

I/O Card	I/O Card Keying	Traditional I/O Terminal Blocks	Mass Termination Blocks
DO, 8-Channel, 24V DC, Isolated	B5	I/O terminal block Fused terminal block	16-pin Mass termination block
DO Plus, 32-Channel, 24V DC High-Side	B4	32-Channel DO terminal block for Series 2 Plus Redundant 32-Channel DO terminal block for Series 2 Plus	40-pin DO Mass termination block for Series 2 Plus Redundant 40-pin DO Mass termination block for Series 2 Plus
DI, 8-Channel, 120V AC, Dry Contact	E1	I/O terminal block Fused terminal block	NA
DI, 8-Channel, 120V AC, Isolated	E4	I/O terminal block Fused terminal block	NA
DO, 8-Channel, 120V AC/ 230V AC, High-Side	F1	I/O terminal block Fused terminal block	NA
DO, 8-Channel, 120V AC/ 230V AC, Isolated	F4	I/O terminal block Fused terminal block	NA

System Compatibility

M-series traditional I/O hardware requires:

- MQ, MX or PK controllers.
- M-series horizontal or VerticalPlus carriers.

S-series and M-series controllers can be installed on the same DeltaV Area Control Network in v11.3.1 and beyond. Control modules can be assigned to any controller and inter-controller references are fully supported.

The following traditional I/O Plus cards require v13.3.1 or higher Software:

- AI Plus, 4-20 mA HART, 16 Channels.
- AO Plus, 4-20 mA HART, 16 Channels.
- DI Plus, 32-channel, 24V DC Dry contact.
- DO Plus, 32-channel, 24V DC High-Side.

Termination Fault Detection is a feature that only works within the following cards:

- DI Plus, 32-channel, 24V DC Dry contact.
- DO Plus, 32-channel, 24V DC High-Side.

when used with the redundant 40-pin Mass DI or DO Terminal Block combined with the M-series Mass Connection Solutions or P+F HiC IS barriers and termination boards for DeltaV DCS.

All other approved third party mass termination products may be used with both non Plus S-series and M-series I/O interfaces.

M-series traditional I/O horizontal carriers are not physically compatible with S-series horizontal controller carriers. Install M-series I/O interfaces with M-series controllers and S-series I/O interfaces with S-series controllers.

Certifications

The following certifications are available for M-series Traditional I/O (see actual certificates for exact certifications for each product):

- **CE**
EMC: EN 61326-1
- **FM**
FM 3600
FM 3611
- **CSA**
CSA C22.2 No. 213
CSA C22.2 No. 1010-1
- **ATEX**
EN60079-0
IEC60079-7
EN60079-15
- **IEC-Ex**
IEC60079-0
IEC60079-7
IEC60079-15
- **Marine Certifications: IACS E10**
ABS Certificate of Design Assessment
DNV Marine Certificate

Hazardous Area/Location

M-series Traditional I/O Cards can be installed and used based on the following standards (see actual certificates for exact product markings for each product):

- **FM (USA)**
Class I, Division 2, Groups A, B, C, D, T4
- **cFM (Canada)**
Class I, Division 2, Groups A, B, C, D, T4
- **ATEX**
II 3G Ex ec IIC T4 Gc
II 3G Ex ec [ic] IIC T4 Gc
II 3G Ex nA nC IIC T4 Gc
- **IEC-Ex**
II 3G Ex ec IIC T4 Gc
II 3G Ex ec ic IIC T4 Gc
II 3G Ex nA nC IIC T4 Gc

*Regarding the Installation instructions please refer to the following Documents:
Class 1 Division 2 Installation Instructions DeltaV M-series 12P1293
Zone 2 Installation Instructions DeltaV M-series 12P2046*

Ordering Information

Analog Input Cards and Termination Blocks	
Description	Model Number
8 Channels 4-20 mA, HART	
Standard I/O Termination Block	VE4003S2B1 **
Redundant Standard I/O Termination Block	VE4033S2B1 **
Fused I/O Termination Block	VE4003S2B2 **
4-wire I/O Termination Block	VE4003S2B3 **
16-Pin Mass Termination Block	VE4003S2B4 **
24-Pin Mass Termination Block	VE4003S2B5 **
16 Channels 4-20 ma, HART, Plus Card	
16-Channel 2-Wire AI Terminal Block for Series 2 Plus	VE4003S2B9
16-Channel 4-Wire AI Terminal Block for Series 2 Plus	VE4003S2B10
Redundant 16-Channel 2- & 4-Wire AI Terminal Block for Series 2 Plus	VE4033S2B10
48-pin AI Mass Termination Block for Series 2 Plus (to be used with DeltaV Signal Conditioning Cards for PLC-5 AI, or P+F HiC IS barriers and terminal boards for DeltaV DCS)	VE4003S2B11
48-pin AI Mass Termination Block for Series 2 Plus including 16-channel Analog Mass Connection Boards*	VE4053S2B11
Redundant 48-pin AI Mass Termination Block for Series 2 Plus (to be used with DeltaV Signal Conditioning Cards for PLC-5 AI, or P+F HiC IS barriers and terminal boards for DeltaV DCS)	VE4033S2B11
Redundant 48-pin AI Mass Termination Block for Series 2 Plus including 16-channel Analog Mass Connection Boards*	VE4083S2B11
8 Channels Thermocouple, mV	
Standard I/O Termination Block	VE4003S4B1
Cold Junction Compensated (CJC) Termination Block	VE4003S5B1
Analog Input Card: 8 Channels RTD	
Resistant Temperature Device (RTD) Termination Block	VE4003S6B1
Isolated Input Card	
Isolated Input Terminal Block	VE4003S7B1

*For more details on the Mass Connection Boards and connection cables, please refer to the M-series Mass Connection Solutions PDS.

**Supported on DeltaV v10.3.1 and later. DNV Marine Certification pending. If DNV certification is required or card will be used on earlier DeltaV versions, please request KJ3222X1-BA2.