



- Eight channels for resistance temperature detectors, potentiometers, thermocouples, mV sensors and joysticks
- Ex ia intrinsically safe inputs with line fault monitoring and LED error indication
- Module in Zone 1 can be replaced without having to disconnect the power supply (i.e. hot-swapped)

A4

WebCode 9482A



The 9482 temperature input module for Zone 1 has eight channels for Ex i operation of resistance temperature detectors with 2-, 3- or 4-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 4-channel operation. Earthed thermocouples can be connected. Reference junction compensation can be performed internally or externally.

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







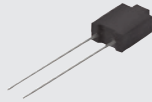

	NEC® 500 CE Code Appendix J					
	Class I		Class II		Class III	
Division	1	2	1	2	1	2
Ex interface	•	•	•	•	•	•
Installation in	•	•				


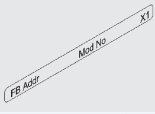

	CE Code Section 18					
	NEC® 505			NEC® 506		
	Class I					
Zone	0	1	2	20	21	22
Ex interface	•	•	•			
Installation in		•	•			

Selection Table				
Installation	Zones 1, 2 and safe areas			
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				

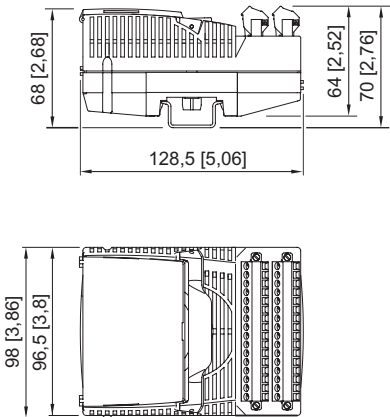
Technical Data	
Explosion Protection	
IECEX gas explosion protection	Ex ia [ia Ga] IIC T4 Gb
IECEX dust explosion protection	[Ex ia Da] IIIC
ATEX gas explosion protection	Ⓜ II 2 (1) G Ex ia [ia Ga] IIC T4 Gb
ATEX dust explosion protection	Ⓜ II (1) D [Ex ia Da] IIIC
Certificates	ATEX (DEK), Brazil (ULB), Canada (FM), China (NEPSI), IECEX (DEK), India (PESO), Korea (KTL), USA (FM)
Ship approval	ABS, BVIS, EU RO MR (DNV), KR, LR
Declaration of Conformity	ATEX (EUK), China (CCC)
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 combinations, see the operating instructions.
Auxiliary Power	
Current consumption	42 mA
Max. power consumption	1 W

Technical Data	
Auxiliary Power	
Max. power dissipation inputs	1 W
Input	
Compensation of reference junctions	Internal (adjustable parameters) External 3-wire circuit
Ambient Conditions	
Ambient temperature	-40°C ... +75°C
Mechanical Data	
Degree of protection (IP) (IEC 60529)	IP20
Connectable sensors see table "Ex i inputs"	

Accessories			
Figure	Description	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.	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	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
Vibration bracket set			
	When installed in environments with extreme vibration (> 0.7 g and max. 4 g), the 9490 vibration brackets may be used as an additional measure and provide mechanical stability for the individual modules. For mounting: All I/O modules, except 9477/12 and 9478 Number of brackets in a set: 8 Screws (item no. 275516) must be ordered separately.	271920	-
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				
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%