

Multifunctional-Powerfactor-Controller MPFC 1-phase

Description:

Available for reactive power control for **SYMMETRICAL GRIDS**, **MEASUREMENTS** and as **MONITORING DEVICE**

Application:

- LV and MV Compensation banks
- Harmonic filter applications
- Renewable energies
- Dynamic Compensation $\cos \phi = 1$ (control coils and capacitors)

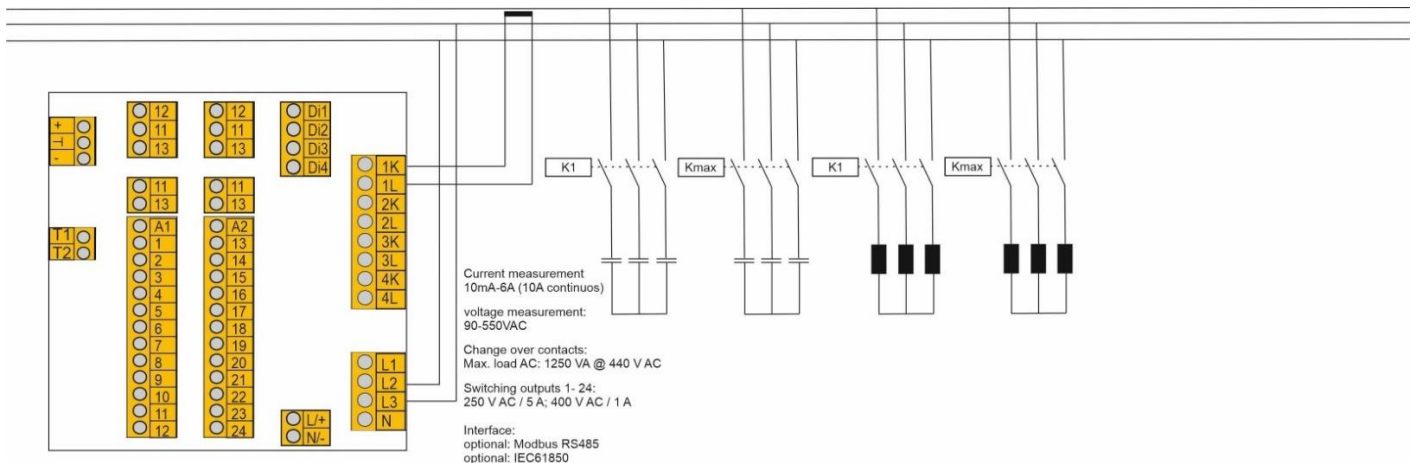
Features:

- 26 Measurement values
- 20 Alarm messages for Equipment Protection against:
Over temperature / Overvoltage / Harmonics / Detuning Monitoring
- Up to 24 relay outputs or transistor outputs to control capacitors or inductors in 3phase connection
- Using different detuned steps in (adjustable detuning rate per step)



Communication	Monitoring	Operation
<p>State of the art communication protocols:</p> <p>Modbus RTU Modbus TCP IEC 61850 Webserver</p>	<p>EN50160 following monitoring</p> <p>Colour changing display</p> <ul style="list-style-type: none"> ● Green okay ● Yellow warning ● Red Alarm <p>Clear Text menu</p> <p>63. Harmonics U and I (Oscilloscope diagram /bar graph or table in %)</p> <p>Datalogger</p>	<ul style="list-style-type: none"> • 6 different control algorithms • Guided first commissioning • Automatic Initialization and step size detection • Configure once stored forever • 4-Quadrant operation

Connection diagram:



Technical Data:

Power supply	90 - 550 V AC 130 - 550 V DC	Measurement values	V, A, A fundamental F VA kW, kVar, cos phi, tan phi, PF, Delta Q, THD I, THD U, Single harmonics as bar graph or table in % OPH controller, OPH per Step switch cycles, T current T max. C°, average PF
OPTION	40 - 250 V DC		
Voltage measurement	Direct 90-600V AC for VT ratio up to 350 adjustable		
Current measurement	via external measuring current transformers! (x/1A); (x/5A) measuring input 10mA-6A Approx. 1VA Overload: 10A continuous		
Measuring accuracy:	Measurement voltage: +/- 0,5 %		
	Measurement current: +/-0,5 %		
Measuring class:	CAT III (300V LN / 519V LL)		
Alarm relay:	2 Change over contacts Max. load AC: 1250VA@440V AC		
Relay outputs:	Up to 24 250V AC/5A 400V AC/1A		
OPTION -T	Up to 24	Counters:	Reactive Power inductive / capacitive import / export
Transistor outputs:	100mA/8-48V DC		Active Power
Fan output	1 -2 N/O (depending on the configuration) 250VCA /5A 400VCA /1A 48VDC/1A 110VDC/0,2A	Casing:	Import / export Front: instrument casing plastic (UL94-VO), Rear: metal
Analog input	1 N/O External Temperature sensor	Protection class:	Front: IP50 Rear: IP20
Digital input:	2 DI 90-250V AC	Dimensions:	144x144x58mm
		Cut-out:	138x138 (+0,5) mm
Interface:	Modbus RS485 (Standard)	Terminals:	Pluggable terminal blocks, screw type, max. 4mm ²
OPTION	Datalogger Extendable with Micro SD Card to max. 32GB Event recorder IEC 61850 Modbus TCP	Weight:	Approx. 0,85 kg
		HS-Code	90328900