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CERTIFICATION DOCUMENT 366-005CS-12B

HiD2000
Control Drawings

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General

The following control drawings are provided to show interconnection between HiD2000 Series Apparatus and other circuits or apparatus resulting in an Intrinsically Safe System.
An Intrinsically Safe System could consist of the interconnection of Intrinsically Safe Apparatus and Associated Apparatus separately investigated under the Entity Evaluation Concept.

Installation Notes

1. HiD2000 Series apparatus must be installed in enclosure and use wiring methods in accordance with:
   For Canadian applications: the Canadian Electrical Code (CEC), CSA C22.1,Part 1, Appendix F.
   For US applications: ANSI/ISA RP12.06.01 “Installation of Intrinsically Safe Systems for Hazardous (Classified) Locations” and the National Electrical Code (ANSI/NFPA 70).
2. Intrinsically safe equipment must be CSA Entity Certified or be a simple apparatus.
   Passive components, such as light-emitting diodes (LEDs), resistors, resistance temperature detectors (RTDs) and switches; thermocouples and similar sources of generated energy that will not generate more than 1.5 volts, 0.1 ampere, and 25 milliwatts are simple apparatus.
3. Intrinsically Safe Apparatus manufacturer’s installation drawings must be followed when installing such equipment.
4. Maximum ambient temperature: 60°C.
5. Control equipment connected to HiD2000 Series apparatus must not use or generate more than 250Vrms or Vdc.
6. The Entity Evaluation Concept allows the interconnection of Intrinsically Safe Apparatus with Associated Apparatus not specifically examined in combination as a system when:
   V_{oc} or V_o or $V_t \leq V_{max}$ or U_i;
   I_{sc} or I_o or $I_t \leq I_{max}$ or I_i;
   $P_o \leq P_i$
   C_a or $C_o \geq C_i + C_{cable}$
   L_a or $L_o \geq L_i + L_{cable}$
7. No revision to drawing without prior acceptance from CSA.
8. **WARNING:**
   To prevent ignition of flammable or combustible atmospheres, disconnect power before servicing.

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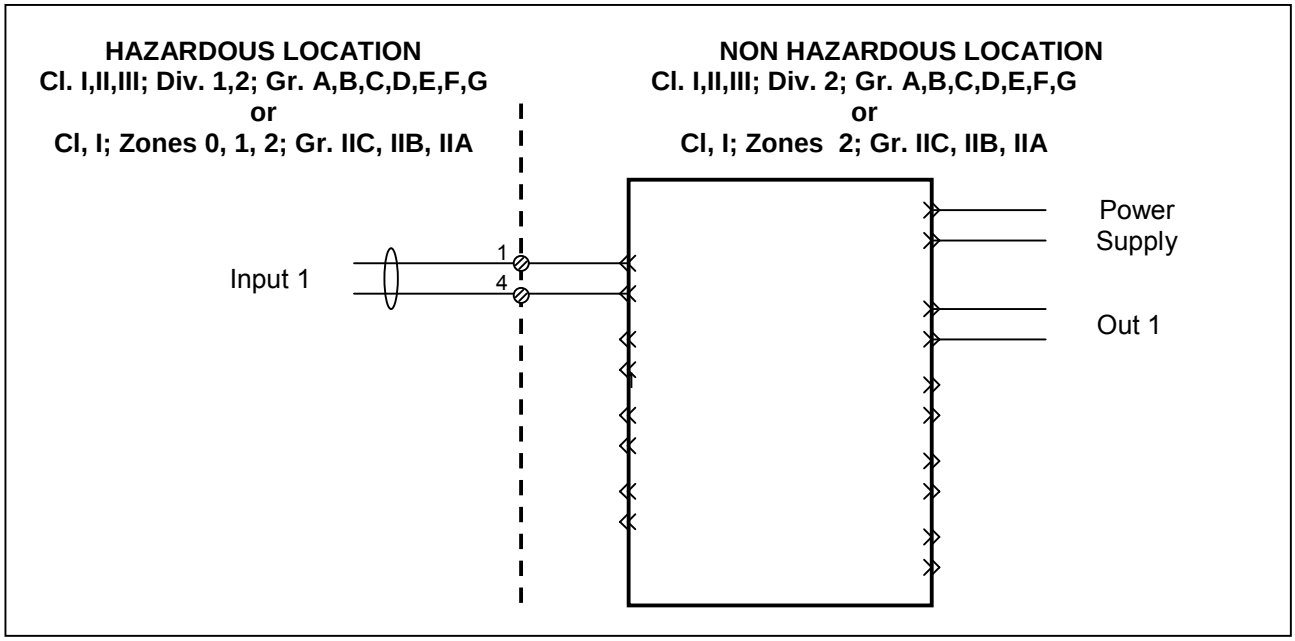

Models	Entity Parameters								
	Haz. Loc. Terminals	Voc / Uo (V)	Isc / Io (mA)	Po (mW)	Gas Groups		Ca / Co (µF)	La / Lo (mH)	NOTE
HiD2025 HiD2025SK HiD2031 HiD2037 HiD2877	1 - 4	26	93	605	A - B	IIC	0.099	4.1	
					C - E	IIB	0.77	16.4	
					D - F - G	IIA	2.6	32.8	
HiD2821	1 - 4	13.2	20	66	A - B	IIC	0.94	88	
					C - E	IIB	5.8	352	
					D - F - G	IIA	21	704	
HiD2873	1 - 4	26	110	715	A - B	IIC	0.099	2.9	
					C - E	IIB	0.77	11.7	
					D - F - G	IIA	2.6	23.5	
HiD2881	1 - 4	26	184	1200	A - B	IIC	N.A.	N.A.	
					C - E	IIB	0.77	4.2	
					D - F - G	IIA	2.6	8.4	

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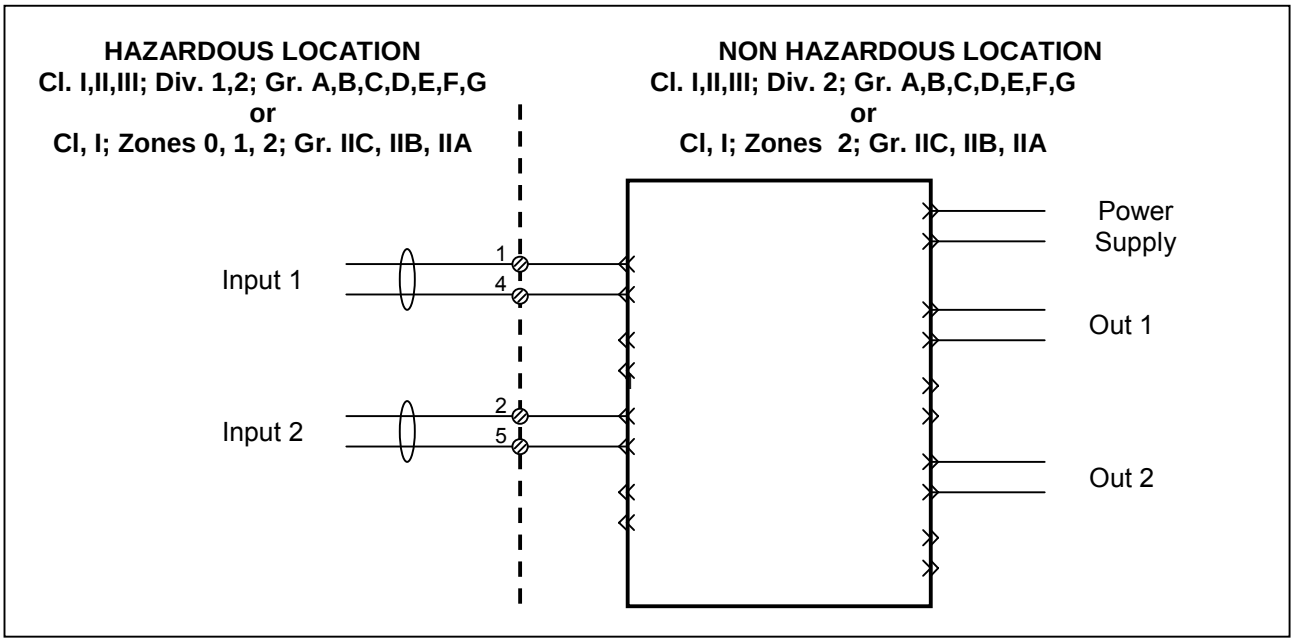

Models	Entity Parameters								
	Haz. Loc. Terminals	Voc / Uo (V)	Isc / Io (mA)	Po (mW)	Gas Groups		Ca / Co (µF)	La / Lo (mH)	NOTE
HiD2026 HiD2026SK HiD2032 HiD2038 HiD2038Y HiD2878	1 - 4 2 - 5	26	93	605	A - B	IIC	0.099	4.1	
					C - E	IIB	0.77	16.4	
					D - F - G	IIA	2.6	32.8	
HiD2822 HiD2842	1 - 4 2 - 5	13.2	20	66	A - B	IIC	0.94	88	
					C - E	IIB	5.8	352	
					D - F - G	IIA	21	704	
HiD2874	1 - 4 2 - 5	26	110	715	A - B	IIC	0.099	2.9	
					C - E	IIB	0.77	11.7	
					D - F - G	IIA	2.6	23.5	

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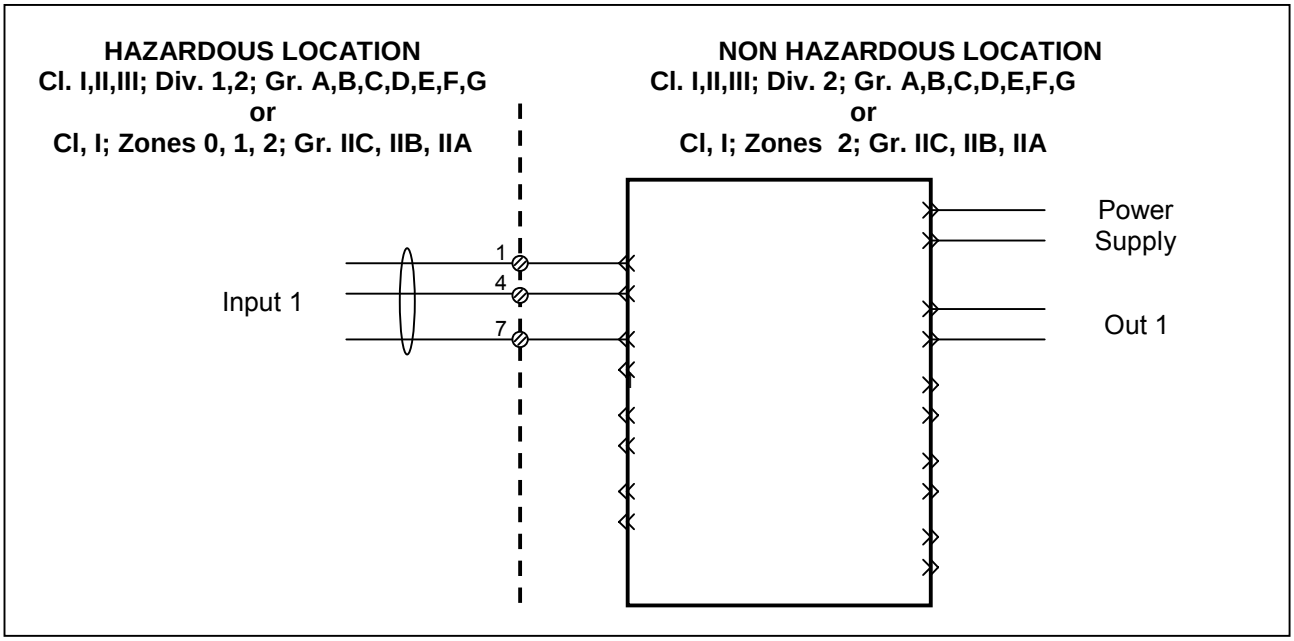
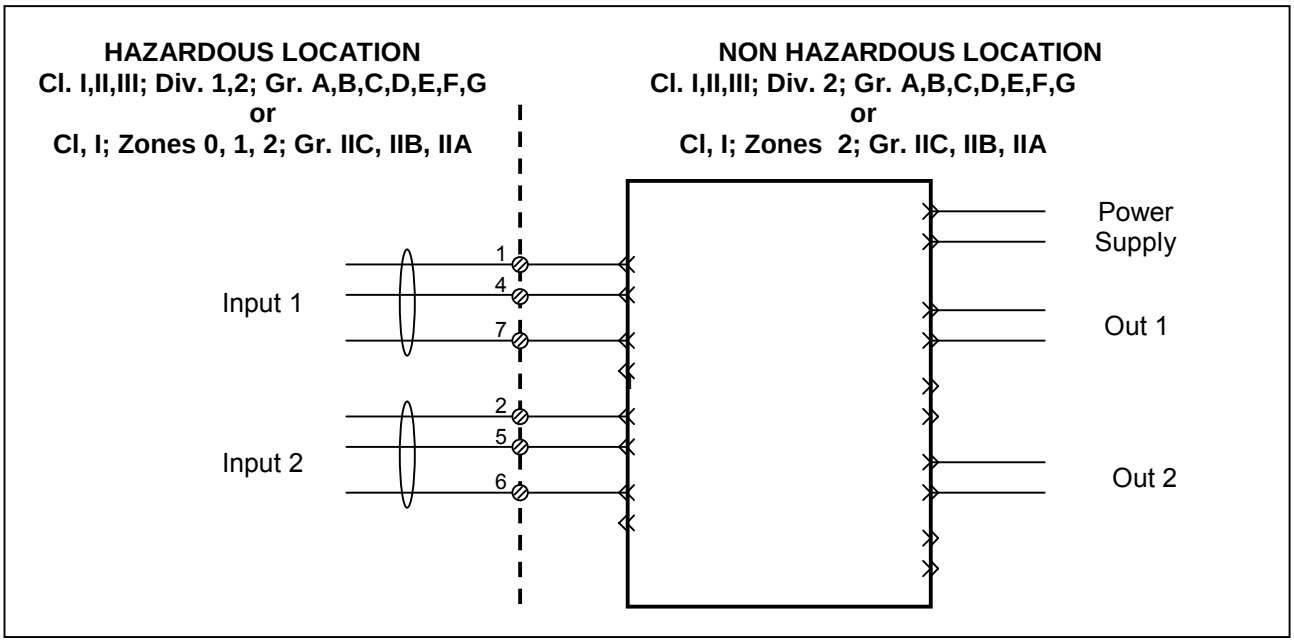


Models	Entity Parameters								
	Haz. Loc. Terminals	Voc / Uo (V)	Isc / Io (mA)	Po (mW)	Gas Groups		Ca / Co (µF)	La / Lo (mH)	NOTE
HiD2029 HiD2029SK	1 - 4	26	93	605	A - B	IIC	0.099	4.1	
					C - E	IIB	0.77	16.4	
					D - F - G	IIA	2.6	32.8	
	4 - 7	1.2	50	15	A - B	IIC	1000	14	
					C - E	IIB	1000	52	
					D - F - G	IIA	1000	110	
	1 - 4 - 7	27.2	143	605	A - B	IIC	0.089	1.43	
					C - E	IIB	0.69	5.72	
					D - F - G	IIA	2.30	11.44	
HiD2871	1 - 4 - 7	26	110	715	A - B	IIC	0.099	2.9	
					C - E	IIB	0.77	11.7	
					D - F - G	IIA	2.6	23.5	
HiD2875	1 - 4 - 7	26	93	605	A - B	IIC	0.099	4.1	
					C - E	IIB	0.77	16.4	
					D - F - G	IIA	2.6	32.8	



Models	Entity Parameters								
	Haz. Loc. Terminals	Voc / Uo (V)	Isc / Io (mA)	Po (mW)	Gas Groups		Ca / Co (µF)	La / Lo (mH)	NOTE
HiD2030 HiD2030SK	1 - 4 2 - 5	26	93	605	A - B	IIC	0.099	4.1	
					C - E	IIB	0.77	16.4	
					D - F - G	IIA	2.6	32.8	
	4 - 7 5 - 6	1.2	50	15	A - B	IIC	1000	14	
					C - E	IIB	1000	52	
					D - F - G	IIA	1000	110	
	1 - 4 - 7 2 - 5 - 6	27.2	143	605	A - B	IIC	0.089	1.43	
					C - E	IIB	0.69	5.72	
					D - F - G	IIA	2.30	11.44	
HiD2872	1 - 4 - 7 2 - 5 - 6	26	110	715	A - B	IIC	0.099	2.9	
					C - E	IIB	0.77	11.7	
					D - F - G	IIA	2.6	23.5	
HiD2876	1 - 4 - 7 2 - 5 - 6	26	93	605	A - B	IIC	0.099	4.1	
					C - E	IIB	0.77	16.4	
					D - F - G	IIA	2.6	32.8	

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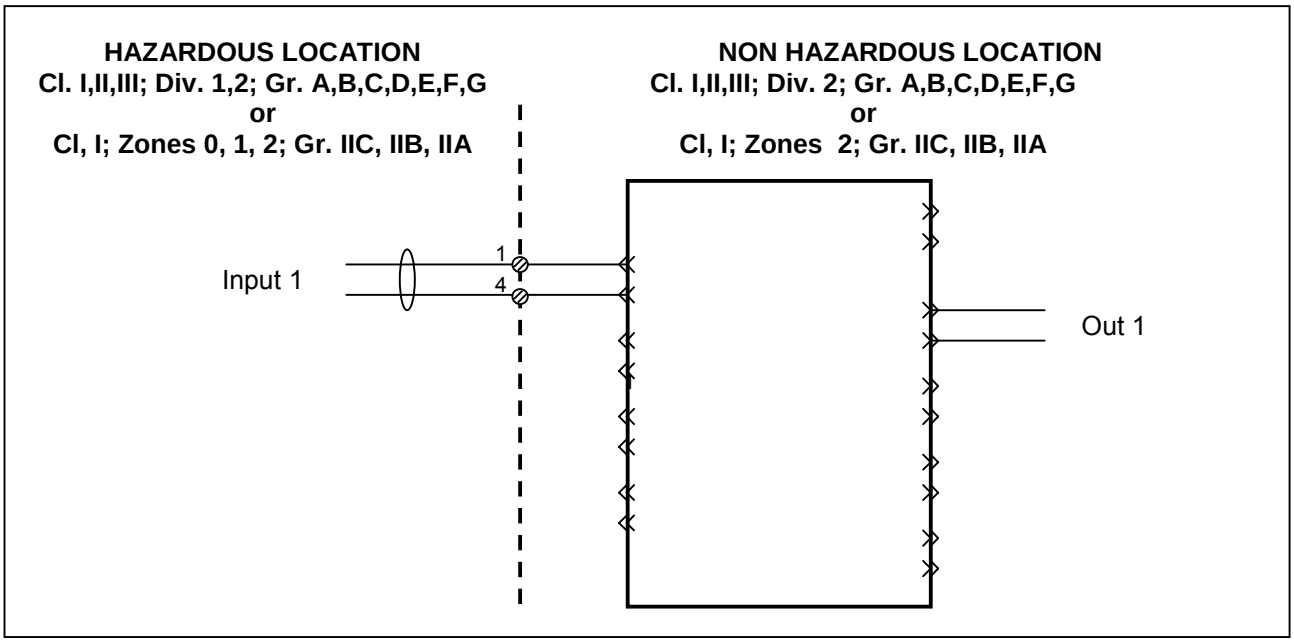
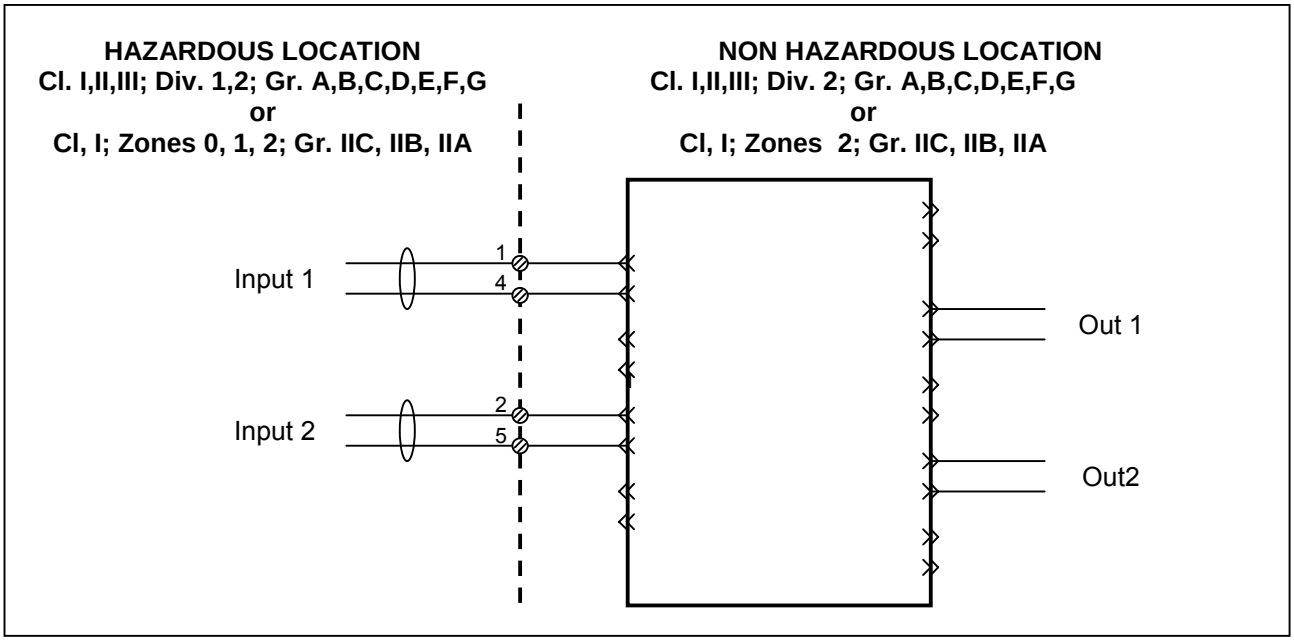
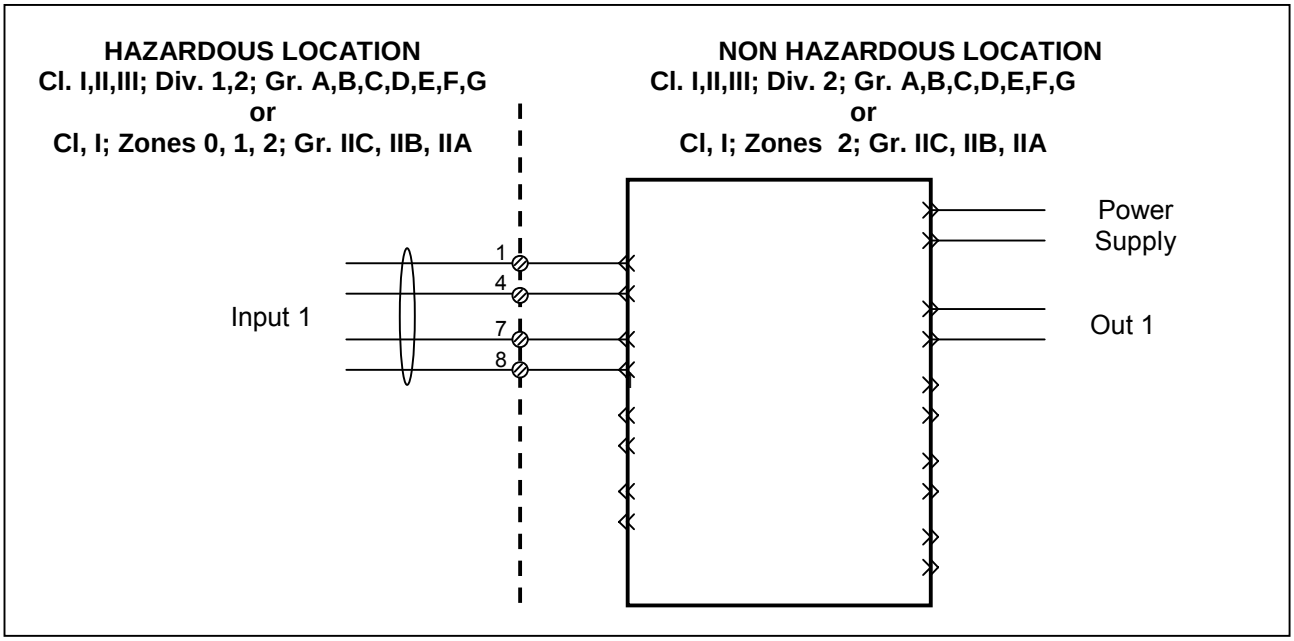


Models	Entity Parameters								
	Haz. Loc. Terminals	Voc / Uo (V)	Isc / Io (mA)	Po (mW)	Gas Groups		Ca / Co (µF)	La / Lo (mH)	NOTE
HiD2033 HiD2035	1 - 4	26	93	605	A - B	IIC	0.099	4.1	
					C - E	IIB	0.77	16.4	
					D - F - G	IIA	2.6	32.8	

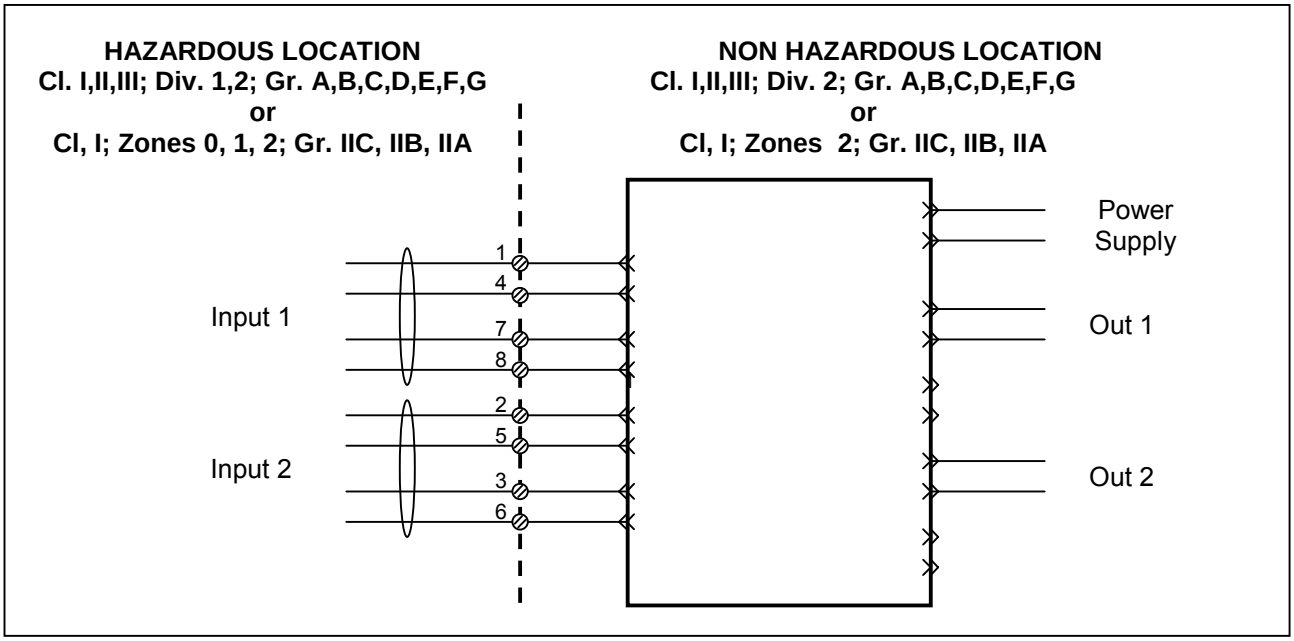
Original seal



Models	Entity Parameters								
	Haz. Loc. Terminals	Voc / Uo (V)	Isc / Io (mA)	Po (mW)	Gas Groups		Ca / Co (µF)	La / Lo (mH)	Haz. Loc. Terminals
HiD2034 HiD2036	1 - 4 2 - 5	26	93	605	A - B	IIC	0.099	4.1	
					C - E	IIB	0.77	16.4	
					D - F - G	IIA	2.6	32.8	



Models	Entity Parameters								
	Haz. Loc. Terminals	Voc / Uo (V)	Isc / Io (mA)	Po (mW)	Gas Groups		Ca / Co (µF)	La / Lo (mH)	NOTE
HiD2061 HiD2071 HiD2071YA4	1 - 4 - 7 - 8	13.2	20	66	A - B	IIC	0.94	88	
					C - E	IIB	5.8	352	
					D - F - G	IIA	21	704	



Models	Entity Parameters								
	Haz. Loc. Terminals	Voc / Uo (V)	Isc / Io (mA)	Po (mW)	Gas Groups		Ca / Co (µF)	La / Lo (mH)	NOTE
HiD2062 HiD2072 HiD2072YA4	1 - 4 - 7 - 8 2 - 5 - 3 - 6	13.2	20	66	A - B	IIC	0.94	88	
					C - E	IIB	5.8	352	
					D - F - G	IIA	21	704	

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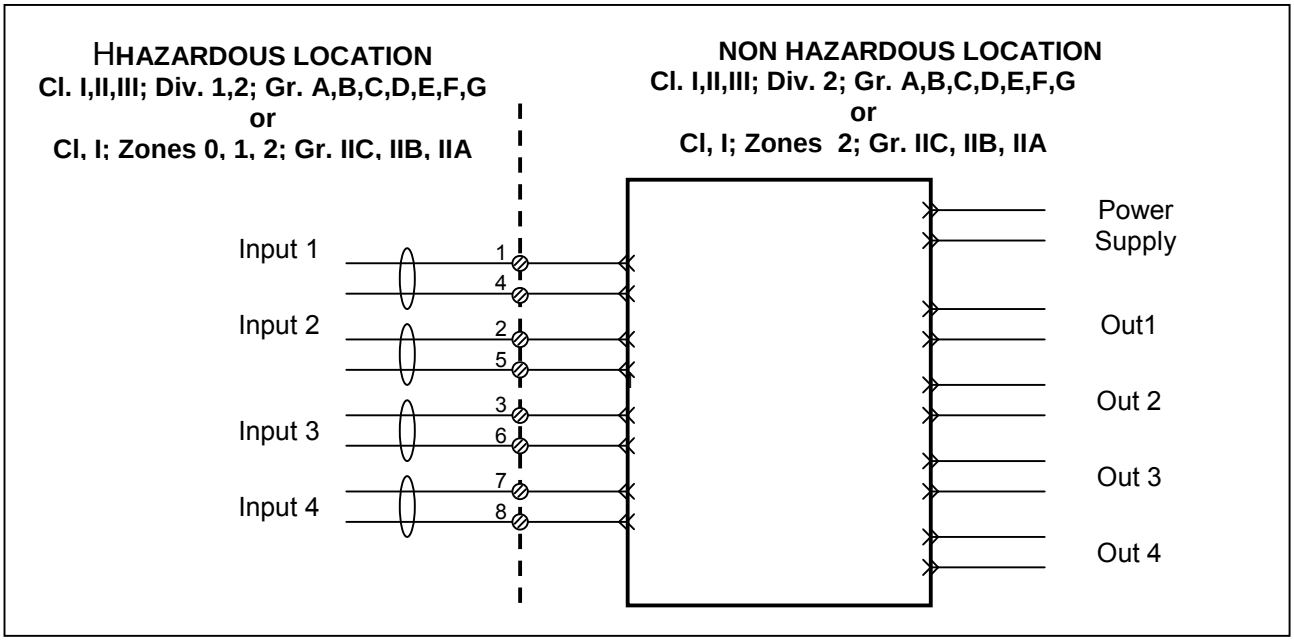

Models	Entity Parameters								
	Haz. Loc. Terminals	Voc / Uo (V)	Isc / Io (mA)	Po (mW)	Gas Groups		Ca / Co (µF)	La / Lo (mH)	NOTE
HiD2824 HiD2844	1 - 4 2 - 5 3 - 6 7 - 8	13.2	20	66	A - B	IIC	0.94	88	
					C - E	IIB	5.8	352	
					D - F - G	IIA	21	704	

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