



- Eight channels can be used as analogue inputs or outputs, and four of these channels can be used as binary inputs or outputs
- Ex ec inputs/outputs with line fault monitoring, an LED fault and status display for each channel and SIL2 shutdown input
- Module in Zone 2 can be replaced without having to disconnect the power supply (i.e. hot-swapped)

A4

WebCode 9469A



The 9469/35 HART analogue universal module for Zone 2 has eight channels which can be used separately for operation of 2-/3-/4-conductor HART transmitters, or control valves/positioners, as well as for operation of 3-conductor proximity switches and 24 V/0.5 A binary outputs.

HART communication is bidirectional. All inputs/outputs are short-circuit proof, galvanically separated from the system and individually monitored to check for line faults.

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


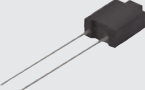
	NEC® 500 CE Code Appendix J					
	Class I		Class II		Class III	
Division	1	2	1	2	1	2
Ex interface		•				
Installation in		•				




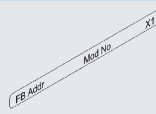

	CE Code Section 18					
	NEC® 505			NEC® 506		
Zone	Class I					
	0	1	2	20	21	22
Ex interface			•			
Installation in			•			

Selection Table				
Installation	Zone 2 and safe areas (non-intrinsically safe field circuits)			
Number of channels	Product Type	Art. No.	Weight	
(adjustable parameters in pairs) 8 Ex ec/nA universal input/output	9469/35-08-12	230184	250 g	
Please order terminal separately – see accessories and spare parts				

Technical Data	
<b>Explosion Protection</b>	
IECEX gas explosion protection	Ex ec ic [ia Ga] IIC T4 Gc
ATEX gas explosion protection	II 3 (1) G Ex ec ic [ia Ga] IIC T4 Gc
Certificates	ATEX (DEK), Canada (FM), China (NEPSI), IECEX (DEK), India (PESO), Korea (KTL), SIL (exida), USA (FM)
Declaration of Conformity	ATEX (EUK), China (CCC)
<b>Electrical Data</b>	
Max. number of 2-conductor analogue input/outputs	8 (channels 0 to 7)
Max. number of 3/4-conductor analogue inputs	4 (channels 4 to 7)
Max. number of 3-conductor PNP inputs	4 (channels 4 to 7)
Max. number of binary outputs	4 (channels 4 to 7)
Analogue digital communication	HART protocol
Digital communication note	Up to version 7.x, only for 4 to 20 mA
External supply voltage U <sub>i</sub> (X0)	18 to 32 V DC (nominal voltage 24 V)
Max. current consumption (X0)	4 x 0.5 A (depends on the total current of the binary outputs)

Technical Data	
<b>Electrical Data</b>	
Control input suitability (X0)	Shutdown up to SIL 2, low demand (IEC 61508)
Control input function (X0)	"Plant STOP" for switching off all channels
<b>Auxiliary Power</b>	
Power supply connection	BusRail types 9494
Auxiliary power version	Intrinsically safe Ex ia via BusRail
Current consumption	250 mA
Max. power consumption	6 W
Max. power dissipation outputs	5.9 W
<b>Input</b>	
Analogue input signal type	2/3/4-conductor transmitter
Analogue input nominal signal	0 to 20 mA 4 to 20 mA
Max. input resistance analogue input	200 Ω per channel
Signal type binary input	3-conductor PNP initiators 2-conductor 24 V contacts
Binary input signal type	Corresponds to the ext. supply voltage $U_{Hi}$ (X0)
Binary input internal resistance	11 kΩ
<b>Output</b>	
Analogue output signal type	2-conductor transmitter
Analogue output nominal signal	0 to 20 mA 4 to 20 mA
Max. input resistance analogue output	200 Ω per channel
Max. load resistance analogue output	750 Ω at 20 mA 700 Ω at 21.8 mA
Signal type binary output	2-conductor (24 V/0.5 A)
Binary output supply voltage	Corresponds to the ext. supply voltage $U_{Hi}$ - 0.7 V (X0)
Binary output output current	30 mA to 0.5 A per channel (electronically limited)
Binary output connectable loads	Resistive Inductive Capacitive
<b>Ambient Conditions</b>	
Ambient temperature	-40°C ... +75°C
<b>Mechanical Data</b>	
Degree of protection (IP) (IEC 60529)	IP20
Width	96.5 mm
Height	67 mm
Length	128 mm

Accessories			
Figure	Description	Art. No.	Weight
<b>Pluggable terminal</b>			
	1.5 mm <sup>2</sup> with lock, 24-pin, spring clamp connection, black, for connecting the field signals to I/O modules, for non-intrinsically safe field circuits Version: Only for 9469, 9471 and 9472 I/O modules Labelling: 1 to 24	245090	20 g
<b>Resistor error message suppression</b>			
	The resistors are used to suppress error messages for unused I/O channels Resistance value: 5K6/0.5 W Suitable for: AIM 9468; UMH 9469; DIOM 9470; DIOM 9471; DIOM 9472; DOM 9475 For intrinsically safe circuits (simple apparatus according to EN 60079-11)	244911	-
	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	-

Accessories			
Figure	Description	Art. No.	Weight
<b>Partition</b>			
	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
<b>Warning label</b>			
	"Clean modules only with a damp cloth."	162796	1 g
<b>DIN A4 sheet</b>			
	For label plate on I/O modules; 6 plates per sheet; IS Wizard printout; packaging unit = 20 sheets	162832	1 g
<b>Labelling strips</b>			
	"FB Addr ... Mod No ..." for pluggable terminal, 26 pieces on the sheet	162788	1 g
<b>Vibration bracket set</b>			
	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	-
<b>Set of screws</b>			
	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**

