

AC Current Transmitter CT 500P

1- and 2-channel, for sinusoidal input signals

Features

- Arithmetic average value measurement
RMS calibrated
- Measuring range 0 ... 1 A or 0 ... 5 A AC
- Frequency range 45 ... 400Hz basic wave
- Output 4 ... 20 mA, loop powered
- Foll 2-port isolation
- End value adjustable ±5 %
- Loop voltage 14 ... 30 V DC
- Power -LED for each channel
- 22.5mm standard case for TS35 DIN-rail mounting



General information

The device convert AC current from 0 ... 1 A or 0 ... 5 A to the proportional standard signal 4 ... 20 mA. It operates like an 2-wire transmitter, which is supplied from the measuring device (e.g. SPS input circuit board).

Short information

- Adjustable The span is adjustable in range ±5%.
- Current output The output burden is supply depending

$$R_{\max} = \frac{U_B - 14 \text{ V}}{20 \text{ mA}}$$

Technical data

Power supply

Loop voltage	: 14 ... 30 V DC
Operating temperature	: -10 ... +60 °C (14 ... 140°F)
Rated voltage	: 500V _{rms} , acc. to VDE 0110 group 2, between input/output
Test voltage	: 4 kV _{rms} , between input/output
CE-conformity	: EN50022, IEC61000-4-4/5

Measuring input

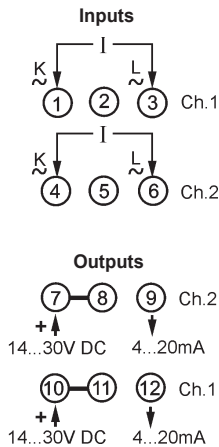
Current input	: 0 ... 1 A or 0 ... 5 A, over load max. 10 A
Input resistance	: R _i ≤ 20 mΩ
Frequency	: 45 ... 400 Hz basic wave (16 2/3 Hz on request)
Measuring range span	: adjustable +/- 5 %

Output

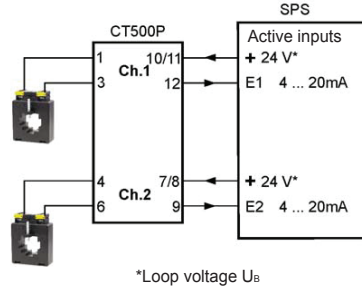
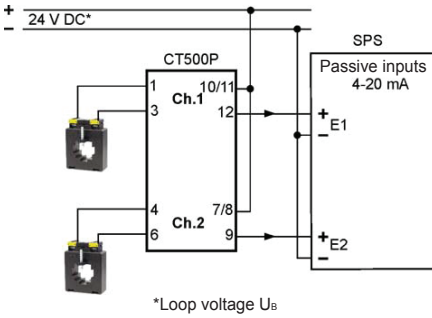
Current output	: 4 ... 20 mA, burden	$R_{max} = \frac{U_B - 14 V}{20 mA}$
Rise time (t ₉₀)	: ≤ 1 s	
Accuracy	: ≤ 0.2 %	
Temperature drift	: ≤ 0.01 %/K	

Case	: Standard case polycarbonate 8020 UL94V-1
Weight	: appr. 200 g
Protection	: Case IP30, terminals IP20 finger safe acc. to BGV A3
Connection	: Screw terminals with pressure plate, max. 2.5 mm ²

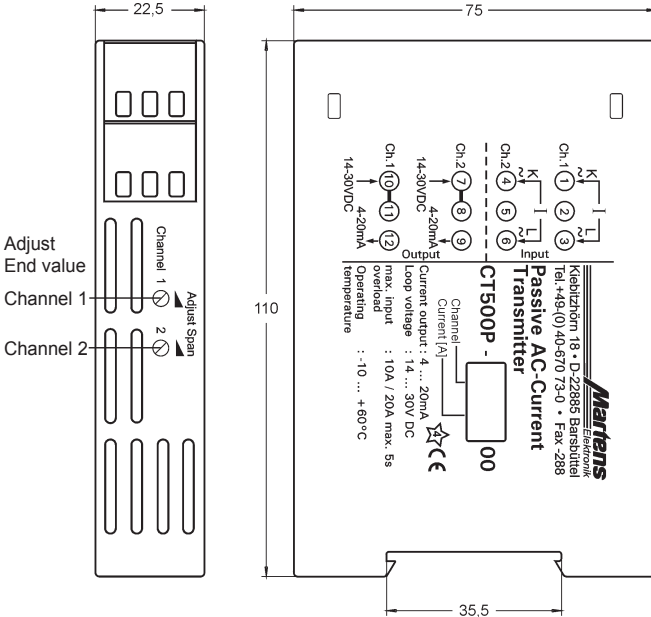
Connection diagram



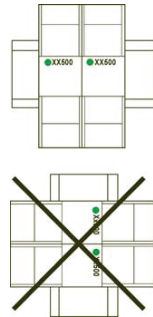
Circuit examples



Dimensions and controls



Caution!
Mounting of multiple units without distance is only permitted in horizontal orientation.



Ordering code

CT500P - 1. - 2. - 3.

1. Number of channels

1
2

2. Input direct connection / via transducer

0 I = 1 A
5 I = 5 A

3. Options

00 without option