Verleitergabe sowe Verweitsingung dieses Dokuments, Verweitung und Mittellung and Ling verbeiter, soweit nicht ausdrucklich gestattet. Zuwiderandlungen verpflichten zu Schaderensstat. Alle Rechte für den Fall der Patent, Nonhazardous (Unclassified), Class I, II, III, Division 2, Group A-D or Class I, Zone 2, Group IIC/IIB Hazardous (Classified) Locations



Approved NAMUR proximity switches, optocouplers, solenoid valves

The Digital Input Output Module Type 9472/35-16-12 is designed to receive up to 16 discrete input signals from dry contacts and NAMUR proximity sensors etc. and transfer them to the IS1 CPU & Power Module. It is also possible to drive solenoid valves.

The module is for use in Nonhazardous (Unclassified), Class I, Division 2, Group A-D or Class I, Zone 2, Group IIC Hazardous (Classified) Locations according to NEC Article 501/504/505 or Canadian Electrical Code, CSA C22.

The system internal circuits are safely galvanically isolated from all input circuits up to a peak voltage of 375  $\rm V.$ 

Maximum Safety Voltage for the Input circuits: U<sub>max</sub> = 253 V AC

## Notes:

- Suitable separation must be maintained between input circuits connected to nonincendive circuits, AEx/Ex nA circuits and the I.S. input circuits of other I/O modules of the IS1 resp. IS1+ system. Use partition (SAP No. 162740 or 220101) for separation from I/O modules with I.S. circuits. Do not carry out work at the terminals without the partition plate in place.
- Electrical Apparatus connected to an intrinsically safe system must not use or generate voltages > 253 V (U<sub>max</sub>)
- Do not disconnect nonincendive circuits or AEx/Ex nA circuits unless area is known to be non hazardous. Mechanically secure the terminal blocks with the screws provided, to prevent from being detached unintentionally.
- Only use BusRail extension Type 9494/L1-V\* fitted aside the module. Do not mount the module fitted aside BusRail Begin or BusRail Begin types 9494/A2-B0 or 9494/A2-E0.
- For Installation in Division 2 or Zone 2 see Certification drawing for IS1 resp. IS1+ Remote I/O System No. 9400 6 031 004 1 or 9400 6 031 006 1 as part of the documentation of the CPU & Power Modules.

## Wiring Legend

X0 connection allocation

Function	X0 Terminal
24 V DC supply	1
Ground (GND) supply	2
"Plant STOP" input	3
"Plant STOP" ground	4

 $\begin{array}{l} U_{supply} = 24 \ V \ (18 \ ... \ 32 \ V) \ DC \\ I_{max \ supply} = 8 \ A \ (T_{A \ max} = 65 \ ^{\circ}C) \end{array} \qquad 4 \ A \ (T_{A \ max} = 75 \ ^{\circ}C) \end{array}$ 

Connector X0 is used to connect an external auxiliary power source to the supply for 3-wire PNP proximity switches (DI) or solenoid valves (24 V / 0.5 A) (DO). If the 24 V DC supply input at X0 is not used, the Output +24 V (A) at X1 and X2 is without power.

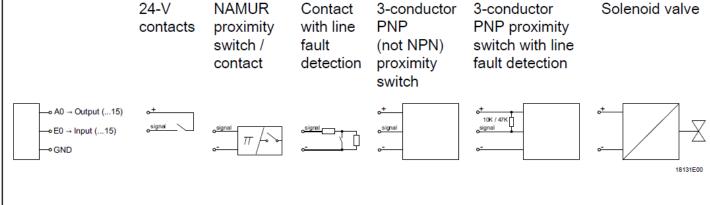
Two terminals exist for "Plant STOP". If terminals 3 and 4 are not used for "Plant STOP", they shall be bridged.

## X1 and X2 connection allocation

	Terminal	X1								X2							
Function	Channel	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Output +24	V (A)	1	4	7	10	13	16	19	22	25	28	31	34	37	40	43	46
Signal Inpu	t (E)	2	5	8	11	14	17	20	23	26	29	32	35	38	41	44	47
Ground (GN	ND)	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48

The GND lines are internally connected. Parallel interconnection of outputs is not permissible. For 3-wire proximity switches only PNP versions shall be connected, no NPN.

## Connection Diagram for Field Devices at X1 and X2:



			2018 Drawn by Checked	 Name Bagusch Kaiser	Certificat Digital Input Type 94	none Sheet 1 of 1	
				STAHL	9472 6	031 001 1	Agency FM
Version	Date	Name	]		Rep. f.	Rep. t.	