

## EAC-S 1-Phase AC Power Sources 250 – 10.000 VA



### OVERVIEW

- Simulation of single-phase networks
- AC / DC operation
- 250 – 10.000 VA power output
- 0 – 700 VAC / 1.000 VDC output voltage
- 1 – 2.000 Hz variable frequency (sine, square, triangle)
- Currents up to 600 A
- Graphical Display
- Measuring of voltage, current, average and peak current, effective power, idle power, apparent power, power factor, crest factor
- Voltage and current constant mode
- Free memory space for programmable curve forms (WAV files), enabled over an external SD card (optional)
- 10 storage locations to save current configuration
- External oscillator input + / - 10 V with adjustable time delay up to 70 ms (optional)
- Galvanic isolated analogue interface: 0 – 5 V or 0 – 10 V (optional)
- Digital interface IEEE, RS232/485, USB, LAN (optional)
- Script control: process programming and booting from memory card
- Creation of user-defined curve shapes and programming via memory card or digital interface
- Three non-volatile curve shapes (programming via memory card)
- Datalog function: operation values can be saved in an adjustable interval to a memory card
- Script operation in combination with Datalog function allows an independent stand-alone test field setup
- Sync input synchronizes the device with external sources (optional)
- Sync output triggers external measurement instruments or similar (optional)
- Disengageable output voltage for a determined amount of half periods
- Connectable output voltage for a determined amount of time (optional)
- Special version on request

### PRODUCT EXAMPLES

| Type        | Power VA | Current VAC / VDC | max. Current A | Dimensions             |
|-------------|----------|-------------------|----------------|------------------------|
| EAC-S 250   | 250      | 0 – 300 / 0 – 425 | 0 – 3          | 19" x 4 HE x 434,5 mm  |
| EAC-S 500   | 500      | 0 – 300 / 0 – 425 | 0 – 6          | 19" x 4 HE x 434,5 mm  |
| EAC-S 1000  | 1.000    | 0 – 300 / 0 – 425 | 0 – 10         | 19" x 6 HE x 434,5 mm  |
| EAC-S 2000  | 2.000    | 0 – 300 / 0 – 425 | 0 – 15         | 19" x 6 HE x 434,5 mm  |
| EAC-S 3000  | 3.000    | 0 – 300 / 0 – 425 | 0 – 20         | 19" x 10 HE x 434,5 mm |
| EAC-S 4000  | 4.000    | 0 – 300 / 0 – 425 | 0 – 30         | 19" x 16 HE x 600 mm   |
| EAC-S 5000  | 5.000    | 0 – 300 / 0 – 425 | 0 – 35         | 19" x 16 HE x 600 mm   |
| EAC-S 6000  | 6.000    | 0 – 300 / 0 – 425 | 0 – 40         | 19" x 16 HE x 600 mm   |
| EAC-S 7000  | 7.000    | 0 – 300 / 0 – 425 | 0 – 50         | 19" x 20 HE x 800 mm   |
| EAC-S 8000  | 8.000    | 0 – 300 / 0 – 425 | 0 – 60         | 19" x 20 HE x 800 mm   |
| EAC-S 9000  | 9.000    | 0 – 300 / 0 – 425 | 0 – 70         | 19" x 25 HE x 800 mm   |
| EAC-S 10000 | 10.000   | 0 – 300 / 0 – 425 | 0 – 80         | 19" x 25 HE x 800 mm   |

## OPTIONS

| Appendix   | Description                                                                                        |
|------------|----------------------------------------------------------------------------------------------------|
| ../230     | Input 230 / 207 – 253 VAC                                                                          |
| ../400     | Input 400 / 360 – 440 VAC                                                                          |
| ../3P208   | Input 3 x 208 / 187 – 229 VAC                                                                      |
| ../3P400   | Input 3 x 400 / 360 – 440 VAC                                                                      |
| ../3P480   | Input 3 x 480 / 432 – 528 VAC                                                                      |
| ../V500    | Extended voltage range 0 – 500 VAC / 0 – 700 VDC -40 % I <sub>max</sub>                            |
| ../V700    | Extended voltage range 0 – 700 VAC / 0 – 1.000 VDC -50 % I <sub>max</sub>                          |
| ../F1000   | Extended frequency range 1 – 1.000 Hz                                                              |
| ../F2000   | Extended frequency range 1 – 2.000 Hz                                                              |
| ../LT      | Interface IEEE488                                                                                  |
| ../LTRS485 | Interface RS485                                                                                    |
| ../LTRS232 | Interface RS232                                                                                    |
| ../LAN     | Interface LAN                                                                                      |
| ../USB     | Interface USB                                                                                      |
| ../ATI 5   | Isolated analogue interface 0 – 5 VDC set and monitor                                              |
| ../ATI 10  | Isolated analogue interface 0 – 10 VDC set and monitor                                             |
| ../EXT/OSZ | OSZ external oscillator input                                                                      |
| ../SD      | SD card slot                                                                                       |
| ../SYNC A  | Sync output for triggering external measurement devices or similar (optinal)                       |
| ../SYNC E  | Sync input for synchronization with external sources (optional)                                    |
| ../INTLOCK | Interlock input / safety shutdown                                                                  |
| ../DIP     | Disengageable output voltage during a specific number of half periods (digital interface required) |
| ../GATE    | Engageable output voltage during a specific amount of time (digital interface required)            |
| ../APuls   | Adjustable puls sequence (digital interface required)                                              |
| ../LoadR   | Load reverse energy recovery                                                                       |
| ../LoadLR  | Load energy recovery / regeneration in development                                                 |

## TECHNICAL DATAS

### Input Voltage Specification

|                     |                                                                           |
|---------------------|---------------------------------------------------------------------------|
| Input voltage range | 230 VAC / 400 VAC / 3 x 208 VAC / 3 x 400 VAC /<br>3 x 480 VAC $\pm$ 10 % |
| Input frequency     | 47 – 63 Hz                                                                |

### Output Specifications

|                                                                               |                  |
|-------------------------------------------------------------------------------|------------------|
| Grid regulation                                                               | 0,10 %           |
| Load control                                                                  | 0,10 %           |
| Distortion Pmax                                                               | 0,10 %           |
| Programming accuracy<br>AC voltage                                            | 100 mV           |
| Programming accuracy<br>DC voltage                                            | 100 mV           |
| Programming accuracy < 10 A                                                   | 1 mA             |
| Effective constant current $\geq$ 10 A                                        | 10 mA            |
| Programming accuracy<br>Activation phase                                      | 0,1°             |
| Programming accuracy<br>Frequency                                             | 0,1 Hz           |
| Frequency standard                                                            | 0 – 500 Hz       |
| External oscillator input                                                     | 0 – 10 V / 1 kHz |
| Resolution, Measurement,<br>Effective voltage,<br>DC voltage,<br>Peak voltage | 100 mV           |
| Resolution , Measurement <10 A                                                | 1 mA             |
| Effective current, DC current<br>Peak current $\geq$ 10 A                     | 10 mA            |
| Resolution , Measurement < 10 A                                               | 10 mW            |
| Active power $\geq$ 10 A                                                      | 100 mW           |

### Programming & Controls

|                             |                                                                                                                        |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------|
| Output Control & Monitoring | Front panel and/or optional Analog 0 – +5V/+10V isolated /<br>Digital 12 bit: RS232, RS485, IEEE488, LAN, USB, SD card |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------|

### Ambient Conditions

|                       |             |
|-----------------------|-------------|
| Cooling               | Fans        |
| Operating temperature | 0 – 50°C    |
| Storage temperature   | -20 – 70°C  |
| Humidity              | < 80 %      |
| Operating height      | < 2.000 m   |
| Weight                | 30 – 400 kg |



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