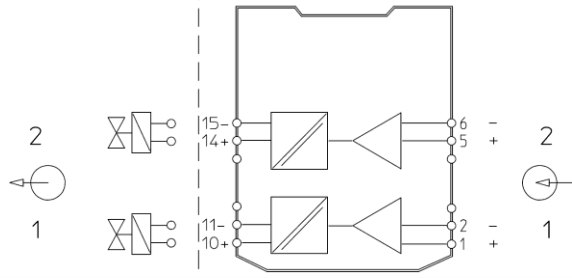


The copying, distribution and utilization of this document as well as the communication of its contents to others without expressed authorization is prohibited. Offenders will be held liable for the payment of damages. All rights reserved in the event of the grant of a patent, utility model or ornamental design registration.

Type 9176/*0-1*-00

Hazardous area

Safe area



Hazardous area: Class I, II, III; DIV 1; Group A-G or Class I; Zone 0; Group IIC/IIB Hazardous Locations
 Safe area: Non-Hazardous; Division 2 or Zone 2 Hazardous (Classified) Locations

The Digital Output Loop Powered Type 9176 is an associated apparatus as well as a nonincendive apparatus for installation in Non-Hazardous, Class I, Division 2 or Zone 2 Hazardous (Classified) Locations providing intrinsically safe connections for one (or two) field devices located in Class I, II, III, Division 1, Group A-G or Class I, Zone 0 [AEx ia] Group IIC, Hazardous Locations according to NEC Article 504/505 as listed below.

Digital Output Loop Powered Type 9176/a0-1d-00
 a = numeral 1 or 2 for number of channels
 d = numeral 2, 4, 5, 6 or 7 for characterizing the output

Entity parameters for wiring configurations are as follows:

Type (hazardous area)		V _{OC} [V]	I _{SC} [mA]	P _O [mW]	L _o	L _o	C _o	C _o	V _{max}	I _{max}
					CL I, DIV 1, A,B/ Zone 0, GP IIC	CL I, DIV 1, C-G/ Zone 0, GP IIB	CL I, DIV 1, A,B/ Zone 0, GP IIC	CL I, DIV 1, C-G/ Zone 0, GP IIB		
9176/*0-12-00 (DIV 1, Zone 0)	one channel	11.3	75	210	6.3 mH	25 mH	1.79 µF	12.1 µF	-	-
	1 & 2 parallel	11.3	150	420	1.5 mH	6 mH	1.79 µF	12.1 µF	-	-
9176/*0-14-00 (DIV 1, Zone 0)	one channel	19.6	150	732	1.5 mH	6 mH	235 nF	1470 nF	-	-
	1 & 2 parallel	19.6	300	1464	0.3 mH	1.5 mH	235 nF	1470 nF	-	-
9176/*0-14-00 (Zone 1, AEx ib)	one channel	19.6	60	732	1.5 mH	6 mH	235 nF	1470 nF	-	-
	1 & 2 parallel	19.6	120	1464	0.3 mH	1.5 mH	235 nF	1470 nF	-	-
9176/*0-15-00 (DIV 1, Zone 0)	one channel	27.6	86.5	596	1.8 mH	17 mH	85 nF	667 nF	-	-
	1 & 2 parallel	27.6	173	1192	-	2.5 mH	-	665 nF	-	-
9176/*0-15-00 (Zone 1, AEx ib)	one channel	27.6	44	596	1.8 mH	17 mH	85 nF	667 nF	-	-
	1 & 2 parallel	27.6	88	1192	-	2.5 mH	-	665 nF	-	-
9176/*0-16-00 (DIV 1, Zone 0)	one channel	27.6	110	760	1.2 mH	9 mH	85 nF	667 nF	-	-
	1 & 2 parallel	27.6	220	1520	-	1.8 mH	-	665 nF	-	-
9176/*0-16-00 (Zone 1, AEx ib)	one channel	27.6	50	760	1.2 mH	9 mH	85 nF	667 nF	-	-
	1 & 2 parallel	27.6	100	1520	-	1.8 mH	-	665 nF	-	-
9176/*0-17-00 (DIV 1, Zone 0)	one channel	27.6	60	415	6.6 mH	40 mH	85 nF	667 nF	-	-
	1 & 2 parallel	27.6	120	830	-	7.5 mH	-	665 nF	-	-

Notes:

- Intrinsically safe apparatus may be switches, thermocouples, LEDs, RTDs or an FM Approved System or Entity device connected in accordance with the manufacturer's installation instructions.
- For Entity concept use the appropriate parameters to ensure the following:
 V_t or $V_{OC} \leq V_{max}$ $C_o, C_a \geq C_i + C_{leads}$ $P_o \leq P_i$
 I_t or $I_{SC} \leq I_{max}$ $L_o, L_a \geq L_i + L_{leads}$
- Electrical apparatus connected to an intrinsically safe system should not use or generate voltages > 250 V (U_{max}).
- Installation should be in accordance with Article 504/505 of the National Electrical Code, ANSI/NFPA 70 and ANSI/ISA RP 12.06.01.
- Installation in Canada should be in accordance with the Canadian Electrical Code, CSA C22.1, Part 1, Appendix F.
- Use a general purpose enclosure meeting the requirements of IEC 61010-1 for use in Non-Hazardous or Class I, Division 2, Hazardous (Classified) Locations.
- Use an FM Approved Dust-ignition proof enclosure appropriate for environmental protection in Class II, Division 1, Groups E, F and G; and Class III, Hazardous (Classified) Locations.
- These modules are to be mounted on DIN rail, DIN rail with pac-Bus (type 9194) or pac-Carrier (type 9195). The field wiring in any case is connected to the ISpac device terminals.
- Ambient temperature: -20°C ... +60°C (any mounting position)
 -20°C ... +70°C (vertical mounting on horizontal DIN rail)

WARNING: Do not disconnect equipment when a flammable or combustable atmosphere is present.
 AVERTISSEMENT: Ne pas débrancher l'équipement en présence d'atmosphère inflammable ou combustible.

The safety relevant statements of this document may be transferred into the operating instructions.
 Transferring the text, editorial changes of equivalent meaning are allowed.

			2007	Date	Name	Certification drawing		Scale
			drawn	18.07.	Einsiedler	Digital Output Loop Powered Type 9176/*0-1*-00		none
			checked		Kaiser			Sheet
								1 of 1
02	22.10.12	Reistle				91 766 01 31 1		Agency
01	24.08.11	Reistle						FM
Version	Date	Name	Ers. f.			Ers. d.		A4

Weitergabe sowie Vervielfältigung dieser Unterlage, Verwertung und Mitteilung ihres Inhalts nicht gestattet, soweit nicht ausdrücklich zugeeignet. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte für den Fall der Patentverletzung oder GK-Eintragung vorbehalten.

F 4830 503 G