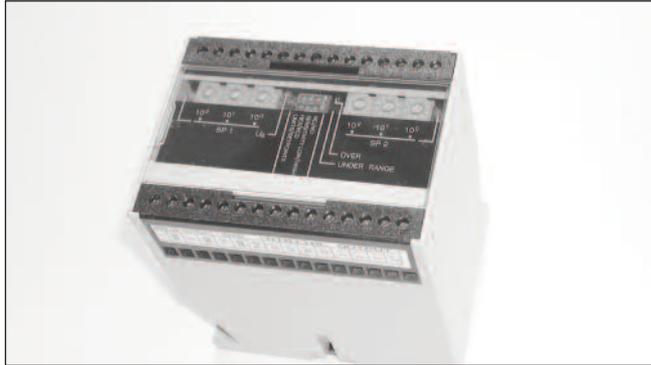


Ultrasonic Evaluation Unit for Sensor Head Type UC EU 80 -1

CARLO GAVAZZI



- 100 x 75 x 110 mm housing, DIN-rail mounting
- Outputs: PLC, Display, RS232, sensor supply
- Input: Sensor head UC 80 CND 80 FS M1
- Full programmable
- Hold function, 2 set points, over- and under range, analogue outputs 0-10 VDC and 4-20 mA
- Power supply: 24 VDC unregulated (19 to 30 VDC)
- Protection: Short-circuit, reverse polarity, transients
- Protection degree IP 40
- Screw terminals
- Distance to sensor head: up to 50 m

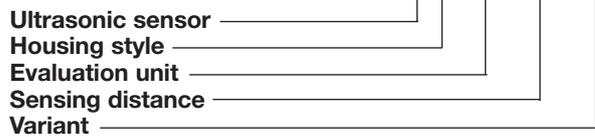
Product Description

Evaluation unit for sensor head UC80CND80FSM1. From the evaluation unit it is possible to program all sensor settings e.g. sensitivity, NO or NC switching and angle of analog output. As the sensor and evaluation unit is sepa-

rated it makes the two-part set-up an ideal solution for level measurement in high tanks. When the evaluation unit is mounted in a panel all settings can be fixed here and not on the top of the tank.

Ordering Key

UC EU 80 -1



Type Selection

Housing dimensions	Connection	Rated operating dist. (S _n)	Ordering no.
100 x 75 x 110 mm	Screw terminals	800-8000 mm	UC EU 80 -1

Specifications

Rated operational volt. (U_e)	19 to 30 VDC (ripple included)	Programmable functions Basic set-up, saving of basic set-up, analogue output range and offset, set points, over- and under range, repetition frequency, false echos, read-out of parameters, mode register.
Ripple	≤ 10%	
Protection	Short-circuit, transients and reverse polarity	
Rated insulation voltage	> 1 kV	
Inputs Sensor head Hold	Pins 3, 4, 5, 6, 8 Pin 10 (active LO)	Rated operating distance 800-8000 mm
Outputs Set point 1 Set point 2 Over range Under range Analogue output, 0-10 VDC Analogue output, 4-20 mA Display	Pin 14 Pin 15 Pin 12 Pin 13 <i>PNP, open collector 100 mA, Short circuit protected</i> Pin 16, R _{min} 1450 Ω Pin 18, R _{max} 250 Ω BCD, pins 23-26 HEX, pins 27-30 NPN, open collector, 30 VDC, 20 mA, short- circuit protected	
Carrier frequency	65 kHz	
Ambient temperature Operating Storage	0° to +50°C (32° to +122°F) -25° to +85°C (-13° to +185°F)	
Degree of protection	IP 40	
Housing material	ABS (Teluran 877T)	
Housing dimensions	100 x 75 x 110 mm	
Connection	Screw terminals	
Weight	370 g	
CE-marking	Yes	



Wiring

External power supply		Display outputs	
1	24 V Power supply	23	10 ³ Digit 3
2	GND Ground, power supply	24	10 ² Digit 2
Sensor head UC80CND80FSM1		25	10 ¹ Digit 1
3	24 V Sensor supply	26	10 ⁰ Digit 0
4	GND Ground, sensor supply	27	2 ³ Digit 3
5	STA Transmit pulse	28	2 ² Digit 2
6	STO Received pulse	29	2 ¹ Digit 1
7	SEN Receiver sensitivity (not connected)	30	2 ⁰ Digit 0
8	TEM Temperature signal		
Remote control			
9	GND Ground		
10	HLD Transmit disable, synchronisation		
Switching outputs			
11	GND Ground		
12	ORA Over Range, no received pulse		
13	URA Under Range, "blind zone"		
14	SP1 Setpoint 1		
15	SP2 Setpoint 2		
Analogue outputs			
16	U Voltage output 0... 10V		
17	GND Ground for voltage output		
18	I Current output 4... 20mA		
19	GND Ground for current output		
Interface, serial output (UDSProg A4N)			
20	TxD Data output, serial		
21	GND Ground, Data output, serial		
22	RxD Data input, serial		

Installation Hints

To avoid interference from inductive voltage/current peaks, separate the prox. switch power cables from any other power cables, e.g. motor, contactor or solenoid cables

Relief of cable strain

Incorrect

Correct

The cable should not be pulled

Protection of the sensing face

A proximity switch should not serve as mechanical stop

Switch mounted on mobile carrier

Any repetitive flexing of the cable should be avoided

Dimensions

