Panel Meters and Controllers
Compact Transducer for Frequency Measurements
Type CVT-DIN F1/F2/F3

CARLO GAVAZZI

- 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-DIN F1 A D 0 1 X

- Model
- Range code
- Measurement
- Power supply
- Setpoints
- Rated output
- Calibration

Type Selection

Range code

F1:	45 to 55 Hz
F2:	55 to 65 Hz
F3:	350 to 450 Hz

[1] On request

Power supply

A:	24 VAC, -15% +10%, 50/60 Hz [1]
B:	48 VAC, -15% +10%, 50/60 Hz [1]
C:	115 VAC, -15% +10%, 50/60 Hz [1]
D:	230 VAC, -15% +10%, 50/60 Hz (standard)

Rated output

1:	Analogue output 0 to 20 mA (standard)
2:	Analogue output 4 to 20 mADC[1]
3:	Analogue output 0 to 10 VDC [1]
4:	Analogue output 0 to ±1 VDC [1]

Calibration

X:	Standard calibration
Y:	Special calibration, use "Y" followed by requested value

Input Specifications

Accuracy (@ 23°C ± 5°C, R.H. ≤ 60%)	± 0.5% f.s.,
Additional errors:	The given accuracy includes: voltage, power supply and output load influences
Humidity	< 0.3%, 60% to 90% R.H.
Magnetic field	< 1%, @400 A/m
Ripple	≤ 1% according to IEC 60688-1 and EN 60 688-1
Rated input	
Frequency ranges:	
F1	45 to 55 Hz (Imp. ≥ 10 kΩ)
F2	55 to 65 Hz (Imp. ≥ 10 kΩ)
F3	350 to 450 Hz (Imp. ≥ 10 kΩ)
Voltage range	90 to 450 V
Overload protection	
Continuous: voltage	1.2 x rated input
For 1 s: voltage	2 x rated input

Output Specifications

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

Supply Specifications

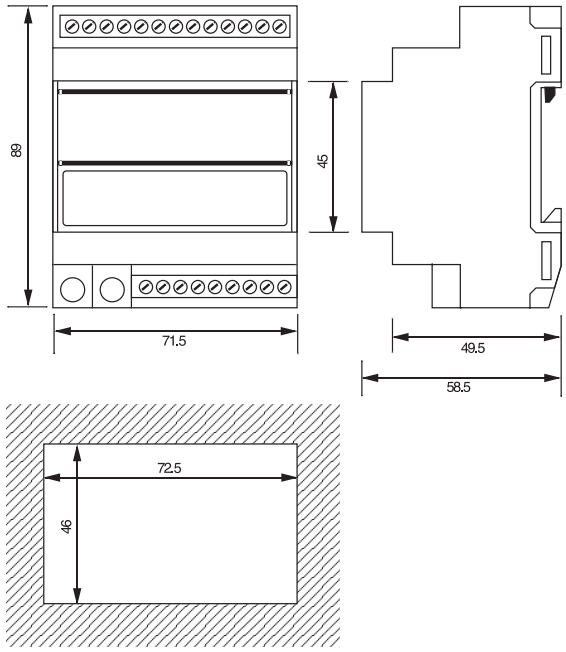
AC supply	230 VAC, -15% +10%, 50/60 Hz (standard) 24 VAC, 48 VAC, 115 VAC, 15% +10%, 50/60 Hz (on request)
Power consumption	≤ 3 VA

CARLO GAVAZZI

General Specifications

Warm-up time	15 minutes
Operating temperature	0 to 50°C (32 to 122°F) (R.H. < 90% non-condensing)
Storage temperature	-10 to 60°C (14 to 140°F) (R.H. < 90% non-condensing)
Insulation reference voltage	300 V_{rms} to ground
Insulation	2000 V_{rms} between output and measuring input, output and supply input. 4000 V_{rms} between input/output and ground
Dielectric strength	4000 V_{rms} for 1 minute
Noise rejection CMRR	 ≥ 80 dB
EMC	EN 50 081-1, EN 50 082-1
Safety standards Safety requirements Product requirements	 IEC 61010-1, EN 61 010-1 IEC 60688-1, EN 60 688-1
Connector	Screw-type, max. 2.5 mm^2 wires
Housing Dimensions Material	 4-DIN modules, 58.5 x 89 x 71.5 mm ABS, self-extinguishing: UL 94 V-0
Degree of protection	IP 50
Weight	Approx. 300 g (packing included)
Approval	CE

Dimensions



Specifications are subject to change without notice (27.10.99)