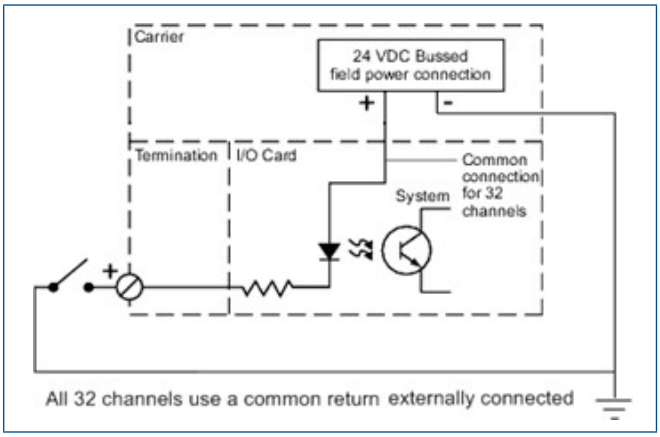
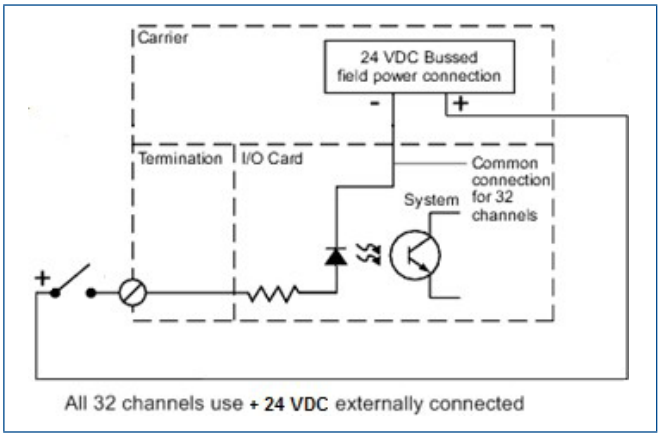
Model	Ref. Fig. 1	Description	Removal or Insertion with System Power Energized	Key Pos.	Field Circuit Class For Definitions please refer to Item 10.
KJ3001X1 - CA1	G	DI Card, 32 Ch. 24VDC, Dry Contact (0°C to +60°C)	YES[1,2]	B 3	NON-SPARKING
KJ3001X1 - CB1	G	DO Card, 32 Ch. 24VDC, High Side (0°C to +60°C)	YES[1,2]	B 4	NON-SPARKING
KJ3002X1 - BA1	G	AI Card, 8 Ch., 4-20mA., HART (0°C to +60°C) 2-Wire	YES[1]	A 1	Energy limited field circuits Uo = 28.7V, Io = 33mA, Po = 607mW Co=.17uF, Lo=11mH
		4-Wire	YES[1,2]		NON-SPARKING
KJ3002X1 – BF1	G	RTD Card 8 Ch. (0°C to +60°C)	YES[1]	C 1	Energy limited field circuits Uo = 5.5, Io = 0.6mA/Ch, 4.8 mA/Card Po = 0.4mW Co=1000µF, Lo=1000mH
KJ3002X1 - BG2	G	Thermocouple Card 8 Ch. (0°C to +60°C)	YES[1]	C 1	Energy limited field circuits Uo = 5.5, Io = 0.3mA/Ch, 0.3 mA/Card Po = 0.8mW Co=1000µF, Lo=1000mH
KJ3003X1 - BA1	H	Serial Interface Card (0°C to +60°C)	NO	D 4	NON-SPARKING
KJ3003X1 - EA1	C	Serial Interface Terminal Block	N/A		N/A
KJ3004X1 - BA1	H	Fieldbus H1 Card (0°C to +60°C)	NO	D 6	NON-SPARKING
KJ3004X1 - EA1	C	Fieldbus H1 Card Terminal Block	N/A		N/A
KJ3005X1 - BA1	H	Actuator-Sensor Interface Card (0°C to +60°C)	NO	D 1	NON-SPARKING
KJ3006X1 - BA1	H	Multifunction Card (0°C to +60°C)	NO	C 6	NON-SPARKING
KJ3007X1 - BA1	H	Profibus DP Card (0°C to +55°C)	NO	D 3	NON-SPARKING
KJ3007X1 - EA1	C	Profibus Terminal Block	N/A		N/A
KJ3008X1 - BA1	G	Sequence Of Events Card (0°C to +60°C)	YES[1,2]	C 5	NON-SPARKING
KJ3009X1 - BA1	H	DeviceNet Card (0°C to +55°C)	NO	D 5	NON-SPARKING
KJ3201X1 - BA1	G	Discrete Input Card, Series-2, 24VDC Dry Contact Note, This card's field power may be lowered to a nominal 12VDC.	YES[1]	B 1	Energy limited field circuits Uo = 18V, Io = 3.6mA, Po = 16mW Co=.7uF, Lo=1000mH Uo = 12.6V, Io = 2.5mA, Po = 8mW Co =3.4uF, Lo =1000mH
KJ3201X1 - EA1	C	Redundant Discrete Terminal Block	N/A		N/A
KJ3202X1 - BA1	G	Discrete Output Card, Series-2, 24VDC High-side	YES[1,2]	B 6	NON-SPARKING
KJ3203X1 - BA1	G	DI Card, 32 Ch. 24VDC, Dry Contact, Series-2	YES[1,2]	B 3	NON-SPARKING
KJ3204X1 - BA1	G	DO Card, 32 Ch. 24VDC, High Side, Series-2	YES[1,2]	B 4	NON-SPARKING
KJ3206X1 - BA1	G	DI Card, 8 Ch. 24VDC, Isolated, Series-2	YES[1,2]	B 2	NON-SPARKING
KJ3208X1 - BA1	G	DO Card, 8 Ch. 24VDC, Isolated, Series-2	YES[1,2]	B 5	NON-SPARKING
KJ3211X1 - BA1	G	Sequence of Events Card, Series-2	YES[1,2]	C 5	NON-SPARKING
KJ3212X1 - BA1	H	Multifunction Card, Series-2	NO	C 6	NON-SPARKING
KJ3221X1 - BA1	G	Analog Output Card with HART, Series-2	YES[1]	A 4	Energy limited field circuits Uo = 28.7V, Io = 33mA, Po = 607mW Co=.17uF, Lo=11mH
KJ3221X1 - EA1	C	Redundant Analog Output Terminal Block	N/A		N/A

Specifications for DI Card, 32-channel, 24V DC, Dry Contact	
Number of Channels	32
Isolation	Each channel is optically isolated from the system and factory tested to 1500V DC
Detection Level for On	>2 mA
Detection Level for Off	<0.25 mA
Input Impedance	5K ohm (approximate)
LocalBus Current (12V DC nominal) per Card	50 mA typical, 75 mA maximum
Field Circuit Power per Card	150 mA at 24V DC
Return	Uses common return
Terminal Block	32-screw termination block
Specifications for DI (Plus) Card, 32-channel, 24V DC, Dry Contact	
Number of Channels	32
Detection Level for On	>2 mA
Detection Level for Off	<0.25 mA
Input Impedance	5K ohm (approximate)
Wetting Voltage	24V DC
Local Bus Current (12V DC Nominal)	50 mA typical, 75 mA maximum
Field Circuit Power per Card	150 mA maximum @ 24V DC (+20%/-15%)
Isolation	Each channel is optically isolated from the system and factory tested to 1500V DC



Simplified Circuit and Connection Diagram for DI Card, 32-channel, 24V DC, Dry Contact.



Simplified Circuit and Connection Diagram for Simplex DI Plus Card, 32-channel, 24V DC, Dry Contact.

Discrete Input Cards and Termination Blocks	
Description	**Model Number**
Discrete Input Card: 8 Channels, 24V DC, Isolated	
Standard I/O Termination Block	VE4001S2T1B1
Fused I/O Termination Block	VE4001S2T1B2
16-Pin Mass Termination Block	VE4001S2T1B3
Discrete Input Card: 8 Channels, 24V DC, Dry Contact	
Standard I/O Termination Block	VE4001S2T2B1
Redundant Standard I/O Termination Block	VE4031S2T2B1
Fused I/O Termination Block	VE4001S2T2B2
16-Pin Mass Termination Block	VE4001S2T2B3
Discrete Input Card: 32 Channels, 24V DC, Dry Contact	
Standard Termination Block	VE4001S2T2B4
40-pin Mass Termination Block	VE4001S2T2B5
Discrete Input Plus Card: 32 Channels, 24V DC, Dry Contact	
32-Channel DI Terminal Block for Series 2 Plus	VE4001S2T2B6
Redundant32-Channel DI Terminal Block for Series 2 Plus	VE4031S2T2B6
40-pin DI Mass Termination Block for Series 2 Plus (to be used with DeltaV Signal Conditioning Cards for PLC-5 DI, or P+F HiC IS barriers and terminal boards for DeltaV DCS)	VE4001S2T2B7
40-pin DI Mass Termination Block for Series 2 Plus including 2 x 16-channel DI Plus Mass Connection Boards*	VE4051S2T2B7
Redundant 40-pin DI Mass Termination Block for Series 2 Plus (to be used with DeltaV Signal Conditioning Cards for PLC-5 DI, or P+F HiC IS barriers and terminal boards for DeltaV DCS)	VE4031S2T2B7
Redundant 40-pin DI Mass Termination Block for Series 2 Plus including 2 x 16-channel DI Plus Mass Connection Boards*	VE4081S2T2B7
Discrete Input Card: 8 Channels, 120V AC, Isolated	
Standard I/O Termination Block	VE4001S3T1B1
Fused I/O Termination Block	VE4001S3T1B2
Discrete Input Card: 8 Channels, 120V AC, Dry Contact	
Standard I/O Termination Block	VE4001S3T2B1
Fused I/O Termination Block	VE4001S3T2B2
Pulse Count Input Card: 4-Channels, 24V DC, Dry Contact	
Discrete 32 Channel Terminal Block	VE4015
Sequence of Event Input Card: 16 Channels, 24V DC Dry Contact	
Discrete 32-Channel Terminal Block	VE4001S5T2B4
40-pin Mass Terminal Block	VE4001S5T2B5

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

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