



## computer SMART III 12

computer SMART III 12, Power factor regulator

Code: R13862.

- > Alarm relay: Yes
- > Communications: RS-485
- > Measurement Range (V): 20...300
- > I $\Delta$ n (A): yes
- > Power supply (Vac): 100...520 Vac
- > Nr steps: 12
- > Input current: .../5A | .../1A
- > Switching unit: Contactor

### Description

Measurement with three current transformers guarantees an analogue reading of the company meter. The **Computer SMART III** reactive energy regulator is the only regulator on the market that offers the possibility of using 3 measurement transformers in addition to the conventional method of measuring with a single current transformer, as well as providing the functions of an integral power analyzer and controlling residual leakage currents (**WG** series current transformers).

**Computer SMART III** is a regulator that ensures excellent preventive maintenance by means of programming its alarms and the options for testing the capacitor status, offering maximum supervision and safety of your compensation unit.

### Application

The connection of 1 or 3 transformers makes **Computer SMART III** the perfect regulator in any installation, allowing the following:

- Changing from 1 to 3 transformers in the following cases:
  - Changes in reactive energy penalties
  - Changes in consumption habits
  - Significant imbalances in the system
- Replacing the regulator of any capacitor bank
- Perfect for installations with up to 4 objective  $\cos \varphi$ , since it can adapt to any compensation need (different time periods).
- It can be used with Medium Voltage compensation units.



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### Specifications

#### AC power supply

Installation category	CAT III 300 V
Consumption	13 ... 20 VA
Frequency	50 ... 60 Hz
Nominal voltage	100 ... 520 V ~

#### Mechanical characteristics

Size (mm) width x height x depth	144 x 144 x 71 (mm)
Envelope	Plastic V0 self-extinguishing
Fastening	Panel
Weight (kg)	0,6

#### Environmental characteristics

Protection class	IP 51 (Front), IP 31 (unmounted)
Relative humidity (without condensation)	5 ... 95%
Storage temperature	-20 ... +70 °C
Working temperature	-10 ... +55 °C

#### Current measurement circuit

Nominal current (In)	.../5A ó .../1A
Phase current measuring range	1 ... 120 % In
Minimum current measurement	50 mA

#### Voltage measurement circuit

Installation category	CAT III 300 V
Sampling frequency	45 ... 65 Hz
Input impedance	660 kΩ
Frequency measuring range	45 ... 65 Hz
Voltage measuring range	20...300 V Ph-N , 35...520 V Ph-Ph
Nominal voltage	230 V Ph-N, 400 V Ph-Ph
Minimum measurement voltage (Vstart)	20 V F-N, 35 V F-F

#### Standards

Electrical safety, Maximum height (m)	2000
Standards	IEC 61010, IEC 61000-6-2, IEC 61000-6-4, Medidas conforme a : IEC 61557-12

#### User interface

LED	4 LED
Keyboard	Capacitive, 5 keys
Display type	LCD Custom COG



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### Digital inputs

Input/output insulation	Optoisolated
Quantity	2
Type	Potential-free contact

### Leakage current measurement (ID)

Secondary nominal current	0,003 A
Minimum current measurement (Istart)	10 mA
Measurement range	0,01 ... 1,5 A

### Digital relay outputs

Quantity	14 (12 salidas, 1 ventilador, 1 alarma)
Maximum current	1A
Maximum open contact voltage	1 kV
Electrical life	30 x 10 <sup>3</sup> ciclos
Mechanical life	5 x 10 <sup>6</sup> Cycles
Maximum switching capacity	2500 VA

### Digital transistor outputs

Quantity	2
Type	NPN
Maximum current	50 mA
Maximum voltage	24 Vcc

### Measurement accuracy

Phase current measurement	0.5% ± 1 digit
Reactive energy measurement (kvarh)	Class 1
Reactive power measurement (kvar)	1% ± 2 digit
Active energy measurement (kWh)	Class 1
Active power measurement (kW)	0.5% ± 2 digits
Phase voltage measurement	0.5% ± 1 digit

### Serial communication

Protocol	Modbus RTU
Technology / Type	RS-485

### computer SMART III

Three-phase Power factor controllers. Regulation, measurement, leakage control and communications

CODE	TYPE	Switching unit	Nr steps	Input current
R13851.	computer SMART III 6	Contactora	6	.../5A   .../1A



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R13862.	computer SMART III 12	Contactora	12	.../5A   .../1A
R13864.	computer SMART III 14	Contactora	14	.../5A   .../1A



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### Dimensions

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### Connections

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