz or lower t the rear panel. age. <b>ase output</b> <sup>96</sup> $\frac{1}{2}$		
ine regulation oad regulation <sup>618</sup> Distortion of Output <sup>619</sup> Dutput voltage response time <sup>629</sup> Ripple noise <sup>521</sup> *1 Y connection is three-phase, five-wire, *2. In the case of AC-INT mode, the rate *3. Can be only set in 3P4W mode. *4. For phase voltage setting in polyphas *5. For an output voltage of 10 V to 175 N *6. Line voltage only can be set in balanc *7. If the output voltage is higher than ra or 400 Hz or higher, and that the amt *8. With respect to the capacitor-input re *9. External power injection or regenerat *10. For 45 Hz to 65 Hz, the rated outpu *11. L1, L2 and L3 phase can be set inde *13. For an output voltage of 50V or high *14. In the case of the AC mode and outpl *15. For an output voltage of 75 V to 175 *19. 50 % or higher of the rated output *19. 50 % or higher of the rated output *20. For an output voltage of 75 V to 175 *19. 50 % or higher of the rated output *20. For an output voltage of 100 V / 200 *21. For 5 Hz to 1 MHz components in 17 Measured Value Display (All accur Resolution RMS value	output voltage, resistance loai se output. In balance mode all V / 20 V to 350 V, sine wave, ar ie mode. Letted value, this is limited to sati bient temperature is 40 degree excitifying load. Limited by the mi ion which is over short reverse to voltage, no load and the resis pend at independ mode in the e in polyphase output. Let, sine wave, same load and y put voltage setting to 0 V, 23" 10 V, +10 V to +250 V / -500 V ti rated value, this is limited to si degree on higher, the maximum cy the maximum current at rate V / 150 V to 350 V, a load pow oftage, the maximum current. V a load power factor of 1, wi DC mode using the output terr racy of the measurement n e accuracy	<0.3 % @1Hz to 100Hz, <0.5 % ( Middle: 100 µs (typ.); Slow: 300 µ 0.5 Vrms / 1 Vrms (TYP) see, four-wire. d at maximum output current, 45 Hz to 65 H: phase are collectively set and in unbalance m n output frequency of 45 Hz to 65 Hz, no load tisfy the power capacity. If there is the DC sup or higher, the maximum current may decreas taxine load for the maximum current, and the polyphase output. voltage condition for all phase. £ ± 5°C to ±20 V, ±20 Vto ±500 V, no load, AC voltage attisfy the power capacity. If there is the AC sup n current may decrease. ed output voltage. wer factor of 1, stepwise change from an outpu ro lower, AC and AC+DC modes, THD+N. For the respect to stepwise change from an outpu minal on the rear panel. t function is indicated for 23 °C±5 °C Single-phas 0.01 V / 0.1 V 45 Hz to 65 Hz and DC: ± (0.7 % of rdg 15 Hz to 1000 Hz: ± (0.7 % of rdg	@100.1 Hz to 500 Hz, <1 % @500.1 F s (typ.) z and sine wave output only. ode each phases are individually set. , DC voltage setting 0V (AC+DC mode) and erimmposition, the active current of AC+D re. coperating temperature range. set to 0V (AC+DC mode) and 23°C ± 5°C perimmposition, the active current of AC+D the polyphase output, it is a specification it the polyphase output, it is a specification (or it)	d 23°C ± 5°C. For phase voltage setting C satisfies the maximum current. In the OC satisfies the maximum current. S reverse), using the output terminal or for phase voltage setting. rits reverse). 10% – 90% of output volt Polyph 45 Hz to 65 Hz: ± (0.5 % of 15 Hz to 1000 Hz: ± (0.7 % of	the rear panel. age. ase output <sup>66</sup> $dg + 0.5 \vee / 1 \vee )$ of rdg + 1 $\vee / 2 \vee )$		
ine regulation oad regulation <sup>°18</sup> Distortion of Output <sup>°19</sup> Dutput voltage response time <sup>°20</sup> (tipple noise <sup>°21</sup> <sup>°21</sup> '' <sup>°21</sup> '' <sup>°22</sup> '' <sup>°22</sup> '' <sup>°22</sup> '' <sup>°23</sup> '' <sup>°23</sup> '' <sup>°24</sup> '' <sup>°25</sup> '' <sup>°25</sup> '' <sup>°25</sup> '' <sup>°25</sup> '' <sup>°27</sup> '' <sup>°2</sup>	output voltage, resistance loa se output. In balance mode all V / 20 V to 350 V, sine wave, ar re mode. tet value, this is limited to sati- bient temperature is 40 degree sectifying load. Limited by the mi- tion which is over short reverse the voltage, no load and the resi- pend at independ mode in the ein polyphase output. ter, sine wave, same load and you put voltage setting to V, 237 voltage setting to V, 237 voltage the maximum current to V, 100 V to 250 V / -500 V ti rated value, this is limited to si degree on higher, the maximum py the maximum current at rati- V / 150 V to 350 V, a load power for load power factor of 1, wi DC mode using the output terr racy of the measurement n e accuracy e accuracy	<0.3 % @1Hz to 100Hz, <0.5 % ( Middle: 100 µs (typ.); Slow: 300 µ 0.5 Vrms / 1 Vrms (TYP) use, four-wire. d at maximum output current, 45 Hz to 65 H: phase are collectively set and in unbalance m n output frequency of 45 Hz to 65 Hz, no load tisfy the power capacity. If there is the DC sup or higher, the maximum current may decrease taxince load for the maximum current, and the polyphase output. voltage condition for all phase. C = 5°C to 20 V, 420 V to +500 V, no load, AC voltage atisfy the power capacity. If there is the AC sup n current may decrease. do output voltage. ver factor of 1, stepwise change from an outpu minal on the rear panel. th respect to stepwise change from an outpu minal on the rear panel. t function is indicated for 23 °C±5 °C Single-phase 0.01 V / 0.1 V 45 Hz to 65 Hz and DC: ± (0.5 % 15 Hz to 1000 Hz: ± (0.7 % of rdg DC: ± ([0.5 % of rdg] + 0.5 V / 1 V	①10.1 Hz to 500 Hz, <1 % @500.1 F     s (typ.)     determine the set of the set	d 23°C ± 5°C. For phase voltage setting C satisfies the maximum current. In the DC satisfies the maximum current. In the setting Setting the output terminal or for phase voltage setting. r its reverse). 10% ~ 90% of output volt Polyph 45 Hz to 65 Hz: ± (0.7 % of 15 Hz to 1000 Hz: ± (0.7 % of DC: ± ([0.5 % of rdg] + 0.5 V	the rear panel. age. age output <sup>66</sup> $rdg + 0.5 \vee / 1 \vee )$ of $rdg + 1 \vee / 2 \vee )$ / 1 $\vee )$		
ine regulation oad regulation <sup>°18</sup> Distortion of Output <sup>°19</sup> Dutput voltage response time <sup>°20</sup> (tipple noise <sup>°21</sup> <sup>°21</sup> '' <sup>°21</sup> '' <sup>°22</sup> '' <sup>°22</sup> '' <sup>°22</sup> '' <sup>°23</sup> '' <sup>°23</sup> '' <sup>°24</sup> '' <sup>°25</sup> '' <sup>°25</sup> '' <sup>°25</sup> '' <sup>°27</sup> '' <sup>°2</sup>	output voltage, resistance loai e output. In balance mode all V / 20 V to 350 V, sine wave, are e mode. ted value, this is limited to sat bient temperature is 40 degree ectifying load. Limited by the m ion which is over short reverse t voltage, no load and the resis pend at independ mode in the ein polyphase output. ter, sine wave, same load and by put voltage setting to 0 V, 23 <sup>4</sup> 10 V, +10 V to +250 V / -500 V 1 rated value, this limited to sa degree or higher, the maximur by the maximum current at rat V / 150 V to 500 V, a load pover factor of 1, wi DC mode using the output terr racy of the measurement n e accuracy e accuracy accuracy <sup>2</sup>	<0.3 % @1Hz to 100Hz, <0.5 % ( Middle: 100 µs (typ.); Slow: 300 µ 0.5 Vrms / 1 Vrms (TYP) see, four-wire. d at maximum output current, 45 Hz to 65 H: phase are collectively set and in unbalance m n output frequency of 45 Hz to 65 Hz, no load tisfy the power capacity. If there is the DC sup or higher, the maximum current may decreas taxine load for the maximum current, and the polyphase output. voltage condition for all phase. £ ± 5°C to ±20 V, ±20 Vto ±500 V, no load, AC voltage attisfy the power capacity. If there is the AC sup n current may decrease. ed output voltage. wer factor of 1, stepwise change from an outpu ro lower, AC and AC+DC modes, THD+N. For the respect to stepwise change from an outpu minal on the rear panel. t function is indicated for 23 °C±5 °C Single-phas 0.01 V / 0.1 V 45 Hz to 65 Hz and DC: ± (0.7 % of rdg 15 Hz to 1000 Hz: ± (0.7 % of rdg	①10.1 Hz to 500 Hz, <1 % @500.1 F     s (typ.)     determine the set of the set	d 23°C ± 5°C. For phase voltage setting C satisfies the maximum current. In the OC satisfies the maximum current. S reverse), using the output terminal or for phase voltage setting. rits reverse). 10% – 90% of output volt Polyph 45 Hz to 65 Hz: ± (0.5 % of 15 Hz to 1000 Hz: ± (0.7 % of	the rear panel. age. age output <sup>66</sup> $rdg + 0.5 \vee / 1 \vee )$ of $rdg + 1 \vee / 2 \vee )$ / 1 $\vee )$		
ine regulation oad regulation <sup>918</sup> Distortion of Output <sup>919</sup> Dutput voltage response time <sup>929</sup> tipple noise <sup>921</sup> *1 Y connection is three-phase, five-wire, *2. In the case of AC-INT mode, the rate *3. Can be only set in 3P4W mode. *4. For phase voltage setting in polyphas *5. For an output voltage of 10 V to 175 N *6. Line voltage only can be set in balanc *7. If the output voltage of 10 V to 175 N *6. Line voltage only can be set in balanc *9. External power injection or regenerat *10. For 45 Hz to 65 Hz, the rated outpu *11. L1, L2 and L3 phase can be set inde *13. For an output voltage of 50V or high *14. In the case of the AC mode and outp *15. For an output voltage of 520 V to 17 *16. If the output voltage of 75 V to 175 *19. 50 % or higher of the rated output *19. 50 % or higher of the rated output *19. 50 % or higher of the rated output *20. For an output voltage of 75 V to 175 *19. 50 % or higher of the rated output *20. For an output voltage of 100 V / 200 *21. For 5 Hz to 1 MHz components in 17 Measured Value Display (All accur RMS value AVG value PEAK value Resolution RMS value	output voltage, resistance loa e output. In balance mode all V / 20 V to 350 V, sine wave, ar e mode. ted value, this is limited to sat bient temperature is 40 degree ectifying load. Limited by the m ion which is over short reverse t voltage, no load and the resi- pend at independ mode in the ein polyphase output. ter, sine wave, same load and the resi- pend at independ mode in the voltage setting to 0 V, 23 <sup>rd</sup> 10 V, +10 V to +250 V / -500 V i rated value, this limited to sa degree or higher, the maximur y the maximum current at rat V / 150 V to 550 V, a load power factor of 1, wit C mode using the output tern racy of the measurement n e accuracy e accuracy <sup>23</sup>	<0.3 % @1Hz to 100Hz, <0.5 % ( Middle: 100 µs (typ.); Slow: 300 µ 0.5 Vrms / 1 Vrms (TYP) see, four-wire. d at maximum output current, 45 Hz to 65 H: phase are collectively set and in unbalance m n output frequency of 45 Hz to 65 Hz, no load tisfy the power capacity. If there is the DC sup or higher, the maximum current may decreas taxine load for the maximum current, and the polyphase output. voltage condition for all phase. C ± 5°C to ±20 V; 20 V to +500 V, no load, AC voltage atisfy the power capacity. If there is the AC sup n current may decrease. d output voltage. ver factor of 1, stepwise change from an outpu r lower, AC and AC+DC modes, THD+N. For th respect to stepwise change from an outpu minal on the rear panel. t function is indicated for 23 °C±5 °C Single-phas 0.01 V / 0.1 V 45 Hz to 65 Hz and DC: ± (0.5 % of rdg DC: ± (10.5 % of rdg  + 0.5 V / 1 V 45 Hz to 65 Hz and DC: ±(2 % o 0.01 A / 0.1 A	@100.1 Hz to 500 Hz, <1 % @500.1 F s (typ.) and sine wave output only. ode each phases are individually set. b. DC voltage setting 0V (AC+DC mode) and erimmposition, the active current of AC+D ie. coperating temperature range. set to 0V (AC+DC mode) and 23°C ± 5°C perimmposition, the active current of AC+D it current of 0 A to maximum current (or it the polyphase output, it is a specification f current of 0 A to the maximum current (or it current of 0 A to 0 A to 0 A to 0 A	d 23°C ± 5°C. For phase voltage setting C satisfies the maximum current. In the DC satisfies the maximum current. In the OC satisfies the maximum current. s reverse), using the output terminal or for phase voltage setting. rits reverse). 10% – 90% of output volt Polyph 45 Hz to 65 Hz: ± (0.5 % of r DC: ± ( 0.5 % of rdg  + 0.5 V 45 Hz to 65 Hz: ± ( 2 % of rd 45 Hz to 65 Hz: ± (0.5 % of r	a case of 40 Hz or lower the rear panel. age. age output <sup>66</sup> $rdg + 0.5 \vee / 1 \vee )$ of $rdg + 1 \vee / 2 \vee )$ $/ 1 \vee )$ $g  + 1 \vee / 2 \vee )$ $dg + 0.15 \land / 0.08 \land )$		
ine regulation ine regulation <sup>118</sup> Distortion of Output <sup>119</sup> Dutput voltage response time <sup>120</sup> Ripple noise <sup>21</sup> *1 Y connection is three-phase, five-wire, *2. In the case of AC-INT mode, the rate *3. Can be only set in 3P4W mode. *4. For phase voltage setting in polyphas *5. For an output voltage of 10 V to 175 *6. Line voltage only can be set in balanc *7. If the output voltage is higher than ra or 400 Hz or higher, and that the amm *8. With respect to the capacitor-input re *9. External power injection or regenerati *10. For 45 Hz to 65 Hz, the rated outpu *11. L1, L2 and L3 phase can be set inde *13. For an output voltage of 520 V to 1 *16. If the output voltage of 520 V to 1 *16. If the output voltage of 520 V to 1 *17. Instraneous eithin 3m, limited be *18. For an output voltage of 75 V to 175 *19. 50% or higher of the rated output v *20. For an output voltage of 100 V / 200 *21. For 5 Hz to 1 MHz components in IC Measured Value Display (All accur AVC value PEAK value Resolution	output voltage, resistance loa se output. In balance mode all V / 20 V to 350 V, sine wave, ar re mode. tet value, this is limited to sati- bient temperature is 40 degree sectifying load. Limited by the mi- tion which is over short reverse the voltage, no load and the resi- pend at independ mode in the ein polyphase output. ter, sine wave, same load and your voltage setting to 0 V, 237 0 V, +10V to +250 V / -500 V ti rated value, this is limited to si degree on higher, the maximum current at rati- V / 150 V to 350 V, a load power factor of 1, wi DC mode using the output terr racy of the measurement n e accuracy te accuracy e accuracy e accuracy	<0.3 % @1Hz to 100Hz, <0.5 % ( Middle: 100 µs (typ.); Slow: 300 µ 0.5 Vrms / 1 Vrms (TYP) ase, four-wire. d at maximum output current, 45 Hz to 65 Hz phase are collectively set and in unbalance m n output frequency of 45 Hz to 65 Hz, no load isor higher, the maximum current may decreas tainimu current. prover the maximum current, and the polyphase output. voltage condition for all phase. C ± 5°C to 20 V to +500 V, no load, AC voltage atisfy the power capacity. If there is the AC sup n current the maximum current, and the polyphase output. voltage condition for all phase. C ± 5°C to 20 V to +500 V, no load, AC voltage atisfy the power capacity. If there is the AC sup n current may decrease. d output voltage. refactor of 1, stepwise change from an outpu norter factor of 1, stepwise change from an outpu norter the rap ranel. t function is indicated for 23 °C±5 °C Single-phase 0.01 V / 0.1 V 45 Hz to 65 Hz and DC: ± (0.5 % of rdg] DC: ± (10.5 % of rdg] + 0.5 V / 1 V 45 Hz to 65 Hz and DC: ± (12 % or 0.01 A / 0.1 A	@ 100.1 Hz to 500 Hz, <1 % @ 500.1 F s (typ.) and sine wave output only. ode each phases are individually set. , DC voltage setting 0V (AC+DC mode) and erimmposition, the active current of AC+D ie. operating temperature range. set to 0V (AC+DC mode) and 23°C ± 5°C perimmposition, the active current of AC+E at current of 0 A to maximum current (or it the polyphase output, it is a specification 1 t current of 0 A to maximum current (or it current of 0 A to the maximum current (or it current of 0 A to the maximum current (or frdg + 0.5 V / 1 V) frdg + 0.5 V / 1 V) frdg   1 V / 2 V) of rdg + 0.3 A / 0.15 A) + 0.6 A / 0.4 A)	d 23°C ± 5°C. For phase voltage setting C satisfies the maximum current. In the DC satisfies the maximum current. S reverse), using the output terminal or for phase voltage setting. rits reverse), 10% – 90% of output volt <b>Polyph</b> 45 Hz to 65 Hz: ± (0.7 % of DC: ± (10.5 % of rdg  + 0.5 V 45 Hz to 65 Hz: ± (12 % of rdg)	ase output <sup>66</sup> ase output <sup>66</sup> (dg + 0.5 V / 1 V) (f dg + 1 V / 2 V) (1 V) g[ + 1 V / 2 V) dg + 0.15 A / 0.08 A) (f rdg + 0.3 A / 0.15 A)		

SPECIFICATION				ASD 6600 19			
Model			ASR-6450-13.5	ASR-6600-18			
	Active (W)	Resolution	0.1 W / 1 W / 10 W				
		Accuracy <sup>*9</sup>	±(2 % of rdg + 6 W)	±(2 % of rdg + 2 W)			
Power <sup>*7*8</sup>	Apparent (VA)	Resolution	0.1 VA / 1 VA / 10VA				
		Accuracy	$\pm (2 \% \text{ of } rdg + 9 \text{ VA})$	±(2 % of rdg + 3 VA)			
	Reactive (VAR)	Resolution	0.1 VAR / 1 VAR / 10VAR				
		Accuracy <sup>*10</sup>	±(2 % of rdg + 9 VAR) ±(2 % of rdg + 3 VAR)				
ower factor		Range	0.000 to 1.000				
		Resolution	0.001				
Iarmonic voltage		Range	Up to 100th order of the fundamental wave				
ffective value (rms)		Full Scale	200 V / 400 V, 100%				
Percent (%) Resolution		Resolution	0.01 V /0.1 V, 0.1%				
		Accuracy <sup>*12</sup>	Up to 20th: ±(0.2 % of rdg + 0.5 V / 1 V)				
(Active and Sofoo H2 only) Accuracy			21th to 100th: ±(0.3 % of rdg + 0.5 V / 1 V)				
Harmonic current Range			Up to 100th order of the fundamental wave				
ffective value (rms)			189 A / 94.5 A, 100%	63 A / 31.5 A, 100%			
Percent (%)			0.01 A / 0.1 A, 0.1%				
		Accuracy <sup>*13</sup>	Up to 20th: ±(1 % of rdg + 3 A / 1.5 A)	Up to 20th: ±(1 % of rdg + 1 A / 0.5 A)			
		Accuracy	21th to 100th: ±(1.5 % of rdg + 3 A / 1.5 A)	21th to 100th: ±(1.5 % of rdg + 1 A / 0.5 A)			
	power factor 0.5 or lov pes not conform to the	ver. IEC or other standard. F	Phase Voltage and Phase Current.				
*13. An output current in		0 % of the maximum cu	rrent.an output current of 0 A to the maximum current (or its reverse). 10 $\%$ f	o 90 % of output voltage.			
	the range of 5 % to 10	0 % of the maximum cu		9 90 % of output voltage.			
*13. An output current in *21. For 5 Hz to 1 MHz co	the range of 5 % to 10	0 % of the maximum cu		o 90 % of output voltage.			
*13. An output current in *21. For 5 Hz to 1 MHz co <b>Others</b>	the range of 5 % to 10	0 % of the maximum cu	inal on the rear panel.				
*13. An output current in *21. For 5 Hz to 1 MHz co Others Protections	the range of 5 % to 10	0 % of the maximum cu	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L				
*13. An output current in *21. For 5 Hz to 1 MHz co Others Protections Display	the range of 5 % to 10	0 % of the maximum cu	uvP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch				
*13. An output current in *21. For 5 Hz to 1 MHz co Others Protections Display	the range of 5 % to 10 omponents in DC mod	0 % of the maximum cu le using the output term	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10				
*13. An output current in *21. For 5 Hz to 1 MHz co Others Protections Display Memory function	the range of 5 % to 10 omponents in DC mod	0 % of the maximum cu le using the output term	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile)				
*13. An output current in *21. For 5 Hz to 1 MHz co Others Protections Display Memory function	the range of 5 % to 10 omponents in DC mod	0 % of the maximum cu le using the output term hories h	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10				
*13. An output current in *21. For 5 Hz to 1 MHz co Others rotections Display Memory function rbitrary wave	the range of 5 % to 10 omponents in DC mod	0 % of the maximum cu le using the output term hories h	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words				
*13. An output current in *21. For 5 Hz to 1 MHz co Others rotections bisplay Memory function rbitrary wave	the range of 5 % to 10 omponents in DC mod	0 % of the maximum cu le using the output term nories h ution	Inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits				
*13. An output current in *21. For 5 Hz to 1 MHz co Others rotections Display Memory function rbitrary wave	the range of 5 % to 10 omponents in DC mod	0 % of the maximum cu le using the output term hories h h ution USB	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC	mit			
*13. An output current in *21. For 5 Hz to 1 MHz co Others rotections Display Memory function rbitrary wave	the range of 5 % to 10 omponents in DC mod	0 % of the maximum cui le using the output term nories h ution USB LAN	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Cateway IP Ad	mit dress, Instrument IP Address, Subnet Mask			
*13. An output current in *21. For 5 Hz to 1 MHz co Others Protections Display Memory function urbitrary wave General Specifications	In the range of 5 % to 10 omponents in DC models in DC mo	0 % of the maximum cui le using the output term hories h tution USB LAN External	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Cateway IP Ac External Signal Input; External Control I/O; V/I Monitor Outpu	mit dress, Instrument IP Address, Subnet Mask			
*13. An output current in *21. For 5 Hz to 1 MHz co Others Protections Display Memory function Arbitrary wave General Specifications	Number of mem Waveform lengt Amplitude resol	0 % of the maximum cui le using the output term nories h ution USB LAN External RS-232C	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Gateway IP Ac External Signal Input; External Control I/O; V/I Monitor Output Complies with the EIA-RS-232 specifications	mit dress, Instrument IP Address, Subnet Mask			
*13. An output current in *21. For 5 Hz to 1 MHz co Others Protections Display Memory function Arbitrary wave General Specifications	Number of mem Waveform lengt Amplitude resol S Standard Optional 1	0 % of the maximum cu le using the output term hories h Lition USB LAN External RS-232C GPIB	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Gateway IP Ac External Signal Input; External Control I/O; V/I Monitor Output Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface	mit dress, Instrument IP Address, Subnet Mask			
*13. An output current in *21. For 5 Hz to 1 MHz co Others Protections Display Memory function urbitrary wave General Specifications	Number of mem Waveform lengt Amplitude resol S Standard Optional 1 Optional 2	0 % of the maximum cui le using the output term nories h UUSB LAN External RS-232C GPIB CAN BUS	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Gateway IP Ac External Signal Input; External Control I/O; V/I Monitor Output Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 482, compliant interface Complies with CAN 2.0A or 2.0B based protocol	mit dress, Instrument IP Address, Subnet Mask			
*13. An output current in *21. For 5 Hz to 1 MHz co Others Protections Display Memory function urbitrary wave General Specifications nterface	Number of mem Waveform lengt Amplitude resol S Standard Optional 1 Optional 2 Optional 3	0 % of the maximum cui le using the output term hories h LAN External RS-232C GPIB CAN Bus Device Net	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Gateway IP Ac External Signal Input; External Control I/O; V/I Monitor Outpu Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface Complies with CAN 2.0A or 2.0B based protocol Complies with CAN 2.0A or 2.0B based protocol	mit dress, Instrument IP Address, Subnet Mask			
*13. An output current in *21. For 5 Hz to 1 MHz co Others Protections Display Memory function Arbitrary wave General Specifications nterface	Number of mem Waveform lengt Amplitude resol S Standard Optional 1 Optional 3 Between input a	0 % of the maximum cu le using the output term le using the output term bories h tution USB LAN External RS-232C GPIB CAN Bus Device Net nd chassis, output	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Gateway IP Ac External Signal Input; External Control I/O; V/I Monitor Output Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 482, compliant interface Complies with CAN 2.0A or 2.0B based protocol	mit dress, Instrument IP Address, Subnet Mask			
*13. An output current in *21. For 5 Hz to 1 MHz co Others Protections Display Memory function Arbitrary wave General Specifications Interface	Number of mem Waveform lengt Amplitude resol S Standard Optional 1 Optional 2 Optional 3 Between input a and chassis, inp	0 % of the maximum cu le using the output term nories h Ution USB LAN External RS-232C GPIB CAN Bus Devices Net nd chassis, output ut and output nd chassis, output	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Gateway IP Ac External Signal Input; External Control I/O; V/I Monitor Outpu Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface Complies with CAN 2.0A or 2.0B based protocol Complies with CAN 2.0A or 2.0B based protocol	mit dress, Instrument IP Address, Subnet Mask			
*13. An output current in *21. For 5 Hz to 1 MHz co Others Protections Display Memory function Arbitrary wave General Specifications Interface Insulation resistance Withstand voltage	Number of men Waveform lengt Amplitude resol S Standard Optional 1 Optional 2 Optional 3 Between input a	0 % of the maximum cu le using the output term nories h Ution USB LAN External RS-232C GPIB CAN Bus Devices Net nd chassis, output ut and output nd chassis, output	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Gateway IP Ac External Signal Input; External Control I/O; V/I Monitor Outpu Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface Complies with CAN 2.0A or 2.0B based protocol Comples with CAN 2.0A or 2.0B based protocol DC 500 V, 30 MΩ or more AC 1500 V or DC 2130 V, 1 minute EN 61326-1 (Class A) EN 61306-3-2 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1)	mit dress, Instrument IP Address, Subnet Mask			
*13. An output current in *21. For 5 Hz to 1 MHz co Dthers interface General Specifications interface (Vithstand voltage MC	Number of mem Waveform lengt Amplitude resol S Standard Optional 1 Optional 2 Optional 3 Between input a and chassis, inp Between input a	0 % of the maximum cu le using the output term nories h LAN LAN External Rs-ra32C GPIB CAN Bus Device Net nd chassis, output ut and output nd chassis, output	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Cateway IP Ad External Signal Input; External Control I/O; V/I Monitor Outpu Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface Complies with CAN 2.0A or 2.0B based protocol Complies with CAN 2.0A or 2.0B based protocol DC 500 V, 30 MΩ or more AC 1500 V or DC 2130 V, 1 minute EN 61326-1 (Class A) EN 61326-2-1/-2-2 (Class A) EN 61300-3-2 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1) EN 61000-4-2/-4-3/-4-4/-4-5/-4-6/-4-8/-4-11 (Class A, Group 1 EN 61010-1	mit dress, Instrument IP Address, Subnet Mask			
*13. An output current in *21. For 5 Hz to 1 MHz co Dthers Protections Display Aemory function Arbitrary wave General Specifications Interface Withstand voltage	he range of 5 % to 10 omponents in DC mod Waveform lengt Amplitude resol S Standard Optional 1 Optional 2 Optional 3 Between input a and chassis, inp Between input a and chassis, inp	0 % of the maximum cui le using the output term nories h Ution USB LAN External RS-232C GPIB CAN Bus Device Net nd chassis, output ut and output nd chassis, output ut and output	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Gateway IP Ad External Signal Input; External Control I/O; V/I Monitor Output Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface Complies with CAN 2.0A or 2.0B based protocol Complies with CAN 2.0A or 2.0B based protocol DC 500 V, 30 MΩ or more AC 1500 V or DC 2130 V, 1 minute EN 61326-1 (Class A) EN 61300-3-2 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1) EN 61000-4-2 (Lass A, Group 1) EN 61010-1 Indoor use, Overvoltage Category II	mit dress, Instrument IP Address, Subnet Mask			
*13. An output current in *21. For 5 Hz to 1 MHz co Dthers Protections Display Aemory function Arbitrary wave General Specifications Interface Withstand voltage	Number of men Waveform lengt Amplitude resol S Standard Optional 1 Optional 2 Optional 3 Between input a and chassis, inp Between input a	0 % of the maximum cu le using the output term le using the output term bories h tution USB LAN External RS-232C GPIB CAN Bus Device Net nd chassis, output ut and output and output ut and output	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Cateway IP Ac External Signal Input; External Control I/O; V/I Monitor Outpu Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface Complies with CAN 2.0A or 2.0B based protocol Complies with CAN 2.0A or 2.0B based protocol DC 500 V, 30 MΩ or more AC 1500 V or DC 2130 V , 1 minute EN 61326-1 (Class A) EN 61326-21, /2-2 (Class A) EN 61000-3-2 (Class A, Group 1) EN 61000-3-3 (Class A, Group 1) EN 61000-3-3 (Class A, Group 1) EN 61000-1 Indoor use, Overvoltage Category II 0 °C to 40 °C	mit dress, Instrument IP Address, Subnet Mask			
*13. An output current in *21. For 5 Hz to 1 MHz co Dthers interface General Specifications interface (Vithstand voltage MC	he range of 5 % to 10 omponents in DC mod waveform lengt Amplitude resol S Standard Optional 1 Optional 2 Optional 3 Between input a and chassis, inp Between input a	0 % of the maximum cu le using the output term h brories h LAN External RS-232C GPIB CAN Bus CAN Bus CAN Bus CAN Bus Device Net nd chassis, output ut and output nd chassis, output ut and output	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Gateway IP Ac External Signal Input; External Control 1/O; V/I Monitor Outpu Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface Complies with CAN 2.0A or 2.0B based protocol Complies with CAN 2.0A or 2.0B based protocol DC 500 V, 30 MΩ or more AC 1500 V or DC 2130 V, 1 minute EN 61326-1 (Class A) EN 61326-2 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1) EN 6100-3-3 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1) EN 6100-3-3 (	mit			
*13. An output current in *21. For 5 Hz to 1 MHz co Dthers Protections Display Aemory function Arbitrary wave General Specifications Interface Withstand voltage	Number of men Waveform lengt Amplitude resol S Standard Optional 1 Optional 2 Optional 3 Between input a and chassis, inp Between input a and chassis, inp Storage temper Operating temp	0 % of the maximum cu le using the output term h ution USB LAN External Rs-ra32C GPIB CAN Bus Device Net nd chassis, output ut and output nd chassis, output ut and output ment erature range dity range	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Cateway IP Ad External Signal Input; External Control I/O; V/I Monitor Outpu Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface Complies with CAN 2.0A or 2.0B based protocol Complies with CAN 2.0A or 2.0B based protocol DC 500 V, 30 MΩ or more AC 1500 V or DC 2130 V, 1 minute EN 61326-1 (Class A) EN 61326-2-1/-2-2 (Class A) EN 61326-3 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1) EN 61000-4-2/-43/-44/-4-5/-4-6/-4-8/-4-11 (Class A, Group 1 EN 61000-4-2/-0-3/-44/-4-5/-4-6/-4-8/-4-11 (Class A, Group 1 EN 61010-1 Indoor use, Overvoltage Category II 0 °C to 40 °C -10° Cto 70°C 20 %rh to 80 % RH (no condensation)	mit			
*13. An output current in *21. For 5 Hz to 1 MHz co Others Protections Display Memory function Arbitrary wave General Specifications Interface Insulation resistance Withstand voltage	Number of men Waveform lengt Amplitude resol S Standard Optional 1 Optional 2 Optional 3 Between input a and chassis, inp Between input a and chassis, inp Between input a chassis, inp Storage tempera	0 % of the maximum cu le using the output term h ution USB LAN External Rs-ra32C GPIB CAN Bus Device Net nd chassis, output ut and output nd chassis, output ut and output ment erature range dity range	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Gateway IP Ad External Signal Input; External Control I/O; V/I Monitor Output Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface Complies with CAN 2.0A or 2.0B based protocol Complies with CAN 2.0A or 2.0B based protocol DC 500 V, 30 MΩ or more AC 1500 V or DC 2130 V, 1 minute EN 61326-1 (Class A) EN 61300-3-2 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1) EN 61000-4-2 (-4.54-4.4-4.5/-4.6/-4.8/-4-11 (Class A, Group 1 EN 61010-1 Indoor use, Overvoltage Category II 0 °C to 40 °C -10 °C to 70 °C 20 %rh to 80 % RH (no condensation) 90 % RH or less (no condensation)	mit			
*13. An output current in *21. For 5 Hz to 1 MHz co Dthers Protections Sisplay Aemory function wbitrary wave General Specifications Interface Withstand voltage SMC	Number of men Waveform lengt Amplitude resol S Standard Optional 1 Optional 2 Optional 3 Between input a and chassis, inp Between input a and chassis, inp Storage temper Operating temp	0 % of the maximum cu le using the output term h ution USB LAN External Rs-ra32C GPIB CAN Bus Device Net nd chassis, output ut and output nd chassis, output ut and output ment erature range dity range	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Cateway IP Ac External Signal Input; External Control I/O; V/I Monitor Outpu Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface Complies with CAN 2.0A or 2.0B based protocol Complies with CAN 2.0A or 2.0B based protocol DC 500 V, 30 MΩ or more AC 1500 V or DC 2130 V , 1 minute EN 61326-1 (Class A) EN 61326-1 (Class A) EN 61326-2 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1) EN 61000-3-3 (Class A, Group 1) EN 61000-3-42/-4-3/-4-4/-4-5/-4-6/-4-8/-4-11 (Class A, Group 1 EN 61000-1 Indoor use, Overvoltage Category II 0 °C to 40 °C -10 °C to 70 °C 20 %rh to 80 % RH (no condensation) 90 % RH or less (no condensation) UC to 2000 m	mit dress, Instrument IP Address, Subnet Mask			
*13. An output current in *21. For S Hz to 1 MHz co Others Protections Display Memory function Arbitrary wave General Specifications Interface Withstand voltage EMC	Number of men Waveform lengt Amplitude resol S Standard Optional 1 Optional 2 Optional 3 Between input a and chassis, inp Between input a and chassis, inp Between input a chassis, inp Storage tempera	0 % of the maximum cu le using the output term h ution USB LAN External Rs-ra32C GPIB CAN Bus Device Net nd chassis, output ut and output nd chassis, output ut and output ment erature range dity range	inal on the rear panel. UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current L TFT-LCD, 7 inch Store and recall settings, Basic settings: 10 253 (nonvolatile) 4096 words 16 bits Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC MAC Address, DNS IP Address, User Password, Gateway IP Ad External Signal Input; External Control I/O; V/I Monitor Output Complies with the EIA-RS-232 specifications SCPI-1993, IEEE 488.2 compliant interface Complies with CAN 2.0A or 2.0B based protocol Complies with CAN 2.0A or 2.0B based protocol DC 500 V, 30 MΩ or more AC 1500 V or DC 2130 V, 1 minute EN 61326-1 (Class A) EN 61300-3-2 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1) EN 61000-3-2 (Class A, Group 1) EN 61000-4-2 (-4.54-4.4-4.5/-4.6/-4.8/-4-11 (Class A, Group 1 EN 61010-1 Indoor use, Overvoltage Category II 0 °C to 40 °C -10 °C to 70 °C 20 %rh to 80 % RH (no condensation) 90 % RH or less (no condensation)	mit dress, Instrument IP Address, Subnet Mask			

Product specifications are subject to change without notice.

Model Input Ratings Power type			1	ASP-6600-24		ASR-6600-30	[	ASR-6600-36
			1	ASR-6600-24		ASR-6600-30		ASR-6600-36
				ree wire Delta connection, Three phase Four v				
Voltage range <sup>*1</sup> Frequency range			200 to 240 Vac 47 Hz to 63 Hz	± 10 % (Phase Voltage), 380 to 415 Vac ± 10 9	% (Line Voltage)			
Power factor <sup>*2</sup>			0.95 or higher	(typ.)				
Efficiency <sup>*2</sup> Maximum power consu	umption		80 % or higher 32 kVA or lowe		40 kVA or lowe	er	48 kVA or lowe	er
AC Output	•			-				
Multi-phase output			Single-phase output	Polyphase output	Single-phase output	Polyphase output	Single-phase output	Polyphase output
Output capacity			24 kVA	1P3W: 16 kVA	30 kVA	1P3W: 20 kVA	36 kVA	1P3W: 24 kVA
				3P4W: 24 kVA 1P3W		3P4W: 30 kVA 1P3W		3P4W: 36 kVA 1P3W
Mode			1P2W	3P4W (Y-connection)	1P2W	3P4W (Y-connection)	1P2W	3P4W (Y-connection) Unbalance, Balanced
Setting mode <sup>*3</sup>		Catting Damas <sup>64</sup>	0.00 V to 175.0	Unbalance, Balanced V / 0.0 V to 350.0 V (sine and square wave), S	etting Resolution: 0.0	Unbalance, Balanced D1 V / 0.1 V		Undalance, Balanced
Phase voltage		Setting Range <sup>°4</sup> Accuracy <sup>°5</sup>	0.00 Vpp to 50 ±(0.3 % of set	0.0 Vpp / 0.00 Vpp to 1000 Vpp (triangle and a + 0.5 V / 1 V)	rbitrary wave), Settin	g Resolution: 0.01 Vpp / 0.1 Vpp / 1 Vpp		
Line voltage setting ran	ge° <sup>6</sup>	Accuracy		1P3W: 0.00 V to 350.0 V / 0.00 V to 700.0 V 3P4W: 0.00 V to 303.1 V / 0.00 V to 606.2 V (sine wave only)		1P3W: 0.00 V to 350.0 V / 0.00 V to 700.0 V 3P4W: 0.00 V to 303.1 V / 0.00 V to 606.2 V (sine wave only)		1P3W: 0.00 V to 350.0 V / 0.00 V to 700.0 V 3P4W: 0.00 V to 303.1 V / 0.00 V to 606.2 V (sine and square wave)
			240 4 / 120 4	Setting Resolution: 0.01 V / 0.1 V	200 A / 150 A	Setting Resolution: 0.01 V / 0.1 V	260 A ( 180 A	Setting Resolution: 0.01 V / 0.1 V
Maximum current <sup>°7</sup> Maximum peak current	*8		240 A / 120 A Four times of t	80 A / 40 A he maximum RMS current	300 A / 150 A	100 A / 50 A	360 A / 180 A	120 A / 60 A
Load power factor*9		le min e man		phase or lagging phase, 45 Hz to 65Hz)	0.011- 5-41			
Frequency		Setting range Accuracy	± 0.01 % of set	0 Hz to 550.0 Hz, AC+DC Mode: 1.00 Hz to 5	0.0 Hz, Setting resol	ution: 0.01 Hz / 0.1 Hz		
	411	Stability <sup>*10</sup>	± 0.005 %		0.1.1.2.18 (500.1.1	550.000		
Output on phase settin Output off phase settin				ariable (Free / Fix selectable), 0.1° (1 Hz to 50 ariable (Free / Fix selectable), 0.1° (1 Hz to 50				
Setting range of the pha	ase angle <sup>*12</sup>			3P4W: L2 phase: 0° to 359.9° L3 phase: 0° to 359.9° Setting Resolution: 0.1°		3P4W: L2 phase: 0° to 359.9° L3 phase: 0° to 359.9° Setting Resolution: 0.1°		3P4W: L2 phase: 0° to 359.9° L3 phase: 0° to 359.9° Setting Resolution: 0.1°
Phase angle accuracy <sup>*13</sup>	3			45 Hz to 65 Hz: ±1.0° 15 Hz to 550 Hz: ±2.0°		45 Hz to 65 Hz: ±1.0° 15 Hz to 550 Hz: ±2.0°		45 Hz to 65 Hz: ±1.0° 15 Hz to 550 Hz: ±2.0°
DC offset <sup>°14</sup>			± 20 mV (typ.)					
DC Output (only sing Output capacity	gle phase output	t)		24 kW		30 kW		36 kW
Mode			Floating output	t, the N terminal can be grounded		30 KW		30 KW
Voltage		Setting Range Accuracy <sup>°15</sup>		0.0 V / -500.0 V to +500.0 V, Setting Resolutio + 0.3 V / 0.6 V)	n: 0.01 V / 0.1 V			
Maximum current <sup>*16</sup>		Accuracy	240 A / 120 A		300 A / 150 A		360 A / 180 A	
Maximum peak current Output Stability, Tota				he maximum current				
Line regulation		tortion, Output ve	±0.1 % or less					
Load regulation *18				Itage, 0 % to 100 %, via output terminal)				
Distortion of Output <sup>°19</sup> Output voltage respons	se time <sup>*20</sup>		<0.3 % @1 Hz Slow: 300 µs (t	to 100 Hz, <0.5 % @100.1 Hz to 550 Hz yp.)				
	in 3P4W mode. se setting in polys			naximum output current, 45 Hz to 65 Hz a e are collectively set and in unbalance mod	-			
<ul> <li>*4. For phase voltage</li> <li>*5. For an output vo</li> <li>*6. Line voltage only</li> <li>*7. If the output volu- higher, and that</li> <li>*8. With respect to t</li> <li>*9. External power in</li> <li>*10. For 45 Hz to 65</li> <li>*11. Li, L2 and 13 p</li> <li>*12. Can be set only</li> <li>*13. For an output v</li> <li>*14. In the case of tl</li> <li>*15. For an output v</li> <li>*16. If the output vo And the ambier</li> <li>*17. Instantaneous</li> <li>*18. For an output v</li> <li>*18. For an output v</li> <li>*18. For an output v</li> <li>*19. For an output v</li> <li>*19. So% or higher</li> </ul>	e setting in polyp plage of 10 V to 1 y can be set in ba tage is higher tha the ambient tem he capacitor-inp njection or regen of H2, the rated ou voltage of 50 V or he AC mode and voltage of 50 V or he AC mode and voltage of -50 V v ht temperature is eithin 3 ms, limit voltage of 75 V to of the rated outp	phase output. In ba 175 V / 20 V to 350 lance mode. In rated value, this perature is 40 degr ut rectifying load. L reation which is ov utput voltage, no lo ndepend at independ reation which is ov utput voltage, sine wave, output voltage, sine wave, output voltage sett to $-10$ V, $+10$ V to $+$ han rated value, this 40 degree or hight red by the maximum 175 V / 150 V to 3: Ut voltage, the maximum 175 V / 150 V to 3: No 2000 N N N N N N N N N N N N N N N N N	lance mode all phas V, sine wave, an out is limited to satisfy the ee or higher, the max- imited by the maxim er short reverse pow ad and the resistance nd mode in the poly same load and volta ing to $0$ , V, 23 °C ± 5 250 V / -500 V to -20 is limited to satisfy r, the maximum cur n current at rated out faith out the satisfy 0 V, al oad power faith imum current or low	e are collectively set and in unbalance mod put frequency of 45 Hz to 55 Hz, no load, I the power capacity. If there is the DC superi imum current may decrease. um current. e flow capacity is not available. e load for the maximum current, and the o phase output. ge condition for all phase. °C V, +20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super rent may decrease. tput voltage. ctor of 1, stepwise change from an output ver, AC and AC+DC modes, THD+N. For the	e each phases are in C voltage setting 0' mmposition, the ac perating temperatur t to 0 V (AC+DC mo immposition, the ac current of 0 A to ma e polyphase output	Advividually set. V (AC+DC mode) and 23 °C ± 5 °C. For phase tive current of AC+DC satisfies the maximu re range. de) and 23 °C ± 5 °C tive current of AC+DC satisfies the maximum unimum current (or its reverse), using the ou it is a specification for phase voltage setting it is a specification for phase voltage setting the set of the set of	m current. In the ca um current. utput terminal on th g.	se of 40 Hz or lower or 400 Hz or e rear panel.
<ul> <li>*4. For phase voltage</li> <li>*5. For an output vo</li> <li>*6. Line voltage only</li> <li>*7. If the output volu- higher, and that</li> <li>*8. With respect to t</li> <li>*9. External power in</li> <li>*10. For 45 Hz to 65</li> <li>*11. Li, L2 and 13 p</li> <li>*12. Can be set only</li> <li>*13. For an output v</li> <li>*14. In the case of tl</li> <li>*15. For an output v</li> <li>*16. If the output vo And the ambier</li> <li>*17. Instantaneous</li> <li>*18. For an output v</li> <li>*18. For an output v</li> <li>*18. For an output v</li> <li>*19. For an output v</li> <li>*19. So% or higher</li> </ul>	ye setting in polyp plage of 10 V to i y can be set in ba tage is higher tha the ambient tem the capacitor-inp njection or regen si Hz, the rated ou hase can be set i with independ n voltage of 50 V or hase can be set is higher th temperature is eithin 3 ms, limit voltage of 75 V to of the rated out poltage of 100 V /	phase output. In ba 175 V / 20 V to 350 lance mode. un rated value, this perature is 40 degr ut rectifying load. L eration which is ow higher, sine wave, output voltage, no lo independ at indepe higher, sine wave, output voltage sett higher, sine wave, output voltage sett to 10 V, 10 V to 4- nan rated value, this 40 degree or high ed by the maximur 175 V / 150 V to 33- out voltage, the maximur 200 V, a load pow	lance mode all phas V, sine wave, an out is limited to satisfy t ee or higher, the man- imited by the maxim er short reverse pow ad and the resistant and mode in the poly output. same load and volta ing to 0 V, 23 °C $\pm$ 5 25 OV / 5-00 V to -20 s is limited to satisfy er, the maximum cur n current at rated ou 50 V, a load power find the rated output find the rate of the rate	e are collectively set and in unbalance mod put frequency of 45 Hz to 65 Hz, no load, IC he power capacity. If there is the DC superi immu current may decrease. um current. e flow capacity is not available. e load for the maximum current, and the o phase output. ge condition for all phase. "C" ( $V_{+20}$ V to +500 V, no load, AC voltage set the power capacity. If there is the AC super rent may decrease. tot or 01, stepwise change from an output ver, AC and AC+DC modes, THD+N. For th spect to stepwise change from an output to	e each phases are in C voltage setting 0' mmposition, the ac perating temperatur t to 0 V (AC+DC mo immposition, the ac current of 0 A to ma e polyphase output	ndividually set. V (AC+DC mode) and 23 °C ± 5 °C. For pha: tive current of AC+DC satisfies the maximu re range. de) and 23 °C ± 5 °C ctive current of AC+DC satisfies the maximu xximum current (or its reverse), using the ou	m current. In the ca um current. utput terminal on th g.	ise of 40 Hz or lower or 400 Hz or ie rear panel.
<ul> <li>*4. For phase voltage</li> <li>*5. For an output vo</li> <li>*6. Line voltage only</li> <li>*7. If the output voltage only</li> <li>*7. If the output voltage only</li> <li>*8. With respect to t</li> <li>*9. External power in</li> <li>*10. For 45 Hz to 65</li> <li>*11. L1, L2 and L3 p</li> <li>*12. Can be set only</li> <li>*13. For an output v</li> <li>*16. If the output voltaneous</li> <li>*18. For an output v</li> <li>*19. To san volta v</li> <li>*19. So % or higher</li> <li>*20. For 5 Hz to 1 M</li> </ul>	e setting in polyp pitage of 10 V to ' V can be set in ba tage is higher tha the ambient tem the capacitor-inp piection or regen 5 Hz, the rated ou shase can be set i with independ r voltage of 50 V or he AC mode and voltage of 50 V or he AC mode and voltage is higher th th temperature is eithin 3 ms, limit voltage of 75 V to of the rated outp voltage of 100 V / AHz components	phase output. In ba 175 V / 20 V to 350 lance mode. In rated value, this perature is 40 degr ut rectifying load. L eration which is ow the total at indege higher, sine wave, output voltage, no lo nidepend at indege higher, sine wave, output voltage sett to 10 V, 10 V to 4 han rated value, this 40 degree or high to 10 V, 10 V to 3 Jutt voltage, the maximut 175 V / 150 V to 3 Jutt voltage, the maximut 5 200 V, a load powe in DC mode using	lance mode all phas V, sine wave, an out is limited to satisfy t ee or higher, the ma- imited by the maxim er short reverse pow ad and the resistant of mode in the poly output. same load and volta ing to 0 V, 23 °C ± 5 25 0V / -500 V to -20 s is limited to satisfy er, the maximum cur or current at rated ou 50 V, a load power fa ámum current or low factor of 1, with re the output terminal	e are collectively set and in unbalance mod put frequency of 45 Hz to 65 Hz, no load, to he power capacity. If there is the DC superi immu current may decrease. um current. er flow capacity is not available. e load for the maximum current, and the o phase output. ge condition for all phase. *C 'V, +20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super rent may decrease. tput voltage. ctor of 1, stepwise change from an output ver, AC and AC+DC modes, THD+N. For th spect to stepwise change from an output c on the rear panel. cated for 23 *C±5 *C. )	e each phases are in C voltage setting 0' mmposition, the ac perating temperatur t to 0 V (AC+DC mo immposition, the ac current of 0 A to ma e polyphase output	Advividually set. V (AC+DC mode) and 23 °C ± 5 °C. For phase tive current of AC+DC satisfies the maximu re range. de) and 23 °C ± 5 °C tive current of AC+DC satisfies the maximum unimum current (or its reverse), using the ou , it is a specification for phase voltage setting the spec	m current. In the ca um current. utput terminal on th g.	ise of 40 Hz or lower or 400 Hz or ie rear panel.
*4. For phase voltag *5. For an output vo *6. Line voltage only *7. If the output volb higher, and that *8. With respect to *9. External power in *10. For 45 Hz to 65 *11. L1, L2 and L3 p *12. Can be set only *13. For an output v *14. In the case of ti *15. For an output v *16. If the output vo And the amblein *17. Instantaneous *18. For an output v *19. For an output v *19. For an output v *20. For an output v *21. For 5 Hz to 1 M	ye setting in polyp platage of 10 V to 0 y can be set in ba tage is higher tha the ambient tem the capacitor-inp njection or regen 5 Hz, the rated ou hase can be set i with independ n hase can be set i has can be set i has can be set i has a can be set i has be set i has can be	phase output. In ba 175 V / 20 V to 350 lance mode. In rated value, this perature is 40 degr ut rectifying load. L eration which is ow the total at indege higher, sine wave, output voltage, no lo nidepend at indege higher, sine wave, output voltage sett to 10 V, 10 V to 4 han rated value, this 40 degree or high to 10 V, 10 V to 3 Jutt voltage, the maximut 175 V / 150 V to 3 Jutt voltage, the maximut 5 200 V, a load powe in DC mode using	lance mode all phas V, sine wave, an out is limited to satisfy t ee or higher, the man- imited by the maxim er short reverse pow ad and the resistanc nd mode in the poly output. same load and volta is limited to satisfy 250 V / -500 V to -20 is limited to satisfy the maximum current n current at rated ou 50 V, a load power fa- timum current or loy er factor of 1, with re the output terminal <b>ent function is indice</b>	e are collectively set and in unbalance mod put frequency of 45 Hz to 55 Hz, no load, f imum current may decrease. um current. e flow capacity is not available. e load for the maximum current, and the o phase output. ge condition for all phase. °C V, +20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super rent may decrease. tput voltage. ctor of 1, stepwise change from an output spect. AC and AC+DC modes, THD-N. For th spect to stepwise change from an output c on the rear panel. tated for 23 "cs5 "C.) Single-phase output	e each phases are in C voltage setting 0' mmposition, the ac perating temperatur t to 0 V (AC+DC mo immposition, the ac current of 0 A to ma e polyphase output	ndividually set. V (AC+DC mode) and 23 °C ± 5 °C. For pha: tive current of AC+DC satisfies the maximu re range. de) and 23 °C ± 5 °C ctive current of AC+DC satisfies the maximu ximum current (or its reverse), using the ou it is a specification for phase voltage settin maximum current (or its reverse). 10 % to 5	m current. In the ca um current. utput terminal on th g.	ise of 40 Hz or lower or 400 Hz or He rear panel. Ige.
*4. For phase voltag *5. For an output vo *6. Line voltage only *7. If the output volt higher, and that *8. With respect to *9. External power in *10. For 45 Hz to 65 *11. L1, L2 and L3 p *12. Can be set only *13. For an output v *14. In the case of tl *15. For an output v *16. If the output vo And the ambier *17. Instantaneous *18. For an output v *19. 50 % or higher *20. For an output v *21. For S Hz to 1 N Measured Value Disp	e setting in polyp plage of 10 V to 1 y can be set in ba tage is higher tha the ambient tem he capacitor-inp njection or regen 5 Hz, the rated ou hase can be set i with independ n hase can be set i with independ n hase can be set i with independ n hase can be set with independ n hase can be set i thin a maximum plage of 50 V or he AC mode and voltage of 50 V or hase can be set i thin a maximum of the plage of 50 V / AHz components olay (All accuracy Resolution	phase output. In ba 175 V / 20 V to 350 lance mode. In rated value, this perature is 40 degr ut rectifying load. L reation which is ov utput voltage, no lo independ at indepe node in polyphase - higher, sine wave, output voltage sett to $10V$ , $+10V$ to + han rated value, this 40 degree or hight ted by the maximur 175 V / 150V to 31 200 V, a load powe in DC mode using <b>y</b> of the measurem	lance mode all phas V, sine wave, an out is limited to satisfy t ee or higher, the max- imited by the maxim er short reverse pow ad and the resistant ad and the resistant and a data the poly output. Solv J - 500 V to - 20 Solv J - 500 V to -	e are collectively set and in unbalance mod put frequency of 45 Hz to 65 Hz, no load, IC he power capacity. If there is the DC superi imm current may decrease. um current. er flow capacity is not available. e load for the maximum current, and the o phase output. ge condition for all phase. *C V; +20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super rent may decrease. tput voltage. ctor of 1, stepwise change from an output ver, AC and AC+DC modes, THD-N. For th spect to stepwise change from an output c on the rear panel. cated for 23 *C±5 *C. ) Single-phase output V Hz and DC: ± (0.5 % of rdg + 0.5 V / 1 V)	e each phases are in C voltage setting 0' mmposition, the ac perating temperatur t to 0 V (AC+DC mo immposition, the ac current of 0 A to ma e polyphase output	ndividually set. V (AC+DC mode) and 23 °C ± 5 °C. For pha: tive current of AC+DC satisfies the maximu re range. de) and 23 °C ± 5 °C ctive current of AC+DC satisfies the maximu ximum current (or its reverse), using the ou it is a specification for phase voltage settin maximum current (or its reverse). 10 % to 5	m current. In the ca um current. utput terminal on th g. 0 % of output volta	ise of 40 Hz or lower or 400 Hz or He rear panel. Ige.
*4. For phase voltag *5. For an output vo *6. Line voltage only *7. If the output volt higher, and that *8. With respect to *9. External power in *10. For 45 Hz to 65 *11. L1, L2 and L3 p *12. Can be set only *13. For an output v *14. In the case of tl *15. For an output v *16. If the output vo And the ambier *17. Instantaneous *18. For an output v *19. 50 % or higher *20. For an output v *21. For S Hz to 1 N Measured Value Disp	e setting in polyn platage of 10 V to 1 y can be set in ba tage is higher tha the ambient tem he capacitor-inp njection or regen 5 Hz, the rated ou hase can be set i with independ n voltage of 50 V or he AC mode and voltage of 50 V V / AHz components <b>solay (All accuracy</b> ) <b>Resolution</b> <b>RMS value acc</b>	phase output. In ba 175 V / 20 V to 350 lance mode. In rated value, this perature is 40 degr ut rectifying load. L eration which is ov utput voltage, no lo independ at indepe output voltage, sine wave, output voltage, sine wave, output voltage sett to 10 V, 110 V to + han rated value, this 40 degree or high ted by the maximur 175 V / 150 V to 31 200 V, a load powe in DC mode using of the measurem	lance mode all phas V, sine wave, an out is limited to satisfy the ee or higher, the max- imited by the maxim er short reverse pow ad and the resistance and mode in the poly output. same load and volta- ing to 0 V, 23 °C $\pm$ 5 SO V 1-500 V to -20 sis limited to satisfy er, the maximum curr er, the maximum curr er, the maximum curr er factor of 1, with re the output terminal ent function is indice 0.01 V /0.1 45 Hz to 55 15 Hz to 555	e are collectively set and in unbalance mod put frequency of 45 Hz to 65 Hz, no load, to he power capacity. If there is the DC superi imum current may decrease. um current. e load for the maximum current, and the o phase output. ge condition for all phase. "C" V( +20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super rent may decrease. tput voltage. ctor of 1, stepwise change from an output ver, AC and AC+DC modes, THD-N. For th spect to stepwise change from an output c on the rear panel. <b>Single-phase output</b> V Hz and DC: $\pm$ (0.5 % of rdg + 0.5 V / 1V) Hz: $\pm$ (0.7 % of rdg + 0.5 V / 1V)	e each phases are in C voltage setting 0' mmposition, the ac perating temperatur t to 0 V (AC+DC mo immposition, the ac current of 0 A to ma e polyphase output	ndividually set. V (AC+DC mode) and 23 °C ± 5 °C. For pha: tive current of AC+DC satisfies the maximu re range. de) and 23 °C ± 5 °C ctive current of AC+DC satisfies the maximu ximum current (or its reverse), using the ou it is a specification for phase voltage settin maximum current (or its reverse). 10 % to 5	m current. In the ca um current. utput terminal on th g. 0 % of output volta	ise of 40 Hz or lower or 400 Hz or He rear panel. ige.
*4. For phase voltag *5. For an output vo *6. Line voltage only *7. If the output volt higher, and that *8. With respect to *9. External power in *10. For 45 Hz to 65 *11. L1, L2 and L3 p *12. Can be set only *13. For an output v *14. In the case of tl *15. For an output v *16. If the output vo And the ambier *17. Instantaneous *18. For an output v *19. 50 % or higher *20. For an output v *21. For S Hz to 1 N Measured Value Disp	e setting in polyp pilage of 10 V to 0 v can be set in ba tage is higher that the ambient tem the ambient tem the capacitor-inp njection or regen 5 Hz, the rated out hase can be set i with independ n voltage of 50 V or he AC mode and voltage of 75 V to of the rated outp roltage of 100 V / he Az components bay (All accuracy RMS value acc AVG value acc PEAK value acc	phase output. In ba 175 V / 20 V to 350 lance mode. In rated value, this perature is 40 degr ut rectifying load. L eration which is ow taptu voltage, no lo independ at independ independ at independent higher, sine wave, output voltage sett higher, sine wave, output voltage sett to 10 V, 10 V to 4 an rated value, this 40 degree or high to 10 V, 10 V to 3 out voltage, the maximur 175 V / 150 V to 3 out voltage, the maximur 200 V, a load powe in DC mode using or of the measurem uracy uracy	lance mode all phas V, sine wave, an out is limited to satisfy t ee or higher, the maximited by the maxim er short reverse pow ad and the resistant and mode in the poly output. Same load and volta ing to 0 V, 23 °C ± 5 250 V / -500 V to -20 250 V / -500 V to -20 50 V, a load power fa dimum current or low for factor of 1, with re the output terminal ent function is indice 0.01 V / 0.1 ° 45 Hz to 55 15 Hz to 55 0 C $\pm$ (10.5 %	e are collectively set and in unbalance mod put frequency of 45 Hz to 65 Hz, no load, to he power capacity. If there is the DC superi immur current may decrease. um current. er flow capacity is not available. e load for the maximum current, and the o phase output. ge condition for all phase. *C 'V, +20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super erent may decrease. tput voltage. ctor of 1, stepwise change from an output ver, AC and AC+DC modes, THD-N. For th spect to stepwise change from an output c on the rear panel. cated for 23 *C±5 *C. ) Single-phase output V Hz and DC: ± (0.5 % of rdg + 0.5 V / 1 V) Hz: ± (0.7 % of rdg + 1 V / 2 V) 6 of rdg  +0.5 V / 1 V) Hz and DC: ± (12 % of rdg  + 1 V / 2 V)	e each phases are in C voltage setting 0' mmposition, the ac perating temperatur t to 0 V (AC+DC mo immposition, the ac current of 0 A to ma e polyphase output	ndividually set. V (AC+DC mode) and 23 °C ± 5 °C. For pha: tive current of AC+DC satisfies the maximu re range. de) and 23 °C ± 5 °C ctive current of AC+DC satisfies the maximu ximum current (or its reverse), using the ou it is a specification for phase voltage settin maximum current (or its reverse). 10 % to 5	m current. In the ca um current. utput terminal on th g. 0 % of output volta	ise of 40 Hz or lower or 400 Hz or He rear panel. ige.
*4. For phase voltag *5. For an output vo *6. Line voltage only *7. If the output volb higher, and that *8. With respect to *9. External power in *10. For 45 Hz to 65 *11. L1, L2 and L3 p *12. Can be set only *13. For an output v *14. In the case of ti *15. For an output v *16. If the output vo And the amblein *17. Instantaneous *18. For an output v *19. For an output v *19. For an output v *20. For an output v *21. For 5 Hz to 1 M	e setting in polyp pilage of 10 V to 0 v can be set in ba tage is higher that the ambient tem the ambient tem the capacitor-inp njection or regen 5 Hz, the rated out hase can be set i with independ n voltage of 50 V or he AC mode and voltage of 75 V to of the rated outp voltage of 100 V / Hz components balay (All accuracy Resolution RMS value acc PEAK value acc Resolution	phase output. In ba 175 V / 20 V to 350 lance mode. In rated value, this perature is 40 degr ut rectifying load. L independ at indepe reation which is ov utput voltage, no lo independ at indepe output voltage, sine wave, output voltage, sine wave, output voltage, sine wave, to 10 V, +10 V to + han rated value, this 40 degree or hight ted by the maximur 175 V J 150 V to 31 200 V, a load powe in DC mode using y of the measurem uracy uracy uracy	lance mode all phas V, sine wave, an out is limited to satisfy t ee or higher, the mai- imited by the maxim er short reverse pow ad and the resistanc nd mode in the poly output. same load and volta: same load and volta: S20 V - 500 V to -20 sis limited to satisfy er, the maximum curr n current at rated ou 50 V, a load power fa cator of 1, with re the output terminal ent function is indified 0.01 V / 0.11 45 Hz to 55 DC: $\pm$ (0.5 45 Hz to 55 0.01 A / 0.1.	e are collectively set and in unbalance mod put frequency of 45 Hz to 65 Hz, no load, to he power capacity. If there is the DC superi dimum current may decrease. um current. e load for the maximum current, and the o phase output. ge condition for all phase. "C" V, +20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super rent may decrease. thut voltage. ctor of 1, stepwise change from an output ver, AC and AC+DC modes, THD+N. For th spect to stepwise change from an output c on the rear panel. <b>Single-phase output</b> V Hz and DC: $\pm (0.5 \% \text{ of rdg} + 0.5 V / 1V)$ Hz and DC: $\pm (2.5 \% \text{ of rdg} + 1.2 V)$ A	e each phases are in C voltage setting 0' mmposition, the ac perating temperatur t to 0 V (AC+DC mo immposition, the ac current of 0 A to ma e polyphase output	ndividually set. V (AC+DC mode) and 23 °C ± 5 °C. For phase tive current of AC+DC satisfies the maximu- re range. de) and 23 °C ± 5 °C ctive current of AC+DC satisfies the maximu- ximum current (or its reverse), using the or it is a specification for phase voltage settin- maximum current (or its reverse). 10 % to 9 P	m current. In the ca um current. utput terminal on th g 0 % of output volta	ise of 40 Hz or lower or 400 Hz or He rear panel. ige.
*4. For phase voltag *5. For an output vo *6. Line voltage only *7. If the output volt higher, and that *8. With respect to *9. External power in *10. For 45 Hz to 65 *11. L1, L2 and L3 p *12. Can be set only *13. For an output v *14. In the case of tl *15. For an output v *16. If the output vo And the ambier *17. Instantaneous *18. For an output v *19. 50 % or higher *20. For an output v *21. For S Hz to 1 N Measured Value Disp	e setting in polyp pilage of 10 V to 0 v can be set in ba tage is higher that the ambient tem the ambient tem the capacitor-inp njection or regen 5 Hz, the rated out hase can be set i with independ m voltage of 50 V or he AC mode and voltage of 75 V to of the rated outp voltage of 75 V to of the rated outp voltage of 100 V / Hz components bay (All accuracy RMS value acc Resolution RMS value acc	phase output. In ba 775 V / 20 V to 350 Ilance mode. In rated value, this perature is 40 degr ut rectifying load. L independ at indepe reation which is ov utput voltage, no lo independ at indepe output voltage, end lo output voltage, end lo output voltage, end lo output voltage, end to -10 V, +10 V to + an rated value, thi 40 degree or hight ted by the maximur 175 V / 150 V to 31 200 V, a load powe in DC mode using y of the measurem uracy uracy uracy	lance mode all phas V, sine wave, an out is limited to satisfy t ee or higher, the mai- imited by the maxim er short reverse pow ad and the resistanc nd mode in the poly output. same load and volta gato 0, 23 °C $\pm$ 5 250 V/ -500 V to -20 is limited to satisfy the to satisfy site output terminal ener function is indice not v/.0.1 45 Hz to 55 0.01 K/.0.1 45 Hz to 55 0.01 K/.0.1 45 Hz to 55 0.01 K/.0.1	e are collectively set and in unbalance mod put frequency of 45 Hz to 55 Hz, no load, [ the power capacity. If there is the DC superi imum current may decrease. um current. e flow capacity is not available. e load for the maximum current, and the o phase output. ge condition for all phase. "C V, +20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super rent may decrease. tput voltage. ctor of 1, stepwise change from an output ver, AC and AC+DC modes, THD-N. For th spect to stepwise change from an output c on the rear panel. tated for 23 "cts" C.) Single-phase output V Hz: and DC: $\pm$ (0.5% of rdg + 0.5 V / 1 V) Hz: and DC: $\pm$ (0.5% of rdg + 1 V / 2 V) A Hz: $\pm$ (0.5% of rdg + 0.3 A / 0.15 A) Hz: $\pm$ (0.5% of rdg + 0.3 A / 0.15 A)	e each phases are in C voltage setting 0' mmposition, the ac perating temperatur t to 0 V (AC+DC mo immposition, the ac current of 0 A to ma e polyphase output	ndividually set. V (AC+DC mode) and 23 °C ± 5 °C. For phase tive current of AC+DC satisfies the maximure re range. de) and 23 °C ± 5 °C tive current of AC+DC satisfies the maximum is a specification for phase voltage settin maximum current (or its reverse), using the or it is a specification for phase voltage settin maximum current (or its reverse). 10 % to 5 P 45 Hz to 65 Hz: ±(0.5 % of rdg + 0.1 15 Hz to 550 Hz: ±(0.7 % of rdg + 0.1) 15 Hz to 550 Hz: ±(0.7 % of rdg +	m current. In the ca um current. utput terminal on th g. 0 % of output volta olyphase output olyphase output 5 A / 0.08 A) 3 A / 0.15 A)	ise of 40 Hz or lower or 400 Hz or He rear panel. Ige.
*4. For phase voltag *5. For an output vo *6. Line voltage only *7. If the output volb higher, and that *8. With respect to *9. External power in *10. For 45 Hz to 65 *11. L1, L2 and L3 p *12. Can be set only *13. For an output v *14. In the case of th *15. For an output v *16. If the output vo And the ambier *17. Instantaneous *18. For an output v *20. For an output v *21. For 5 Hz to 1 N Measured Value Disp Voltage <sup>*1+2</sup>	e setting in polyp oltage of 10 V to 0 y can be set in bat tage is higher the the ambient tem the capacitor-inp njection or regen 5 Hz, the rated ou shase can be set i with independ m oltage of 50 V or he AC mode and voltage of 50 V or he AC mode and voltage of 75 V to of the rated outp oltage of 75 V to of the rated outp AVG value acc AVG value acc AVG value acc AVG value acc	phase output. In ba 175 V / 20 V to 350 lance mode. In rated value, this perature is 40 degr ut rectifying load. L eration which is ov atput voltage, no lo independ at indepe reation which sub- relation to 10 V, 10 V to 4 higher, sine wave, output voltage, setu to 10 V, 10 V to 2 40 degree or high 40 degree or high 40 degree or high 40 degree or high 40 degree or high 175 V / 150 V to 3 200 V, a load powe in DC mode using of the measurem uracy uracy uracy uracy uracy uracy uracy	lance mode all phas V, sine wave, an out is limited to satisfy t ee or higher, the mai- imited by the maxim er short reverse pow ad and the resistanc and mode in the poly output. same load and volta same load and volta sing to 0 V, 23 °C = 5 250 V / 500 V to -20 sis limited to satisfy er, the maximum cur er uternet at rated ou 50 V, a load power fa- tor of 1, with re the output terminal ent function is indice 0.01 V / 0.11 45 Hz to 55 0.01 A / 0.1. 45 Hz to 55 0.01 C + (10.5 PC = (10.5 PC = (10.5) PC = (10.5)	e are collectively set and in unbalance mod put frequency of 45 Hz to 65 Hz, no load, IC he power capacity. If there is the DC superi immu current may decrease. um current. er flow capacity is not available. e load for the maximum current, and the o phase output. ge condition for all phase. "C" (V, +20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super rent may decrease. typut voltage. ctor of 1, stepwise change from an output ver, AC and AC+DC modes, THD+N. For th spect to stepwise change from an output c on the rear panel. <b>Single-phase output</b> V Hz and DC: #(0.5 % of rdg + 0.5 V / 1 V) Hz: ± (0.7 % of rdg + 0.5 V / 1 V) Hz: ± (0.7 % of rdg + 1 V / 2 V) A Hz: ± (0.7 % of rdg + 0.3 A / 0.15 A) Hz: ± (0.7 % of rdg + 0.6 A / 0.4 A)	e each phases are in C voltage setting 0' mmposition, the ac perating temperatur t to 0 V (AC+DC mo immposition, the ac current of 0 A to ma e polyphase output	ndividually set. V (AC+DC mode) and 23 °C ± 5 °C. For phase tive current of AC+DC satisfies the maximu- re range. de) and 23 °C ± 5 °C ctive current of AC+DC satisfies the maximu- iximum current (or its reverse), using the ou- , it is a specification for phase voltage settin maximum current (or its reverse), 10 % to 5 Maximum current (or its reverse), 10 % to 5 Maximum current (or its reverse), 10 % to 5 45 Hz to 550 Hz: ±(0.5 % of rdg + 0.1 15 Hz to 550 Hz: ±(0.5 % of rdg + 0.3 A) (0.15 % DC: ± (0.5 % of rdg   + 0.3 A) (0.15 %	m current. In the ca um current. utput terminal on th g. 0 % of output volta olyphase output olyphase output s A / 0.08 A) 3 A / 0.15 A) )	ise of 40 Hz or lower or 400 Hz or He rear panel. Ige.
*4. For phase voltag *5. For an output vo *6. Line voltage only *7. If the output volb higher, and that *8. With respect to *9. External power in *10. For 45 Hz to 65 *11. L1, L2 and L3 p *12. Can be set only *13. For an output v *14. In the case of th *15. For an output v *16. If the output vo And the ambier *17. Instantaneous *18. For an output v *20. For an output v *21. For 5 Hz to 1 N Measured Value Disp Voltage <sup>*1+2</sup>	e setting in polyp oitage of 10 V to 1 v can be set in ba tage is higher tha the ambient tem the capacitor-inp oitage of 50 V or base can be set i with independ m voltage of 50 V or he AC mode and voltage of 50 V or for the rated outp ooltage of 75 V to of the rated outp voltage of 100 V / AHz components oltage (All accuracy Resolution RMS value acc AVC value acc AVC value acc PEAK value acc PEAK value acc	phase output. In ba 175 V / 20 V to 350 lance mode. In rated value, this perature is 40 degr ut rectifying load. L eration which is ov atput voltage, no lo independ at indepe reation which sub- relation to 10 V, 10 V to 4 higher, sine wave, output voltage, setu to 10 V, 10 V to 2 40 degree or high 40 degree or high 40 degree or high 40 degree or high 40 degree or high 175 V / 150 V to 3 200 V, a load powe in DC mode using of the measurem uracy uracy uracy uracy uracy uracy uracy	lance mode all phas V, sine wave, an out is limited to satisfy t ee or higher, the mai- imited by the maxim er short reverse pow ad and the resistanc nd mode in the poly output. Same load and volta ing to 0 V, 23 "C $\pm$ 5 25 V / -500 V to -20 is limited to satisfy control to 20 V to 20 is low the dot satisfy output the maximum cur n current at rated ou 50 V, a load power fa current or load power fa current or load power fa current or load power fa is load power fa the output terminal ent function is indifie 0.01 V/0.11 45 Hz to 65 0.01 A /0.1, 45 Hz to 65 15 Hz to 55 DC: $\pm$ (0.5 Y 45 Hz to 55)	e are collectively set and in unbalance mod put frequency of 45 Hz to 55 Hz, no load, f the power capacity. If there is the DC superi imum current may decrease. um current. e load for the maximum current, and the o phase output. ge condition for all phase. "C" V(+20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super rent may decrease. tput voltage. ctor of 1, stepwise change from an output ver, AC and AC+DC modes, THD-N. For th spect to stepwise change from an output c on the rear panel. <b>Single-phase output</b> V Hz and DC: $\pm$ (0.5% of rdg + 0.5 V / 1 V) Hz: $\pm$ (0.7% of rdg + 1 V / 2 V) $\frac{1}{2} \times (0.5\% \text{ of rdg} + 0.3 A / 0.15 A)$ $\frac{1}{2} \times (0.5\% \text{ of rdg} + 0.3 A / 0.15 A)$ $\frac{1}{2} \times (0.2\% \text{ of rdg} + 0.4 A)$ $\frac{1}{2} \times (0.2\% \text{ of rdg} + 1 X A / 1.5 A)$ $\frac{1}{2} W$	e each phases are in C voltage setting 0' mmposition, the ac perating temperatur t to 0 V (AC+DC mo immposition, the ac current of 0 A to ma e polyphase output	Adividually set. V (AC+DC mode) and 23 °C ± 5 °C. For phase tive current of AC+DC satisfies the maximu re range. de) and 23 °C ± 5 °C tive current of AC+DC satisfies the maximum and the current (or its reverse), using the or it is a specification for phase voltage settin maximum current (or its reverse), 10 % to 9 P 45 Hz to 65 Hz: ±(0.5 % of rdg + 0.1 15 Hz: to 550 Hz: ±(0.5 % of rdg + 0.1 15 Hz: to 550 Hz: ±(0.5 % of rdg + 0.3 A / 0.15 A 45 Hz to 65 Hz: and DC: ±(12 % of rd	m current. In the ca um current. utput terminal on th g. 0 % of output volta olyphase output 5 A / 0.08 A) 3 A / 0.15 A) ) g   + 1.5 A / 0.75 A)	ise of 40 Hz or lower or 400 Hz or He rear panel. Ige.
*4. For phase voltag *5. For an output vo *6. Line voltage only *7. If the output volu *8. With respect to 1 *9. External power in *10. For 45 Hz to 65 *11. L1, L2 and 13 p *12. Can be set only *13. For an output v *14. In the case of fl *15. For an output v *16. If the output vo And the ambier *17. Instantaneous. *18. For an output v *19. 50 % or higher *20. For an output v *21. For 5 Hz to 1 N Measured Value Disp Voltage <sup>*1+2</sup> Current <sup>*4</sup>	e setting in polyn plage of 10 V to 0 y can be set in ba tage is higher tha the ambient tem the apacitor-inp njection or regen 5 Hz, the rated ou hase can be set i with independ n hase can be set i vith independ n hase can be set i vith independ n hase can be set i with independ n hase can be set i with independ n hase can be set i with independ n hase can be set i vith i hase can be set i vith i vi	phase output. In ba 175 V / 20 V to 350 lance mode. In rated value, this perature is 40 degr ut rectifying load. L independ at indepe- node in polyphase. higher, sine wave, output voltage, end ba node in polyphase. higher, sine wave, output voltage, no lo independ at indepe- tion de in polyphase. higher, sine wave, output voltage, the maximum 175 V / 150 V to 3: ut voltage, the maximum 200 V, a load powe in DC mode using y of the measurem uracy uracy uracy uracy uracy accuracy <sup>33</sup> Resolution Accuracy <sup>32</sup>	lance mode all phas V, sine wave, an out is limited to satisfy t ee or higher, the ma- imited by the maxim er short reverse pow ad and the resistant and mode in the poly output. same load and volta ing to 0 V, 23 °C = 5 25 0 V / 500 V to -20 sis limited to satisfy er, the maximum cur- net rated ou 50 V, a load power factor of 1, with re the output terminal ent function is indifi 0.01 V / 0.11 45 Hz to 55 15 Hz to 5515 Hz to 55 15 Hz to 55 15 Hz to 55 15 Hz to 5515 Hz to 55 15 Hz to 5515 Hz	e are collectively set and in unbalance mod put frequency of 45 Hz to 65 Hz, no load, IC he power capacity. If there is the DC superi immum current may decrease. um current. e flow capacity is not available. e load for the maximum current, and the o phase output. ge condition for all phase. "C V, +20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super rent may decrease. ty +20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super rent may decrease. tor of 1, stepwise change from an output V ver, AC and AC+DC modes, THD+N. For th spect to stepwise change from an output C on the rear panel. <b>Single-phase output</b> V Hz and DC: $\pm (0.5 \% \text{ of rdg} + 0.5 V / 1 V)$ HZ: $\pm (0.5 \% \text{ of rdg} + 0.5 V / 1 V)$ HZ: $\pm (0.5 \% \text{ of rdg} + 1.0 / 2 V)$ A HZ: $\pm (0.5 \% \text{ of rdg} + 0.3 A / 0.15 A)$ HZ: $\pm (0.7 \% \text{ of rdg} + 0.3 A / 0.15 A)$ HZ: $\pm (0.7 \% \text{ of rdg} + 3 A / 1.5 A)$ HZ: and DC: $\pm (2 \% \text{ of rdg} + 3 A / 1.5 A)$ HZ: and DC: $\pm (2 \% \text{ of rdg} + 3 A / 1.5 A)$ HZ: and DC: $\pm (2 \% \text{ of rdg} + 3 A / 1.5 A)$	e each phases are in C voltage setting 0' mmposition, the ac perating temperatur t to 0 V (AC+DC mo immposition, the ac current of 0 A to ma e polyphase output	ndividually set. V (AC+DC mode) and 23 °C ± 5 °C. For phase tive current of AC+DC satisfies the maximu- re range. de) and 23 °C ± 5 °C ctive current of AC+DC satisfies the maximu- iximum current (or its reverse), using the ou- , it is a specification for phase voltage settin maximum current (or its reverse). 10 % to 5 Maximum current (or its reverse). 10 % to 5 Maximum current (or its reverse). 10 % to 5 45 Hz to 550 Hz: ±(0.5 % of rdg + 0.1 15 Hz to 550 Hz: ±(0.5 % of rdg + 0.3 A / 0.15 % DC: ± (0.5 % of rdg   + 0.3 A / 0.15 %	m current. In the ca um current. utput terminal on th g. 0 % of output volta olyphase output 5 A / 0.08 A) 3 A / 0.15 A) ) g   + 1.5 A / 0.75 A)	ise of 40 Hz or lower or 400 Hz or He rear panel. Ige.
*4. For phase voltag *5. For an output vo *6. Line voltage only *7. If the output volu *8. With respect to 1 *9. External power in *10. For 45 Hz to 65 *11. L1, L2 and 13 p *12. Can be set only *13. For an output v *14. In the case of fl *15. For an output v *16. If the output vo And the ambier *17. Instantaneous. *18. For an output v *19. 50 % or higher *20. For an output v *21. For 5 Hz to 1 N Measured Value Disp Voltage <sup>*1+2</sup> Current <sup>*4</sup>	e setting in polyp oitage of 10 V to 1 v can be set in ba tage is higher tha the ambient tem the capacitor-inp oitage of 50 V or base can be set i with independ m voltage of 50 V or he AC mode and voltage of 50 V or for the rated outp ooltage of 75 V to of the rated outp voltage of 100 V / AHz components oltage (All accuracy Resolution RMS value acc AVC value acc AVC value acc PEAK value acc PEAK value acc	phase output. In ba 175 V / 20 V to 350 lance mode. In rated value, this perature is 40 degr ut rectifying load. L onde in polyphase. higher, sine wave, output voltage, no lo independ at indepe node in polyphase. higher, sine wave, output voltage, setto to 10 V, 110 V to + han rated value, this 40 degree or higher 40 degree or higher 40 degree or higher 175 V / 150 V to 3 200 V, a load powe in DC mode using of the measurem uracy uracy uracy uracy 156 March 100 March	lance mode all phas V, sine wave, an out is limited to satisfy t ee or higher, the ma- imited by the maxim er short reverse pow ad and the resistanc nd mode in the poly output. same load and volta ing to 0 V, 23 °C $\pm$ 5 25 V / -500 V to -20 is limited to satisfy er, the maximum curr er, the maximum curr er, the maximum curr er factor of 1, with re the output terminal ent function is indice 0.01 V / 0.1' 45 Hz to 55 DC: $\pm$ (0.5° 45 Hz to 55 DC: $\pm$ (0.5° 3 45 Hz to 55 DC: $\pm$ (0.5° 3 45 Hz to 55 DC: $\pm$ (0.5° 3 45 Hz to 55 DC: $\pm$ (0.5° 4 5 Hz to 55 DC: $\pm$ (0.5°) 4 5 Hz to 55 DC: $\pm$ (0.5° 4 5 Hz to 55 DC: $\pm$ (0.5°) 4	e are collectively set and in unbalance mod put frequency of 45 Hz to 65 Hz, no load, to he power capacity. If there is the DC superi dimum current may decrease. um current. e load for the maximum current, and the o phase output. ge condition for all phase. "C" V( +20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super rent may decrease. thut voltage. ctor of 1, stepwise change from an output ver, AC and AC+DC modes, THD-N. For th spect to stepwise change from an output c on the rear panel. <b>Single-phase output</b> V Hz and DC: $\pm (0.5 \% \text{ of rdg} + 0.5 V / 1 V)$ Hz: $\pm (0.7 \% \text{ of rdg} + 0.5 A / 0.15 Å)$ Hz: $\pm (0.7 \% \text{ of rdg} + 0.3 A / 0.15 Å)$ Hz: $\pm (0.7 \% \text{ of rdg} + 0.3 A / 0.15 Å)$ Hz: $\pm (0.7 \% \text{ of rdg} + 0.3 A / 0.15 Å)$ Hz and DC: $\pm (2.\% \text{ of rdg} + 3 A / 1.5 Å)$ /10 W Hz and DC: $\pm (2.\% \text{ of rdg} + 3 A / 1.5 Å)$ /10 W Hz: $\pm (2.\% \text{ of rdg} + 13 A / 1.5 Å)$	e each phases are in C voltage setting 0' mmposition, the ac perating temperatur t to 0 V (AC+DC mo immposition, the ac current of 0 A to ma e polyphase output	Adividually set. V (AC+DC mode) and 23 °C ± 5 °C. For phase tive current of AC+DC satisfies the maximu re range. de) and 23 °C ± 5 °C tive current of AC+DC satisfies the maximum and the current (or its reverse), using the or it is a specification for phase voltage settin maximum current (or its reverse), 10 % to 9 P 45 Hz to 65 Hz: ±(0.5 % of rdg + 0.1 15 Hz: to 550 Hz: ±(0.5 % of rdg + 0.1 15 Hz: to 550 Hz: ±(0.5 % of rdg + 0.3 A / 0.15 A 45 Hz to 65 Hz: and DC: ±(12 % of rd	m current. In the ca im current. itput terminal on th ig. 00 % of output volta volta volta 5 A / 0.08 A) 3 A / 0.15 A) ) g  + 1.5 A / 0.75 A) + 3 W)	ise of 40 Hz or lower or 400 Hz or He rear panel. Ige.
*4. For phase voltag *5. For an output vo *6. Line voltage only *7. If the output volu *8. With respect to 1 *9. External power in *10. For 45 Hz to 65 *11. L1, L2 and 13 p *12. Can be set only *13. For an output v *14. In the case of fl *15. For an output v *16. If the output vo And the ambier *17. Instantaneous. *18. For an output v *19. 50 % or higher *20. For an output v *21. For 5 Hz to 1 N Measured Value Disp Voltage <sup>*1+2</sup> Current <sup>*4</sup>	e setting in polyn plage of 10 V to 0 y can be set in ba tage is higher tha the ambient tem the apacitor-inp njection or regen 5 Hz, the rated ou hase can be set i with independ n hase can be set i vith independ n hase can be set i vith independ n hase can be set i with independ n hase can be set i with independ n hase can be set i with independ n hase can be set i vith i hase can be set i vith i vi	phase output. In ba 175 V / 20 V to 350 lance mode. In rated value, this perature is 40 degr ut rectifying load. L eration which is ow higher, sine wave, output voltage, no lo independ at independ higher, sine wave, output voltage, est lo to 10 V, 10 V to 4 an rated value, thil 40 degree or high to 10 V, 10 V to 3 out voltage, the maximur 175 V / 150 V to 3 out voltage, the maximur 175 V / 150 V to 3 out voltage, the maximur 175 V / 150 V to 3 out voltage, the maximur 175 V / 150 V to 3 out voltage, the maximur 175 V / 150 V to 3 Out voltage, the maximur 175 V / 150 V to 3 Out voltage, the maximur 175 V / 150 V to 3 Out voltage, the maximur 175 V / 150 V to 3 Out voltage, the maximur 175 V / 150 V to 3 Out voltage, the maximur 175 V / 150 V to 3 Out voltage, the maximur 175 V / 150 V to 3 Out voltage, the maximur 175 V / 150 V to 3 Out voltage, the maximur 175 V / 150 V to 3 Out voltage, the maximur 175 V / 150 V to 3 Out voltage, the maximur 175 V / 150 V to 3 100 V and power in DC mode using V of the measurem uracy Resolution Accuracy Resolution	lance mode all phas V, sine wave, an out is limited to satisfy t ee or higher, the ma- imited by the maxim er short reverse pow ad and the resistant of mode in the poly output. same load and volta ing to 0 V, 23 °C = 5 25 0V / -500 V to -20 s is limited to satisfy er, the maximum cur net rated ou 50 V, a load pover factor of 1, with re the output terminal ent function is indic 0.01 V / 0.11 45 Hz to 65 0.01 A / 0.1 45 Hz to 65 0.01 V / 1 V 45 Hz to 65 0.01 V / 1 V 45 Hz to 65 0.01 V / 1 V	e are collectively set and in unbalance mod put frequency of 45 Hz to 65 Hz, no load, IC he power capacity. If there is the DC superi immum current may decrease. um current. e flow capacity is not available. e load for the maximum current, and the o phase output. ge condition for all phase. "C V, +20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super rent may decrease. UV, +20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super rent may decrease. ctor of 1, stepwise change from an output voltage. ctor of 1, stepwise change from an output c on the rear panel. <b>Single-phase output</b> V Hz and DC: $\pm (0.5\% \circ frdg + 0.5 V / 1 V)$ DHz: $\pm (0.5\% \circ frdg + 0.5 V / 1 V)$ DHz: $\pm (0.5\% \circ frdg + 0.5 V / 1 V)$ Hz $\pm (0.5\% \circ frdg + 0.3 A / 0.15 A)$ Hz: $\pm (0.7\% \circ frdg + 0.3 A / 0.15 A)$ Hz: $\pm (0.7\% \circ frdg + 0.5 A / 0.4 A)$ $6 \circ frdg   - 0.5 A / 0.4 A)$ Hz and DC: $\pm (2\% \circ frdg + 3 A / 1.5 A)$ TIOW Hz and DC: $\pm (2\% \circ frdg + 18 V/A)$ VAR	e each phases are in C voltage setting 0' mmposition, the ac perating temperatur t to 0 V (AC+DC mo immposition, the ac current of 0 A to ma e polyphase output	ndividually set. V (AC+DC mode) and 23 °C ± 5 °C. For phase tive current of AC+DC satisfies the maximu- re range. de) and 23 °C ± 5 °C ctive current of AC+DC satisfies the maximu- maximum current (or its reverse), using the ou- , it is a specification for phase voltage settin maximum current (or its reverse). 10 % to 5 p 45 Hz to 65 Hz: ±(0.5 % of rdg + 0.1 15 Hz to 550 Hz: ±(0.7 % of rdg + 0.1 15 Hz to 55 Hz: ±(0.7 % of rdg + 0.1 15 Hz to 55 Hz: ±(0.7 % of rdg + 0.4 45 Hz to 65 Hz: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4) 45 Hz to 65 Hz and DC: ±(2 % of	m current. In the ca im current. intput terminal on th g. 00 % of output volta olyphase output s A / 0.15 A) 0) g  + 1.5 A / 0.75 A) 1	ise of 40 Hz or lower or 400 Hz or He rear panel. Ige.
*4. For phase voltag *5. For an output vo *6. Line voltage only *7. If the output vol higher, and that *8. With respect to *9. External power in *10. For 45 Hz to 65 *11. L1, L2 and L3 p *12. Can be set only *13. For an output *14. In the case of ti *15. For an output v *16. If the output vo And the ambier *17. Instantaneous *18. For an output *20. For an output *21. For 5 Hz to 1 N Measured Value Disp Voltage <sup>*1*2</sup> Current <sup>*4</sup>	e setting in polyp ioltage of 10 V to 0 v can be set in ba tage is higher that the ambient tem the ambient tem the capacitor-inp njection or regen 5 Hz, the rated out hase can be set i with independ n voltage of 50 V or he AC mode and voltage of 750 V to of the rated output voltage of 750 V to of the rated output voltage of 100 V / Alz components DeEAK value accc AVG value accc AVG value accc AVG value accc ACV value accc	phase output. In ba 175 V / 20 V to 350 lance mode. In rated value, this perature is 40 degr ut rectifying load. L independ at indepe reation which is ov atput voltage, no lo independ at indepe independ at indepe independ at indepe output voltage, setu to 10 V, 10 V to 3 40 degree or high 40 degree or high 175 V / 150 V to 3 200 V, a load powe in DC mode using or of the measurem uracy uracy uracy area Resolution Accuracy <sup>19</sup> Resolution Accuracy <sup>19</sup> Resolution	lance mode all phas V, sine wave, an out is limited to satisfy t ee or higher, the mai- imited by the maxim er short reverse pow ad and the resistanc nd mode in the poly output. same load and volta same load and volta sing to 0 V, 23 °C $\pm$ 5 25 V / 500 V to 20 s is limited to satisfy er, the maximum cur n current at rated ou 50 V, a load power fail and the output terminal ent function is indii current of load power fail to 0.01 V / 0.11 45 Hz to 55 0.01 X / 0.11 45 Hz to 65 0.11 VA / 11 45 Hz to 65 0.01 VA / 11	e are collectively set and in unbalance mod put frequency of 45 Hz to 55 Hz, no load, f the power capacity. If there is the DC superi imum current may decrease. um current. e flow capacity is not available. e load for the maximum current, and the o phase output. ge condition for all phase. "C V, +20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super rent may decrease. tput voltage. ctor of 1, stepwise change from an output ver, AC and AC+DC modes, THD-N. For th spect to stepwise change from an output c on the rear panel. <b>isted for 23</b> "c <b>25</b> °C.) <b>Single-phase output</b> V Hz: and DC: $\pm$ (0.5% of rdg + 0.5 V / 1 V) Hz: $\pm$ (0.7% of rdg + 0.4 / 0.15 A) Hz: $\pm$ (0.5% of rdg + 0.3 A / 0.15 A) Hz: $\pm$ (0.5% of rdg + 0.3 A / 0.15 A) Hz: $\pm$ (0.5% of rdg + 0.3 A / 0.15 A) Hz: $\pm$ (0.5% of rdg + 0.3 A / 0.15 A) Hz: $\pm$ (0.5% of rdg + 0.3 A / 0.15 A) Hz: $\pm$ (0.5% of rdg + 0.3 A / 0.15 A) Hz: $\pm$ (0.5% of rdg + 0.3 A / 0.15 A) Hz: $\pm$ (0.5% of rdg + 0.3 A / 0.15 A) Hz: $\pm$ (0.5% of rdg + 0.3 A / 0.15 A) Hz: $\pm$ (0.5% of rdg + 0.3 A / 0.15 A) Hz: $\pm$ (0.5% of rdg + 0.3 A / 0.15 A) Hz: $\pm$ (0.5% of rdg + 18 VA) VAR / 10VAR Hz: $\pm$ (2% of rdg + 18 VA)	e each phases are in C voltage setting 0' mmposition, the ac perating temperatur t to 0 V (AC+DC mo immposition, the ac current of 0 A to ma e polyphase output	ndividually set. V (AC+DC mode) and 23 °C ± 5 °C. For phase tive current of AC+DC satisfies the maximuse re range. de) and 23 °C ± 5 °C trive current of AC+DC satisfies the maximum it is a specification for phase voltage settin maximum current (or its reverse), using the or it is a specification for phase voltage settin maximum current (or its reverse), 10 % to 5 P 45 Hz to 65 Hz: ±(0.5 % of rdg + 0.1 15 Hz to 65 Hz: ±(0.5 % of rdg + 0.1 15 Hz to 65 Hz: ±(0.7 % of rdg + 0.3 A / 0.15 A 45 Hz to 65 Hz and DC: ±(2 % of rdg 45 Hz to 65 Hz and DC: ±(2 % of rdg 45 Hz to 65 Hz and DC: ±(2 % of rdg 45 Hz to 65 Hz and DC: ±(2 % of rdg 45 Hz to 65 Hz and DC: ±(2 % of rdg 45 Hz to 65 Hz and DC: ±(2 % of rdg	m current. In the ca im current. intput terminal on th g. 00 % of output volta olyphase output s A / 0.15 A) 0) g  + 1.5 A / 0.75 A) 1	ise of 40 Hz or lower or 400 Hz or He rear panel. Ige.
*4. For phase voltag *5. For an output vo *6. Line voltage only *7. If the output volu- higher, and that *8. With respect to 1 *9. External power in *10. For 45 Hz to 65 *11. L1, L2 and L3 p *12. Can be set only *13. For an output v *14. In the case of tl *15. For an output v *16. If the output vo And the ambier *17. Instantaneous- *18. For an output v *19. 50 % or higher *20. For an output v *21. For 5 Hz to 1 N Measured Value Disp Voltage *1*2 Current*4	e setting in polyp ioltage of 10 V to 0 v can be set in ba tage is higher that the ambient tem the ambient tem the capacitor-inp njection or regen 5 Hz, the rated out hase can be set i with independ n voltage of 50 V or he AC mode and voltage of 750 V to of the rated output voltage of 750 V to of the rated output voltage of 100 V / Alz components DeEAK value accc AVG value accc AVG value accc AVG value accc ACV value accc	phase output. In ba 175 V / 20 V to 350 lance mode. In rated value, this perature is 40 degr ut rectifying load. L eration which is ow higher, sine wave, output voltage, no lo nidepend at independ higher, sine wave, output voltage, no lo node in polyphase. higher, sine wave, output voltage, no lo to 10 V, 10 V to 4 an rated value, this 40 degree or higher to 10 V, 10 V to 3 out voltage, the maximur 175 V / 150 V to 3 out voltage, the maximur 200 V, a load powe in DC mode using or of the measurem uracy uracy uracy uracy uracy Resolution Accuracy <sup>15</sup> Resolution Accuracy Resolution	lance mode all phas V, sine wave, an out is limited to satisfy t e or higher, the ma- imited by the maxim er short reverse pow ad and the resistant of mode in the poly output. same load and volta ing to 0 V, 23 °C = 5 25 0V / -500 V to -20 s is limited to satisfy er, the maximum cur trated ou 50 V, a load power fa dimum current or low 50 V, a lo	e are collectively set and in unbalance mod put frequency of 45 Hz to 65 Hz, no load, C he power capacity. If there is the DC superi immur current may decrease. um current. er flow capacity is not available. e load for the maximum current, and the o phase output. ge condition for all phase. "C V, +20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super erent may decrease. tor of 1, stepwise change from an output ver, AC and AC+DC modes, THD+N. For th spect to stepwise change from an output c on the rear panel. <b>Single-phase output</b> V Hz and DC: $\pm (0.5 \% \text{ of rdg} + 0.5 V / 1 V)$ Hz: $\pm (0.7 \% \text{ of rdg} + 1 V / 2 V)$ 6 of rdg $\mid -0.5 V / 1 V)$ Hz and DC: $\pm (2\% \text{ of rdg} + 1 A / 1.5 A)$ Hz: $\pm (0.7 \% \text{ of rdg} + 1 A / 1.5 A)$ Hz: $\pm (0.7 \% \text{ of rdg} + 3 A / 1.5 A)$ Hz: $\pm (0.7 \% \text{ of rdg} + 3 A / 1.5 A)$ Hz: $\pm (2\% \text{ of rdg} + 18 VA)$ VA(P10VA	e each phases are in C voltage setting 0' mmposition, the ac perating temperatur t to 0 V (AC+DC mo immposition, the ac current of 0 A to ma e polyphase output	ndividually set. V (AC+DC mode) and 23 °C ± 5 °C. For phase tive current of AC+DC satisfies the maximu- re range. de) and 23 °C ± 5 °C ctive current of AC+DC satisfies the maximu- maximum current (or its reverse), using the ou- , it is a specification for phase voltage settin maximum current (or its reverse). 10 % to 5 p 45 Hz to 65 Hz: ±(0.5 % of rdg + 0.1 15 Hz to 550 Hz: ±(0.7 % of rdg + 0.1 15 Hz to 55 Hz: ±(0.7 % of rdg + 0.1 15 Hz to 55 Hz: ±(0.7 % of rdg + 0.4 45 Hz to 65 Hz: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4) 45 Hz to 65 Hz and DC: ±(2 % of	m current. In the ca im current. intput terminal on th g. 00 % of output volta olyphase output s A / 0.15 A) 0) g  + 1.5 A / 0.75 A) 1	ise of 40 Hz or lower or 400 Hz or He rear panel. Ige.
*4. For phase voltag *5. For an output vo f6. Line voltage only *7. If the output vol higher, and that *8. With respect to *9. External power in *10. For 45 Hz to 65 *11. L1, L2 and L3 p *12. Can be set only *13. For an output v *14. In the case of ti *15. For an output v *16. If the output vo And the ambier *17. Instantaneous *18. For an output v *19. 50 % or higher *20. For an output v *19. For 5 Hz to 1 N Measured Value Disp Voltage <sup>*1*2</sup> Current <sup>*4</sup> Power <sup>*7*8</sup>	e setting in polyp ioltage of 10 V to 0 v can be set in ba tage is higher that the ambient tem the ambient tem the capacitor-inp njection or regen 5 Hz, the rated out hase can be set i with independ n voltage of 50 V or he AC mode and voltage of 750 V to of the rated output voltage of 750 V to of the rated output voltage of 100 V / Alz components DeEAK value accc AVG value accc AVG value accc AVG value accc ACV value accc	phase output. In ba 175 V / 20 V to 350 lance mode. In rated value, this perature is 40 degr ut rectifying load. L independ at indepe reation which is ov atput voltage, no lo independ at indepe independ at indepe independ at indepe output voltage, setu to 10 V, 10 V to 3 40 degree or high 40 degree or high 175 V / 150 V to 3 200 V, a load powe in DC mode using or of the measurem uracy uracy uracy area Resolution Accuracy <sup>19</sup> Resolution Accuracy <sup>19</sup> Resolution	lance mode all phas V, sine wave, an out is limited to satisfy t e or higher, the ma- imited by the maxim er short reverse pow ad and the resistant of mode in the poly output. same load and volta ing to 0 V, 23 °C = 5 25 0V / -500 V to -20 s is limited to satisfy er, the maximum cur trated ou 50 V, a load power fa dimum current or low 50 V, a lo	e are collectively set and in unbalance mod put frequency of 45 Hz to 55 Hz, no load, f the power capacity. If there is the DC superi imum current may decrease. um current. e load for the maximum current, and the o phase output. ge condition for all phase. "C" V(+20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super rent may decrease. tput voltage. ctor of 1, stepwise change from an output ver, AC and AC+DC modes, THD-N. For th spect to stepwise change from an output c on the rear panel. <b>Single-phase output</b> V Hz and DC: $\pm (0.5\% \text{ of rdg} + 0.5 V / 1 V)$ Hz: $\pm (0.5\% \text{ of rdg} + 0.5 V / 1 V)$ Hz: $\pm (0.5\% \text{ of rdg} + 0.3 A / 0.15 A)$ Hz: $\pm (0.5\% \text{ of rdg} + 0.3 A / 0.15 A)$ Hz: $\pm (0.5\% \text{ of rdg} + 0.3 A / 0.15 A)$ Hz: $\pm (2\% \text{ of rdg} + 13 A / 1.5 A)$ 10 W Hz and DC: $\pm (2\% \text{ of rdg} + 3 A / 1.5 A)$ 10 W Hz: $\pm (2\% \text{ of rdg} + 18 VA)$ AA (10VA Hz: $\pm (2\% \text{ of rdg} + 18 VA)$ AA (10VA Hz: $\pm (2\% \text{ of rdg} + 18 VA)$ AA (10VA Hz: $\pm (2\% \text{ of rdg} + 18 VA)$ AA (10VA	e each phases are in C voltage setting 0' mmposition, the ac perating temperatur t to 0 V (AC+DC mo immposition, the ac current of 0 A to ma e polyphase output	ndividually set. V (AC+DC mode) and 23 °C ± 5 °C. For phase tive current of AC+DC satisfies the maximu- re range. de) and 23 °C ± 5 °C ctive current of AC+DC satisfies the maximu- maximum current (or its reverse), using the ou- , it is a specification for phase voltage settin maximum current (or its reverse). 10 % to 5 p 45 Hz to 65 Hz: ±(0.5 % of rdg + 0.1 15 Hz to 550 Hz: ±(0.7 % of rdg + 0.1 15 Hz to 55 Hz: ±(0.7 % of rdg + 0.1 15 Hz to 55 Hz: ±(0.7 % of rdg + 0.4 45 Hz to 65 Hz: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4) 45 Hz to 65 Hz and DC: ±(2 % of	m current. In the ca im current. intput terminal on th g. 00 % of output volta olyphase output s A / 0.15 A) 0) g  + 1.5 A / 0.75 A) 1	ise of 40 Hz or lower or 400 Hz or He rear panel. Ige.
*4. For phase voltag *5. For an output vo f6. Line voltage only *7. If the output vol higher, and that *8. With respect to *9. External power in *10. For 45 Hz to 65 *11. L1, L2 and L3 p *12. Can be set only *13. For an output v *14. In the case of ti *15. For an output v *16. If the output vo And the ambier *17. Instantaneous *18. For an output v *19. 50 % or higher *20. For an output v *19. For 5 Hz to 1 N Measured Value Disp Voltage <sup>*1*2</sup> Current <sup>*4</sup> Power <sup>*7*8</sup>	e setting in polyp ioltage of 10 V to 0 v can be set in ba tage is higher that the ambient tem the ambient tem the capacitor-inp njection or regen 5 Hz, the rated out hase can be set i with independ n voltage of 50 V or he AC mode and voltage of 750 V to of the rated output voltage of 750 V to of the rated output voltage of 100 V / Alz components DeEAK value accc AVG value accc AVG value accc AVG value accc ACV value accc	phase output. In ba 75 V / 20 V to 350 lance mode. In rated value, this perature is 40 degr ut rectifying load. L eration which is ow higher, sine wave, output voltage, no lo independ at independ higher, sine wave, output voltage, no lo node in polyphase. higher, sine wave, output voltage, no lo to -10 V, +10 V to 4- han rated value, this 40 degree or higher to -10 V, +10 V to 3- out voltage, the max- uut voltage, the max- color of the measurem uracy uracy uracy uracy uracy uracy Resolution Accuracy <sup>10</sup> Range Resolution Range Resolution	lance mode all phas V, sine wave, an out is limited to satisfy t ee or higher, the mai- imited by the maxim er short reverse pow ad and the resistanc nd mode in the poly same load and volta is limited to satisfy 250 V / 500 V to -20 is limited to satisfy and and work is limited to satisfy 250 V / 500 V to -20 is limited to satisfy and and work is limited to satisfy and any ork is limited to satisfy and any ork is limited to satisfy and any ork is limited to satisfy on current or low fr factor of 1, with re ent function is indic control of 1, with re ent function is indic control of 1, with re ent function is indic control of 1, with re state to 55 0, 01 V / 0.1 45 Hz to 55 0, 01 W / 1 W 45 Hz to 65 0, 01 W / 1 W 45 Hz to 65 0, 01 W / 1 W 45 Hz to 65 0, 000 to 1, 0, 0, 001 Up to 100th 200 V / 4001 0, 01 V / 0.1	e are collectively set and in unbalance mod put frequency of 45 Hz to 55 Hz, no load, 1 the power capacity. If there is the DC superi immum current may decrease. um current. e flow capacity is not available. e load for the maximum current, and the o phase output. ge condition for all phase. "C V, +20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super rent may decrease. tput voltage. ctor of 1, stepwise change from an output to ever, AC and AC+DC modes, THD-N. For th spect to stepwise change from an output c on the rear panel. <b>atted for 23 °C.5 °C.)</b> Single-phase output V Hz: $\pm (0.5 \% \text{ of rdg} + 0.5 V / 1 V)$ DHz: $\pm (0.7 \% \text{ of rdg} + 0.3 A / 0.15 A)$ Ht: $\pm (0.7 \% \text{ of rdg} + 0.3 A / 0.15 A)$ Ht: $\pm (0.7 \% \text{ of rdg} + 0.3 A / 0.15 A)$ Ht: $\pm (0.7 \% \text{ of rdg} + 0.3 A / 0.15 A)$ Ht: $\pm (0.7 \% \text{ of rdg} + 0.3 A / 0.15 A)$ Ht: $\pm (0.7 \% \text{ of rdg} + 0.3 A / 0.15 A)$ Ht: $\pm (0.7 \% \text{ of rdg} + 0.3 A / 0.15 A)$ Ht: $\pm (0.7 \% \text{ of rdg} + 18 VA)$ VAR / 10VA Hz: $\pm (2\% \text{ of rdg} + 18 VA)$ VAR / 10VA Hz: $\pm (2\% \text{ of rdg} + 18 VA)$ VAR / 10VA Hz: $\pm (2\% \text{ of rdg} + 18 VAR)$ Worder of the fundamental wave V, 100 % (0.1%	e each phases are in C voltage setting 0' mmposition, the ac perating temperatur t to 0 V (AC+DC mo immposition, the ac current of 0 A to ma e polyphase output	ndividually set. V (AC+DC mode) and 23 °C ± 5 °C. For phase tive current of AC+DC satisfies the maximu- re range. de) and 23 °C ± 5 °C ctive current of AC+DC satisfies the maximu- maximum current (or its reverse), using the ou- , it is a specification for phase voltage settin maximum current (or its reverse). 10 % to 5 p 45 Hz to 65 Hz: ±(0.5 % of rdg + 0.1 15 Hz to 550 Hz: ±(0.7 % of rdg + 0.1 15 Hz to 55 Hz: ±(0.7 % of rdg + 0.1 15 Hz to 55 Hz: ±(0.7 % of rdg + 0.4 45 Hz to 65 Hz: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4) 45 Hz to 65 Hz and DC: ±(2 % of	m current. In the ca im current. intput terminal on th g. 00 % of output volta olyphase output s A / 0.15 A) 0) g  + 1.5 A / 0.75 A) 1	ise of 40 Hz or lower or 400 Hz or He rear panel. Ige.
*4. For phase voltag *5. For an output vo *6. Line voltage only *7. If the output vol higher, and that *8. With respect to 1 *9. External power in *10. For 45 Hz to 65 *11. L1, L2 and L3 p *12. Can be set output vo *14. In the case of the *15. For an output v *14. In the case of the *15. For an output v *14. In the case of the *17. Instantaneous *18. For an output v *20. For an output v *21. For 5 Hz to 1 N Measured Value Disp Voltage *1*2 Current *4 Power *7*8 Power *7*8	e setting in polypicage of 10 V to 1 y can be set in battage is higher that the ambient tem the capacitor-inp njection or regen 5 Hz, the rated out obtage of 50 V or he AC mode and voltage of 50 V or he AC mode and voltage of 50 V or he AC mode and voltage of 50 V or he AC mode and to the AC mode and AC would accord PEAK value accord PEAK value accord PEAK value accord Active (W) Apparent (VA) Reactive (VAR)	phase output. In ba 175 V / 20 V to 350 lance mode. an rated value, this perature is 40 degr ut rectifying load. L output voltage, no lo independ at indepe ration which is ov atput voltage, eno lo independ at indepe to 10 V, +10 V to + higher, sine wave, output voltage, end 40 degree or high 40 degree	lance mode all phas V, sine wave, an out is limited to satisfy t ee or higher, the mai- mited by the maxim er short reverse pow ad and the resistanc nd mode in the poly output. same load and volta- ing to 0 V, 23 °C $\pm$ 5 25 V / 500 V to 20 is limited to satisfy er, the maximum current n current at rated ou 50 V, load power fa- ert, the maximum current n current at rated ou 50 V, load power fa- the output terminal ent function is indice 0.01 V / 0.11 45 Hz to 65 0.01 X / 0.11 45 Hz to 65 0.01 V / 10 Y 45 Hz to 65 0.01 V / 11 45 Hz to 55 0.1 VA (11) 45 Hz to 55 0.000 to 1.00 0.001 0.001 V / 0.11 45 Hz to 55 0.000 to 1.00 0.001 V / 0.11 45 Hz to 55 0.000 to 1.00 0.000 to 1.00 0.001 V / 0.11 45 Hz to 55 0.000 to 1.00 0.000 to 1.000 0.000 to 1.000 to 1.000 0.000	e are collectively set and in unbalance mod put frequency of 45 Hz to 65 Hz, no load, IC he power capacity. If there is the DC superi immum current may decrease. um current. e flow capacity is not available. e load for the maximum current, and the o phase output. ge condition for all phase. "C" V, +20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super rent may decrease. typut voltage. ctor of 1, stepwise change from an output v ver, AC and AC+DC modes, THD+N. For th spect to stepwise change from an output on the rear panel. <b>Single-phase output</b> V Hz and DC: $\pm (0.5 \% \text{ of rdg} + 0.5 V / 1 V)$ Hz: $\pm (0.7 \% \text{ of rdg} + 0.5 V / 1 V)$ Hz: $\pm (0.7 \% \text{ of rdg} + 0.5 V / 1 V)$ Hz: $\pm (0.7 \% \text{ of rdg} + 0.5 A / 0.4 A)$ for rdg + 0.5 A / 0.4 A) Hz: $\pm (2.7 \% \text{ of rdg} + 0.3 A / 0.15 A)$ Hz: $\pm (2.7 \% \text{ of rdg} + 1.3 A / 1.5 A)$ /10W Hz and DC: $\pm (2 \% \text{ of rdg} + 3 A / 1.5 A)$ /10W Hz: $\pm (2.7 \% \text{ of rdg} + 1.8 VA)$ /AR / 10VA Hz: $\pm (2.7 \% \text{ of rdg} + 1.8 VA)$ /AR / 10VA Hz: $\pm (2.7 \% \text{ of rdg} + 1.8 VA)$ /AR / 10VAR Hz: $\pm (2.7 \% \text{ of rdg} + 1.8 VA)$ /AR / 10VAR Hz: $\pm (2.7 \% \text{ of rdg} + 1.8 VA)$ /AR / 10VAR	e each phases are in C voltage setting 0' mmposition, the ac perating temperatur t to 0 V (AC+DC mo immposition, the ac current of 0 A to ma e polyphase output	ndividually set. V (AC+DC mode) and 23 °C ± 5 °C. For phase tive current of AC+DC satisfies the maximu- re range. de) and 23 °C ± 5 °C ctive current of AC+DC satisfies the maximu- maximum current (or its reverse), using the ou- , it is a specification for phase voltage settin maximum current (or its reverse). 10 % to 5 p 45 Hz to 65 Hz: ±(0.5 % of rdg + 0.1 15 Hz to 550 Hz: ±(0.7 % of rdg + 0.1 15 Hz to 55 Hz: ±(0.7 % of rdg + 0.1 15 Hz to 55 Hz: ±(0.7 % of rdg + 0.4 45 Hz to 65 Hz: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4) 45 Hz to 65 Hz and DC: ±(2 % of	m current. In the ca im current. intput terminal on th g. 00 % of output volta olyphase output s A / 0.15 A) 0) g  + 1.5 A / 0.75 A) 1	ise of 40 Hz or lower or 400 Hz or He rear panel. ige.
<ul> <li>*4. For phase voltage</li> <li>*5. For an output vo</li> <li>*6. Line voltage only</li> <li>*7. If the output voltage</li> <li>*8. With respect to t</li> <li>*9. External power in voltage</li> <li>*11. L1, L2 and L3 p</li> <li>*12. Can be set only</li> <li>*13. For an output v</li> <li>*14. In the case of ti</li> <li>*15. For an output v</li> <li>*14. In the case of ti</li> <li>*15. For an output v</li> <li>*16. If the output vo</li> <li>And the ambier</li> <li>*17. Instantaneous</li> <li>*18. For an output v</li> <li>*19. 50 % or higher</li> <li>*20. For an output v</li> <li>*19. 50 % or higher</li> <li>Yoottage<sup>*1+2</sup></li> <li>Current<sup>*4</sup></li> <li>Power <sup>778</sup></li> <li>Power factor</li> <li>Harmonic voltage</li> <li>Effective value (rms)</li> <li>Percent (%)</li> <li>(AC-INT and 50/60 Hz of the set of t</li></ul>	e setting in polypicage of 10 V to 1 y can be set in batage is higher that the ambient tem the capacitor-inp njection or regen 5 Hz, the rated ou- shase can be set i with independ m toltage of 50 V or he AC mode and voltage of 50 V or he AC mode and voltage of 50 V or he AC mode and toltage of 50 V or he AC mode and toltage of 50 V or he AC mode and toltage of 750 V to of the rated output Charles of the set to a set AVG value acc AVG value acc PEAK value acc PEAK value acc PEAK value acc AVG value acc PEAK value acc AVG value acc AVG value acc AVG value acc PEAK value acc AVG value acc AVG value acc AVG value acc PEAK value acc AVG value acc AVG value acc PEAK value acc AVG val	phase output. In ba 75 V / 20 V to 350 lance mode. In rated value, this perature is 40 degr ut rectifying load. L eration which is ow higher, sine wave, output voltage, no lo independ at independ higher, sine wave, output voltage, no lo node in polyphase. higher, sine wave, output voltage, no lo to -10 V, +10 V to 4- han rated value, this 40 degree or higher to -10 V, +10 V to 3- out voltage, the max- uut voltage, the max- color of the measurem uracy uracy uracy uracy uracy uracy Resolution Accuracy <sup>10</sup> Range Resolution Range Resolution	lance mode all phas V, sine wave, an out is limited to satisfy t ee or higher, the mai- imited by the maxim er short reverse pow ad and the resistanc nd mode in the poly output. same load and volta group V, 23 'C $\pm$ 5 250 V / -500 V to -20 is limited to satisfy the output terminal ent function is indice the output terminal ent function is indice 0.01 V /0.11 (0.01 V /0.11) (0.01 V /0.11) (0.00 V /0.01) (0.00 V /0.01) (0.00 V /0.01) (0.01 V /0.11) (0.00 V /0.01) (0.01 V /0.11) (0.00 V /0.01) (0.01 V /0.11) (0.010 V /	e are collectively set and in unbalance mod put frequency of 45 Hz to 55 Hz, no load, f the power capacity. If there is the DC superi immum current may decrease. um current. e flow capacity is not available. e load for the maximum current, and the o phase output. ge condition for all phase. "C V(V +20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super rent may decrease. tput voltage. ctor of 1, stepwise change from an output ver, AC and AC+DC modes, THD-N. For th spect to stepwise change from an output c on the rear panel. <b>Single-phase output</b> V Hz and DC: $\pm (0.5\% \text{ of rdg} + 0.5 V / 1 V)$ Hz: $\pm (0.5\% \text{ of rdg} + 0.5 V / 1 V)$ Hz: $\pm (0.5\% \text{ of rdg} + 0.4 A / 0.5 A)$ Hz: $\pm (0.5\% \text{ of rdg} + 0.4 A / 0.5 A)$ Hz: $\pm (0.5\% \text{ of rdg} + 0.4 A / 0.5 A)$ Hz: $\pm (0.5\% \text{ of rdg} + 0.4 A / 0.5 A)$ Hz: $\pm (0.5\% \text{ of rdg} + 0.4 A / 0.5 A)$ Hz: $\pm (0.5\% \text{ of rdg} + 0.4 A / 0.5 A)$ Hz: $\pm (0.5\% \text{ of rdg} + 0.4 A / 0.5 A)$ Hz: $\pm (0.5\% \text{ of rdg} + 0.4 A / 0.5 A)$ Hz: $\pm (0.5\% \text{ of rdg} + 0.3 A / 0.15 A)$ Hz: $\pm (0.5\% \text{ of rdg} + 0.3 A / 0.15 A)$ Hz: $\pm (2.5\% \text{ of rdg} + 18 VA)$ Hz: $\pm (2.5\% \text{ of rdg} + 18 VA)$ Hz: $\pm (2.5\% \text{ of rdg} + 18 VA)$ MAR / 10VAR Hz: $\pm (2.5\% \text{ of rdg} + 0.5 V / 1 V)$ order of the fundamental wave (7.00% (-0.15% (-0.5V / 1 V))	e each phases are in C voltage setting 0' mmposition, the ac- perating temperature immposition, the ac- current of 0 A to ma e polyphase output urrent of 0 A to the output e polyphase output urrent of 0 A to the output e polyphase output	ndividually set. V (AC+DC mode) and 23 °C ± 5 °C. For phase tive current of AC+DC satisfies the maximu- re range. de) and 23 °C ± 5 °C tive current of AC+DC satisfies the maximu- re range. de) and 23 °C ± 5 °C tive current of AC+DC satisfies the maximu- ix is a specification for phase voltage settin- maximum current (or its reverse). using the or i, it is a specification for phase voltage settin- maximum current (or its reverse). 10 % to 5 P P 45 Hz to 65 Hz: ±(0.5 % of rdg + 0.1 15 Hz to 550 Hz: ±(0.7 % of rdg + 0.1 15 Hz to 55 Hz: ±(0.7 % of rdg + 0.1) 45 Hz to 65 Hz: ±(0.7 % of rdg + 6 VA) 45 Hz to 65 Hz: ±(2 % of rdg + 6 VA) 45 Hz to 65 Hz: ±(2 % of rdg + 6 VA) 45 Hz to 65 Hz: ±(2 % of rdg + 6 VA)	m current. In the ca um current. utput terminal on th ig. 0% of output volta volyphase output (olyphase output (o	se of 40 Hz or lower or 400 Hz or ie rear panel. ige. t <sup>6</sup> 6
*4. For phase voltag *5. For an output vo *6. Line voltage only *7. If the output vol- higher, and that *8. With respect to 1 *9. External power in *10. For 45 Hz to 65 *11. L1, L2 and L3 p *12. Can be set only *13. For an output v *14. In the case of th *15. For an output v *16. If the output vo And the ambier *17. Instantaneous *18. For an output v *19. 50 % or higher *20. For an output v *21. For 5 Hz to 1 M Measured Value Disp Voltage <sup>*1*2</sup> Current <sup>*4</sup> Power <sup>*778</sup> Power factor Harmonic voltage Effective value (rms) Percent (%) (AC INT and 50/60 Hz v	e setting in polypicage of 10 V to 1 y can be set in batage is higher that the ambient tem the capacitor-inp njection or regen 5 Hz, the rated ou- shase can be set i with independ m toltage of 50 V or he AC mode and voltage of 50 V or he AC mode and voltage of 50 V or he AC mode and toltage of 50 V or he AC mode and toltage of 50 V or he AC mode and toltage of 750 V to of the rated output Charles of the set to a set AVG value acc AVG value acc PEAK value acc PEAK value acc PEAK value acc AVG value acc PEAK value acc AVG value acc AVG value acc AVG value acc PEAK value acc AVG value acc AVG value acc AVG value acc PEAK value acc AVG value acc AVG value acc PEAK value acc AVG val	phase output. In ba 775 V / 20 V to 350 lance mode. In rated value, this perature is 40 degr ut rectifying load. L eration which is ow ration which is ow ration which is ow ration which is ow ration which is own rated value, this 40 degree or high an rated value, this 40 degree or high 40 degree or high and to 10 V, 10 V to 3 Jout voltage, the maximum 175 V / 150 V to 3 Jout voltage, the maximum 175 V / 150 V to 3 Jout voltage, the maximum 200 V, a load powe in DC mode using y of the measurem uracy uracy uracy uracy Resolution Accuracy <sup>19</sup> Resolution Range Resolution Range Resolution Accuracy <sup>172</sup>	lance mode all phas V, sine wave, an out is limited to satisfy t ee or higher, the mai- imited by the maxim er short reverse pow ad and the resistanc nd mode in the poly output. same load and volta: same load and volta	e are collectively set and in unbalance mod put frequency of 45 Hz to 65 Hz, no load, IC he power capacity. If there is the DC superi ainum current may decrease. um current. e flow capacity is not available. e load for the maximum current, and the o phase output. ge condition for all phase. "C V, +20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super rent may decrease. typut voltage. ctor of 1, stepwise change from an output v ver, AC and AC+DC modes, THD+N. For th spect to stepwise change from an output on the rear panel. <b>Single-phase output</b> V Hz and DC: $\pm (0.5 \% \text{ of } rdg + 0.5 V / 1 V)$ HZ: $\pm (0.7 \% \text{ of } rdg + 10 V / 2 V)$ A HZ: $\pm (0.7 \% \text{ of } rdg + 10 A / 0.15 A)$ HZ: $\pm (0.7 \% \text{ of } rdg + 0.5 A / 0.4 A)$ for drgl + 10C: $\pm (2 \% \text{ of } rdg + 3 A / 1.5 A)$ /10W HZ: $\pm (2 \% \text{ of } rdg + 18 VA)$ /A/ 10VA HZ: $\pm (2 \% \text{ of } rdg + 18 VAR)$ MO order of the fundamental wave V, 100 % V, 100 %	e each phases are in C voltage setting 0' mmposition, the ac- perating temperature immposition, the ac- current of 0 A to ma e polyphase output urrent of 0 A to the output e polyphase output urrent of 0 A to the output e polyphase output	ndividually set. V (AC+DC mode) and 23 °C ± 5 °C. For phase tive current of AC+DC satisfies the maximu- re range. de) and 23 °C ± 5 °C ctive current of AC+DC satisfies the maximu- maximum current (or its reverse), using the ou- , it is a specification for phase voltage settin maximum current (or its reverse). 10 % to 5 p 45 Hz to 65 Hz: ±(0.5 % of rdg + 0.1 15 Hz to 550 Hz: ±(0.7 % of rdg + 0.1 15 Hz to 55 Hz: ±(0.7 % of rdg + 0.1 15 Hz to 55 Hz: ±(0.7 % of rdg + 0.4 45 Hz to 65 Hz: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4 45 Hz to 65 Hz and DC: ±(2 % of rdg + 0.4) 45 Hz to 65 Hz and DC: ±(2 % of	m current. In the ca um current. utput terminal on th ig. 0% of output volta volyphase output (olyphase output (o	ise of 40 Hz or lower or 400 Hz or ie rear panel. ige. t <sup>6</sup> 6
<ul> <li>*4. For phase voltage</li> <li>*5. For an output vo</li> <li>*6. Line voltage only</li> <li>*7. If the output voltage</li> <li>*8. With respect to t</li> <li>*9. External power in voltage</li> <li>*11. L1, L2 and L3 p</li> <li>*12. Can be set only</li> <li>*13. For an output v</li> <li>*14. In the case of ti</li> <li>*15. For an output v</li> <li>*14. In the case of ti</li> <li>*15. For an output v</li> <li>*16. If the output vo</li> <li>And the ambier</li> <li>*17. Instantaneous</li> <li>*18. For an output v</li> <li>*19. 50 % or higher</li> <li>*20. For an output v</li> <li>*19. 50 % or higher</li> <li>Yoottage<sup>*1+2</sup></li> <li>Current<sup>*4</sup></li> <li>Power <sup>778</sup></li> <li>Power factor</li> <li>Harmonic voltage</li> <li>Effective value (rms)</li> <li>Percent (%)</li> <li>(AC-INT and 50/60 Hz of the set of t</li></ul>	e setting in polyp oitage of 10 V to 1 y can be set in ba tage is higher the the ambient tem the capacitor-inp njection or regen 5 H2, the rated ou shase can be set i with independ m oitage of 50 V or he AC mode and oitage of 75 V to of the rated outp oitage of 75 V to of the rated outp oitage of 100 V / HZ components Jay (All accuracy Resolution RMS value acc ACV value acc PEAK value acc Active (W) Apparent (VA) Reactive (VAR)	phase output. In ba 75 V / 20 V to 350 lance mode. In rated value, this perature is 40 degr ut rectifying load. L eration which is ow higher, sine wave, output voltage, no lo independ at independ higher, sine wave, output voltage, no lo node in polyphase. higher, sine wave, output voltage, no lo to -10 V, +10 V to 4- han rated value, this 40 degree or higher to -10 V, +10 V to 3- but voltage, the max- in DC mode using or of the measurem uracy uracy uracy uracy uracy uracy uracy Resolution Accuracy <sup>19</sup> Resolution Range Resolution Accuracy <sup>12</sup> Range Resolution Accuracy <sup>12</sup> Range	lance mode all phas V, sine wave, an out is limited to satisfy t ee or higher, the mai- imited by the maxim er short reverse pow ad and the resistanc nd mode in the poly output. Same load and volta ing to 0 V, 23 °C $\pm$ 5 25 V / 500 V to 20 is limited to satisfy the to 20 V to 20 V to 20 is limited to satisfy er, the maximum cur n current at rated ou 50 V, a load power fa is dialog to 20 V to 20 0 V to 10 V to 10 4 S Hz to 65 0 0 V V 0 T 4 S Hz to 65 0 0 V V 0 T 4 S Hz to 65 0 0 V V 0 T 4 S Hz to 65 0 0 V V 0 T 4 S Hz to 65 0 0 V V 0 T 4 S Hz to 65 0 0 V V 0 T 4 S Hz to 65 0 0 V V 0 T 4 S Hz to 65 0 0 V V 0 T 4 S Hz to 65 0 0 V V 0 T 4 S Hz to 65 0 0 V 0 V 1 4 S Hz to 65 0 0 V 0 T 4 S Hz to 65 0 0 V 0 V 1 4 S Hz to 65 0 0 V 0 V 0 V 1 4 S	e are collectively set and in unbalance mod put frequency of 45 Hz to 65 Hz, no load, to he power capacity. If there is the DC superi dimum current may decrease. um current. e load for the maximum current, and the o phase output. ge condition for all phase. "C" V, +20 V to +500 V, no load, AC voltage set the power capacity. If there is the AC super rent may decrease. they nower capacity. If there is the AC super rent may decrease. they nower capacity. If there is the AC super rent may decrease. they nower capacity. If there is the AC super rent may decrease. tor of 1, stepwise change from an output to on the rear panel. <b>Single-phase output</b> V Hz and DC: $\pm (0.5 \% \text{ of rdg} + 0.5 V / 1 V)$ Hz: $\pm (0.7 \% \text{ of rdg} + 0.5 V / 1 V)$ Hz: $\pm (0.7 \% \text{ of rdg} + 0.3 A / 0.15 A)$ DHz: $\pm (0.7 \% \text{ of rdg} + 0.3 A / 0.15 A)$ DHz: $\pm (0.7 \% \text{ of rdg} + 0.3 A / 0.15 A)$ DHz: $\pm (0.7 \% \text{ of rdg} + 1.3 A / 1.5 A)$ / 10W Hz and DC: $\pm (2\% \text{ of rdg} + 1.8 A / 1.5 A)$ / 10W Hz: $\pm (2\% \text{ of rdg} + 1.8 VA)$ AA A (10YAA Hz: $\pm (2\% \text{ of rdg} + 1.8 VA)$ A (10YA Hz: $\pm (2\% \text{ of rdg} + 0.5 V / 1 V)$ moder of the fundamental wave V, 100 % (0.2 \% \text{ of rdg} + 0.5 V / 1 V) mit = (0.7\% \text{ of rdg} + 0.5	e each phases are in C voltage setting 0' mmposition, the ac- perating temperature immposition, the ac- current of 0 A to ma e polyphase output urrent of 0 A to the output e polyphase output urrent of 0 A to the output e polyphase output	ndividually set. V (AC+DC mode) and 23 °C ± 5 °C. For phase tive current of AC+DC satisfies the maximu- re range. de) and 23 °C ± 5 °C ctive current of AC+DC satisfies the maximu- maximum current (or its reverse), using the or, it is a specification for phase voltage settin maximum current (or its reverse). 10 % to 5 <b>P</b> <b>P</b> 45 Hz to 65 Hz: ±(0.5 % of rdg + 0.1 15 Hz to 550 Hz: ±(0.7 % of rdg + 0.1 15 Hz to 550 Hz: ±(0.7 % of rdg + 0.1 15 Hz to 551 Hz: ±(0.7 % of rdg + 0.1 15 Hz to 551 Hz: ±(0.7 % of rdg + 0.1 45 Hz to 65 Hz: ±(0.7 % of rdg + 0.1 45 Hz to 65 Hz: ±(0.7 % of rdg + 0.1 45 Hz to 65 Hz: ±(2 % of rdg + 0.1 45 Hz to 65 Hz: ±(2 % of rdg + 6 VA) 45 Hz to 65 Hz to 65 Hz: ±(2 % of rdg + 6 VA) 45 Hz to 65 Hz	m current. In the ca im current. utput terminal on th ig. 0 % of output volta <b>olyphase output</b> <b>olyphase output</b> <b>j</b> <b>i</b> <b>i</b> <b>i</b> <b>i</b> <b>i</b> <b>i</b> <b>i</b> <b>i</b>	ise of 40 Hz or lower or 400 Hz or ie rear panel. ige. t <sup>6</sup> 6

Model	ONS				
viouel			ASR-6600-24	ASR-6600-30	ASR-6600-36
*2. Accuracy values a *3. The accuracy is f *4. Accuracy values *5. The accuracy is f *6. In the polyphase *7. For an output vo *8. The aparent an *9. For the load with *10. For the load with *11. The measurem *12. For an output v	are in the case is or output wave are in the case is or output wave output, these a ltage of 50 V or d reactive power d the power fact th the power fact out does not co oltage of 10 V t	hat the output voltag form DC or sine wav form DC or sine wav re the specifications greater, an output ci or 0.5 or higher. tor 0.5 or higher. tor 0.5 or lower. no form to the IEC or co or 175 V / 20 V to 350	nt is 5 % to 100 % of the maximum current. e only. for each phase. urrent in the range of 10 % to 100 % of the maximum current. n the DC mode. ather standard. Phase Voltage and Phase Current.		
Others					
Protections			UVP, OVP, OCP, OTP, OPP, Fan Fail, Peak and RMS Current Lin	it	
Display			TFT-LCD. 7 inch	in .	
Memory function			Store and recall settings, Basic settings: 10		
nemory function	Number of me	mories	253 (nonvolatile)		
Arbitrary wave	Waveform lens		4096 words		
abiaaly wave	Amplitude res		16 bits		
- I.C. 10 11		biution	10 bits		
General Specifications	s	· · · · ·			
		USB	Type A: Host, Type B: Slave, Speed: 2.0, USB-CDC / USB-TMC		
		LAN	MAC Address, DNS IP Address, User Password, Gateway IP Add	ress, Instrument IP Address, Subnet Mask	
Interface	Standard	External	External Signal Input External Control I/O V/I Monitor Output		
		RS-232C	Complies with the EIA-RS-232 specifications		
	Optional 1	GPIB	SCPI-1993, IEEE 488.2 compliant interface		
	Optional 2	CAN Bus	Complies with CAN 2.0A or 2.0B based protocol		
	Optional 3	Device Net	Complies with CAN 2.0A or 2.0B based protocol		
nsulation resistance		and chassis, output put and output	DC 500 V, 30 MΩ or more		
Withstand voltage		and chassis, output put and output	AC 1500 V or DC 2130 V , 1 minute		
EMC			EN 61326-1 (Class A) EN 61326-2-1/-2-2 (Class A) EN 61000-3-2 (Class A, Group 1) EN 61000-3-3 (Class A, Group 1) EN 61000-4-2/-4-3/-4-4/-4-5/-4-8/-4-11 (Class A, Group 1) EN 50101 (Class A, Group1)		
Safety			EN 61010-1		
Environment	Operating env	ironment	Indoor use, Overvoltage Category II		
	Operating tem	perature range	0 °C to 40 °C		
	Storage tempe	rature range	-10 °C to 70 °C		
	Operating hur	nidity range	20 %rh to 80 % RH (no condensation)		
	Storage humic	ity range	90 % RH or less (no condensation)		
	Altitude		Up to 2000 m		
		ions)	598(W)×1294(H)×906(D)	598(W)×1472(H)×906(D)	598(W)×1650(H)×906(D)
Dimensions (mm) (not i					

### Dimensions(mm)



 $\overline{\mathbb{O}}^{1}$ 







### ASR-6600-24 (Four units)



# ASR-6600-30 (Five units)





### ORDERING INFORMATION

ASR-6450	4.5 kVA High-Performance AC/DC Power Supply	
ASR-6450-09	9 kVA AC/DC Rack Type Power Source	
ASR-6450-13.5	13.5 kVA AC/DC Rack Type Power Source	
ASR-6600	6 kVA High-Performance AC/DC Power Supply	
ASR-6600-12	12 kVA AC/DC Rack Type Power Source	
ASR-6600-18	18 kVA AC/DC Rack Type Power Source	
ASR-6600-24	24 kVA AC/DC Rack Type Power Source	
ASR-6600-30	30 kVA AC/DC Rack Power Source	
ASR-6600-36	36 kVA AC/DC Rack Power Source	
ACCESSORIES		
	cover, Output terminal cover,	

Copper plate for delta connection input (Mark 1), Copper plate for delta connection input(Mark 1), Copper plate for single phase and Y connection input(Mark 2), Copper plate for delta connection input(Mark 3), Copper plate for 1P output(Mark 4), **GRA-451-E** Rack mount adapter(EIA) (Stand-alone models only) **GTL-246** USB cable (USB 2.0 Type A - Type B cable, approx. 1.2 M)

### Specifications subject to change without notice. ASR-6000ID2BH

OPTION A	OPTION ACCESSORIES	
ASR-003	GPIB Interface Card	
ASR-004	DeviceNet Interface Card	
ASR-005		
ASR-C003	Modbus TCP feature	
GTL-232	RS-232C Cable, approx. 2 M	
GTL-248	GPIB Cable, approx. 2 M	
For ASR-6450/ASR-6600 use only :		
GET-006	Universal Extension	
ASR-006	External Parallel Cable	
	Rack mount adapter(EIA)	
	Rack mount adapter(JIS)	
GPW-008	6RV3 Power Cord; 10 AWG/3 C, 3 m Max Length, RV5-5*3P, RV5-5*3P UL Type	
GPW-012	6RVV5 VDE Power Cord; 2.5 mm 2/5 C, 3 m Max Length, RVS3-5*5P, RVS3-5*5P VDE Type	
GPW-013	6RVT5 PSE Power Cord; 2.0 mm 2/5 C, 3 m Max Length, RVS2-5*5P, RVS2-5*5P PSE Type	
GPW-014	6RV4 UL Power Cord; 10 AWG/4 C, 3 m, RV5-5*4P,RV5-5*4P UL TYPE	
GPW-015	6RVV4 VDE Power Cord; 2.5 mm 2/4 C, 3 m Max Length, RVS3-5*4P, RVS3-5*4P VDE Type	