

computer SMART III F6-12Vdc

computer SMART III F6-12Vdc, Power factor regulator

Code: R13953.

> Alarm relay: Yes
> Communications: RS-485
> Measurement Range (V): 100...520
> IΔn (A): yes
> Power supply (Vac): 100...520 Vac
> Nr steps: 6
> Input current: .../5A | .../1A
> Switching unit: EMB-2PH

Description

Measurement with three current transformers guarantees an analogue reading of the company meter. The **Computer SMART III Fast** 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.
Computer SMART III Fast 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

Computer Smart III fast it's the ideal solution to compensate installations with a variation of quick load, between 40 ms and 4 seconds, and/or large unbalances between phases, such as welding units, cranes, lifts and lifting units, smelters, hospitals, automotive industry or any other sector or unit that requires an efficient compensation of the power factor.
The connection of 1 or 3 transformers makes **computer SMART III Fast** the perfect regulator in any installation, allowing the following:

- Changing from 1 to 3 transformers in the following cases:
  - Single-phase fast changing equipment
  - Example: Single-phase welding
  - 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).



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Specifications

AC power supply

Installation category	CAT III 300 V
Consumption	10 ... 15 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)	0,53

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

Installation category	CAT III 300 V
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 61326-1, Medidas conforme a : IEC 61557-12

User interface

LED	4 LED
Keyboard	Capacitive, 5 keys



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Display type	LCD Custom COG

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

Other digital transistor outputs

Quantity	6
Type	Voltage output (dc)
Maximum current	20 mA
Maximum voltage	12 ± 1 Vcc

Digital relay outputs

Quantity	2 (ventilador, 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



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Technology / Type	RS-485

computer SMART III-Fast
Power factor controllers for static switching

CODE	TYPE	Switching unit	Nr steps	Input current
R13953.	computer SMART III F6-12Vdc	EMB-2PH	6	.../5A | .../1A
R13964.	computer SMART III F12-12Vdc	EMB-2PH	12	.../5A | .../1A
R13951.	computer SMART III Fast 6	EMF / EMB	6	.../5A | .../1A
R13962.	computer SMART III Fast 12	EMF / EMB	12	.../5A | .../1A

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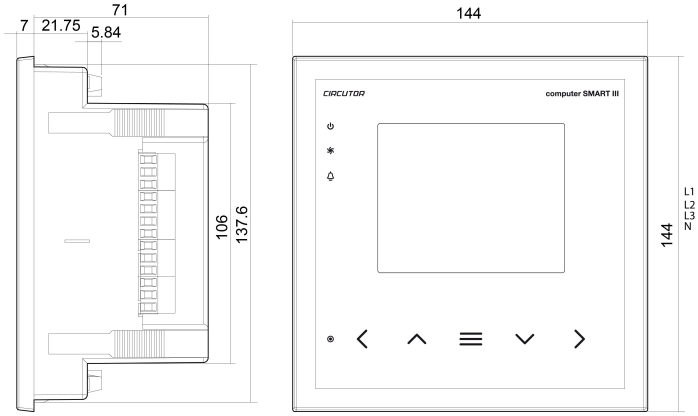
Dimensions



Connections

