



ELCON HiD 2000 / ABB S800

Introduction

- The Intrinsic Safety (I.S.) interface termination boards (TB) listed here are designed to connect with ABB S800 I/O blocks mounted on enhanced MTUs (which have a sub-“D” socket for field cable connection) and provide I.S. isolation and protection through the modules of the Elcon Series HiD2000. The TB connectors link with the enhanced MTUs by standard Elcon cables.
- The connections to/from the hazardous area can be made with standard screw-clamp terminals (.../HAT/...), or loop-disconnect terminals (.../HAKE/...). The latter, HAKE, can only be used for normal 2 channel module boards, not 4 channel or temperature inputs.
- The 24 V dc power supply is connected to two plug-in terminals (Dual Power Feeds, Diode “ORed”) and then bussed to the isolators by the termination board. If required, power is also routed to operate the field circuits of the I/O cards.
- For all basic characteristics, functions and installation information please refer to the standard Series HiD2000 instructions manuals: Termination Board User Instruction Manual” PN991190 - Module User Instruction Manual, PN991169.

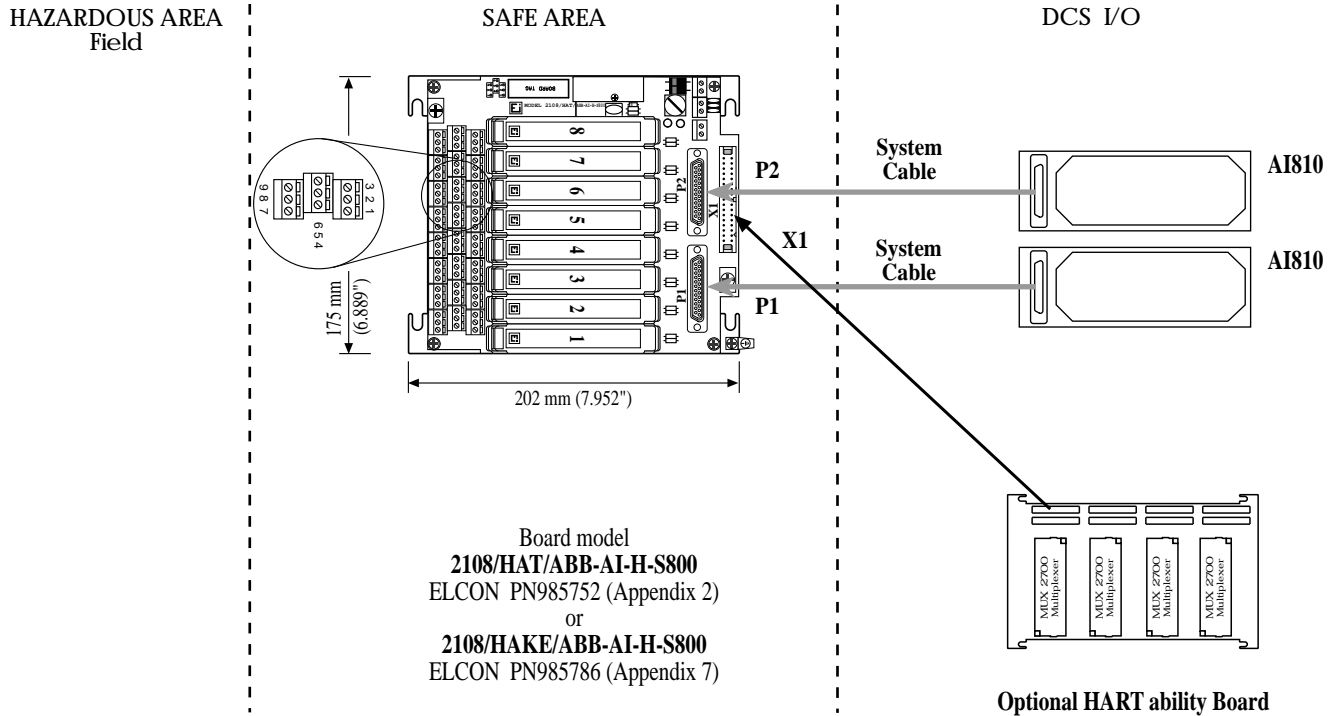
MODEL LIST & APPLICATIONS

Application	Ch. / Function	DCS I/O Cards	T.B. Model	Section	Page
Analogue Input	16 AI	AI810 (2 off) – 8 ch. each	2108/HAT/ABB-AI-H-S800	1	1.1
	32 AI	AI810 (4 off) – 16 ch. each	2116/HAT/ABB-AI-HART-S800	1	1.2
Analogue Output	16 AO	AO810 (2 off) – 8 ch. each	2108/HAT/ABB-AO-H-S800	2	2.1
Digital Input	32 DI	DI810 (2 off) – 16 ch. each	2108/HAT/ABB-DI-S800	3	3.1
Digital Output	16 DO	DO810 – 16 ch. each	2108/HAT/ABB-DO-S800	4	4.1

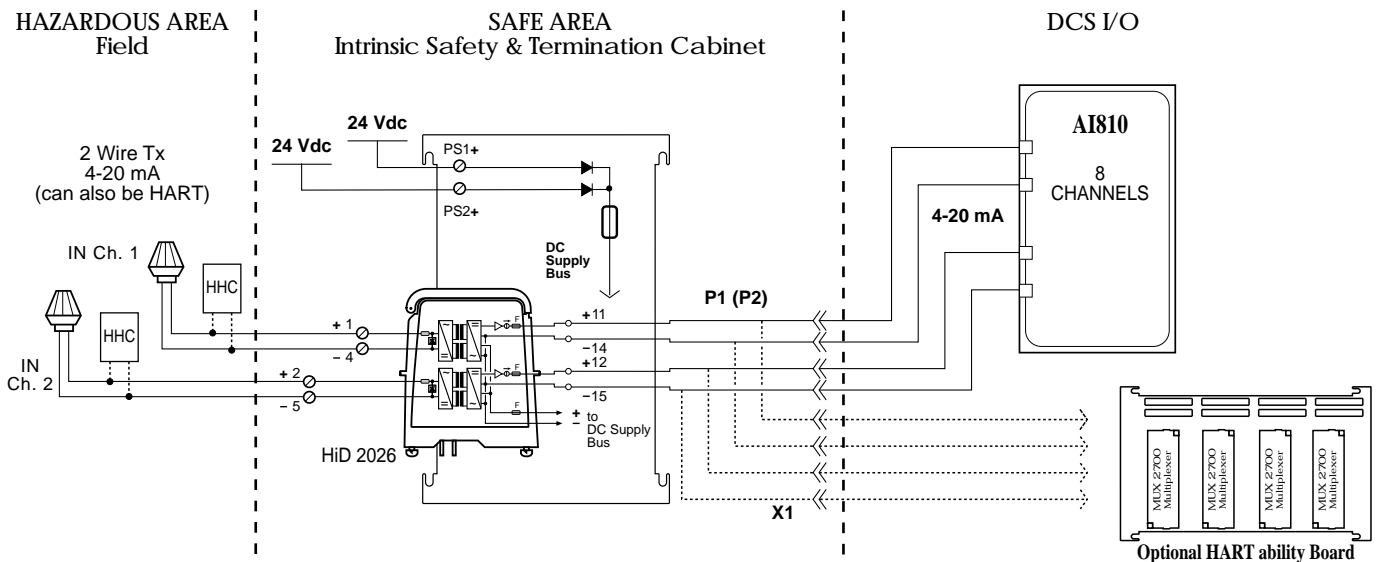
Appendix	Description
1 • LY-985751	Layout board HiD 2000 model 2108/HAT/ABB-AO-H-S800
2 • LY-985752	Layout board HiD 2000 model 2108/HAT/ABB-AI-H-S800
3 • LY-985753	Layout board HiD 2000 model 2108/HAT/ABB-DI-S800
4 • LY-985783	Layout board HiD 2000 model 2108/HAT/ABB-DO-S800
5 • LY-985784	Layout board HiD 2000 model 2108/HAKE/ABB-DO-S800
6 • LY-985785	Layout board HiD 2000 model 2108/HAKE/ABB-AO-H-S800
7 • LY-985786	Layout board HiD 2000 model 2108/HAKE/ABB-AI-H-S800
8 • LY-985858	Layout board HiD 2000 model 2116/HAT/ABB-AI-HART-S800
9 • LY-985861	Layout board HiD 2000 model 2116/HAKE/ABB-AI-H-S800

ELCON HiD2000 / ABB S800 ANALOGUE INPUTS - 16AI

CONNECTION ARCHITECTURE



LOOP-DIAGRAM



NOTES

• **Module type:**

positions 1 to 8 are for 2 channel analogue input models configured for 4-20 mA Out; HiD2026, HiD2030*, HiD2062*, HiD2072* (* indicates not for use with /HAKE/ hazardous terminals).

• **Cable used:**

Elcon, part number 930106A/1, 3 metre and 930114A 20 cm. For MUX connections use ELCON cables PN 803162 (30 cm length) PN 803178 (50 cm length) PN 803179 (180 cm length).

• **Connector type:**

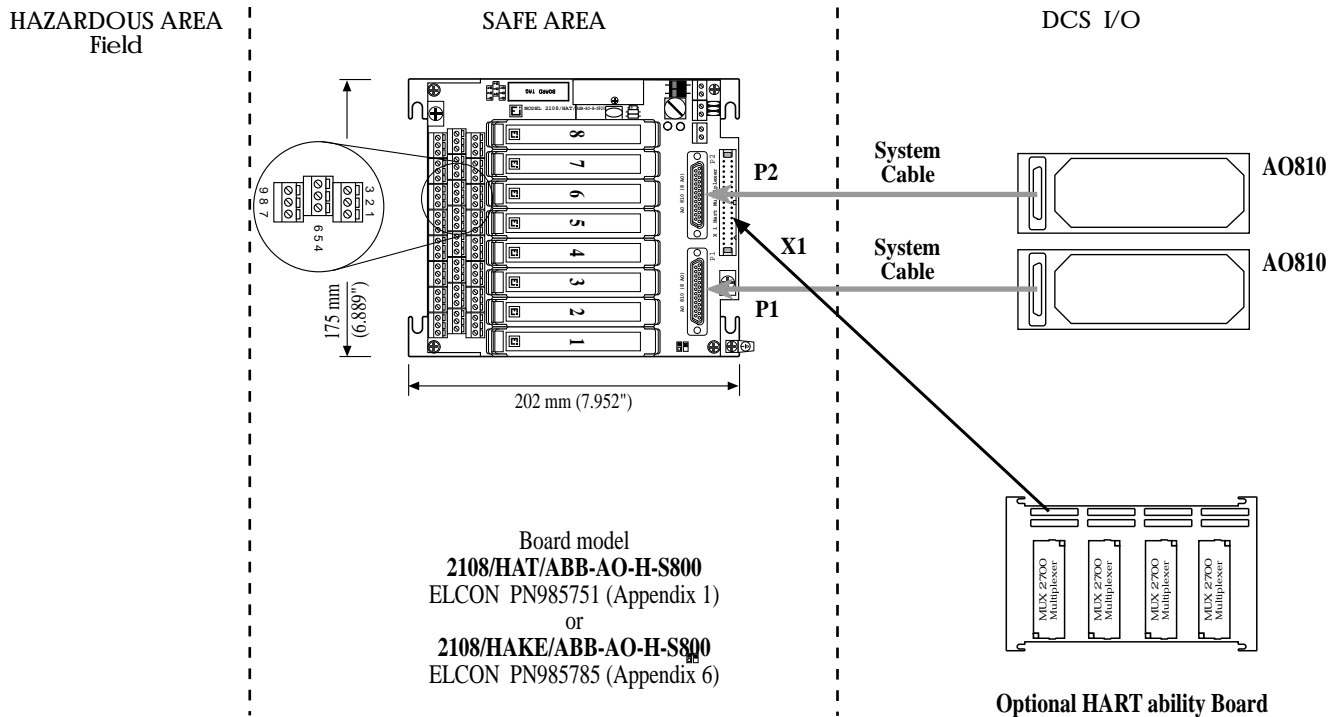
P1 & P2: 25 way sub "D" female.
 X1: 34 way ribbon cable header.

• **Capacity:**

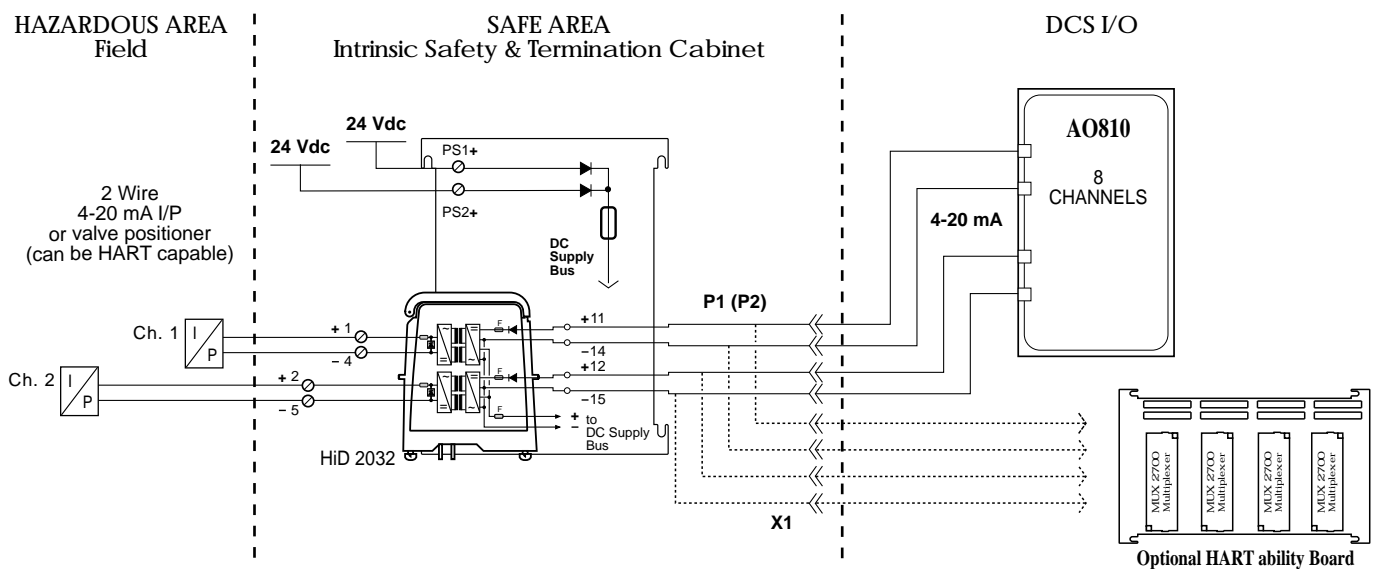
The terminal board supports connection to two AI810 blocks, i.e. 8 + 8 input channels, 16 channels total, and a connector is provided for feeding the signals to an optional Hart multiplexer.

ELCON HiD2000 / ABB S800 ANALOGUE OUTPUT - 16AO

CONNECTION ARCHITECTURE



LOOP-DIAGRAM

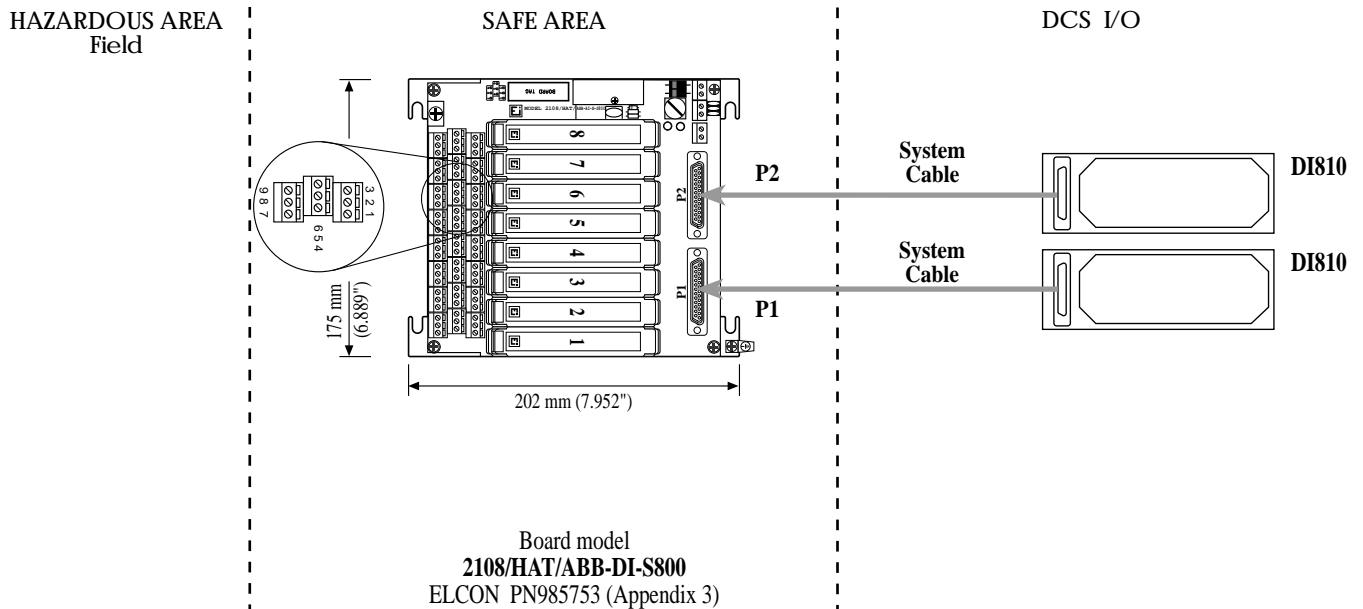


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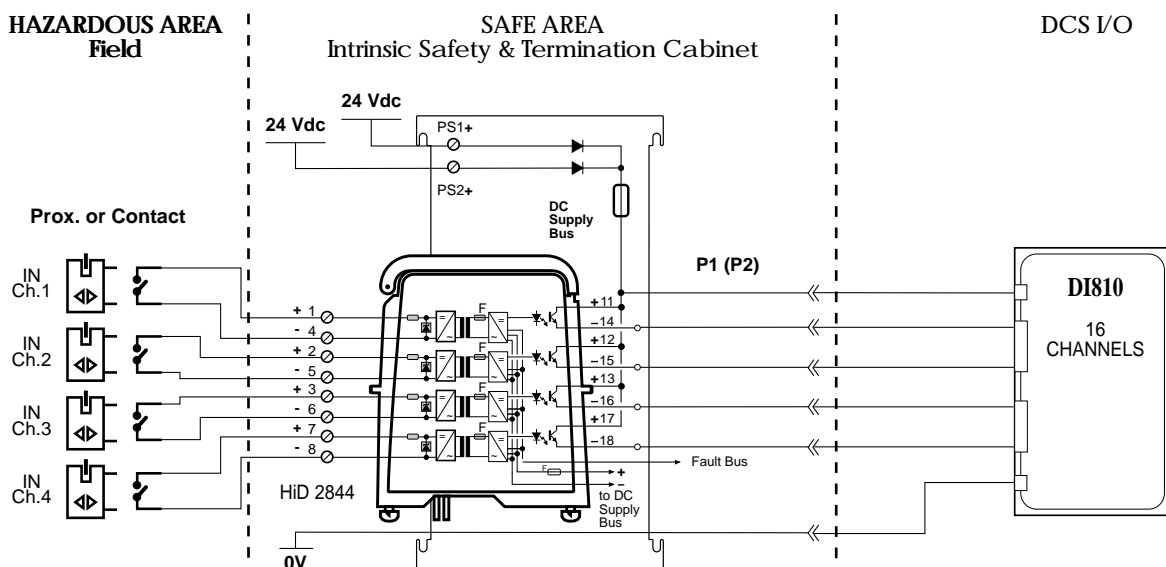
- Module type:**
positions 1 to 8 are for 2 channel analogue output models; HiD2032, HiD2034, HiD2038.
- Cable used:**
Elcon, part number 930106A/1, 3 metre and 930114A, 20 cm.
For MUX connections use ELCON cables PN 803162 (30 cm length)
PN 803178 (50 cm length)
PN 803179 (180 cm length).
- Connector type:**
P1 & P2: 25 way sub "D" female.
X1: 34 way ribbon cable header.
- Capacity:**
the terminal board supports connection to two AO810 blocks, i.e. 8 + 8 output channels, 16 channels total, and a connector is provided for feeding the signals to an optional Hart multiplexer.

ELCON HiD2000 / ABB S800 DIGITAL INPUT - 32DI

CONNECTION ARCHITECTURE



LOOP-DIAGRAM

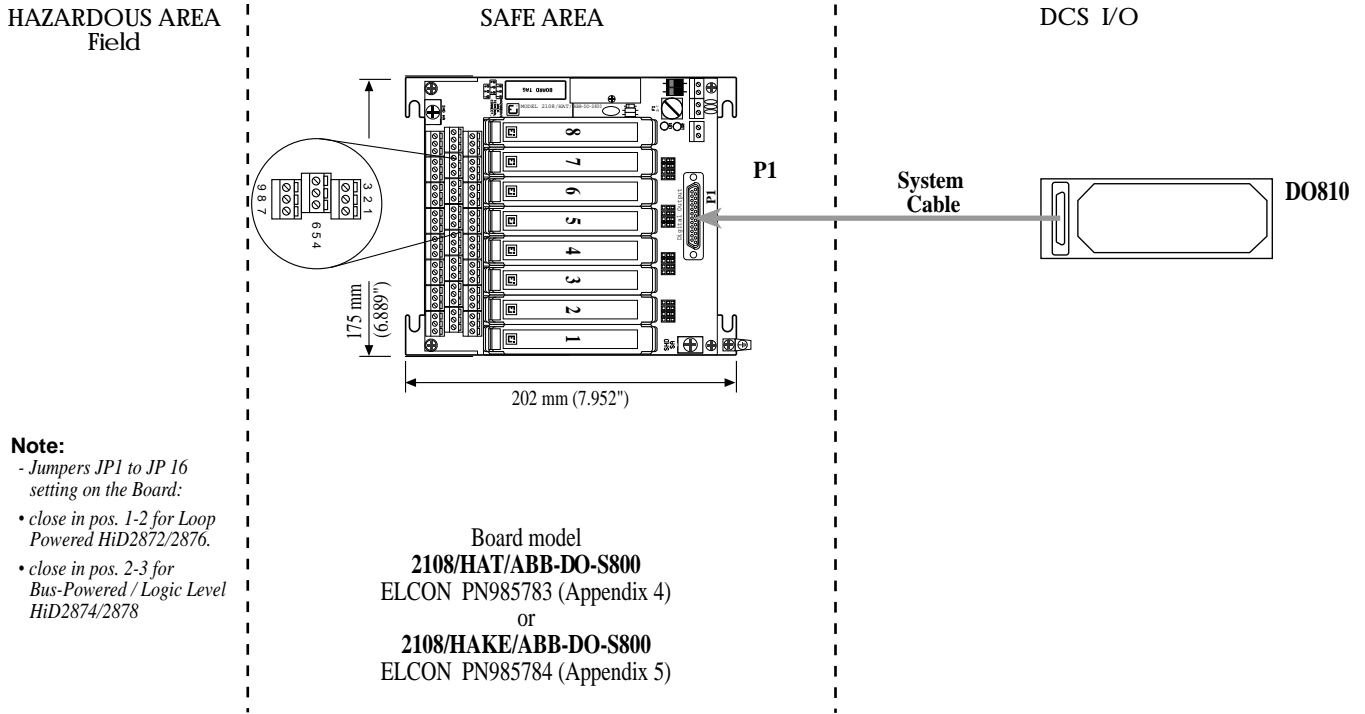


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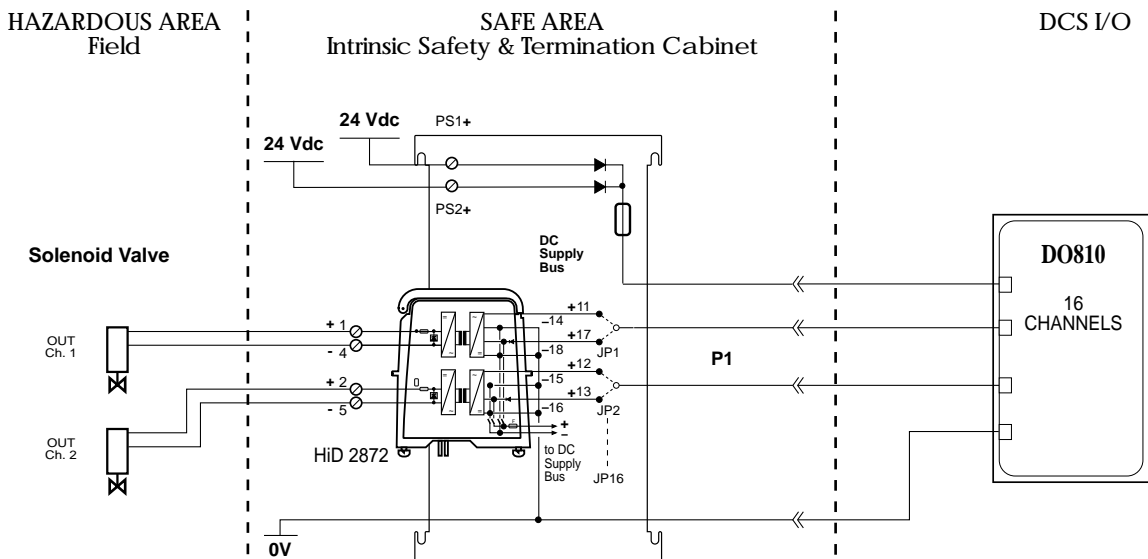
- **Module type:**
positions 1 to 8 are for 4 channel digital input models; HiD2844 and HiD2824.
- **Connector type:**
P1 & P2: 25 way sub "D" female.
- **Capacity:**
the terminal board supports connection to two DI810 blocks, i.e. 16 + 16 input channels, 32 channels total.
- **Cable used:**
Elcon, part number 930106A/1, 3 metre and 930114A 20 cm.

ELCON HiD2000 / ABB S800 DIGITAL OUTPUT - 16DO

CONNECTION ARCHITECTURE



LOOP-DIAGRAM



NOTES

- **Module type:**
positions 1 to 8 are for 2 channel digital output models; HiD2872, HiD2874, HiD2876, HiD2878.
- **Connector type:**
P1: 25 way sub "D" female.
- **Capacity:**
the terminal board supports connection to one DO810 block, i.e. 16 output channels.
- **Cable used:**
Elcon, part number 930106A/1, 3 metre and 930114A, 20 cm.