computer SMART III 14

computer SMART III 14, Power factor regulator

Code: R13864.

> Alarm relay: Yes
> Communications: RS-485
> Measurement Range (V): 20...300
> IΔn (A): yes
> Power supply (Vac): 100...400 Vac
> Nr steps: 14
> 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 φ, since it can adapt to any compensation need (different time periods).
- It can be used with Medium Voltage compensation units.

computer SMART III 14

Code: R13864.

Specifications

AC power supply

Installation category	CAT III 300 V
Consumption	14 ... 18 VA
Frequency	50 ... 60 Hz
Nominal voltage	100 ... 400 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)	0,619

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

computer SMART III 14

Code: R13864.

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	16 (14 salidas, 1 ventilador, 1 alarma)
Maximum current	1A
Maximum open contact voltage	1 kV
Electrical life	30 x 10^3 ciclos
Mechanical life	5 x 10^6 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	Contactor	6	.../5A | .../1A

computer SMART III 14

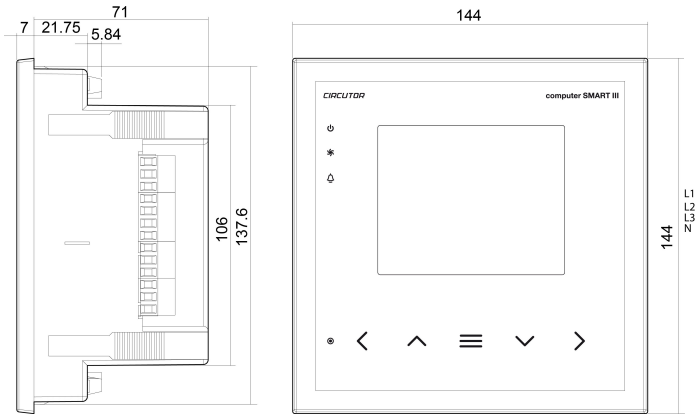
Code: R13864.

CODE	TYPE	Switching unit	Nr steps	Input current
R13862.	computer SMART III 12	Contactor	12	.../5A | .../1A
R13864.	computer SMART III 14	Contactor	14	.../5A | .../1A

computer SMART III 14

Code: R13864.

Dimensions



Connections