



- Eight channels for resistance temperature detectors, potentiometers, thermocouples, mV sensors and joysticks
- Intrinsically safe Ex ia inputs with line fault monitoring and LED error indication
- Module in Zone 1, Cl. I, II, Div. 1 can be hot swapped

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WebCode **9482A**



The series 9482 temperature input module for Zone 1, Cl. I, II, Div. 1 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 CE Code Appendix J					
	Class I		Class II		Class III	
Division	1	2	1	2	1	2
Ex interface	•	•	•	•	•	•
Installation in	•	•				




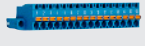


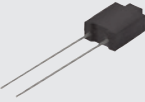

	CE Code Section 18					
	NEC® 505			NEC® 506		
	Class I					
Zone	0	1	2	20	21	22
Ex interface	•	•	•			
Installation in		•	•			


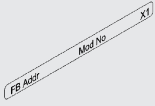
	IECEX / ATEX					
	Zone 0		Zone 1		Zone 2	
Zone	0	1	2	20	21	22
Ex interface	•	•	•	•	•	•
Installation in		•	•			

Selection Table				
Installation	Zone 1, Zone 2, Cl. I, Div. 1, 2 and in the safe area			
Number of channels	Product Type	Art. No.	Weight	
8 or 4 Ex i inputs (depends on operating mode)	9482/32-08-11	217643 ▲	275 g	
Please order two terminals separately – see accessories and spare parts				

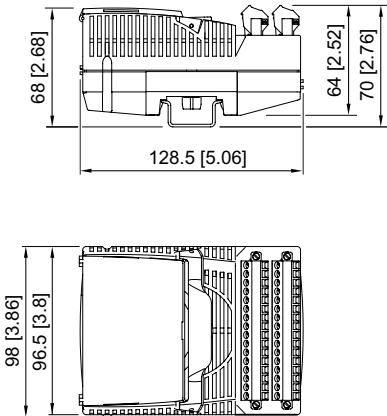
Technical Data	
Explosion Protection	
FMus certificate	FM17US0332X
cFM certificate	FM16CA0134X
Marking cFMus	IS, Class I, Div. 1, Groups A,B,C,D; Class I, Zone 1, AEx/Ex ia [ia] IIC AIS Class I,II,III, Div. 1, Groups A,B,C,D,E,F,G; T4 at Ta = 75°C See Doc. 9482 6 031 001 1
IECEX gas explosion protection	Ex ia [ia Ga] IIC T4 Gb
IECEX dust explosion protection	[Ex ia Da] IIIC
Certificates	ATEX (DEK), Brazil (ULB), Canada (FM), China (NEPSI), IECEX (DEK), India (PESO), Korea (KTL), USA (FM)
Ship approval	ABS, BVIS, EU RO MR (DNV), KR, LR
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.

Technical Data	
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 table "Ex i inputs"
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
Connectable sensors see table "Ex i inputs"	

Accessories				
Figure	Description	Product Type	Art. No.	Weight
External reference junction				
	External reference junction for 2 x thermocouple (1 x Pt100 for 2-, 3- or 4-conductor connection) integrated into the 4-pin terminal block. Mounted on a DIN rail.	9191/VS-04	160675 ▲	30 g
Pluggable terminal				
	2.5 mm² with lock, 16-pin, screw connector, blue, for connecting the field signals to I/O modules, for intrinsically safe field circuits Labelling: 1 to 16 Note: A second terminal is additionally required for I/O module Series 9470 and 9482 Labelling: 17 to 32	-	162702 ▲	28 g
	2.5 mm² with lock, 16-pin, screw connector, blue, for connecting the field signals to I/O modules, for intrinsically safe field circuits Labelling: 17 to 32	-	162718 ▲	28 g
	2.5 mm² with lock, 16-pin, spring clamp connection, blue, for connecting the field signals to I/O modules, for intrinsically safe field circuits, incl. test jacks Labelling: 1 to 16 Note: A second terminal is additionally required for I/O module Series 9470 and 9482 Labelling: 17 to 32	-	162695	28 g
	2.5 mm² with lock, 16-pin, spring clamp connection, blue, for connecting the field signals to I/O modules, for intrinsically safe field circuits, incl. test jacks Labelling: 17 to 32	-	162716	28 g
Partition				
	For mounting between intrinsically safe and non-intrinsically safe connections between I/O modules to maintain a tight string length of 50 mm	-	220101	10 g
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; UMH 9469; DIOM 9472; TIM 9482	-	244912	-
Warning label				
	"Clean modules only with a damp cloth."	-	162796	1 g

Accessories				
Figure	Description	Product Type	Art. No.	Weight
DIN A4 sheet				
	For label plate on I/O modules; 6 plates per sheet; IS Wizard printout; packaging unit = 20 sheets	-	162832	1 g
Labelling strips				
	"FB Addr ... Mod No ..." for pluggable terminal, 26 pieces on the sheet	-	162788	1 g
Set of screws				
	Set of M5 x 14 screws (self-tapping) for 9490 vibration brackets Number of screws in a set: 25	-	275516	-

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



Ex i inputs

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Connectable resistance temperature detectors/ resistance transmitters	Type	Reference	Measuring range (ITS-90)	Average measurement discrimination	
	Pt100	IEC 60751	-200 to +850 °C	0.1 K	
	Pt500	IEC 60751	-200 to +850 °C	0.1 K	
	Pt1000	IEC 60751	-200 to +850 °C	0.1 K	
	Ni100	DIN 43760	-60 to +180 °C	0.1 K	
	Ni500	DIN 43760	-60 to +180 °C	0.1 K	
	Ni1000	DIN 43760	-60 to +180 °C	0.1 K	
	Pt46	GOST 6651-94	-200 to +1100 °C	0.15 K	
	Pt50	GOST 6651-94	-200 to +1100 °C	0.15 K	
	Pt100	GOST 6651-94	-200 to +1100 °C	0.1 K	
	Cu53	GOST 6651-94	-50 to +180 °C	0.1 K	
	M50	GOST 6651-94	-200 to +200 °C	0.15 K	
	M100	GOST 6651-94	-200 to +200 °C	0.1 K	
	Resistance transmitter (3-conductor)	--	0 to 500 Ω	0.02 Ω	
	Resistance transmitter (3-conductor)	--	0 to 2.5 kΩ	0.10 Ω	
	Resistance transmitter (3-conductor)	--	0 to 5 kΩ	0.20 Ω	
	Resistance transmitter (3-conductor)	--	0 to 10 kΩ	0.4 Ω	
	Resistance transmitter (3-conductor)	--	-200 to +850 °C	0.1 K	
	Joystick (4-conductor)	--	500 to 10 kΩ		
Connectable thermocouples/mV sensors	Type	Reference	Measuring range (ITS-90)	Average measurement discrimination	Average error of measurement based on measuring range
	B	IEC 60584-1	-400 to +1800 °C	0.25 K	0.1%
	E	IEC 60584-1	-200 to +1000 °C	0.1 K	0.013%
	J	IEC 60584-1	-200 to +1200 °C	0.1 K	0.014%
	K	IEC 60584-1	-200 to +1370 °C	0.1 K	0.02%
	N	IEC 60584-1	-200 to +1300 °C	0.1 K	0.02%
	R	IEC 60584-1	-50 to +1767 °C	0.2 K	0.05%
	S	IEC 60584-1	-50 to +1767 °C	0.2 K	0.053%
	T	IEC 60584-1	-200 to +400 °C	0.1 K	0.042%
	L	DIN 43710	-200 to +900 °C	0.1 K	0.027%
	U	DIN 43710	-200 to +600 °C	0.1 K	0.038%
	XK	GOST 8,585	-50 to +800 °C	0.1 K	0.02%
	mV	--	0 to +100 mV	3.6 μV	0.01%