

Energy Management Compact Transducer for Frequency Measurements Type CVT-DIN F1/F2/F3



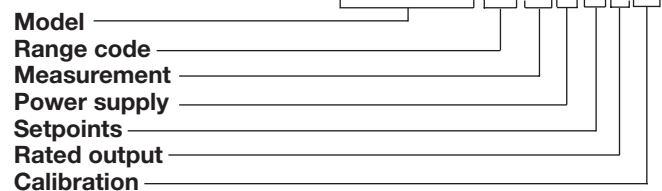
- For frequency measurement
- For DIN-rail mounting
- Degree of protection: IP 50

Product Description

Compact transducer for frequency measurements. The housing is for DIN-rail mounting and ensures a degree of protection of IP 50.

Ordering Key

CVT-DINF1AD01X



Type Selection

Range code	Power supply	Rated output	Calibration
F1: 45 to 55 Hz	A: 24 VAC, -15% +10%, 50/60 Hz ¹⁾	1: Analogue output 0 to 20 mA (standard)	X: Standard calibration
F2: 55 to 65 Hz	B: 48 VAC, -15% +10%, 50/60 Hz ¹⁾	2: Analogue output 4 to 20 mADC ¹⁾	Y: Special calibration, use "Y" followed by requested value
F3: 350 to 450 Hz	C: 115 VAC, -15% +10%, 50/60 Hz ¹⁾	3: Analogue output 0 to 10 VDC ¹⁾	
	D: 230 VAC, -15% +10%, 50/60 Hz (standard)	4: Analogue output 0 to ±1 VDC ¹⁾	

¹⁾ On request

Input Specifications

Accuracy (@ 23°C ± 5°C, R.H. ≤ 60%) Additional errors: Humidity Magnetic field	± 0.5% f.s., The given accuracy includes: voltage, power supply and output load influences < 0.3%, 60% to 90% R.H. < 1%, @400 A/m
Ripple	≤ 1% according to IEC 60688-1 and EN 60688-1
Rated input Frequency ranges: F1 F2 F3	45 to 55 Hz (Imp. ≥ 10 kΩ) 55 to 65 Hz (Imp. ≥ 10 kΩ) 350 to 450 Hz (Imp. ≥ 10 kΩ)
Voltage range	90 to 450 V
Overload protection Continuous: voltage For 1 s: voltage	1.2 x rated input 2 x rated input

Output Specifications

Range/load 0 to 20 mA 4 to 20 mA 0 to 10 V 0 to ±1 V	Load: ≤ 500 Ω Load: ≤ 500 Ω Load: ≥ 10 kΩ Load: ≥ 10 kΩ
Response time	4 s typical
Temperature drift	200 ppm/°C

Supply Specifications

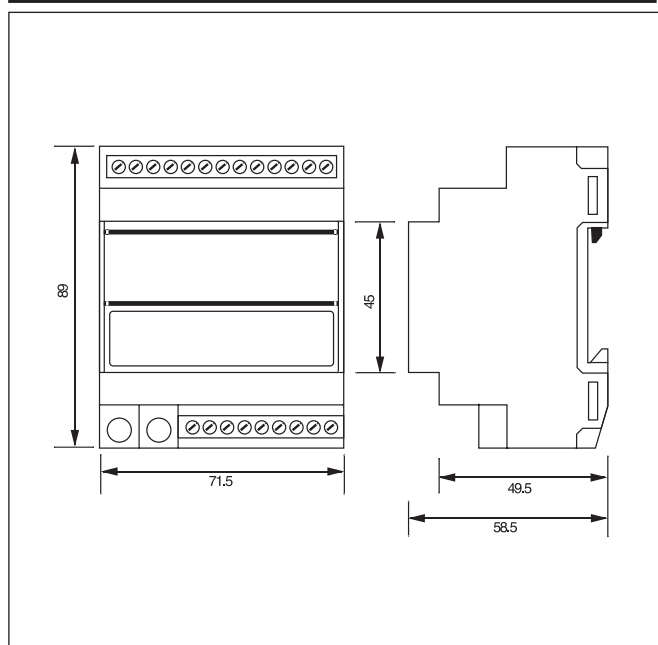
AC supply	230 VAC, -15% +10%, 50/60 Hz (standard) 24 VAC, 48 VAC, 115 VAC, 15% +10%, 50/60 Hz (on request)
Power consumption	≤ 3 VA



General Specifications

Warm-up time	15 minutes	EMC	EN 50081-1, EN 50082-1
Operating temperature	0 to 50°C (32 to 122°F) (R.H. < 90% non-condensing)	Safety standards	
Storage temperature	-10 to 60°C (14 to 140°F) (R.H. < 90% non-condensing)	Safety requirements	IEC 61010-1, EN 61010-1
Insulation reference voltage	300 V _{rms} to ground	Product requirements	IEC 60688-1, EN 60688-1
Insulation	2000 V _{rms} between output and measuring input, output and supply input. 4000 V _{rms} between input/output and ground	Connector	Screw-type, max. 2.5 mm ² wires
Dielectric strength	4000 V _{rms} for 1 minute	Housing	
Noise rejection		Dimensions	4-DIN modules, 58.5 x 89 x 71.5 mm
CMRR	≥ 80 dB	Material	ABS, self-extinguishing: UL 94 V-0
		Degree of protection	IP 50
		Weight	Approx. 300 g (packing included)
		Approval	CE

Dimensions



Connections

