

Measuring transducer CP 4000 programmable multitransducer

- Programmable transducer for all electrical parameters
- 4 analog outputs
- 2 digital relay outputs for alarm or energy pulses
- Software, easy to use, showing all parameters

CP4000 is a programmable multitransducer for all electrical parameters.

The 4 analog outputs are programmable for any of the electrical parameters, easy to change, from the software. Measuring range and output signal are programmable. The 2 relay outputs can be used for alarm on any measuring quantity or for energy pulses.

The transducer is delivered with a serial port RS232 or RS485 for configuration or connection to a multidrop fieldbus-system (Modbus etc.)

The transducers is based on a 16 bit micro processor and an A/D converter. The input signals are sampled 32 times/period.

Models

The following models are available:

CP4000	1 phase
CP4001	3 phase symmetrical load, 1 system
CP4002	3 phase 3 wire unsymmetrical load, 2 system
CP4003	3 phase 4 wire unsymmetrical load, 3 system

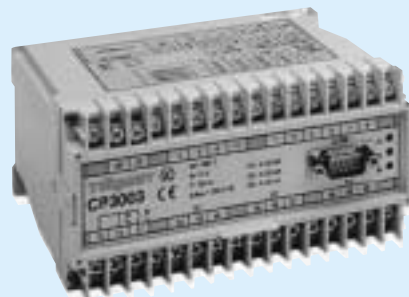
The following parameters can be measured.

Parameter	Total	L1	L2	L3
Main voltage		X	X	X
Phase voltage		X	X	X
Current		X	X	X
Active power	X	X	X	X
Reactive power	X	X	X	X
Apparent power	X	X	X	X
Cos phi	X	X	X	X
Sin. phi	X	X	X	X
Frequency	X			
Active energy EP+	X			
Active energy EP-	X			
Reactive energy Eq ind.	X			
Reactive energy Eq cap.	X			
THD voltage		X	X	X
THD current		X	X	X

The following parameters are programmable:

- Primary voltage
- Primary current
- Pulse constant for energy measurement
- Identity for fieldbus connection
- Variable used for each analog output
- Output range for each analog output
- Digital output · energy pulse or · alarm
- Measuring quantity for alarm
- Alarm level

IU400-FA



Technical data

Input voltage

Measuring range	min. 0-63.5 V max. 0-500 V
Nominal voltage	63.5/110/230/400 V
Frequency	45-55Hz, 55-65 Hz
Consumption (burden)	$U_N \times 1 \text{ mA}$
Max. overload	1.2 U_N continuously 2 x U_N 10 sec.

Measuring range	0-120%
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Input current

Measuring range	min 0 - 0,5 A max 0 - 6 A
Nominal current	0,1 A, 0,5 A
Consumption (burden)	0,2 VA
Max. overload	2 x I_N continuously 40 x I_N 0,5 sec

Measuring range	0 - 120%
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Output

Current	±1, ±5, ±10, ±20, 4-20 mA
Voltage	±1, ±5, ±10 V
Burden	max 10 V (500 Ohm 20 mA)
Ripple	0,1 p.p.

General data

Accuracy

Accuracy	class 0.2 EN 60688 (IEC688)
Energy	class 1 IEC 1036
Response time	0 - 90% 200 ms
Temp. influence	
Operating temp.	-10 to +55 deg. C
Test voltage	3,7 kV
Aux. supply	110, 230 or 400 V±20% AC 24, 48, 110 V ±20% DC
Burden	4 VA/3 W DC DIN-rail
Weight	ca 0.56 kg

Standards

Transducers	EN60688
EMC emission	EN50081-2
immunity	EN50082-2
Safety	EN61010-1
Overvoltage class	II