



- Eight channels for resistance temperature detectors, potentiometers, thermocouples, mV sensors and joysticks
- Intrinsically safe Ex ia inputs with line fault monitoring
- Module in Zone 2, Cl. I, II, Div. 2 can be hot swapped

06 b

WebCode 9482B



The 9482 series temperature input module for Zone 2, Cl. I, II, Div. 2 has eight channels for the Ex i operation of resistance temperature detectors with two-, three- or four-conductor connection and thermocouples. Sensors that comply with DIN, IEC and GOST are supported as well as resistance transmitters up to 10 kΩ and also joysticks for rapid four-channel operation. Earthed thermocouples can be connected. Cold junction compensation can be performed internally or externally.

	NEC® 500 CEC Appendix J					
	Class I		Class II		Class III	
Division	1	2	1	2	1	2
Ex interface	•	•	•	•	•	•
Installation in		•		•		•




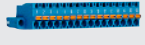

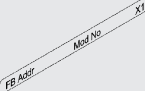

	CEC Section 18 NEC® 505 NEC® 506					
	Class I					
Zone	0	1	2	20	21	22
Ex interface	•	•	•	•	•	•
Installation in			•			•



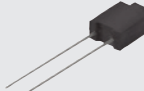
	IECEX / ATEX					
	Zone	0	1	2	20	21
Ex interface	•	•	•	•	•	•
Installation in			•			•

Selection Table					
Installation	Zones 2, 22, Cl I, II, Div. 2 and in the safe area				
Number of channels	Product Type			Art. No.	Weight lb
(depends on operating mode) 8 or 4 Ex i inputs	9482/33-08-10			217644	0.61
Please order 2 terminals separately - see accessories and spare parts					

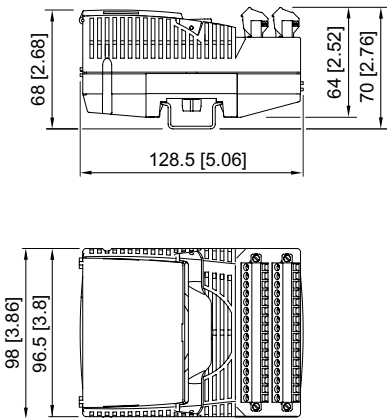
Technical Data	
Explosion Protection	
Certificate FMus	FM17US0332X
Certificate cFM	FM16CA0134X
Marking FMus	IS; Class I,II,III, Div. 1, Groups A,B,C,D,E,F,G; AIS; Class I,II,III, Div. 1, Groups A,B,C,D,E,F,G; Class I, Zone 2, AEx ia [ia] IIC; T4 at Ta = 75 °C; See Doc. 9482 6 031 002 1
Marking cFM	NI, Class I,II,III, Div. 2, Groups A,B,C,D,E,F,G; AIS, Class I,II,III, Div. 1, Groups A,B,C,D,E,F,G; Class I, Zone 2, Ex nA ia [ia] IIC; T4 at Ta = 75 °C; See Doc. 9482 6 031 002 1
IECEX gas explosion protection	Ex nA ia [ia Ga] IIC T4 Gb
IECEX dust explosion protection	[Ex ia Da] IIIC
Certificates	ATEX (DEK), Brazil (ULB), Canada (FM), EAC (STV), IECEX (DEK), India (PESO), Korea (KTL), Russia (Meteorological certificate), USA (FM)
Ship approval	DNVGL, RINA

Technical Data	
Safety Data	
Notes	For proof of intrinsic safety, the safety data must be used in accordance with the combination of connections and the corresponding sensor. For further information and combination, see operating instructions.
Auxiliary Power	
Current consumption	42 mA
Max. power consumption	1 W
Max. power dissipation inputs	1 W
Input	
Compensation of reference junctions	Internal (adjustable parameters) External 3-wire circuit
Notes	For a breakdown of the sensors see page [NoVersionPageNo]
Ambient Conditions	
Ambient temperature °F	-40°F ... +167°F
Ambient temperature °C	-40°C ... +75°C
Mechanical Data	
Degree of protection IP (IEC 60529)	IP20

Accessories				
Figure	Description	Product Type	Art. No.	Weight lb
External reference junction				
	External reference junction for 2 x thermocouple (1 x Pt100 for 2, 3 or 4 wire connection) integrated into the 4-pole terminal block. Installation takes place on the DIN rail.	9191/VS-04	160675 ▲	0.07
Pluggable terminal				
	2.5 mm² with lock, 16-pole, screw connector, blue, for connecting the field signals to I/O modules, for intrinsically safe field circuits Labelling: 1 ... 16 Attention: An additional terminal is necessary for I/O module Series 9470 and 9482. Labelling: 17 ... 32	-	162702 ▲	0.06
	2.5 mm² with lock, 16-pole, screw connector, blue for connecting the field signals to I/O modules, for intrinsically safe field circuits Labelling: 17 ... 32	-	162718 ▲	0.06
	2.5 mm² with lock, 16-pole, spring clamp connection, blue, for connecting the field signals to I/O modules, for intrinsically safe field circuits, incl. test jacks Labelling: 1 ... 16 Attention: An additional terminal is necessary for I/O module Series 9470 and 9482. Labelling: 17 ... 32	-	162695	0.06
	2.5 mm² with lock, 16-pole, spring clamp connection, blue for connecting the field signals to I/O modules, for intrinsically safe field circuits, incl. test jacks Labelling: 17 ... 32	-	162716	0.06
Labelling strips				
	"FB Addr ... Mod No ..." for pluggable terminal, 26 pieces on the sheet	-	162788	-
DIN A4 sheet				
	For the label plate on I/O modules, 6 labels per sheet Print IS Wizard, packaging unit = 20 sheets	-	162832	-

Accessories				
Figure	Description	Product Type	Art. No.	Weight lb
Partition				
	For mounting between intrinsically safe and non-intrinsically safe connections of the I/O modules, in order to adhere to the required 50 mm distance	-	220101	0.02
Warning sign				
	"Clean modules only with a damp cloth."	-	162796	-
Resistor error message suppression				
	The resistors are used to suppress error messages for unused I/O channels Resistance value: 62R / 0.5 W Suitable for: AOM 9468; TIM 9482	-	244912	-

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



Ex i Inputs

06 b

Connectable resistance temperature detectors / resistance transmitters	Type	Reference	Measuring range (ITS-90)	Medium resolution
	Pt100	IEC 60751	200 ... +850 °C	0.1 K
	Pt500	IEC 60751	-200 ... +850 °C	0.1 K
	Pt1000	IEC 60751	-200 ... +850 °C	0.1 K
	Ni100	DIN 43760	-60 ... +180 °C	0.1 K
	Ni500	DIN 43760	-60 ... +180 °C	0.1 K
	Ni1000	DIN 43760	-60 ... +180 °C	0.1 K
	Pt46	GOST 6651-94	-200 ... +1100 °C	0.15 K
	Pt50	GOST 6651-94	-200 ... +1100 °C	0.15 K
	Pt100	GOST 6651-94	-200 ... +1100 °C	0.1 K
	Cu53	GOST 6651-94	-50 ... +180 °C	0.1 K
	M50	GOST 6651-94	-200 ... +200 °C	0.15 K
	M100	GOST 6651-94	-200 ... +200 °C	0.1 K
	Resistance transmitter (3-wire)	--	0 ... 500 Ω	0.02 Ω
	Resistance transmitter (3-wire)	--	0 ... 2.5 kΩ	0.10 Ω
	Resistance transmitter (3-wire)	--	0 ... 5 kΩ	0.20 Ω
	Resistance transmitter (3-wire)	--	0 ... 10 kΩ	0.4 Ω
	Resistance transmitter (3-wire)	--	-200 ... +850 °C	0.1 K
	Joystick (4-wire)	--	500 ... 10 kΩ	

Connectable thermocouples / mV sensors	Type	Reference	Measuring range (ITS-90)	Medium resolution	Medium error of measurement with regard to measuring range
	B	IEC 60584-1	-400 ... +1800 °C	0.25 K	0.1 %
	E	IEC 60584-1	-200 ... +1000 °C	0.1 K	0.013 %
	J	IEC 60584-1	-200 ... +1200 °C	0.1 K	0.014 %
	K	IEC 60584-1	-200 ... +1370 °C	0.1 K	0.02 %
	N	IEC 60584-1	-200 ... +1300 °C	0.1 K	0.02 %
	R	IEC 60584-1	-50 ... +1767 °C	0.2 K	0.05 %
	S	IEC 60584-1	-50 ... +1767 °C	0.2 K	0.053 %
	T	IEC 60584-1	-200 ... +400 °C	0.1 K	0.042 %
	L	DIN 43710	-200 ... +900 °C	0.1 K	0.027 %
	U	DIN 43710	-200 ... +600 °C	0.1 K	0.038 %
	XK	GOST 8.585	-50 ... +800 °C	0.1 K	0.02 %
	mV	--	0 ... +100 mV	3.6 μV	0.01 %