DENVER
metrología electrónica, S.L.

ETSYSTEM

EAC-4Q-GS – Programmable AC-Source

30 – 180 KVA

FEATURES

- High power AC-Source, with output power from 30 KVA to 180 KVA
- 30 KVA, 45 KVA and 60 KVA in each cabinet, and can be paralleled up to 180 KVA and above
- Bi-directional current flow
- Three-phase voltages can be adjusted independently
- Sequence programming of voltage and frequency
- Harmonic waveform generation
- LVRT option supports LVRT test of PV inverters
- RLC option integrates electronic RLC load inside for anti-island test

EAC-4Q-GS series bi-directional AC-Source contains multi output power levels from 30 KVA to 180 KVA. Using advanced PWM technology, single power module of 30 KVA, 45 KVA or 60 KVA is integrated in one 600 mm*1800 mm*600 mm (W*H*D) cabinet. Up to 3 cabinets can be paralleled to get up to 180 KVA as standard. At most 6 cabinets can be paralleled with factory modification to get higher output power.

Simple settings can be done from a large LCD displayer on the front panel; also measurements can be read from front panel. Programming interfaces including RS232, RS485, CAN and Ethernet are available for automated test applications.

EAC-4Q-GS series AC-Source is a high-performance and multi-functional grid simulator. It can be used to simulate grid disturbances such as voltage drops, frequency shift, three-phase voltage unbalance and etc.

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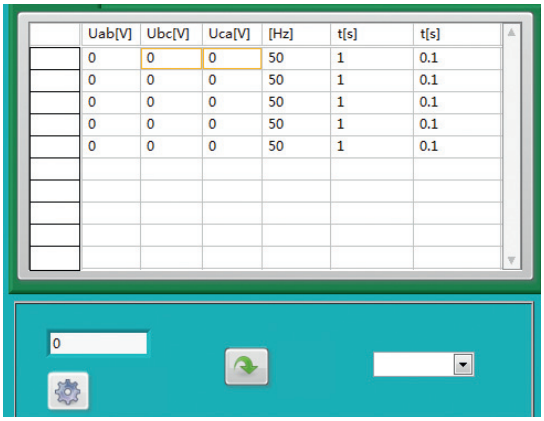
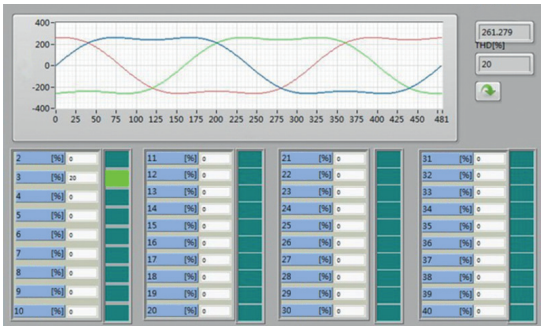
1) EAC-4Q-GS series AC-Source provides standard software, which supports sequence programming of voltage and frequency.



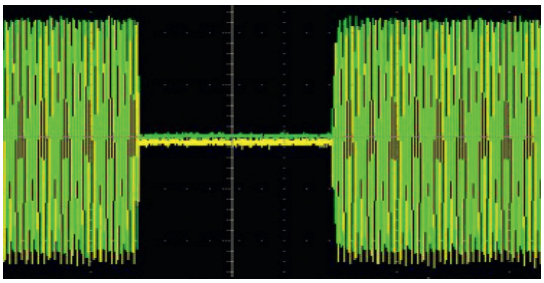
2) EAC-4Q-GS series AC-Source can be used to simulate grid voltage variations, drops, surges and sags.
The voltage dip depths and time can be programmed.
And each phase can be programmed independently.

3) Frequency variations, surges and sags can also be simulated.
Frequency changes can be set to start at any test moment; both slew rate and hold time can be programmed.

4) With harmonic generator integrated, harmonics and interharmonics can be programmed. Harmonics waveforms can be programmed by specifying amplitude and phase up to 40th harmonics.



5) LVRT option provide firmware and software support for low voltage ride through test and zero voltage ride through test for PV inverters.



6) RLC option integrates electronic RLC load into the AC-Source.
Using real time control technology, the electronic RLC load monitors active power and reactive power outputs of PV inverters, and calculates required resistance, inductance and capacitance to simulate.

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SPECIFICATIONS

Model	EAC-4Q-GS30	EAC-4Q-GS45	EAC-4Q-GS60	EAC-4Q-GS90	EAC-4Q-GS120	EAC-4Q-GS180
Input voltage	3 x 400 VAC ±10 %					
Input line current	60 A	90 A	120 A	180 A	240 A	360 A
Frequency	47 – 63 Hz					
Efficiency	≥ 90 %					
Power factor	0.95					
Output power	30 KVA	45 KVA	60 KVA	90 KVA	120 KVA	180 KVA
Output voltage range (L-N)	0~312 VAC					
Output voltage resolution	0.1 V					
Output voltage accuracy	0.50 %					
THD	<1 % (resistive load)					
Load regulation	0.2 % FS					
Line regulation	0.1 % (10 % input line change)					
Current range/phase	32 A	48 A	64 A	96 A	128 A	192 A
Crest factor	2:1					
Current resolution	0.1 A					
Frequency range	45 Hz – 65 Hz					
Frequency resolution	0.001 Hz					
Frequency accuracy	± 0.05 %					
Phase angel range	Phase B/C relative to phase A, 0.0~360.0°					
Accuracy	<1.2° (@50 Hz)					
Harmonic generation	up to 40th					
Protection	over current, over load, over temperature, short circuit					
Cooling	Forced air					
Noise	<65 dB					
Operation temperature	0 – 40 °C					
Humidity	<80 % (non-condensing)					

Note:

Specifications are subject to change without notice.

Specifications are warranted over an ambient temperature range of 25°± 5°C.

Input voltage selections
3 x 208 V (L-L) ±10 %
3 x 230 V (L-L) ±10 %
3 x 380 V (L-L) ±10 %
3 x 480 V (L-L) ±10 %

Option	
RLC	Integrated electronic RLC load
V460	Add output voltage range up to 460 V (L-N)
V750	Add output voltage range up to 750 V (L-N)
CCR	Custom current range, contact factory
LVRT	Low voltage ride through / Zero voltage ride through firmware

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