

Measurement transducers

Indicators & transducers



Current transducer



Power transducer, current

Function

SOCOMECS **transducers** convert an electrical value (A, W) into a DC signal. They come in a protruding case (CS range).

Characteristics

- Dielectric quality:
 - 2.5 kV (50 Hz - 1 mm) between input and output,
 - 2.5 kV (50 Hz - 1 mm) between power supply and other terminals,
 - 4 kV (50 Hz - 1 mm) between earth and other terminals.
- Accuracy class: 0.5 or 0.2 depending on model.
- Response time < 200 ms (0 - 90% of the output signal).
- Overloads:
 - circuit I: 1.2 I_n permanent; 20 I_n/3 s, - 40 I_n/1 s,
 - circuit U: 1.2 U_n permanent; 2 U_n/10 s.
- Max. load resistance:
 - Current output: R_O (Ω) = 12 V/I_O (mA),
 - Voltage output: R_O (Ω) = V_O/10 mA.
- Consumption:
 - Self-powered: 1.5 VA,
 - Current input: 0.2 VA,
 - Voltage input: (U_n x 1 mA) VA.
- Operating temperature: -10 °C to +60 °C.
- Residual ripple rate: 0.3%.
- Operating frequency: 50/60 Hz.

References

Current transducer with auxiliary power supply

				CSA-A4
Input	Output	Auxiliary power supply	Frequency	Reference
5 A	4 - 20 mA	230 VAC	50 Hz	192Y 1104
1 A	4 - 20 mA	230 VAC	50 Hz	192Y 1106

Active power transducer with auxiliary power supply

				CSA-P3FE Three-phase	CSA-P3FNE Three-phase	CSA-P4FNE Three-phase
Input	Connection	Output	Auxiliary power supply	Reference	Reference	Reference
400 VAC	5 A CT	4 - 20 mA	230 VAC	192Y 3132	192Y 3332	192Y 3432
400 VAC	5 A CT	4 - 20 mA	24 VDC	179Y 3133	-	-
400 VAC	5 A CT	4 - 20 mA	24 VDC	-	179Y 3333	-