



METEOROLOGICAL EQUIPMENT

ED-250-2 COS/SIN ADAPTER

FEATURES

- 5-wire transmission from Wind Direction Sensor, Cos/Sin Type
- 0-360° measurement
- Output 0-10V / 0-20mA
- Output 0-5V, 4-20mA as option
- Resolution better than 0.1°
- LED-indication for Supply Voltage
- LED-indication for Sensor
- 24VDC Supply Voltage
- 11-Pole PLUG-IN Module

APPLICATIONS

- Connected to Wind Direction Sensor, Cos/Sin Type



TECHNICAL CHARACTERISTICS

ED-250-2 Cos/Sin Adapter is designed as interface to ED- and DMI-Wind Direction Sensors with an Cos/Sin resolver as signal transducer. A 4.5 KHz oscillator generates a carrier signal to the transducer. A Sine/Cosine signal is returned with an amplitude corresponding to the angle of the Wind Vane. A 12 Bit tracking

resolver-to-digital converter converts the input signals into a 12-bit word, using a radiometric tracking conversion method. This word is again converted to an analog voltage for the output driver to give an 0-10V / 0-20mA output signal for 0-360° measurement.

TECHNICAL SPECIFICATIONS FOR ED-250-2 COS/SIN ADAPTER

Measuring Range

0 - 360°

Input Signal

Sine/Cosine to the angle of the Vane

Carrier Signal

4.5 KHz +/- 10%, 4Vrms to the Resolver

Sampling Interval

25 mSec. +/- 10%

Resolution

Better than 0.1°

Linearity

Better than 0.5°

Output Signal

0-10V/0-20mA for 0-360°

Power Indication

3mm LED Red

Sensor Indication

3mm LED Green

Supply Voltage

24 VDC +/- 15%

Current Drain

max. 45mA

Operating Temperature

-10 to +60°C

Electrical Connections

Terminal 1:	11-Pole Plug
Terminal 2:	Output GND
Terminal 3:	Output U1+
Terminal 4:	Output I+ (U2+ Option 5)
Terminal 5:	Carrier LOW
Terminal 6:	Carrier HIGH
Terminal 7:	Cos/Sin LOW
Terminal 8:	Cos HIGH
Terminal 9:	Sin HIGH
Terminal 10:	+ 24 VDC
Terminal 11:	NC
Terminal 12:	Supply GND

Mechanical Specifications

Height	75mm
Width	37mm
Depth	73mm
Weight	85g

Accessories included

11-Pole Socket for DIN-rail mounting

Options (By order)

- 1: Signal Output 0-2,5V
- 2: Signal Output 0-5,0V
- 3: Signal Output 0-7,5V
- 4: Signal Output 4-20mA
- 5: Signal Output 2xU-Out

EU Declaration of Conformity

EN61000-6-3 Emission
EN61000-6-2 Immunity

Warranty

One Year against faulty materials or workmanship.

Maintenance

None

Serial no.: _____

Options: _____

Date: _____

Sign: _____