

Description

Measurement with three current transformers guarantees an analogue reading of the company's meter. The **Master control Var** reactive energy regulator is the only regulator in the market that offers the possibility of using 3 measuring transformers in addition to the traditional method of measuring with a single current transformer, as well as providing the functions of an integral power analyzer and controlling the residual leakage currents.

Master control Var is a regulator that guarantees excellent preventive maintenance operations by means of programming its alarms and the test options of the capacitor status, offering the maximum supervision and safety of your compensation unit.

Application

The connection of 1 or 3 transformers makes **Master control Var** 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 $\cos\phi$, since it can adapt to any compensation need (different time periods).
- It can be used with Medium Voltage compensation units.



Technical features

Voltage inputs	Power supply voltage	110...480 Vac
	Tolerance	10%
	Consumption	6 VA
	Frequency	45...65 Hz
Measurement circuit	Measurement voltage	525 Vac p-p 300 Vac p-n
	Current measurement	x1 or x3 transformers .../5 A or .../1 A
Leakage current	Measurement range	$I_{\text{aprim}} = 10 \text{ mA} \dots 1 \text{ Aac}$
	Current transformers	WGC Series
Accuracy	Voltage and Current	1%
	Cos ϕ	2% ± 1 digit
Temperature measurement	Measurement range	0...80 °C ± 3 °C
Alarm relay	Output contact	Switched
	U_{max} and I_{max} (operation)	250 Vac / 6 A
Output relay	No. of relays	6 or 12, depending on the type
	U_{max} and I_{max} (operation)	250 Vac / 6 A
Fan relay	Output contact	Not switched
	U_{max} and I_{max} (operation)	250 Vac / 6 A
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
Operating conditions	Temperature	-20 °C to +60 °C
	Relative humidity	95% without condensation
	Maximum altitude	2000 m
Safety	Insulation	Category III Class II EN 61010-1
	Protection degree	IP40 mounted IP30 not mounted, in accordance with EN-60529
Control system	PFC (Program that minimises the number of operations)	
Standards	IEC 62053-23 (2003-01), IEC 61326-1, EN 61010-1, UL 508	

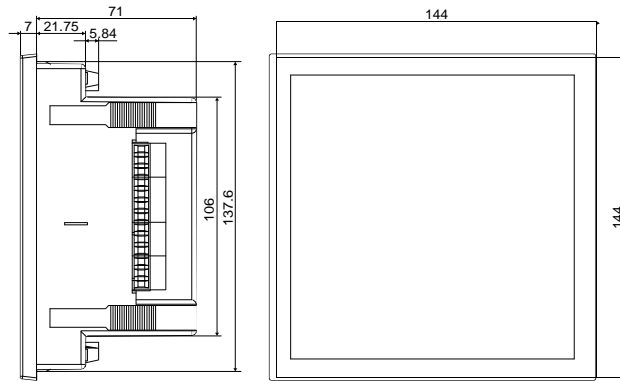
Master control Var

Power Factor Controller

References

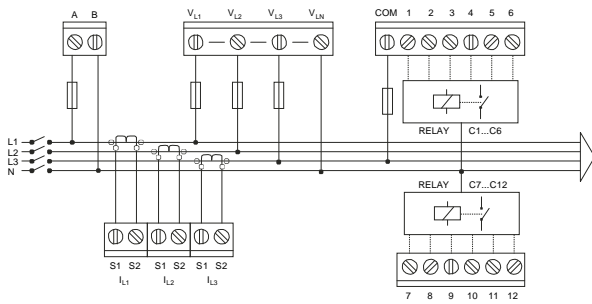
Type	Code	No. of Relays
Master control Var 6		6
Master control Var 12		12

Dimensions

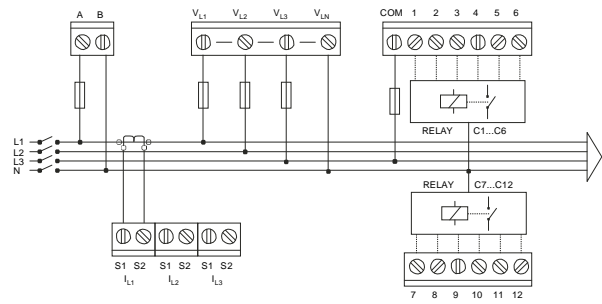


Connections

Connection of 3 Phases +
3 Current transformers



Connection of 3 Phases +
1 Current transformer



Connection of 2 Phases +
1 Current transformer

