

AEL-5000 Series

AC & DC Electronic Load

FEATURES

- CC, Linear CC, CR, CV, CP and AC Rectifier Load Mode
- Frequency Range : DC, 40~440Hz
- Turbo Mode for 2 Times the Current and Power of Electronic Load within 1 Second
- Three Units Parallel up to 90kW and Three-phase \triangle or Y Load Connection Can be Synchronized Control by One Master Unit
- Loading and Unloading Angle Control; 0~359 Degree is Settable
- Positive Half-cycle or Negative Half-cycle Loading
- Supports SCR/TRIAC Current Phase Modulation Waveforms, 90 Degree Trailing Edge and Leading Edge
- Optional Interface : GPIB
 RS232
 USB
 LAN





AEL-5002-350-18.75 AEL-5003-350-28 AEL-5004-350-37.5 AEL-5002-425-18.75 AEL-5003-425-28 AEL-5004-425-37.5 AEL-5003-480-18.75 AEL-5004-480-28

AEL-5008-425-75

 AEL-5006-350-56
 AEL-5012-350-112.5
 AEL-5015-350-112.5
 AEL-5019-350-112.5
 AEL-5023-350-112.5

 AEL-5008-350-75
 AEL-5012-425-112.5
 AEL-5015-425-112.5
 AEL-5019-425-112.5
 AEL-5023-425-112.5

 AEL-5006-425-56
 AEL-5012-425-112.5
 AEL-5015-425-112.5
 AEL-5019-425-112.5
 AEL-5023-425-112.5

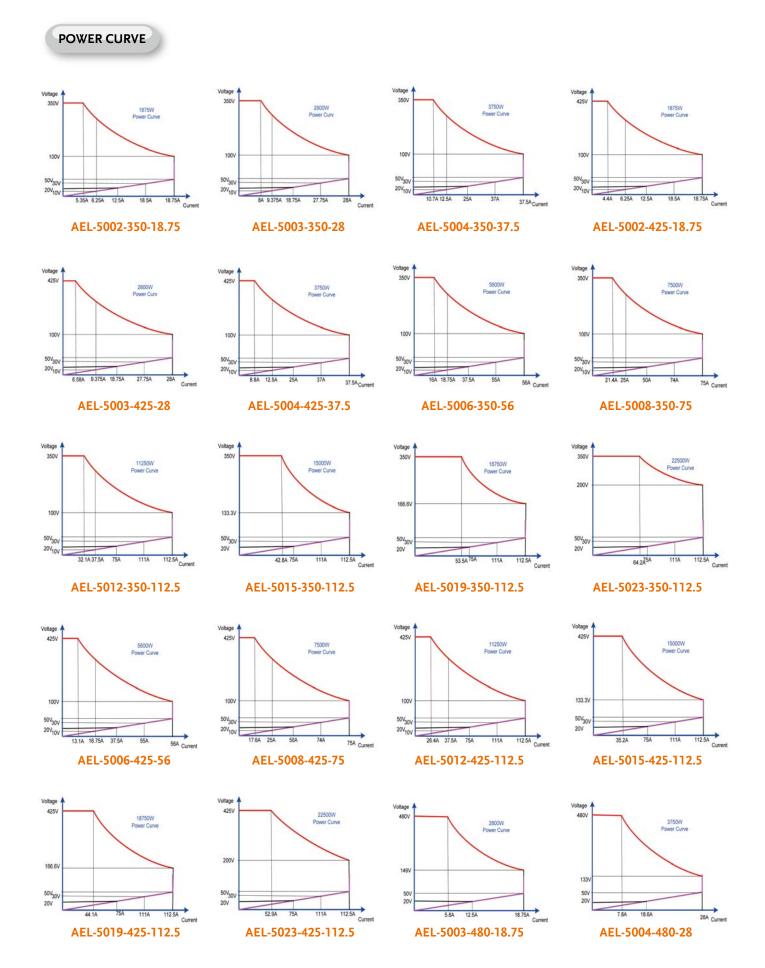
NODE	Power (W)		Currer		
MODEL	Turbo OFF	Turbo ON	Turbo OFF	Turbo ON	Voltage(Volt)
AEL-5002-350-18.75	1875 W	3750W (x2)*	18.75 Arms / 56.25Apeak	37.5Arms/56.25Apeak (x2)*	
AEL-5003-350-28	2800W	5600W (x2)*	28 Arms / 84Apeak	56Arms/84Apeak (x2)*	
AEL-5004-350-37.5	3750 W	7500W (x2)*	37.5 Arms / 112.5Apeak	75.0Arms/112.5Apeak (x2)*	50~350Vrms / 500Vdc
AEL-5002-425-18.75	1875 W	3750W (x2)*	18.75 Arms / 56.25Apeak	37.5Arms/56.25Apeak (x2)*	
AEL-5003-425-28	2800W	5600W (x2)*	28 Arms / 84Apeak	56Arms/84Apeak (x2)*	
AEL-5004-425-37.5	3750 W	7500W (x2)*	37.5 Arms / 112.5Apeak	75.0Arms/112.5Apeak (x2)*	50~425Vrms / 600Vdc
AEL-5006-350-56	5600 W	11200W (x2)*	56.0 Arms / 168Apeak	112.0Arms/ 168Apeak (x2)*	
AEL-5008-350-75	7500 W	15000W (x2)*	75.0 Arms / 225Apeak	150.0Arms/225Apeak (x2)*	
AEL-5012-350-112.5	11250W	22500W (x2)*	112.5 Arms / 337.5Apeak	225Arms/337.5Apeak (x2)*	
AEL-5015-350-112.5	15000W	30000W (x2)*	112.5 Arms / 337.5Apeak	225Arms/337.5Apeak (x2)*	
AEL-5019-350-112.5	18750W	37500W (x2)*	112.5 Arms / 337.5Apeak	225Arms/337.5Apeak (x2)*	
AEL-5023-350-112.5	22500W	45000W (x2)*	112.5 Arms / 337.5Apeak	225Arms/337.5Apeak (x2)*	50~350Vrms / 500Vdc
AEL-5006-425-56	5600 W	11200W (x2)*	56.0 Arms / 168Apeak	112.0Arms/ 168Apeak (x2)*	
AEL-5008-425-75	7500 W	15000W (x2)*	75.0 Arms / 225Apeak	150.0Arms/225Apeak (x2)*	
AEL-5012-425-112.5	11250W	22500W (x2)*	112.5 Arms / 337.5Apeak	225Arms/337.5Apeak (x2)*	
AEL-5015-425-112.5	15000W	30000W (x2)*	112.5 Arms / 337.5Apeak	225Arms/337.5Apeak (x2)*	
AEL-5019-425-112.5	18750W	37500W (x2)*	112.5 Arms / 337.5Apeak	225Arms/337.5Apeak (x2)*	
AEL-5023-425-112.5	22500W	45000W (x2)*	112.5 Arms / 337.5Apeak	225Arms/337.5Apeak (x2)*	50~425Vrms / 600Vdc
AEL-5003-480-18.75	2800W	5600W (x2)*	18.75 Arms / 56.25Apeak	37.5Arms/56.25Apeak (x2)*	
AEL-5004-480-28	3750 W	7500W (x2)*	28 Arms / 84Apeak	56Arms/84Apeak (x2)*	50~480Vrms / 700Vdc

* Power and current boost rate of Turbo ON

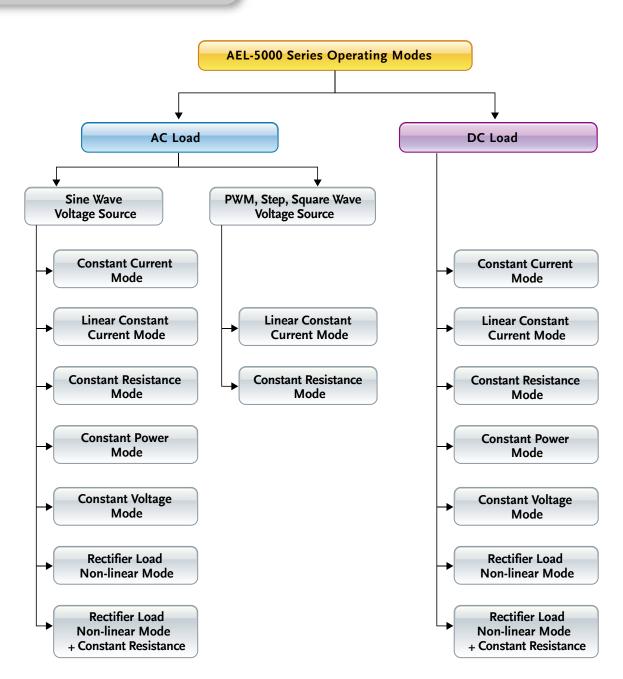
FEATURES

- 4 digit V / A/W Meter · display the Voltage (Vrms, Vpeak, Vmax., Vmin) · Current (Irms, Ipeak, Imax., Imin.) · Watt, Voltampere (VA) · Frequency · Crest Factor · Power Factor · Total Harmonic Distortion of Voltage (VTHD), Voltage Harmonic (VH) · Total Harmonic Distortion of Current (ITHD), Current Harmonic (IH)
- CC, Linear CC, CR, CV, CP and AC Rectifier Load mode
- Crest factor range : 1.414~5.0
- Power factor (PF) range : 0~1 lead or (-1~0) lag
- Built-in function test modes include UPS Efficiency, PV Inverter Efficiency, UPS Back-up time, Battery Discharge time, UPS transfer time, Fuse/Breaker Trip/Non-Trip, Short circuit, OCP, OPP test modes
- Turbo mode is able to increase to 2 times the current and power of electronic load in a short period which is the most suitable for Fuse / Breaker test and short circuit, OCP, OPP test of AC power supply
- Time measurement can be applied to batteries, UPS, fuses and circuit breakers and other tests
- Three units parallel up to 90KW and three-phase △ or Y load connection can be synchronized control by one master unit
- Support on-load boot; at first set Load ON to support on-load boot, inverter or uninterruptible power supply is turned on directly with the set load current, used to verify whether the starter is stable when the Inverter is connected.
- Supports the loading and unloading angle control; the loading and unloading angle control, the full range of 0-359 degrees can be set to verify whether the Inverter output voltage transient response is stable when the actual electrical plugging and unplugging, and whether Overshoot/Undershoot is within the allowable range.
- Support positive half-cycle or negative half-cycle loading; used to verify whether the Inverter output voltage remains stable when the actual appliance has only positive half-cycle or negative half-cycle load current.
- Supports SCR/TRIAC current phase modulation waveforms, 90 degree Trailing edge and Leading Edge.
- Supports the Inrush Current of the inverter at startup and the Surge Current test when the load is suddenly plugged in (Hot Plug-in) during testing.
- Frequency Range : DC, 40~440Hz
- Voltage and current monitoring
- Can be controlled by external voltage for CC, Linear CC, CR, CV, CP operating modes
- \bullet Protection against V, I, W, and $^\circ\! \mathbb C$
- Optional interface : GPIB < RS232 < USB < LAN
- The most complete measurement capabilities

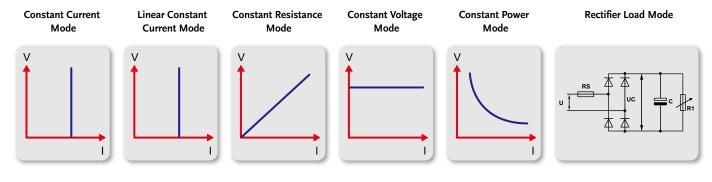
AEL-5000 Series AC & DC electronic load built-in 16-bit A/D and DSP precision measurement circuit, provides accurate measurements, measurement items have Vrms, Arms, Watt, VA, CF, PF, THD, VTHD, ITHD, Ipeak, Amax, Amin, Vmax, and Vmin In addition to these measurement functions, it also provides time measurement [,] products such as UPS, fuses and circuit breakers etc. trip or blow time and transfer time for Off-line UPS



COMPLETE AC AND DC LOAD MODES

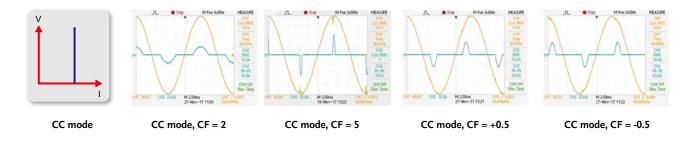


AC LOAD MODE

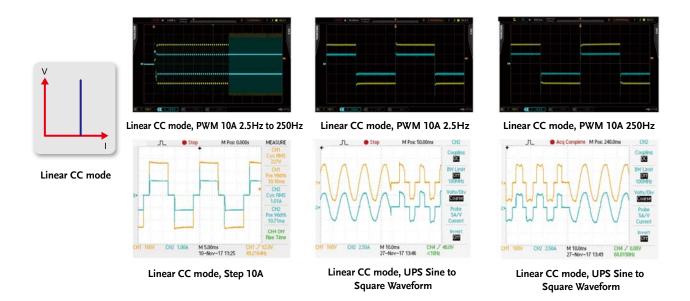




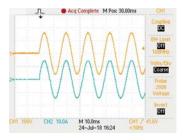
CC Mode : In the constant current mode of AC Load, can be applied to sine wave voltage source, providing CF, PF test of linear load.



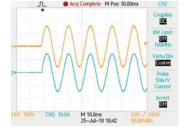
Linear Constant Current Mode : Can be applied to sine wave and non-sine wave voltage source, as shown in the PWM inverter driver, step voltage source, and off-line UPS sine wave switch to square wave, square wave switch to sine wave.



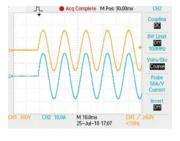
Supported on-load start-up : at first set Load ON to support on-load start-up, inverter or uninterruptible power supply is start-up directly with the set load current, used to verify whether the Inverter is stable when the load is connected during start-up.



CC 10 A on-load boot

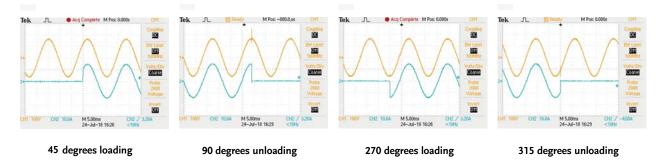


CR 10 A on-load boot

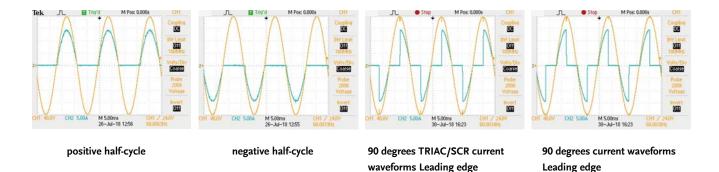


CV 10 A on-load boot

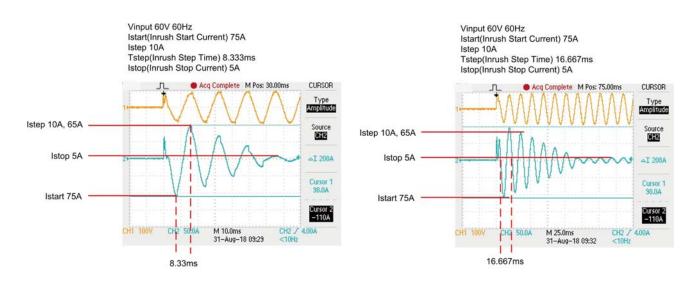
Supports the loading and unloading current angle control ; the loading and unloading current angle range of 0-359 degrees can be programmed to verify whether the Inverter output voltage transient response is stable during the actual electrical appliance is connected or turn ON / OFF randomly it can be used to verify the Overshoot / Undershoot response is within the desire range.



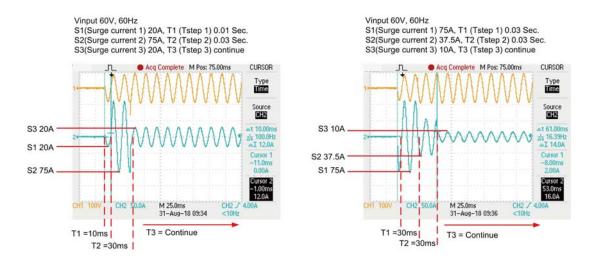
Support positive half-cycle or negative half-cycle loading ; it can be used to verify whether the Inverter output voltage remains stable when the actual appliance has only positive half-cycle or negative half-cycle load current.



Support the Inrush Current of the inverter at startup and Power Plug-in test when the power supply is turned on to verify the Inrush Current and the sudden connection of the appliance when the power is turned on (Surge Current), to verify if whether the Inverter output voltage transient response is stable, as shown in the figure below.



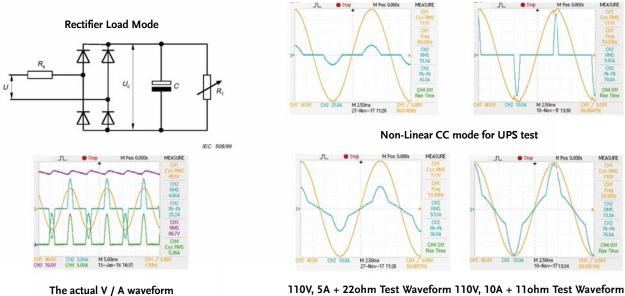
Inrush current test at boot



Inrush Current test at boot

AC RECTIFIED LOAD SIMULATION MEET THE IEC62040-3 AND IEC61683 TEST SPECIFICATIONS

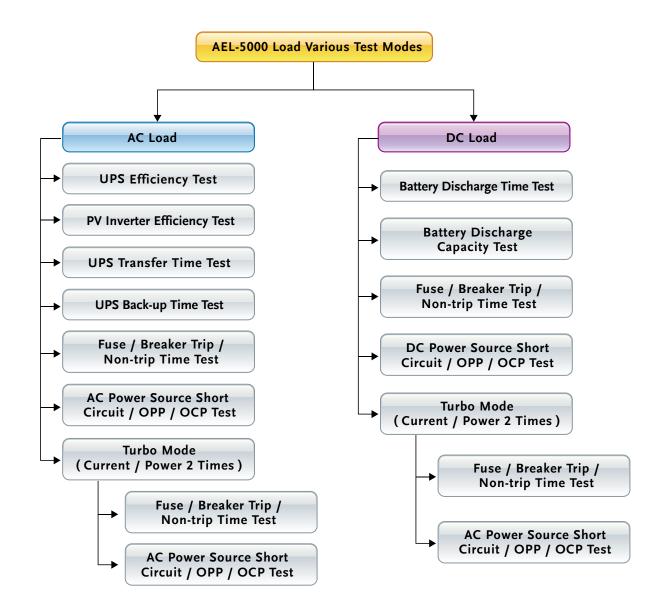
(IEC62040-3 UPS Efficiency Measurement non-Linear and IEC61683 Resistive Plus Non-Linear) C AC & DC electronic load AC rectified load mode is fully compliance with the IEC test specification requirements for the UPS, IEC 62040-3 UPS Efficiency Measurement Non-Linear and IEC 61683 Resistive Plus Non-Linear, respectively, AEL-5000 Series AC rectifier load mode uses CC + CR load mode and maintain current THD at 80%, to simulate the actual PV Inverter connected to the electronic device.



110V, 5A + 22ohm Test Waveform 110V, 10A + 11ohm Test Waveform PV Inverter test Non-Linear CC + Resistive mode (CC+CR)

AEL-5000 LOAD VARIOUS TEST MODES

The AEL-5000 Series AC & DC electronic load features built-in test modes for a variety of products. Including AC Load of UPS, Inverter, Fuse/Breaker, AC Power Source , and DC Load of Battery, Fuse/Breaker, DC Power Source etc.., as shown below.



CURRENT PROTECTION COMPONENT TEST

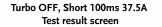
Current protection component includes Fuse, Circuit breakers and a new PTC Resettable fuse etc.., its function is when the circuit current exceeds the design of the rated value, that is, if the load exceeds the design of the current capacity, the circuit will be disconnected, in order to avoid overheating, even fire. Fuse is a one-time use of the protection components, Breaker and PTC can be reused.

The current protection components of the protection current value and the protection reaction time has usually a product of the relationship that is, the greater the current through the current protection component, the shorter the reaction time to protect the circuit. This is similar to energy protection components.

Due to this feature, the AEL-5000 Series AC & DC electronic load, in particular for the verification of current protection components, has developed a Fuse Test function to test and verify such protection element with an electronic load of rated current and power. When Turbo mode is set to ON, the test current can be up to double the maximum current within 1 second of test period. Take AEL-5004-350-37.5 as an example, the maximum test current can be doubled to 75A. That is, when the Turbo mode of the AEL-5000 Series is ON, the test current value can reach to 2 units AEL-5000 Series (normal mode) within 1

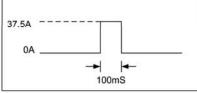




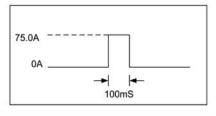




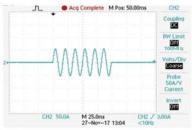
Turbo ON, Short 100ms 75.0A Test result screen



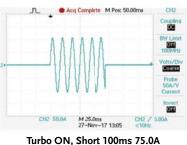




Turbo ON, Short 100ms 75.0A Setting



Turbo OFF, Short 100ms 37.5A The actual test waveform



The actual test waveform



Turbo OFF, OCP Istep 3.75 A Istop 37.5A Test result screen

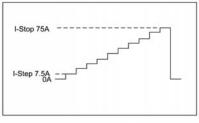


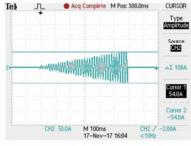
Turbo ON, OCP Istep 7.5 A Istop 75A

Test result screen

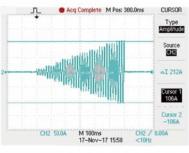


Turbo OFF, OCP Istep 3.75 A Istop 37.5A Setting





Turbo OFF, OCP Istep 3.75 A Istop 37.5A The actual test waveform



Turbo ON, OCP Istep 7.5 A Istop 75.0A Setting

Turbo ON, OCP Istep 7.5 A Istop 75.0A The actual test waveform

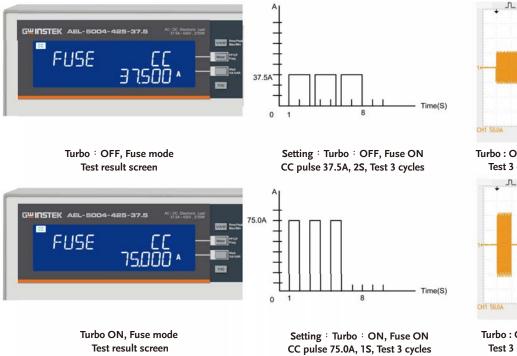
Basically, Fuse test has Trip (Blown) and Non-Trip (no Blown) 2 types.

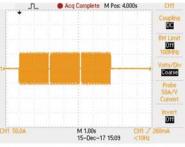
Fuse Test setting parameters include test current (Istart), test time (Time), test REPEAT Time etc..

In the Trip fuse test, it is used to test when there is too large abnormal current the Fuse or Bleaker must be able to provide the protection of the circuit break, that means current protection components need the fuse action, therefore the test current needs to be larger than the fuse current rating.

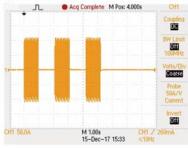
When the AEL-5000 Series AC & DC electronic load detects a voltage lower than 1.0V, the LCD displays the number of Repeat Cycle and Current Protection Fusing Time XXXX.X sec.

In the Non-Trip (no Blown) test, the current protection component is required to achieve non-blow action, so the test current needs to be lower than the fuse current rating that is used to verify the fuse must not blow during normal current range. When the AEL-5000 Series AC & DC electronic load is not blown after the test time (Pulse Time) and the repeated Repeat number, the LCD displays the information of the Repeat number.





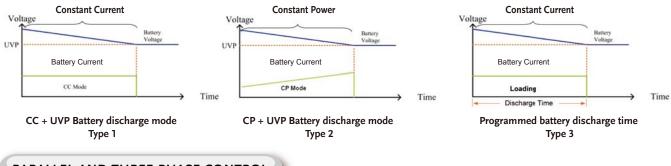
Turbo : OFF, Fuse ON, CC pulse 37.5A, 2S, Test 3 cycles the actual test waveform



Turbo : ON, Fuse ON, CC pulse 75A, 1S, Test 3 cycles the actual test waveform

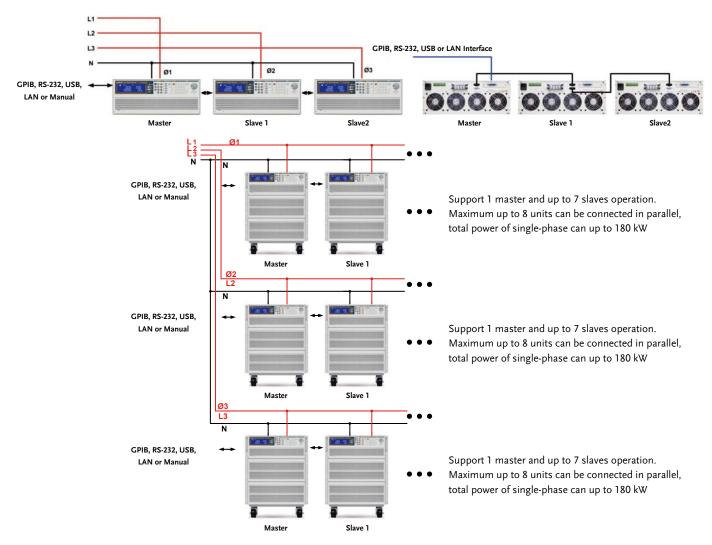
BATTERY TEST FUNCTION

AEL-5000 Series AC & DC electronic load has built-in new TYPE1 ~ TYPE3 battery discharge test, you can select the desired battery test mode, the test results can be directly displayed on the LCD display for battery AH capacity, the voltage value after discharge and the cumulative discharge time.



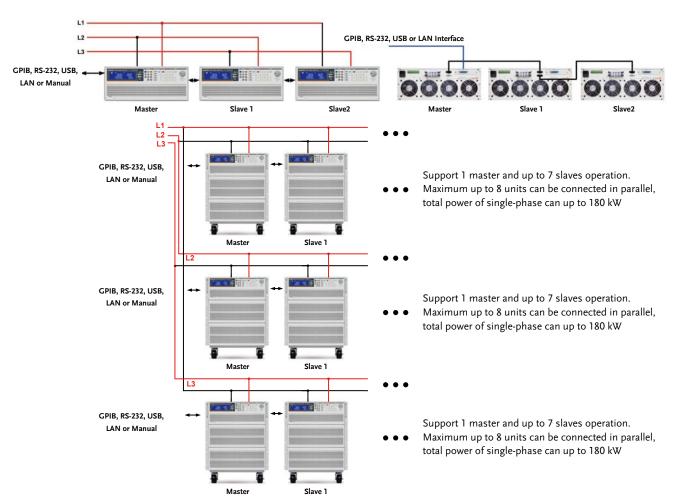
PARALLEL AND THREE-PHASE CONTROL

The AEL-5000 Series AC & DC load provides multiple units in parallel, three-phase applications that allows users to test applications with greater power or three-phase AC power, this is more flexibility to use the AEL-5000 Series AC & DC Electronic Load for control. In parallel / three-phase operation, the user operates the unit as the operation of a single machine, as long as the Master can be operated, Slave1 and Slave2 will automatically sink the load and measurement. Parallel and three-phase connection as shown below.

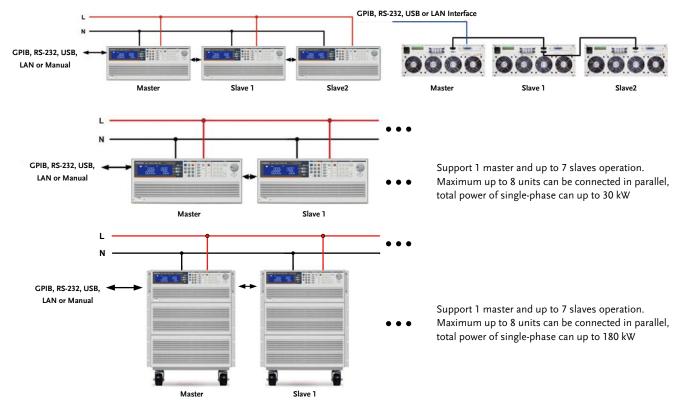


Maximum power of single-phase can up to 180KW, 3-phase total power up to 540KW 3-phase riangle or Y Connection

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Maximum power of single-phase can up to 180KW, 3-phase total power up to 540KW 3-phase \triangle or Y Connection parallel connection

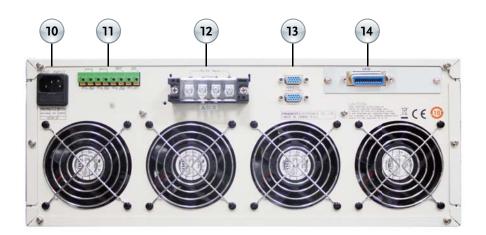


Parallel connection

PANEL INSTRUCTIONS



		LCD Multi-function display Four meters can display the voltage value at the same time the Voltage(Vrms, Vpeak, Vmax., Vmin) < Current (Irms, Ipeak, Imax., Imin.) < Watt, Voltampere(VA) < Frequency < Crest Factor < Power Factor < Total Harmonic Distortion of Voltag(VTHD) < Voltage Harmonic(VH) < Total Harmonic Distortion of Current(ITHD) < Current Harmonic(IH)	3	Operate function keys Mode <pre>> Preset ON / OFF < Load ON / OFF <sense <config="" a="" b="" function="" keys<="" level="" limit="" local="" off="" on="" operate="" pre="" recall="" seq="" store="" system=""></sense></pre>
	1		4	Waveform library keys Can be quickly set CF √2 / 2 / 2.5 / 3 / 3.5 ' +/- PF0.6 / 0.7 / 0.8 / 0.9 / 1.0 ' FREQ Auto / 50Hz/ 60Hz / 400Hz °
			5	Test function keys Can select Short / OPP / OCP /Non-L / NL-CR /Fuse / Batt (Battery Discharge) / Trans (UPS transfer time) test functions.
		Meter switch button V / A / W keys can set the display Rms / Peak / Max / Min,Meter key can select PF / CF / FREQ · switchable display WATT / VA /	6	Numeric keypad
	2			Knob setting
			8	Switch
		VAR keys [,] THD key choose to display THD		Cursor and button setting



10	AC power input connector		Master-slave control connector		
11	Vmonitor < Imonitor < Analog input < SYNC input Input terminal	13	Master : Connect the top or bottom to the next unit Slave : The top connects to the previous unit and the bottom connects to the next unit		
12	Vload, Vsense Input terminal	14	Communication interface (GPIB \ RS-232 \ USB \ LAN)		

			SP	ECIFICATIONS			
MODEL		AEL-5002-350-18.75			AEL-5002-425-18.75	AEL-5003-425-28	AEL-5004-425-37.5
Power (W) Current(Ampere)		1875 W 18.75 Arms / 56.25Apeak	2800W 28 Arms / 84Apeak	3750 W 37.5 Arms / 112.5Apeak	1875 W 18.75 Arms / 56.25Apeak	2800W 28 Arms / 84Apeak	3750 W 37.5 Arms / 112.5Apeak
Voltage(Volt) FREQUENCY Range			50~350Vrms / 500Vdc 0Hz(CC,CP Mode) , DC~440Hz(LIN,CR,	· · ·		50~425Vrms / 600Vdc 0Hz(CC,CP Mode) , DC~440Hz(LIN,CF	CV Mode)
PROTECTIONS Over Power Protection		≒ 1968.75Wrms or Programmable	≒2940Wrms or Programmable	≒ 3937.5Wrms or Programmable	≒ 1968.75Wrms or Programmable	≒2940Wrms or Programmable	≒ 3937.5Wrms or Programmable
Over Current Protection		≒ 19.687 Arms or Programmable	≈ 29.4 Arms or Programmable ≈ 29.4 Arms or Programmable	≒ 39.375 Arms, or Programmable	= 19.687 Arms or Programmable	≒ 29.4 Arms or Programmable ≒ 446.25 Vrms/630Vdc	= 39.375 Arms, or Programmable
Over Vlotage Protection Over Temp. Protection OPERATION MODE			- 367.5 Vittis / 323Vdc Yes			446.25 Virils/650Vdc Yes	
OPERATION MODE Constant Current Mode for Sine-Wave	e			1			
Range Resolution		0~18.75A 0.3125mA/16bits	0~28A 0.5mA/16bits	0~37.5A 0.625mA/16bits	0~18.75A 0.3125mA/16bits	0~28A 0.5mA/16bits	0~37.5A 0.625mA/16bits
Accuracy Linear Constant Current Mode for Sin	ne-Wave, Square	-Wave or Quasi-Square Wave, PWM Wave		0/60Hz		1% of setting + 0.2% of range)@!	
Range Resolution		0~18.75A 0.3125mA/16bits	0~28A 0.5mA/16bits	0~37.5A 0.625mA/16bits	0~18.75A 0.3125mA/16bits	0~28A 0.5mA/16bits	0~37.5A 0.625mA/16bits
Accuracy Constant Resistance Mode		± (0.1	% of setting + 0.2% of range) @ 5	0/60Hz	± (0.	1% of setting + 0.2% of range) @ !	50/60Hz
Range Resolution*1		3.2 ohm ~ 64K ohm 0.0052083mS/16bits	2.0 ohm ~ 40K ohm 0.0083333mS/16bits	1.6 ohm ~ 32K ohm 0.010416mS/16bits	3.2 ohm ~ 64K ohm 0.0052083mS/16bits	2.0 ohm ~ 40K ohm 0.0083333mS/16bits	1.6 ohm ~ 32K ohm 0.010416mS/16bits
Accuracy Constant Voltage Mode			0.2% of (setting + range) @ 50/60H			±0.2% of (setting + range) @ 50/60	
Range Resolution			50~350Vrms / 500Vdc			50~425Vrms / 600Vdc 0.1V	
Accuracy			±(0.1% of setting + 0.1% of range)			±(0.1% of setting + 0.1% of range)	
Constant Power Mode Range		1875W	2800W	3750W	1875W	2800W	3750W
Resolution Accuracy		0.1W	0.1W ±(0.1% of setting + 0.1% of range)	0.1W	0.1W	0.1W ±(0.1% of setting + 0.1% of range)	0.1W
CREST FACTOR (CC & CP MODE ON Range	NLY)		√25			√25	
Resolution Accuracy			0.1 (0.5% / Irms) + 1% F.S.			0.1 (0.5% / Irms) + 1%F.S.	
POWER FACTOR (CC & CP MODE O Range	INLY)	1	0~1 Lag or Lead			0~1 Lag or Lead	
Resolution			0.01 1%F.S.			0.01 1%F.S.	
Accuracy TEST MODE USE Efficient Measurement		I I					
UPS Efficient Measurement Operating Frequency		A 10 164	Non-Linear Mode Auto ; 40~440Hz	* ****	A 10 361	Non-Linear Mode Auto ; 40~440Hz	A 488.5
Current Range PF Range		018.75A	0-28A 0-1	0-37.5A	0~18.75A	028A 0-1	037.5A
Measuring Efficiency For PV Systems, Power Conditioners for THD 80%	,		Resistive + Non-Linear Mode			Resistive + Non-Linear Mode	
Operating Frequency Current Range		018.75A	Auto ; 40–440Hz 0–28A	0-37.5A	018.75A	Auto ; 40–440Hz 0–28A	0-37.5A
Resistive Range UPS Back-Up Function(CC,LIN,CR,CI	P)	3.2 ohm ~ 64K ohm	2.0 ohm ~ 40K ohm	1.6 ohm ~ 32K ohm	3.2 ohm ~ 64K ohm	2.0 ohm ~ 40K ohm	1.6 ohm ~ 32K ohm
UVP (VTH) UPS Back-Up Time			50-350Vrms / 500Vdc 1-99999 Sec. (>27H)			50-425Vrms / 600Vdc 1-99999 Sec. (>27H)	
Battery Discharge Function(CC,LIN,C UVP (VTH)	r,CP)		50~350Vrms / 500Vdc			50~425Vrms / 600Vdc	
Battery Discharge Time			1-99999 Sec. (>27H)		-	1~99999 Sec. (>27H)	
UPS Transfer Time Current Range		0~18.75A	0~28A	0~37.5A	0~18.75A	0~28A	0~37.5A
UVP (VTH) Time Range			2.5V 0.15mS-999.99mS			2.5V 0.15mS-999.99mS	
Fuse Test Mode Max. Current	Turbo OFF	18.75Arms	28.0Arms	37.5Arms	18.75Arms	28.0Arms	37.5Arms
	Turbo ON Turbo OFF	37.5Arms (x2) *3	56.0Arms (x2) *3 0.1-9999.9sec.	75.0Arms (x2) *3	37.5Arms (x2) *3	56.0Arms (x2) *3 0.1-9999.9sec.	75.0Arms (x2) *3
Trip & Non-Trip Time Meas. Accuracy	Turbo ON		0.1~1.0sec. ±0.003 Sec.			0.1-1.0sec. ±0.003 Sec.	
Repeat Cycle Short/OPP/OCP Test Function			0~255			0~255	
Short Time	Turbo OFF Turbo ON		0.15 ~ 10Sec. Or Cont. 0.15 ~ 1Sec			0.15 - 10Sec. Or Cont. 0.15 - 1Sec	
OPP/OCP Step Time	Turbo OFF		100ms			100ms	
OCP Istop	Turbo ON Turbo OFF	18.75Arms	100ms, up to 10 Steps 28.0Arms	37.5Arms	18.75Arms	100ms, up to 10 Steps 28.0Arms	37.5Arms
OPP Pstop	Turbo ON Turbo OFF	37.5Arms 1875W	56.0Arms 2800W	75.0Arms 3750W	37.5Arms 1875W	56.0Arms 2800W	75.0Arms 3750W
Programmable Inrush Current Simula	Turbo ON ation: Istart - Isto		5600W	7500W	3750W	5600W	7500W
Istart, Inrush Start Current Inrush Step Time		0~37.5A	0~56A 0.1mS~100mS	0~75A	0~37.5A	0~56A 0.1mS~100mS	0~75A
Istop, Inrush Stop Current Programmable Surge Current Simulat	tion: S1/T1 - S2/	0~18.75A T2 - \$3/T3	028A	0~37.5A	0~18.75A	028A	0~37.5A
S1 and S2 Current T1 and T2 Time		0~37.5A	056A 0.01S~0.5Sec.	0~75A	0~37.5A	0~56A 0.01S~0.5Sec.	0~75A
S3 Current T3 Time		0~18.75A	0~28A 0.015 - 9.99Sec. Or Cont.	0~37.5A	0~18.75A	0~28A 0.01S - 9.99Sec. Or Cont.	0~37.5A
MEASUREMENTS VOLTAGE READBACK V METER		l	clore sussee or conc			starts - stassact or cont.	
Range			500V			600V	
Resolution Accuracy			0.01V ±0.05% of (reading + range)			0.01V ±0.05% of (reading + range)	
Parameter CURRENT READBACK A METER		[Vrms,V Max/Min,+/-Vpk	I		Vrms,V Max/Min,+/-Vpk	
Range Resolution		9.375Arms/18.75Arms 0.2mA/0.4mA	14Arms/28Arms 0.3mA/0.6mA	18.75Arms/37.5Arms 0.4mA/0.8mA	9.375Arms/18.75Arms 0.2mA/0.4mA	14Arms/28Arms 0.3mA/0.6mA	18.75Arms/37.5Arms 0.4mA/0.8mA
Accuracy Parameter		±	0.05% of (reading + range) @ 50/60 Irms,I Max/Min,+/-Ipk			0.05% of (reading + range) @ 50/60 Irms,I Max/Min,+/-Ipk	
WATT READBACK W METER Range		1875W	2800W	3750W	1875W	2800W	3750W
Resolution Accuracy		0.03125W	0.05W ±0.1% of (reading + range)	0.0625W	0.03125W	0.05W ±0.1% of (reading + range)	0.0625W
VA METER POWER FACTOR METER		Vi	±0.1% of (reading + range) ms×Arms Correspond To Vrms and Arr	ns	v	±0.1% of (reading + range) rmsxArms Correspond To Vrms and Ar	ms
Range			+/- 0.000~1.000			+/- 0.000~1.000	
Accuracy Frequency METER(V)			±(0.002±(0.001/PF)*F)			±(0.002±(0.001/PF)*F)	
Range Accuracy			DC,40-440Hz 0.1%			DC,40440Hz 0.1%	
Other Parameter METER	VA.	VAR, CF_I, Ipeak, Imax., Imin. Vmax., Vn	nin., IHD, VHD, ITHD, VTHD				
DTHERS Start up Loading			ower on loading during Inverter / UPS s	tart up	Yac E	Power on loading during Inverter / UPS	start up
Load ON / OFF Angle Half Cycle and SCR/TRIAC Loading		0 ~ 359 degree can be	programmed for the angle of load ON	and load OFF loading	0 ~ 359 degree can b	e programmed for the angle of load ON	and load OFF loading
Master/Slave (3 Phase or Parallel App		Postive or Negative half cycle, 9	0° Trailing edge or Leading edge current Yes, 1 master and upto 7 slave units	wavelorm can be programmed	Postive or Negative half cycle, S	90° Trailing edge or Leading edge currer Yes, 1 master and upto 7 slave units	n waverorm can be programmed
External Programming Input (OPTIOI External SYNC Input	N)		F.S / 10Vdc, Resulotion 0.1V TTL			F.S / 10Vdc, Resulotion 0.1V TTL	
Vmonitor (Isolated) Imonitor (Isolated)		±56.25Apk / ±10Vpk	±500V / ±10V ±84Apk / ±10Vpk	±112.5Apk / ±10Vpk	±56.25Apk / ±10Vpk	±600V / ±10V ±84Apk / ±10Vpk	±112.5Apk / ±10Vpk
Interface (OPTION) MAX. Power Consumption			GPIB ; RS-232 ; LAN ; USB 150VA			GPIB ; RS-232 ; LAN ; USB 150VA	
Operation Temperature *2 Current of Input Impedance(mA)@50	0/60Hz :					0 ~ 40 °C	
@ 400Hz Dimension(H x W x D)		V*0.3 ;V*2.2 177 x 440 x 558 mm	-V*0.45 ; -V*3.3 177 x 440 x 558mm	V*0.6 ;V*4.4 177 x 440 x 558 mm	V*0.3 ;V*2.2 177 x 440 x 558 mm	V*0.45 ;V*3.3 177 x 440 x 558mm	-V*0.6 ; -V*4.4 177 x 440 x 558 mm
Weight		21.5Kg	27.5Kg	33.5Kg	21.5Kg	27.5Kg	33.5Kg

* All specifications apply for 50/60Hz. * All specifications subject to change without notice.

*1 ms (millisiemens) is the unit of conductance(G), one siemens equal to $1/\Omega$ *2 Operating temperature range is 0-40°C, all specification apply for 25°C±5°C. Except as noted *3 Turbo mode for up to 2X Current rating & Power rating support Fuse, Short/OCP/OPP test function

			SPEC	FICATIONS			
MODEL		AEL-5006-350-56	AEL-5008-350-75		AEL-5015-350-112.5	AEL 5019 250 112 5	AEL 5022 250 112 5
Power (W)		5600 W	7500 W	11250W	15000 W	18750W	22500W
Current(Ampere) Voltage(Volt)		56 Arms / 168Apeak	75 Arms / 225Apeak	112.5 Arms / 337.5Apeak 50~350Vm	112.5 Arms / 337.5Apeak ms / 500Vdc	112.5 Arms / 337.5Apeak	112.5 Arms / 337.5Apeak
FREQUENCY Range					, DC~440Hz(LIN,CR,CV Mode)		
PROTECTIONS Over Power Protection		≒ 5880Wrms or Programmable	≒ 7875Wrms or Programmable	≒11812.5Wrms or Programmable		≒19687.5Wrms or Programmable	≒23625Wrms or Programmable
Over Current Protection Over Vlotage Protection		≒ 58.8 Arms, or Programmable	≒ 78.75 Arms, or Programmable	≒ 118.125 Arms or Programmable ≒ 367.5 V	≒ 118.125 Arms or Programmable (rms/525Vdc	≒ 118.125 Arms or Programmable	≒ 118.125 Arms or Programmable
Over Temp. Protection OPERATION MODE					íes		
Constant Current Mode for Sine-Wave							
Range Resolution		0~56A 1mA/16bits	0~75A 1.25mA/16bits	0~112.5A 1.875mA/16bits	0~112.5A 1.875mA/16bits	0~112.5A 1.875mA/16bits	0~112.5A 1.875mA/16bits
Accuracy					.2% of range) @ 50/60Hz		
Linear Constant Current Mode for Sine- Range	Wave, Square-Wa	0~56A	0~75A	0~112.5A	0~112.5A	0~112.5A	0~112.5A
Resolution Accuracy		1mA/16bits	1.25mA/16bits	1.875mA/16bits + (0.1% of setting + 0	1.875mA/16bits .2% of range) @ 50/60Hz	1.875mA/16bits	1.875mA/16bits
Constant Resistance Mode							1
Range Resolution*1		1 ohm ~ 20K ohm 0.016666mS/16bits	0.8 ohm ~ 16K ohm 0.020832mS/16bits	0.533 ohm ~ 10.666K ohm 0.031248mS/16bits	0.533 ohm ~ 10.666K ohm 0.031248mS/16bits	0.533 ohm ~ 10.666K ohm 0.031248mS/16bits	0.533 ohm ~ 10.666K ohm 0.031248mS/16bits
Accuracy Constant Voltage Mode				±0.2% of (setting	+ range) @ 50/60Hz		
Range					ms / 500Vdc		
Resolution Accuracy					1.1V + range) @ 50/60Hz		
Constant Power Mode Range		5600W	7500W	11250W	15000 W	18750W	22500W
Resolution		0.1W	0.1W	1W	۱W	1W	1W
Accuracy CREST FACTOR (CC & CP MODE ONL)	0			±0.2% of (setting	+ range) @ 50/60Hz		
Range Resolution					2~5 0.1		
Accuracy					ns) + 1%F.S.		
POWER FACTOR (CC & CP MODE ON Range	LY)			0~1 La	g or Lead		
Resolution				0	0.01		
Accuracy TEST MODE					6F.S.		
UPS Efficient Measurement Operating Frequency					near Mode 10~440Hz		
Current Range		0~56A	0~75A	0112.5A	0~112.5A	0~112.5A	0112.5A
PF Range Measuring Efficiency For PV Systems,					H-1 on-Linear Mode		
Power Conditioners for THD 80% Operating Frequency					I0-440Hz		
Current Range		0~56A	0~75A	0~112.5A	0~112.5A	0~112.5A	0~112.5A
Resistive Range UPS Back-Up Function(CC,LIN,CR,CP)		1 ohm ~ 20K ohm	0.8 ohm ~ 16K ohm	0.533 ohm ~ 10.666K ohm	0.533 ohm ~ 10.666K ohm	0.533 ohm ~ 10.666K ohm	0.533 ohm ~ 10.666K ohm
UVP (VTH) UPS Back-Up Time					ms / 500Vdc Sec. (>27H)		
Battery Discharge Function(CC,LIN,CR,	CP)						
UVP (VTH) Battery Discharge Time					ms / 500Vdc Sec. (>27H)		
UPS Transfer Time		0.554	0.754			0.330.54	0.110.54
Current Range UVP (VTH)		0~56A	0~75A	0~112.5A	0~112.5A	0~112.5A	0~112.5A
Time range Fuse Test Mode				0.15mS-	-999.99mS		
Max. Current	Turbo OFF	75Arms	75Arms	112.5Arms	112.5Arms	112.5Arms	112.5Arms
Trip & Non-Trip Time	Turbo ON Turbo OFF	150Arms (x2) *3	150Arms (x2) *3		225Arms (x2) *3 999.9sec.	225Arms (x2) *3	225Arms (x2) *3
Meas. Accuracy	Turbo ON				1.0sec. 03 Sec.		
Repeat Cycle					-255		
Short/OPP/OCP Test Function Short Time	Turbo OFF			0.15 ~ 105	Sec. Or Cont.		
-	Turbo ON Turbo OFF				~ 1Sec IOms		
OPP/OCP Step Time	Turbo ON			100ms, up	to 10 Steps		
OCP Istop	Turbo OFF Turbo ON	56Arms 112Arms	75Arms 150Arms	112.5Arms 225Arms	112.5Arms 225Arms	112.5Arms 225Arms	112.5Arms 225Arms
OPP Pstop	Turbo OFF Turbo ON	5600W 11200W	7500W 15000W	11250W 22500W	15000W 30000W	18750W 37500W	22500W 45000W
Programmable Inrush Current Simulation		Tsep		1	1	1	
Istart, Inrush Start Current Inrush Step Time		0~112A	0~150A	0225A 0.1mS	0~225A	0~225A	0-225A
Istop, Inrush Stop Current Programmable Surge Current Simulatio	n: \$1/T1 - \$2/T2 -	0~56A	075A	0~112.5A	0~112.5A	0~112.5A	0~112.5A
S1 and S2 Current		0~112A	0~150A	0~225A	0~225A	0~225A	0~225A
T1 and T2 Time S3 Current		0~56A	0~75A	0~112.5A	~0.5Sec. 0~112.5A	0~112.5A	0~112.5A
T3 Time MEASUREMENTS					9Sec. Or Cont.		
VOLTAGE READBACK A METER					2014		
Range Resolution				0.	00V 01V		
Accuracy Parameter				±0.05% of (re Vrms V Ma	eading + range) x/Min,+/-Vpk	-	
CURRENT READBACK A METER							
Range Resolution		28Arms/56Arms 0.6mA/1.2mA	37.5Arms/75Arms 0.8mA/1.6mA	56.25Arms/112.5Arms 1.2mA/2.4mA	56.25Arms/112.5Arms 1.2mA/2.4mA	56.25Arms/112.5Arms 1.2mA/2.4mA	56.25Arms/112.5Arms 1.2mA/2.4mA
Accuracy Parameter				±0.1% of (reading	+ range) @ 50/60Hz x/Min,+/-Ipk		
WATT READBACK W METER							
Range Resolution		5600W 0.1W	7500W 0.125W	11250W 0.1875W	15000W 0.25W	18750W 0.3125W	22500W 0.375W
Accuracy VA METER				±0.2% of (reading + range) @ 50/	60Hz , ±0.4% of (reading + range) ond To Vrms and Arms	•	
Power Factor METER							
Range Accuracy					00~1.000 0.001/PF)*F)		
Frequency METER(V)							
Range Accuracy					H40Hz 1%		
Other Parameter METER			VA VAR CE Linest im	ax., Imin. Vmax., Vmin., IHD, VHD, ITHE			
OTHERS			vo, von, cr_i, ipeak, im				
Start up Loading Load ON / OFF Angle				Yes , Power on loading du 0 ~ 359 degree can be programmed for t	iring Inverter / UPS start up he angle of load ON and load OFF loading	3	
Half Cycle and SCR/TRIAC Loading Master/Slave (3 Phase or Parallel Applic	ation)			Negative half cycle, 90° Trailing edge or	Leading edge current waveform can be pr		
External Programming Input (OPTION)				F.S / 10Vdc, I	d upto 7 slave unit Resulotion 0.1V		
External SYNC Input Vmonitor (Isolated)					TTL //±10V		
Imonitor (Isolated)		±168Apk / ±10Vpk	±225Apk / ±10Vpk	±337.5Apk / ±10Vpk	±337.5Apk / ±10Vpk	±337.5Apk / ±10Vpk	±337.5Apk / ±10Vpk
Interface (OPTION) MAX. Power Consumption		270VA	270VA	GPIB ; RS-23 390VA	2 ; LAN ; USB 510VA	630VA	750VA
Operation Temperature *2 Current of Input Impedance(mA)@50/6	0Hz :			0~	40 °C		
@ 400Hz	,	-V*0.9 ; -V*6.6	V*1.2 ;V*8.8	~V*1.8 ; ~V*13.2	V*2.4 ;V*17.6	-V*3.0 ; -V*22	-V*3.6 ; -V*26.4
		458 x 480 x 590 mm	458 x 480 x 590 mm	636 x 480 x 590 mm	814 x 480 x 590 mm	1283 x 600 x 600 mm	1283 x 600 x 600 mm
Dimension(H x W x D) Weight		58 kg	70 kg	105kg	140kg	260kg	295kg

*1 ms (millisiemens) is the unit of conductance(G), one siemens equal to $1/\Omega$ *2 Operating temperature range is 0-40°C, all specification apply for 25°C±5°C. Except as noted *3 Turbo mode for up to 2X Current rating & Power rating support Fuse, Short/OCP/OPP test function

* All specifications apply for 50/60Hz. * All specifications subject to change without notice.

OrderA.E. 2006 47.5 SP NomeA.E. 2007 47.5 TIZ 5 NomeA.E. 2007 47.5 TIZ 5 NOT NOT NOT NOT NOT NOT NOT NOT NOT NOT				SPE	CIFICATIONS				
Control RepairNon-YakanDistant JakanDistant JakanDistant JakanDistant JakanDistant JakanDistant JakanNon-YakanNon	MODEL			AEL-5008-425-75	AEL-5012-425-112.5	AEL-5015-425-112.5	AEL-5019-425-112.5	AEL-5023-425-112	
The transmit of the transmit of transm	Power (W) Current(Ampere)				112.5 Arms / 337.5Apeak		18750W 112.5 Arms / 337.5Apeak	22500W 112.5 Arms / 337.5Apeak	
Non-New ProcessingNon-New ProcessingNon-N	Voltage(Volt) FREQUENCY Range								
Sample of the second of the	ROTECTIONS Over Power Protection		≒ 5880Wrms or Programmable	≒ 7875Wrms or Programmable	≒11812.5Wrms or Programmable	≒15750Wrms or Programmable	≒19687.5Wrms or Programmable	≒23625Wrms or Programmable	
Name of the second se	Over Current Protection Over Vlotage Protection				≒ 118.125 Arms or Programmable	≒ 118.125 Arms or Programmable		≒ 118.125 Arms or Programma	
1.5 (20)	Over Temp. Protection								
Addition No. 100 Distriction Distriction Distriction Distriction Distriction Note that that the total set of total set of the total set of		ave	Q~56A	0~754	0~112.54	0~112.54	0~112.54	0~112.54	
3.1% <th cols<="" td=""><td>Resolution</td><td></td><td></td><td></td><td>1.875mA/16bits</td><td>1.875mA/16bits</td><td></td><td></td></th>	<td>Resolution</td> <td></td> <td></td> <td></td> <td>1.875mA/16bits</td> <td>1.875mA/16bits</td> <td></td> <td></td>	Resolution				1.875mA/16bits	1.875mA/16bits		
damIndexidesI		Sine-Wave, Square						1	
Table 100 100 100 100 100 100 100 100 100 10	Range Resolution				1.875mA/16bits	1.875mA/16bits			
data0.0000/000_00.0000/000_00.0000/000_00.0000/000_00.0000/000_0The product of the product	Accuracy Constant Resistance Mode				± (0.1% of setting + 0.	· · ·			
Set 0.0000 - 1000 - 10000	Range Resolution*1								
The set of the	Accuracy Constant Voltage Mode			· · · · · · · · · · · · · · · · · · ·	±0.2% of (setting	+ range) @ 50/60Hz	<u>п</u>		
product of the set	Range Resolution								
product100010001000100010001000100010001000NormNor	Accuracy								
Apply Streep 	Range								
product11State31State <td< td=""><td>Accuracy</td><td></td><td>0.1 W</td><td>0.1W</td><td></td><td></td><td>Tw</td><td>Iw</td></td<>	Accuracy		0.1 W	0.1W			Tw	Iw	
(B1 partial interaction of B1 partial int	Range	ONLY)							
the series of	Resolution Accuracy								
share in the second se	OWER FACTOR (CC & CP MODE Range	ONLY)							
Name of the second sec	Resolution Accuracy				0	.01			
take a datatake a d	EST MODE								
laglocloclocloccontact loc134 arr134 a	Operating Frequency			A 1984	Auto ; 4	0~440Hz	A 334.57	A 337 71	
ek cale and Phy Byse merchange 1 alow 100 alow	Current Range PF Range		U~56A	U~75A			0~112.5A	0~112.5A	
sam bang bang bang bang bang bang bang bang	ower Conditioners for THD 80%	ms,							
amin lagn of the lagn 201 of the lagn 201 of the lagn of the lag	Operating Frequency Current Range		056A	075A			0112.5A	0-112.5A	
IBA INTERNATION INTERNATI	Resistive Range	(P)	1 ohm ~ 20K ohm	0.8 ohm ~ 16K ohm	0.533 ohm ~ 10.666K ohm	0.533 ohm ~ 10.666K ohm	0.533 ohm ~ 10.666K ohm	0.533 ohm ~ 10.666K ohm	
migraphic metastrong (mode of a metastrong	UVP (VTH)	,er /							
<table-container> The second second</table-container>	attery Discharge Function(CC,LIN	I,CR,CP)							
<table-container>met fage met fage of 1925 met 2000 me</table-container>	UVP (VTH) Battery Discharge Time								
Image: state in the state in th	JPS Transfer Time Current Range		0~56A	0~75A	0~112.5A	0~112.5A	0~112.5A	0~112.5A	
Ten MaxTen Max	UVP (VTH) Time range						*		
National into the interval is plan regionNotem (a) 1Statem (a) 1 <t< td=""><td>Fuse Test Mode</td><td>Turbo OFF</td><td>75Arms</td><td>75Arms</td><td></td><td></td><td>112.5Arms</td><td>112.5Arms</td></t<>	Fuse Test Mode	Turbo OFF	75Arms	75Arms			112.5Arms	112.5Arms	
yi λ λ δ n d m k A construct set of 3 - 3 k k		Turbo ON			225Arms (x2) *3	225Arms (x2) *3			
	Trip & Non-Trip Time	Turbo ON			0.1-1	1.0sec.			
mar I me of interest in the of interest in the of interest in the of interest interest in the of interest int	Repeat Cycle								
Image of the set of	· · ·								
Image Stature Stature <thstature< th=""> <thstature< th=""> <thst< td=""><td></td><td></td><td></td><td></td><td>0.15</td><td>~ 1Sec Oms</td><td></td><td></td></thst<></thstature<></thstature<>					0.15	~ 1Sec Oms			
Or Bage Inde OR Inde OR 			56Arms	75Arms		to 10 Steps 112.5Arms	112.5Arms	112.5Arms	
memmemmemmemmemmemmemmemmem0.11200.11200.11230.2530.02530.02530.0253mem0.5630.0.50.11230.11230.11230.01230.0253prem0.5640.7530.01230.11230.11230.11230.1125prem0.5640.7530.02530.22540.22540.22540.2254all 71 fm0.5640.7540.11230.016-058c0.22540.22540.2254all 71 fm0.5640.7580.012-058c0.016-058c0.012-058c0.012-058c0.012-058call 71 fm0.5640.7580.012-058c </td <td></td> <td>Turbo ON</td> <td>112Arms</td> <td>150Arms</td> <td>225Arms</td> <td>225Arms</td> <td>225Arms</td> <td>225Arms</td>		Turbo ON	112Arms	150Arms	225Arms	225Arms	225Arms	225Arms	
n, number 1, number	OPP Pstop	Turbo ON	11200W						
<table-container>p. mon k sing Carrent k set and set and</table-container>	start, Inrush Start Current	ulation: Istart - Ist	0~112A	0~150A	0~225A	0~225A	0~225A	0~225A	
and S2 Gravenia 0-112A 0-150A 0-25A	stop, Inrush Stop Current			0~75A			0~112.5A	0~112.5A	
Current 00-56A0-112 A0-112 A0-112 A0-112 A00	and S2 Current	ulation: S1/T1 - S2		0~150A	0~225A	0225A	0225A	0225A	
Time 0015 - 9.39%sc. Or. Cont. SQUEMENTS SQUEME	11 and T2 Time 53 Current				0.015~	-0.5Sec.			
TAGE READEX A METER 6000 000 0000 0000 0000000000000000000	T3 Time MEASUREMENTS						•	+	
obsision 0.01V samese 0.01V 3.000% of cending + range) 3.000% of cendin	OLTAGE READBACK A METER Range				61	00V			
sameImageImageSignary Signary Sig	Resolution				0.0	01V			
gen 28Amm (12.Amm 373 Amm (12.Amm 56.23Amm (11.2.Amm 56.23Amm (11.2.Amm 56.23Amm (11.2.Amm 56.23Amm (11.2.Amm 1.2.Amm (2.Amm 1.2.Amm (2.Amm (2.	Accuracy Parameter								
solution 0.6mA/i.2mA 0.3mA/i.6mA 1.2mA/2.4mA	Range		28Arms/56Arms	37.5Arms/75Arms	56.25Arms/112.5Arms			56.25Arms/112.5Arms	
Instant with set instant w	Resolution Accuracy		0.6mA/1.2mA	0.8mA/1.6mA	1.2mA/2.4mA	1.2mA/2.4mA	1.2mA/2.4mA	1.2mA/2.4mA	
rge 5600W 7500W 11250W 15000W 18750W 22500W oslution 0.1W 0.125W 0.125W 0.25W 0.112SW 0.37SW Verse s0.2% of (reading + range) g 05/00Hz, s0.4% of (reading + range)	Parameter VATT READBACK W METER				Irms,I Max	<td></td> <td></td>			
curscy e.02% of (reading + ange)@ 50/60Hz, ±.04.% of (reading + range) WETER VmsxAmms Correspond Vms and Arms er Factor METER +/:0.000-1.000 usersy ±(0.002±(0.001/PF)+F) usersy tsersy Usersy	Range								
er Facor METER spe spe spe spe spe spe spe sp	Accuracy		0.1W	V.12JW	±0.2% of (reading + range) @ 50/6	60Hz , ±0.4% of (reading + range)	0.012JW	0.375W	
charge $\pm (0.02×[0.001/PF) F)$ $\pm DC_4D=440Hz$ $\pm 0.1\%$ <th c<="" td=""><td>ower Factor METER</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th>	<td>ower Factor METER</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	ower Factor METER							
$\begin{tabular}{ c c c c c c } \hline \hline$	Range Accuracy								
Curracy 0.1% er Parameter METEB VA, VAR, CF_J, Ipeak, Imax, Imin, Vmax, Vmin, IHD, VHD, UTHD, VTHD IERS VA, VAR, CF_J, Ipeak, Imax, Imin, Vmax, Vmin, IHD, VHD, ITHD, VTHD IERS Yes, Power on loading during Inverter / UPS start up ION / OFF Angle 0 - 359 degree: an be programmed for the angle of Ioad ON and Ioad OFF Ioading (Cycle and SCR/TEAC Loading 0 - 359 degree: an be programmed for the angle of Ioad ON and Ioad OFF Ioading (Cycle and SCR/TEAC Loading 0 - 359 degree: an be programmed for the angle of Ioad ON and Ioad OFF Ioading (Cycle and SCR/TEAC Loading 0 - 359 degree: an be programmed for the angle of Ioad ON and Ioad OFF Ioading Terr/Stave (3 Phase or Parallel Application) Yes, 1 master and upto 7 Stave unit mail Programming Input (OPTION) Yes, 1 master and upto 7 Stave unit minor (Isolated) ±164Apt / ±10Vpk ±337.SApk / ±10Vpk ±337.SApk / ±10Vpk ration Temperature *2 CPII 510VA 630VA 750VA ration Temperature *2 0 - 40 C 0 - 40 C - V*1.2 ; -V*1.8 d -V*1.8 ; -V*1.3 Z -V*1.4 (; -V*1.7.6 d -V*3.0 ; -V*2.6 d off thr themaer(IPAIA)@S050/60Hz ; -V*0.9 ; -V*6.6 d -V*1.8 ; -V*1.8 2 -V*1.8 (: -V*1.	requency METER(V) Range								
VA, VAR, CF_J, Ipeak, Imax, Imin, Vmax, Vmin, IHD, VHD, THD, VTHD VA, VAR, CF_J, Ipeak, Imax, Imin, Vmax, Vmin, IHD, VHD, THD, VTHD VA, VAR, CF_J, Ipeak, Imax, Imin, Vmax, Vmin, IHD, VHD, THD, VTHD Vertice of the angle during timetar / IPD Start up Start up Start up OF Angle OF Angle OF Angle of Ioad ON and Ioad OF Floading Cycle and SCI/TRIAC Loading OF Angle Application Vert, Imate and uptor 7 Slave unit Ter Slave or Parallel Application Vert, Imate and uptor 7 Slave unit Ter Slave or Parallel Application Vert, Imate and uptor 7 Slave unit Ter Slave or Parallel Application Vert, Imate and uptor 7 Slave unit Ter Slave or Parallel Application Ter Slave or Paralle Application <td>Accuracy</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Accuracy								
tup Lading Yes, Power on loading during fumedar / UPS start up 00 / OFF Angle 0 - 359 degres can be programmed for the angle of load ON and load OFF loading Cycle and SCR/TRIAC Loading Postive or Negative half cycle, 90 Trailing edge or Leading edge current waveform can be programmed ter/Sive (9 Phase or Parallel Application) Yes, 1 master and upto 7 Size unit Ter/Sive (9 Phase or Parallel Application) Yes, 1 master and upto 7 Size unit The Size (PTINAC Input Yes, 1 master and upto 7 Size unit The Size (PTINAC Input FS/S/DVGL, Resultation 0.1V Third (Stated) ±168Apk / ±10Vpk ±237.5Apk / ±10Vpk ±337.5Apk / ±10Vpk ±337.5Apk / ±10Vpk frage (PTINAC) ±600 Y10V ±337.5Apk / ±10Vpk ±337.5Apk / ±10Vpk <td></td> <td></td> <td></td> <td>VA, VAR, CF_I, Ipeak, I</td> <td>max., Imin. Vmax., Vmin., IHD, VHD, ITH</td> <td>HD, VTHD</td> <td></td> <td></td>				VA, VAR, CF_I, Ipeak, I	max., Imin. Vmax., Vmin., IHD, VHD, ITH	HD, VTHD			
$\begin{tabular}{ c c c c c } \hline Positive or Negative hilf cycle, 90 Trailing edge or Leading edge current waveform can be programmed $$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$	tart up Loading				Yes , Power on loading du	ring Inverter / UPS start up			
Start Yes, 1 master and upto 7 slave unit TerrySlave (2) Phase or Parallel Application) Yes, 1 master and upto 7 slave unit mail SYRX (nput FS / 100/cR, Resultion 0.1V mail SYRX (nput FS / 100/cR, Resultion 0.1V mail SYRX (nput FS / 100/cR, Resultion 0.1V mail SYRX (nput ±600 / ±10V intor (isolated) ±600 / ±10V CPID R (SS 222; LAN ; USS ±337.5Apk / ±10Vpk CPIB (SS 222; LAN ; USS 600 / 4 10V ration Temperature *2 0 - 40 °C enfort (mutimescentral/050/60Hz; V=0.2;V=6.6 V=1.2;V=8.8 V=1.3.2 V=1.3.2 V=1.3.2 V=1.3.2,V=1.3.2 V=3.0;V=2.2 00+2 00+2	alf Cycle and SCR/TRIAC Loading				Negative half cycle, 90° Trailing edge or I	Leading edge current waveform can be p			
TTL TTL State	Aaster/Slave (3 Phase or Parallel A xternal Programming Input (OPT	Application) ION)			Yes, 1 master and	d upto 7 slave unit			
ninor (solated) ±168Apk / ±10Vpk ±225Apk / ±10Vpk ±337.5Apk / ±1	xternal SYNC Input				T	TL			
K. Power Consumption 270VA 390VA 510VA 630VA 750VA ration Temperature *2 0 - 40 C	monitor (Isolated)		±168Apk / ±10Vpk	±225Apk / ±10Vpk	±337.5Apk / ±10Vpk	±337.5Apk / ±10Vpk	±337.5Apk / ±10Vpk	±337.5Apk / ±10Vpk	
ent of Input Impedance(mA)@50/60Hz; -v=0.9; -v=6.6 -v=1.2; -v=8.8 -v=1.8; -v=13.2 -v=2.4; -v=17.6 -v=3.0; -v=22 -v=3.6; -v=26.4 00Hz d58 x 480 x 590 mm 458 x 480 x 590 mm 636 x 480 x 590 mm 814 x 480 x 590 mm 1283 x 600 x 600 mm 1283 x 600 x 600 mm	AX. Power Consumption		270VA	270VA	390VA	510VA	630VA	750VA	
00m2	peration Temperature *2 urrent of Input Impedance(mA)@	50/60Hz ;	V#0.9 · V#6.6	_V+1 7 · V+0 0			_V#3 0 · V#77	_Ve3 6 Ve36 4	
	@ 400Hz Dimension(H x W x D)								
	Veight								

*1 ms (millisiemens) is the unit of conductance(G), one siemens equal to 1/ Ω *2 Operating temperature range is 0-40°C, all specification apply for 25°C±5°C, Except as noted *3 Turbo mode for up to 2X Current rating & Power rating support Fuse, Short/OCP/OPP test function

* All specifications apply for 50/60Hz. * All specifications subject to change without notice.

		SPECIFICATIONS							
MODEL		AEL-5003-480-18.75	AEL-5004-480-28						
Power (W)		2800W	3750 W						
Current(Ampere) /oltage(Volt)		18.75 Arms / 56.25Apeak 50~480Vrm	28 Arms / 84Apeak rms / 700Vdc						
REQUENCY Range		DC,40~70Hz(CC,CP Mode) ,	DC~70Hz(LIN,CR,CV Mode)						
Over Power Protection		≒2940Wrms or Programmable	≒ 3937.5Wrms or Programmable						
Over Current Protection Over Vlotage Protection		≒ 19.687 Arms or Programmable ≒ 504Vrms	≒ 29.4 Arms or Programmable s / 735Vdc						
Over Temp. Protection OPERATION MODE		Ye							
Constant Current Mode for Sine-Wave	'e								
Range Resolution		0~18.75A 0.3125mA/16bits	0~28A 0.5mA/16bits						
Accuracy		± (0.1% of setting + 0.2 e-Wave or Quasi-Square Wave, PWM Wave	% of range) @ 50/60Hz						
Range	ne wave, squar	0~18.75A	0~28A						
Resolution Accuracy		0.3125mA/16bits ± (0.1% of setting + 0.2	0.5mA/16bits 2% of range) @ 50/60Hz						
Constant Resistance Mode		4 ohm ~ 80K ohm							
Range Resolution*1		4 ohm ~ 80K ohm 0.004166mS/16bits	2.5 ohm ~ 50K ohm 0.006666mS/16bits						
Accuracy Constant Voltage Mode		±0.2% of (setting + range) @ 50/60Hz							
Range		50~480Vrm	50~480Vrms / 700Vdc						
Resolution Accuracy		0.01 ±(0.1% of setting							
Constant Power Mode		2800W	3750W						
Range Resolution		0.1W	0.1W						
Accuracy CREST FACTOR (CC & CP MODE ON	NLY)	±(0.1% of setting	+ 0.1% of range)						
Range		√2.							
Resolution Accuracy		0. (0.5 % / Irm:							
POWER FACTOR (CC & CP MODE O Range	DNLY)	0~1 Lag							
Resolution		0.0)1						
Accuracy TEST MODE		1%1	F.S.						
UPS Efficient Measurement Operating Frequency		Non-Line Auto ; 40							
Current Range		0~18.75A	028A						
PF Range Measuring Efficiency For PV Systems		0-							
Power Conditioners for THD 80%	•	Resistive + Nor							
Operating Frequency Current Range		Auto ; 40 0~18.75A	028A						
Resistive Range UPS Back-Up Function(CC,LIN,CR,CF	D)	4 ohm ~ 80K ohm	2.5 ohm ~ 50K ohm						
UVP (VTH)	r)	50480Vrm							
UPS Back-Up Time Battery Discharge Function(CC,LIN,C	CR.CP)	1~99999 Se	ec. (>27H)						
UVP (VTH)		50~480Vrm	s / 700Vdc						
Battery Discharge Time UPS Transfer Time		1–99999 Se							
Current Range UVP (VTH)		0~18.75A 2.5	0~28A						
Time range		0.15mS~9							
Fuse Test Mode	Turbo OFF	18.75Arms	28.0Arms						
Max. Current	Turbo ON	37.5Arms (x2) *3	56.0Arms (x2) *3						
Trip & Non-Trip Time	Turbo OFF Turbo ON	0.1-999							
Meas. Accuracy Repeat Cycle		±0.003 0~2							
Short/OPP/OCP Test Function	1	•							
	Turbo OFF	0.15 - 105e 0.15 -							
Short Time	Turbo ON		ms						
	Turbo OFF	100	to 10 Seens						
Short Time OPP/OCP Step Time	Turbo OFF Turbo ON Turbo OFF	100ms, up 1 18.75Arms	28.0Arms						
Short Time OPP/OCP Step Time OCP Istop	Turbo OFF Turbo ON Turbo OFF Turbo ON	100ms, up 1 18.75Arms 37.5Arms	28.0Arms 56.0Arms						
Short Time OPP/OCP Step Time OCP Istop OPP Pstop	Turbo OFF Turbo ON Turbo OFF Turbo ON Turbo OFF Turbo ON	100ms, up 18.75Arms 37.5Arms 2800W 5600W	28.0Arms						
Short Time OPP/OCP Step Time OCP Istop OPP Pstop Programmable Inrush Current Simula	Turbo OFF Turbo ON Turbo OFF Turbo ON Turbo OFF Turbo ON	100ms, up 1 18.75Arms 37.5Arms 2800W 5600W top / Tsep	28.0Arms 56.0Arms 3750W						
Short Time OPP/OCP Step Time OCP Istop OPP Pstop Programmable Inrush Current Simula Istart, Inrush Start Current Inrush Step Time	Turbo OFF Turbo ON Turbo OFF Turbo ON Turbo OFF Turbo ON	100ms, up 18.75Arms 37.5Arms 2800W 5600W top / Tsep 0-37.5A	28.0Arms 56.0Arms 3750W 7500W 0-56A						
Short Time OPP/OCP Step Time OCP Istop OPP Pstop Programmable Inrush Current Simula Istart, Inrush Start Current	Turbo OFF Turbo ON Turbo OFF Turbo ON Turbo OFF Turbo ON ation: Istart - Is	100ms, up 1 18,75Ams 37,5Ams 2800W 5600W top / Tsep 0-37,5A -1,875A	28.0Arms 56.0Arms 3750W 7500W 0-56A 0-28A						
Short Time OPP/OCP Step Time OCP Istop OPP psop Programmable Inrush Current Simulai Istari, Inrush Start Current Inrush Stap Time Istop, Inrush Stop Current Stop, Inrush Stop Current Programmable Surge Current Stand S2 Current	Turbo OFF Turbo ON Turbo OFF Turbo ON Turbo OFF Turbo ON ation: Istart - Is	100ms, up 1 18,75Ams 37,5Ams 2800W 5600W top / Tsep 0-37,5A -1,875A	28.0Arms 56.0Arms 3750W 7500W 0-56A						
Short Time OPP/OCP Step Time OCP Istop OPP stop Programmable Inrush Current Simula Istar, Inrush Start Current Istop, Inrush Start Current Programmable Surge Current Stand S2 Current Ti and T2 Time S3 Current S1 Current	Turbo OFF Turbo ON Turbo OFF Turbo ON Turbo OFF Turbo ON ation: Istart - Is	100ms, up 18.75Arms 37.5Arms 2800W 5600W 0-37.5A 0-37.5A 7/2 - 53/73	28.0Arms 56.0Arms 3750W 7500W 0-56A 0-28A						
Short Time OPP/OCP Step Time OCP Istop OCP Istop OPP Pogrammable Inrush Current Simula Istar, Inrush Start Current Istop, Inrush Start Current Istop, Inrush Stop Current Stand Start Current T and T2 Time S 3 Current T3 Time MEASUREMENTS	Turbo OFF Turbo ON Turbo OFF Turbo ON Turbo OFF Turbo ON ation: Istart - Is	100ms, up 18.75Ams 37.5Ams 2800W 5600W 0-37.5A 0-18.75A //12 - 53/T3 0-37.5A	28.0Arms 56.0Arms 3750W 7500W 0-56A 0-28A 0-28A						
Short Time OPP/OCP Step Time OCP Istop OPP Potop Programmable Inrush Current Simula Istar, Imrush Start Current Istop, Imrush Start Current Istop, Imrush Stop Current ST and T2 Time S3 Current T3 Time MEASUREMENTS VOLTACE READBACKY WIETER VOLTACE READBACKY WIETER	Turbo OFF Turbo ON Turbo OFF Turbo ON Turbo OFF Turbo ON ation: Istart - Is	100ms, up 1 18,75Ams 37,5Ams 2800W 2600W 2600W 200 / Tsep 0-37,5A 0-18,75A //T2 - \$3/T3 0-37,5A 0-18,75A	28.0Arms 56.0Arms 3750W 7500W 0-56A 0-28A 0-56A 0-56A 0-28A						
Short Time OPP/OCP Step Time OCP Istop OPP Pospamable Insuh Current Simula Istar, Insuh Start Current Istop, Insuh Start Current Istop, Insuh Start Current Istop, Insuh Stop Current ST and T2 Time S3 Current T3 aT Time MEASUREMENTS VOLTACE READBACK V METER Range Resolution	Turbo OFF Turbo ON Turbo OFF Turbo ON Turbo OFF Turbo ON ation: Istart - Is	100ms, up 1 18,75Ams 37,5Ams 2800W 2600W 100 / Tsep 0-37,5A 1 0-18,75A 1 0-18,75A 1 0-18,75A 1 0-18,75A 1 0,001 0,001	28.0Arms 56.0Arms 3750W 7500W 0-56A 0-28A 0-56A 0-28A 0-28A 0-28A 0-28A 0-28A 0-28A 0-28A						
Short Time OPP/OCP Step Time OCP Istop OPP Pstop Programmable Innush Current Simula Istar, Innush Star Current Istop, Innush Stap Time Istop, Innush Stop Current Tiand T2 Time S3 Current T3 mine MEASUREMENTS MCASUREMENTS MCASURE READBACK V METER Range Resolution Accuracy	Turbo OFF Turbo ON Turbo OFF Turbo ON Turbo OFF Turbo ON ation: Istart - Is	100ms, up 1 18.75Arms 37.5Arms 2200W 5600W 10 5600W 10 - 0-37.5A	28.0Arms 56.0Arms 3750W 7500W 0-56A 0-28A 0-56A 0-28A 0-2						
Short Time OPP/OCP Step Time OCP Istop OPP Potop Programmable Innush Current Simula Istar, Innush Stap Time Istop, Innush Stap Time Istop, Innush Stap Current S1 and 12 Time S3 Current T1 and T2 Time MEASUREMENTS VDLTAGE READBACK & METER Resolution Accuracy Parameter QURRENT READBACK A METER	Turbo OFF Turbo ON Turbo OFF Turbo ON Turbo OFF Turbo ON ation: Istart - Is	100ms, up 1 18.754ms 19.754ms 2200W 2800W 0-37.54 0-37.54 0-18.754 0-18.754 0-18.754 0-18.754 0-18.754 0-36.754 0-18.754 0.18.754 0.18.754 0.18.754 0.18.754 0.18.754 0.18.754 0.10.00.00 0.00 0.00 0.00 0.00 0.00 0.	28.0Arms 56.0Arms 3750W 7500W 0-56A 0-28A 0-2						
Short Time OPP/OCP Step Time OCP Istop OPP Patop Programmable Inrush Current Simula Istar, Inrush Start Current Inrush Stap Time Istop, Inrush Stap Current Sta of 22 Current T1 and T2 Time S3 Current T1 and T2 Time S3 Current T1 and T2 Time MEASUREMENTS VOLTAGE READBACK V METER Range Resolution Accuracy Parameter CURRENT FEADBACK A METER Range Resolution	Turbo OFF Turbo ON Turbo OFF Turbo ON Turbo OFF Turbo ON ation: Istart - Is	100ms, up 1 18.75Arms 37.5Arms 2200W bop / Tsep 0-37.5A 0-37.5A 0-18.75A 0-18.75A 0-18.75A 0-18.75A 0-18.75A 0-18.75A 0-18.75A 0.0.8.75A 0.0.8.75A 0.0.000 0.000	28.0Arms 56.0Arms 3750W 7500W 0-56A 0-28A 0-2						
Short Time OPP/OCP Step Time OCP Istop OPP Potop Programmable Insub Current Simula Istar, Insub Star Current Istop, Insub Stop Current Stop, Insub Stop Current Star A Current T and T2 Time S3 Current T3 Time T3 Time Range Resolution Accuracy Parameter Para	Turbo OFF Turbo ON Turbo OFF Turbo ON Turbo OFF Turbo ON ation: Istart - Is	100ms, up 1 18.75Arms 27.5Arms 2800W 00 / Tsep 0-37.5A 0-18.75A 100ms 0-37.5A 0-18.75A 0-18.75A 0-37.5A 0-18.75A 0-18.75A 0.000 0.001 ±0.05% of (reading ± 0.2ms/18.75Arms 0.2mA/0.4mA ±0.05% of (reading ± 0.2ms/18.75Arms	28.0Arms 56.0Arms 3750W 7500W 0-56A 0-28A 0-28A 0-28A 0-28A 0-28A 0-28A 0-28A 0-28A 0-36A 1 0-28A 1 0-28A 0.3760 km 1 14Arms/28Arms 0.3760 km 1 14Arms/06mA						
Short Time OPP/OCP Step Time OCP Istop OPP Potop Programmable Insub Current Simuli Sitari, Insub Start Current Insub Stag Time Istop, Insub Stog Current Stag Time Stag Current Stag Current Stag Current Ta MT Z Time Range Resolution Accuracy Parameter Range Resolution Accuracy Parameter Mart READBACK W METER	Turbo OFF Turbo ON Turbo OFF Turbo ON Turbo OFF Turbo ON ation: Istart - Is	100ms, up 1 18.75Arms 37.5Arms 22600W 2800W 00 07.7sep 0-37.5A 1 0-18.75A 1 0.000 001 000 000 000 000 000 0005% of (reading 4 005% of (reading 4 100% of (reading	28.0Arms 56.0Arms 3750W 7500W 0~56A 0~28A 0~28A 0~56A 0~28A 0~28A 0~28A 0~36A 1 0~37A 1 0~3						
Short Time OPP/OCP Step Time OCP Istop OPP Pstop Programmable Innush Current Simula Istar, Innush Start Current Istop, Innush Start Current Istop, Innush Stop Current Ti and T2 Time S3 Current T1 and T2 Time MEASUREMENTS VOLTACE READBACK V METER Range Resolution Accuracy Parameter Range Resolution Accuracy Parameter Range	Turbo OFF Turbo ON Turbo OFF Turbo ON Turbo OFF Turbo ON ation: Istart - Is	100ms, up 1 18.75Arms 27.5Arms 2800W 00 / Tsep 0-37.5A 0-18.75A 100ms 0-37.5A 0-18.75A 0-18.75A 0-37.5A 0-18.75A 0-18.75A 0.000 0.001 ±0.05% of (reading ± 0.2ms/18.75Arms 0.2mA/0.4mA ±0.05% of (reading ± 0.2ms/18.75Arms	28.0Arms 56.0Arms 3750W 7500W 0-56A 0-28A 0-28A 0-28A 0-28A 0-28A 0-28A 0-28A 0-28A 0-36A 1 0-28A 1 0-28A 0.3760 km 1 14Arms/28Arms 0.3760 km 1 14Arms/06mA						
Short Time OPP/OCP Step Time OCP Istop OPP Pstop Programmable Innush Current Simuli Start, Innush Start Current Innush Step Time Stop, Innush Stop Current Stop, Innush Stop Current Ti and T2 Time S3 Current T1 and T2 Time MEASUREMENTS VOLTACE READBACK AV METER Range Resolution Accuracy Parameter CURRENT READBACK A METER Range Resolution Accuracy Parameter Para	Turbo OFF Turbo ON Turbo OFF Turbo ON Turbo OFF Turbo ON ation: Istart - Is	100ms, up 1 18.75Arms 37.5Arms 2800W 5600W 109-37.5A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	28.0Arms 56.0Arms 56.0Arms 3750W 7500W 0-56A 0-28A 0-28A 0-56A 0-28A 0-28A 0-28A 0-28A 0-28A 0.28A						
Short Time OPP/OCP Step Time OCP Istop OPP Posop Programmable Innush Current Simula Istar, Innush Start Current Istop, Innush Start Current Istop, Innush Start Current Istop, Innush Stop Current Start Current Tand T2 Time S3 Current Tand T2 Time S3 Current Ta Ta Time MEASUREMENTS VOLTACE READACK V METER Range Resolution Accuracy Parameter CURRENT FEADBACK A METER Range Resolution Accuracy Parameter Range Resolution Accuracy VAN RETER Power Factor METER	Turbo OFF Turbo ON Turbo OFF Turbo ON Turbo OFF Turbo ON ation: Istart - Is	100ms, up1 18.75Arms 27.5Arms 2800W 2800W 19 0-37.5A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	28.0Arms 56.0Arms 56.0Arms 3750W 7500W 056A 028A 0.065 0.065 0.065 0.065 0.065 0.055						
Short Time OPP/OCP Step Time OCP Istop OPP Potop Programmable Insush Current Simuli Sitan, Insush Start Current Insush Stap Time Sitan, Insush Start Current Tind T2 Time Sid Start Current Tind T2 Time Sid Start Current Sid Start Current Sid Curre	Turbo OFF Turbo ON Turbo OFF Turbo ON Turbo OFF Turbo ON ation: Istart - Is	100ms, up 1 18.75Arms 37.5Arms 2200W 2800W 10 5600W 10 0-37.5A 0-37.5A 1 0-18.75A 1 0-18.75A 1 0-18.75A 1 0-18.75A 1 0.18.75A 1 0.18	28.0Arms 56.0Arms 3750W 						
Short Time OPP/OCP Step Time OCP Istop OPP Potop Programmable Insush Current Simuli Sitani, Insush Start Current Insush Step Time Istop, Insush Store Starter Start, Starter S	Turbo OFF Turbo ON Turbo OFF Turbo ON Turbo OFF Turbo ON ation: Istart - Is	100ms, up 1 18.75Arms 37.5Arms 22600W 2800W 100 / Tsep 0-37.5A 0-18.75A 10-18.75A 10-1	28.0Arms 56.0Arms 3750W 						
Short Time OPP/OCP Step Time OCP Istop OPP Potop Programmable Insush Current Simuli Sital, finush Start Current Insush Stag Time Stand, Start, Start Stag Current Ti and T2 Time S3 Current T3 Time S4 Current T3 Time Resolution Accuracy Parameter Range Resolution Accuracy VMTTERDBACK W METER Range Resolution Accuracy VMTTERDBACK WMETER Range Resolution Accuracy VMTTERDBACK WMETER Range Resolution Accuracy VMTTERDBACK WMETER Range Accuracy Figure Parameter Range Rang	Turbo OFF Turbo ON Turbo OFF Turbo ON Turbo OFF Turbo ON ation: Istart - Is	100ms, up 1 18.75Arms 37.5Arms 2200W 2800W 10 5600W 10 0-37.5A 0-37.5A 1 0-18.75A 1 0-18.75A 1 0-18.75A 1 0-18.75A 1 0.18.75A 1 0.18	28.0Arms 56.0Arms 56.0Arms 56.0Arms 7500W 0-56A 0-28						
Short Time OPP/OCP Step Time OCP Istop OPP Potop Programmabe Innush Current Simula Istar, Innush Start Current Istop, Innush Start Current Istop, Innush Start Current Istop, Innush Stop Current ST and T2 Time S3 Current T3 and T2 Time T3 Time MEASUREMENTS VOLTACE READACK V METER Range Resolution Accuracy Parameter CURRENT FEADBACK A METER Range Resolution Accuracy Parameter WATT READBACK W METER Range Resolution Accuracy Parameter WATT READBACK METER Range Accuracy NAMETER PARAMETER Range Resolution Accuracy NAMETER Range Resolution Resolution Resolution Resolution Range Resolution R	Turbo OFF Turbo OFF Turbo OFF Turbo OF Turbo ON Turbo OFF Turbo ON titon: Istart - Is tion: S1/T1 - S2	100ms, up 1 18.75Arms 37.5Arms 2800W 2800W 1 5600W 1 5600W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	28.0Arms 56.0Arms 56.0Arms 3750W 7500W 0-56A 0-28A 0-29A						
Short Time OPP/OCP Step Time OCP Istop OPP Potop Programmable Inrush Current Simula Istar, Inrush Start Current Istray, Inrush Start Current Istray, Inrush Start Current Istray, Inrush Start Current Istray, Inrush Start Current I and T2 Time S3 Current T3 Infine S3 Current T3 Time MEASUREMENTS VOLTACE READBACK A METER Range Resolution Accuracy Parameter CURRENT FEADBACK A METER Range Resolution Accuracy Parameter CURRENT FEADBACK A METER Range Resolution Accuracy Parameter VA METER Parae Resolution Accuracy Parameter VA METER Range Accuracy VA METER Range Accuracy Other ParaMetER Range Accuracy Other Parameter VA METER Range Accuracy Other Parameter CURRENT SUBJECT SUBJ	Turbo OFF Turbo OFF Turbo OFF Turbo OF Turbo ON Turbo OFF Turbo ON titon: Istart - Is tion: S1/T1 - S2	100ms, up 1 18.75Ams 37.5Ams 2800W 2800W 309 / Tsep -37.5A	28.0Arms 56.0Arms 3750W 7500W 0-56A 0-28A 0-29A 0-2						
Short Time OPP/OCP Step Time OCP Istop OPP Postop Programmable Innush Current Simuli Istain, Innush Start Current Innush Step Time Istain, Innush Start Current Innush Step Time Istop, Innush Storge Current Si and S2 Current I and T2 Time S3 Current I and T2 Time MEASUREMENTS VOLTAGE READBACK V METER Range Resolution Accuracy Parameter Range Resolution Accuracy Parameter Range Resolution Accuracy VAIT TEADBACK A METER Range Resolution Accuracy VAIT READBACK W METER Range Accuracy Chir Parameter METER DTHERS Sut up Loading	Turbo OFF Turbo OFF Turbo OFF Turbo OF Turbo ON Turbo OFF Turbo ON titon: Istart - Is tion: S1/T1 - S2	100ms, up 1 18.754ms 37.54ms 2200W 2800W 195600W 100p / Tsep 0-37.5A 100-18.75A 100-18.	28.0 Arms 56.0 Arms 3750W 0-56A 0-56A 0-58A 0-58A 0-58A 0-28A 0						
Short Time OPP/OCP Step Time OCP Istop OPP Postop Programmable Innush Current Simuli Istain, Innush Start Current Innush Step Time Istain, Innush Start Current Innush Step Time Istop, Innush Storge Current Si and S2 Current Current Range Resolution Accuracy Parameter Range Resolution Accuracy Parameter Range Resolution Accuracy VAITTERADBACK W METER Range Range Resolution Accuracy VAITTERADBACK W METER Range Accuracy Chire Parameter METER Startup Ladding Ladd ON / OFF Angle Half Cycle and SCHTRALCadeng	Turbo OFF Turbo OFF	100ms, up 1 18.754ms 37.54ms 2200W 200W 195600W 100 -37.5A 0-37.5A 0-37.5A 0-37.5A 0-37.5A 0-37.5A 0-18.75A 0-18.75A 0-18.75A 0-18.75A 0.2mA/0.4mA 0.055% of (reading 0.2mA/0.4mA 0.1mm.1Ma/ 0.1mm.1	28.0 Arms 35.0 Arms 3750W 0-56A 0-56A 0-58A 0-58A 0-58A 0-28A 0						
Short Time OPP/OCP Step Time OCP Istop OPP Postop Programmable Innuh Current Simula Istar, Innush Star Current Istop, Innush Star Current Istop, Innush Star Current Istop, Innush Star Current I and T2 Time S3 Current T1 and T2 Time S3 Current T1 and T2 Time Range Resolution Accuracy Parameter CURRENT FEADBACK A METER Range Resolution Accuracy Parameter WATT BEADBACK W METER Range Resolution Accuracy Parameter WATT BEADBACK W METER Range Resolution Accuracy Parameter WATT BEADBACK METER Range Accuracy Parameter WATT BEADBACK METER Range Accuracy OMATT BEADBACK METER Range Accuracy OMAT BEADBACK ACURACY ACU	Turbo OFF Turbo OFF Turbo OFF Turbo OFF Turbo OF Turbo OFF Turbo OFF Turbo Istart - Is titon: S1/T1 - S2	100ms, up 1 18.75Ams 37.5Ams 2800W 2800W 1907/Tsep 0-37.5A 1 1 0-18.75A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	28.0Arms 56.0Arms 56.0Arms 3750W 7500W 0-56A 0-28A						
Short Time OPP/OCP Step Time OCP Istop OPP Patop Programmable Invush Current Simuli Istart, Inrush Start Current Istop, Inrush Stop Current Istop, Inrush Stop Current Istop, Inrush Stop Current Istop, Inrush Stop Current Ti and T2 Time S1 Gurent T1 and T2 Time MEASUREMENTS VOLTACE READBACK V METER Range Resolution Accuracy Parameter CURRENT READBACK A METER Range Resolution Accuracy Parameter CURRENT READBACK W METER Range Resolution Accuracy Parameter WATT READBACK W METER Range Resolution Accuracy Parameter CURRENT READBACK W METER Range Resolution Accuracy Parameter CURRENT READBACK W METER Range Resolution Accuracy Parameter Other Parameter Start up Loading Laad ON / OFF Angle Half Cycle and SCR/TRIAC Loading Master/Slave J Phase or Parallel App External Programming Input (OPTIO)	Turbo OFF Turbo OFF Turbo OFF Turbo OFF Turbo OF Turbo OFF Turbo OFF Turbo Istart - Is titon: S1/T1 - S2	100ms, up 1 18.75Ams 37.5Ams 2800W 2800W 199 71sep -37.5A	28.0Arms 56.0Arms 3750W 3750W 0-56A 0-28A 0-29A 0-2						
Short Time OPP/OCP Step Time OCP Istop OPP stop Programmable Insuh Current Timula Start. Innush Start Current Innush Start Current Innush Start Current Stop, Innush Start Current Tiand T2 Time S3 Current Ti and T2 Time S3 Current Ti and T2 Time S3 Current Ti and T2 Time Range Resolution Accuracy Parameter CURRENT FEADBACK A METER Range Resolution Accuracy Parameter CURRENT FEADBACK A METER Range Resolution Accuracy Parameter WATT READBACK W METER Range Resolution Accuracy Parameter WATT READBACK W METER Range Resolution Accuracy Parameter WATT READBACK W METER Range Accuracy VATT READBACK W METER Range Accuracy Other Parameter METER Power Factor METER Range Accuracy Other Parameter METER Other Parameter METER Ditter Dodding Litenal SYACHTREA Ditter(V) Range Accuracy CHERPATER Ditter	Turbo OFF Turbo OFF Turbo OFF Turbo OFF Turbo OF Turbo OFF Turbo OFF Turbo Istart - Is titon: S1/T1 - S2	100ms, up 1 18.75Arms 27.5Arms 22.00W 2.50W 10.5600W 10.575A 10.37.5A 10.3	28.0Arms 56.0Arms 3750W 3750W 0-56A 0-28A 0-29A 0-2						
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Short Time OPP/OCP Step Time OCP Istop OP Patop Programmable Invush Current Simuli Istart, Inrush Start Current Invush Stap Time Istop, Inrush Stap Current Istop, Inrush Stap Current Istop, Inrush Stap Current Ti and T2 Time S3 Current T3 Time MEASUREMENTS VOLTACE READBACK V METER Range Resolution Accuracy Parameter CURRENT READBACK M METER Range Resolution Accuracy Parameter CURRENT READBACK W METER Range Resolution Accuracy Other Parameter CURRENT SUBJECK Start up Loading Load ON / OFF Angle Haif Cycle and SCR/RIAC Loading Mater/Slave [Dhase or Paralel App External Programming Input (OPTIO) Ext	Turbo OFF Turbo	100ms, up 1 18.75Ams 13.75Ams 2800W 2800W 1560 2800W 1560 2754 1 0-37.5A 1 1 72-53/73 1 0-37.5A 1 1 1 72-53/73 1 0-37.5A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	28.0Arms 56.0Arms 3750W 3750W 0-56A 0-56A 0-28A 0-28A 0-28A 0-28A 0-28A 0-28A 0-28A 0-36A 1 0-36A 0-374 0.3740 4 14Arms/28Arms 0.37A/0.6rmA r ange) @ 50/60Hz Min,et/Vpk 14Arms/28Arms 0.37A/0.6rmA r ange) @ 50/60Hz Min,et/1pk 3750W 0.0625W Min,et/1pk 3750W 0.0625W Min,et/1pk 3750W 0.0625W Min,et/1pk 3750W 0.0625W Min,et/1pk 3750W 0.0625W Min,et/1pk 3750W 0.0625W Min,et/1pk 3750W 0.0625W 14Arms 0.3740 0.0625W 14Arms 0.3740 0.0625W 14Arms 0.3750W 0.0625W 14Arms 0.3750W 0.0625W 150 0.07500 0.07500 0.07500 0.07500 0.07500 0.07500 0.07500						
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*1 ms (millisiemens) is the unit of conductance(G), one siemens equal to $1/\Omega$ *2 Operating temperature range is 0–40°C, all specification apply for 25°C±5°C, Except as noted *3 Turbo mode for up to 2X Current rating & Power rating support Fuse, Short/OCP/OPP test function

* All specifications apply for 50/60Hz. * All specifications subject to change without notice.

		OR	DER INFORMATION	
AEL-5002-350-18.75	350V/18.75A/1875W	AC &	DC Electronic Load	
AEL-5003-350-28	350V/28A/2800W	AC &	DC Electronic Load	
AEL-5004-350-37.5	350V/37.5A/3750W	AC &	DC Electronic Load	
AEL-5006-350-56	350V/56A/5600W	AC &	DC Electronic Load	
AEL-5008-350-75	350V/75A/7500W	AC &	DC Electronic Load	Income Income
AEL-5012-350-112.5	350V/112.5A/11250W	AC &	DC Electronic Load	
AEL-5015-350-112.5	350V/112.5A/15000W	AC &	DC Electronic Load	
AEL-5019-350-112.5	350V/112.5A/18750W	AC &	DC Electronic Load	
AEL-5023-350-112.5	350V/112.5A/22500W	AC &	DC Electronic Load	
AEL-5002-425-18.75	425V/18.75A/1875W	AC &	DC Electronic Load	
AEL-5003-425-28	425V /28A/2800W	AC &	DC Electronic Load	
AEL-5004-425-37.5	425V /37.5A/3750W	AC &	DC Electronic Load	
AEL-5006-425-56	425V /56A/5600W	AC &	DC Electronic Load	
AEL-5008-425-75	425V /75A/7500W	AC &	DC Electronic Load	
AEL-5012-425-112.5	425V /112.5A/11250W	AC &	DC Electronic Load	
AEL-5015-425-112.5	425V /112.5A/15000W	AC &	DC Electronic Load	
AEL-5019-425-112.5	425V /112.5A/18750W	AC &	DC Electronic Load	AEL-50 <u>15</u> - <u>425</u> - <u>112.5</u>
AEL-5023-425-112.5	425V /112.5A/22500W	AC &	DC Electronic Load	Power rating: 15-> 15kW Maximum output current 112.5-> 112.5A
AEL-5003-480-18.75	480V/18.75A/2800W	AC &	DC Electronic Load	→ Maximum output voltage:
AEL-5004-480-28	480V/28A/3750W	AC &	DC Electronic Load	425-> 425V
		Ó	PTIONAL ACCESSORIES	
PEL-022 GPIB Card	PEI	L-024	LAN Card	
PEL-023 RS-232 Card	PEI	L-025	USB Card	

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