Easy to install

PT100R1

⟨Ex⟩ CE

Ex barrier module for probe connection to FuelCom

The PT100R1 is an intrinsically safe galvanic isolated sensor input module, which provides the user with two independent channels of interface to the sensors NVF and KVF. The data output from the module is presented on the RS485 local bus. With the PT100R1 protocol implemented on a host computer data can easily be polled true the local bus interface. If more than one module of PT100R1 is added to the bus system, each module has to be addressed. The two channels is labelled with letters A and B.

Product ID:		PT100R1 Module
Operating voltage:		5VDC/ 12VDC (fed from FuelCom)
Output voltage to probes:		12,5VDC
Input signal range:		4-20 mA current loop
Number of analogue channels:		2
A/D converter:		16 bits
Precision:	Linearity:	+/- 0,01%
	Accuracy:	+/- 0,2%
Communication:		RS485 max 9600 bps
Environment:		0 - +55°C, indoor
Outdoor operation:		With FuelCom in approved cabinet (optional)
Certification:	ATEX	
	Ex category:	⟨Ex⟩ [EEx ia] II B
	Gas group:	II (1)G
Safety limits:	Voltage:	U_o=23,64V
	Current:	I_o= 366mA
	Power:	P_o=2,16W
II B	Capacitance	C_o< 960 nF
	Inductance	L_o< 1 mH
Preferred ext. probe:		NVF
		KVF

When a sensor is connected to one of the channels, a yellow led is set to indicate that the sensor is enabled and the polarity of the sensor connection is made correct The NVF sensor /thermistor need a 20-60 sec. of warm up period before its enabled. During the warm up period the red led on channel a starts to blink. If an alarm condition occurs, on one of the sensors, a red led is set to a steady state. A flash on the green (RX) LED is indicating a successful transmission from a host computer. A green LED (PWR) indicates that power is applied to the module.

Tank2Eye

Product:	**PT00R1 Intrinsically safe isolated oil separator input module**
Communication standard:	RS485 BUS, full duplex, 9600b/s, L<1200m, max 32 stations
Environment:	0 to +55 ºC Indoor. (IP20)
Dimensions (W x H x D):	Approx: 10 x 10 x 2 cm.
Installation: **Alternative:**	Inside FuelCom slot PA-VO green housing for DIN rail mount
CE	EN 50014, EN50020, EN 60079-11
Power supply (From FuelCom):	12V DC +/- 5% 200mA, 5VDC +/-5% 30mA, 2,2W total
Power supply for feed devices:	U>13,5V DC@ 20mA (Uo =23,6V)
Type of sensors to be used:	KVF / NVF
Number of channels:	Two, loop powered.
Function:	Separator and overfill protection module; alarm /no alarm
Resolution:	16 bit
Linearity:	0,01%
Accuracy:	+/- 0,2%
Temperature coefficient:	0,01% / ºC
Response time.	1 sec.
Input/ output side isolation barrier safe side:	6 kV
ATEX notification body number:	0470 Nemko
Explosion category:	[EEx ia] IIB (Ta= -20 - +55 ºC)
Gas group:	⟨Ex⟩ II 1G
EC type Examination certificate:	DNV-2000-ATEX-OSL-0244
Safety limits:	Uo=23,64V, Io= 366 mA, Po= 2,16W
Max. permissible connected inductance:	IIA: Lo= 2mH, IIB: Lo=1mH,
Max permissible connected capacitance:	IIA: Co= 3.0µF, IIB: Co=960nF,
User accessible keys:	Setting tank number by DIL switch. (binary coded)
Connection:	Screw terminals, wire data: AWG14-AWG24. (0,25-2,0mm^2)
Max serial resistance:	Channel A:10 ohm / Channel B : 20 ohm

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