

Transmitter for kW, 3-phase symmetrical load

Connection to 3-phase net up to 3 x 500 VAC

Monitoring of total power consumption ($\sqrt{3} \times U \times I \times \cos \Phi$)

Built-in current transformer, ranges up to 60 AAC

Analogue output 0-20 mA / 4-20 mA

24 DC supply

Galvanic separation, input- output



C-mac® PA38 is monitoring the power consumption on 3-phase symmetrical load, primary motors.

The wanted metering range is selected by means of DIP-switches, from 0-3,46 kW up to 0-41,6 kW at 3x400 VAC supply, proportional to 0-20/4-20 mA on the metering output.

0-10 V is also possible, see below.

The supply voltage, 24 VDC, and the 3 voltage phases are connected to the relevant terminals. The current is monitored by putting the current phase L1 through the built-in current transformer, see connection diagram.

Technical data:	
Supply voltage:	24 VDC +/- 5%
Current consumption:	max. 60 mA
Operating temp.:	-15°C to +50°C
Metering range V:	3 x 200 to 3 x 500 VAC
Metering range I:	5, 10, 20, 25, 40, 60 A
Metering range f:	10-150 Hz
Accuracy:	Klasse 2
Analogue output:	Selectable 0-20 mA or 4-20 mA For 0-10 V, select 0-20 mA, and then connect pin 7 og 8 (GND og X1)
Note:	The metering output is not galvanic separated from 24 VDC supply.
Load, outputs:	Current: max. 500 Ohm Voltage: min. 100 kOhm
Note:	Output is short-circuit proof
Reaction time:	approx. 200 msec.

Selection of metering range

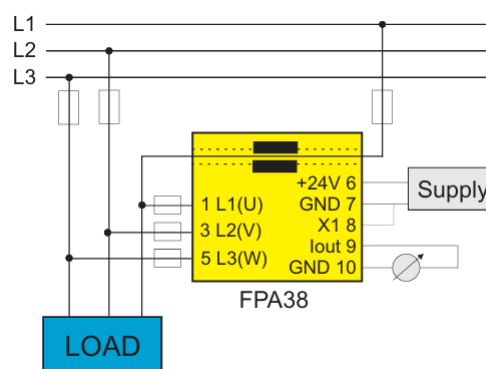
The wanted ranges are selected with the DIP-switches on the side of the unit.

Select output signal, 0-20 mA or 4-20 mA with SW1. SW2, 3 and 4, selection of monitoring current, see table.

SW1	OFF =4-20 mA			ON=0-20 mA		
SW2	OFF	ON	OFF	ON	OFF	ON
SW3	OFF	OFF	ON	ON	OFF	ON
SW4	OFF	OFF	OFF	OFF	OF	ON
Amp	5	10	20	25	40	60
Kw	3,46	6,92	13,8	17,3	27,7	41,6

Note: The power ranges in the table are calculated and calibrated with a supply voltage of 400 VAC.

Connection diagram.



Metering principle.

The FPA 38 is connected to the supply, 3-phase net and load as shown above.

It can also be used together with frequency converters, as it operates in the frequency range 10-150 Hz.

For monitoring of 1-phase loads, connect L2 and L3 to N, and L1 to the phase.

Since the unit is calibrated for 3-phase loads, the output signal must be multiplied with 1.5 in order to get the correct value at 1-phase loads.

EMC and safety regulations	
Emmision:	EN50081-1
Immunity:	EN50082-2
Safety:	EN60730
	

Materials and weight:	
Housing:	NORYL-SE-1, grå, selvs lukkende
Housing bottom:	NORYL SE-1, GFN-2, sort selvs lukkende
Terminals	Forzinket messing
Weight:	200g
Dimensioner:	90 x 35 x57 mm