

POWER FACTOR CONTROLLER 12 STEP MODELS



Technical information

- Automatic search of C/K values
- Possibility to set different C/K values for inductive and capacitive side *)
- Easy-to-use menu-driven user interface
- 16-character alphanumeric display
- THD(u) measurement and alarm *)
- I_{rms}/I_n measurement and alarm
- Measurement and alarm of low capacitor output *)
- Hunting detection and alarm
- Any step used can be defined as a fixed step (permanently ON or OFF) *)
- Measurement of ambient temperature, possibility to control a cooling fan
- Automatic CT polarity retrieval
- Four-quadrant operation *)
- Display of measured values (I_S , I_Q , THD(u), step status) *)
- Five-language menu texts (English, French, Spanish, German, Finnish)
- State-of-the-art microprocessor technology
- Suitable for systems with or without neutral line
- All steps are released at voltage dropout
- Separate alarm relay with potential-free terminals
- Flexibility and accuracy are combined and used in the design of this regulator. It is possible to use steps of various sizes and choose a combination to suit.
- 35 mm DIN-rail (EN 50022) or panel mounting 144 x 144 mm (DIN 43700), depth 90 mm
- Complies with EN 50082-2 and EN 50081-2 EMC standards

*) A12 only



TECHNICAL SPECIFICATIONS

Power supply	230 V \pm 15%, burden 8 VA
Measurement voltage	120 V \pm 15%
	230 V \pm 15%
	400 V \pm 15% or
	415 V +10% or
	440 V +5%
Connection	with or without neutral line
Frequency	50 Hz or 60 Hz \pm 2 Hz, automatic selection
CT	5 A, burden 0.7 VA
Manual operation	Manual operation with momentary push-buttons
Operational sequence	user-selectable from menu
	normal 1:2:4:4
	stack 1:1:1:1
	circulating A 1:1:1:1
	circulating B 1:2:2:2
Output relays	2.0 A, 400 VAC, normally open
	0.3 A, 110 VDC
	0.6 A, 60 VDC
	5.0 A, 30 VDC
	5.0 A, 24 VDC
Alarm relay	2.0 A, 400 VAC, normally open
	0.3 A, 110 VDC
	0.6 A, 60 VDC
	5.0 A, 30 VDC
	2.0 A, 24 VDC
Accuracy class	A12: 1.5 %
	B12: 2.5 %
Ambient temperature	0 ...+50°C
Protection class	IP 40 at panel installation
	IP 20 DIN-rail installation
Dimensions	144 x 144 mm, depth 90 mm
Panel cut-out	138 x 138 mm, -0...+1 mm
Weight	0.9 kg

SETTINGS AND DISPLAY

- Power factor display 0.00 ind ... 1.00 ... 0.00 cap
- Capacitor step indication using alphanumeric display, simultaneously with power factor display
- Led display for alarm and ind/cap
- C/K setting and display 0.00 ... 1.99, inductive and capacitive
- CT ratio settings and display 100/5 ... 6000/5
- Language setting and display (English, French, Spanish, German, Finnish)
- Target power factor setting and display 0.80 ind ... 1.00 ... 0.90 cap
- Step reconnection delay setting and display 10 ... 900 seconds (step response delay is automatically set to 20% of reconnection delay, min. 10 s)
- Connection setting and display LN/LL
- Stepping program setting and display, Normal, Circulating A, Circulating B, Stack
- Number of steps setting and display 1...12
- Automatic CT polarity detect setting and display
- Setting and display of step sizes, 10 ... 1000 kvar
- Setting and display of input voltage, 80 ... 460 V
- Manual stepping setting and display
- Fixed stepping setting and display

In line with our policy of on-going product development we reserve the right to alter specifications.



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