

PFC CONTROLLERS



PFC controller MULTI PFR 6/12

The new generation of the MULTI PFR reactive energy controller has been developed to meet the most demanding reactive power regulation requirements.

The MULTI PFR controller provides possibility of using three or one current transformers, integrated network analyzer and residual current control in the installation. Combined with the ability to program alarm states, the MULTI PFR is a great tool for regulation and preventative maintenance too. This ensures maximum control and security of installation.

Characteristics

- unit for regulation of 6 and 12 steps
- integrated power analyzer and controlling residual leakage currents
- RS-485 communication interface with Modbus RTU protocol
- alarms – for example temperature (fan relay), operating states, indicates the risk of the presence of harmonics etc.

Technical features

		MULTI PFR 6/12
Voltage circuit	Power supply voltage	100 - 520 V AC
	Tolerance	10 %
	Frequency	50 / 60 Hz
Measurement circuit	Measurement voltage	35 - 520 V AC Ph-Ph 20 - 3000 V AC Ph-N
	Current transformers	1x or 3x pcs / 5 or / 1 A
Leakage current	Measurement range	$I_{\Delta prim} = 10 \text{ mA} - 1,5 \text{ A AC}$
Accuracy	Voltage and current	0,5% ± 1 digit
	Active power measurement	0,5 % ± 2 digit
Output relays	No. of relays	depending on type
	No. of relays	2
Digital outputs	Type	NPN transistor
	U_{max} / I_{max}	24 V DC / 50 mA
Digital inputs	No. of inputs	2
Alarms	No. of alarms	17
Communications	Port	RS-485
	Protocol	Modbus / RTU
Safety	Insulation	Category III Class II
	Protection degree	IP31 IP51 (front panel)

PFC CONTROLLER PFR6 / PFR12

PFR6/PFR12 is the type of power factor regulator designed for easy and effective regulation. Regulator monitors the power system status and accurately and quickly takes decisions on the connection or disconnection of compensation stages in order to reach the preset target cos phi.

PFC CONTROLLER Super PFR 6/12

SUPER PFR6/PFR12 controller brings some new features to the previous version PFR 6/12. These include the measurement of current and voltage harmonic distortion, temperature measurement, RS-485 interface or automatic setup mode.

Regulator monitors the power system status and accurately and quickly takes decisions on the connection or disconnection of compensation stages in order to reach the preset target cos phi.



Technical features

	PFR6 / PFR12	Super PFR6 / PFR12
Measurement	THD	THDI and THDU
Temperature measurement	no	yes
Alarm output	yes	yes
FCP system	yes	yes
Interface	no	RS-485
4 quadrant PFC	yes	yes
Supply and measuring voltage	400 V AC (+15%/-10%), 50 / 60 Hz	400 V AC (+15%/-10%), 50 / 60 Hz
Current measurement circuit	CT, IN / 5	CT, IN / 5
Accuracy of voltage measurement	1 %	1 %
Accuracy of current measurement	1 %	1 %
Accuracy of cos φ measurement	±2%	±2%
Display	1 line, 3 digits, 7 segments, 20 icons	4 lines, 15 digits, 55 icons
Output	relays, max. 250 V, 10 A, AC1	relays, max. 250 V, 4 A
Protection degree	IP 51	IP 40
Dimensions	144 x 144 x 62 mm	144 x 144 x 62 mm
Connection	12 - steps regulator	12 - steps regulator