Computer SMART III

Smart Power Factor regulator

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.

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.

Technical features

Voltage circuit	Power supply voltage	100...520 Vac
	Tolerance	10%
	Consumption	10...18 VA (depending on the type)
	Frequency	50...60 Hz
Measurement circuit	Measurement voltage	35...520 Vac Ph-Ph 20...300 Vac Ph-N
	Current measurement	x1 or x3 transformers .../5 A or .../1 A
Leakage current	Measurement range	$I_{\Delta prim}$ = 10 mA...1.5 A AC
	Current transformers	**WGS** series
Accuracy	Voltage and Current	0.5% ±1 digit
	Active power measurement	0.5% ±2 digit
Temperature measurement	Configuration range	0...80 °C
Output relay	No. of relays	6 or 14, depending on the type
	I_{max} (operation)	1 A
	U_{max} Open contacts	1 kV
	Maximum switching power	2500 VA
Digital outputs	No. of outputs	2
	Type	NPN transistor
	U_{max} and I_{max} (operation)	24 Vdc /50 mA
Digital inputs	No. of inputs	2
Alarms	No. of alarms	17, fully configurable
Communications	Port	RS-485
	Protocol	Modbus / RTU
Environmental features	Operating temperature	-10 °C...+55 °C
	Relative humidity	5...95% without condensation
	Maximum altitude	2,000 m
Control system	**PFC** (Program that minimises the number of operations)	
Safety	Insulation	Category III Class II **EN 61010-1**
	Protection degree	IP31 IP51 Front panel
Standards	**IEC 62053-23** (2003-01), **IEC 61326-1**, **EN 61010-1**, **UL 508**	

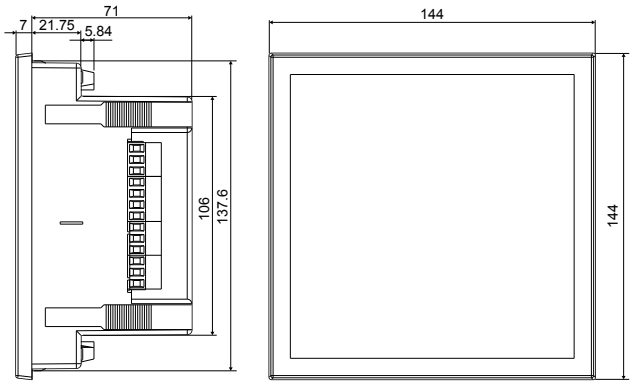
Computer SMART III

Smart Power Factor regulator

References

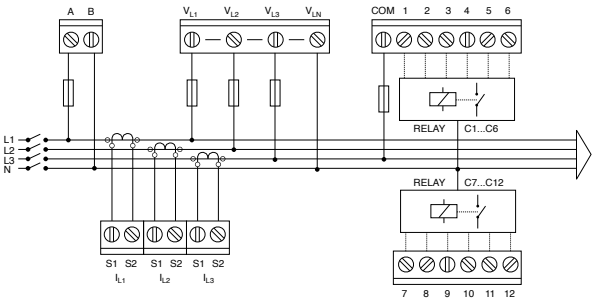
Type	Code	No. relays
Computer Smart III 6	**R13851**	6
Computer Smart III 12	**R13862**	12
Computer Smart III 14	**R13864**	14

Dimensions

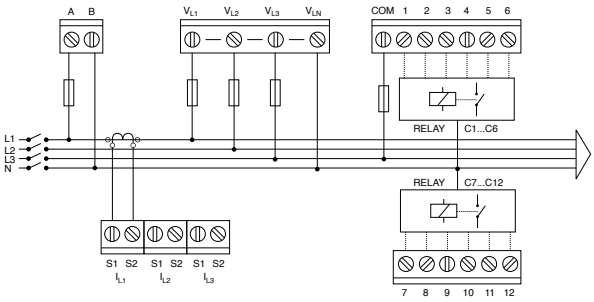


Connections

Connection of 3 phases + neutral
3 current transformers



Connection of 3 phases + neutral
1 current transformer



Connection of 2 phases +
1 current transformer