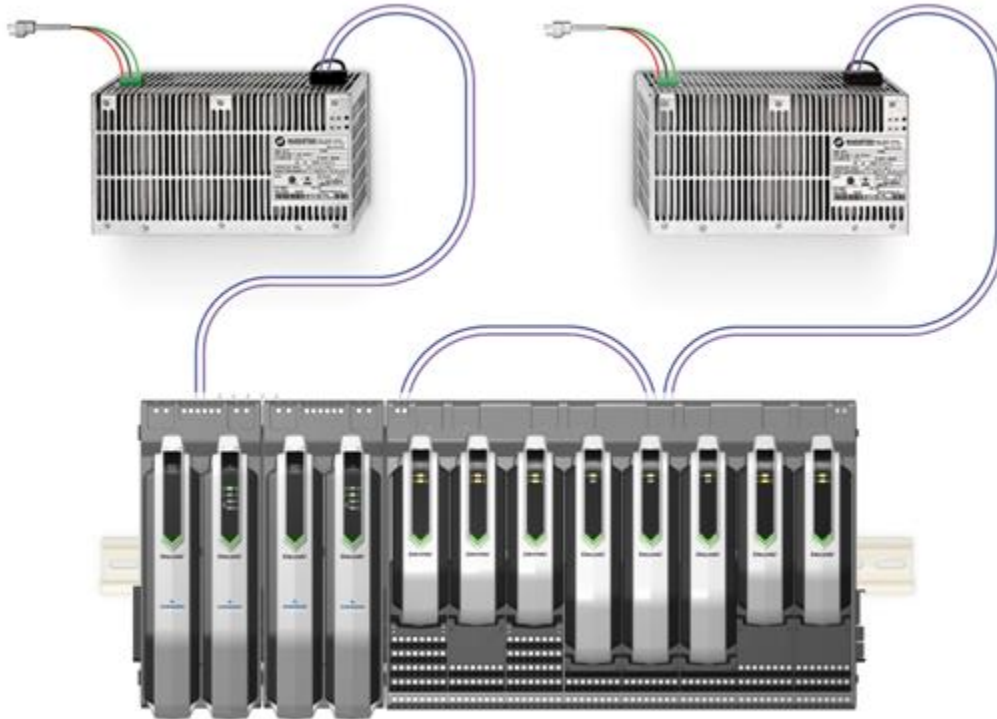


DeltaV Bulk Power Supply



Bulk Power Supply illustrating wiring connections.

- Easy to use
- Flexible and cost-effective

Introduction

Power—your system won't operate without it. DeltaV power supplies offer you the *most efficient and reliable power solution* for your money. The DeltaV power supply suite provides power to the system electronics and to the field. This is all the power required for your DeltaV system.



Benefits

Easy to use. The Bulk Power Supplies provide reliable 12 and 24 VDC power for your DeltaV system power and bussed field power needs. They mount easily onto a T-type DIN rail—*easy!*

Flexible and cost-effective. The Bulk Power Supplies' built in load-sharing capabilities enable you to add more power or provide power redundancy to your system.

AC to 24 VDC Bulk Power Supply

The 24 V Bulk Power Supply provides a centralized power supply and distributes power to system power supplies and also can provide power for field devices. The DeltaV Bulk AC to 24 VDC Power Supply comes in a 300 W version. It converts 120/230 VAC power to 24 VDC power. The 24 VDC power provides power to the field devices via power distribution.

Description	DIN-rail Mounted Bulk AC to 24 VDC Power Supply Specifications
AC input	120/230 VAC nominal, 90 VAC to 264 VAC range, 47 Hz to 63 Hz, single-phase
Output power rating 60°C	24.6 VDC at 12.0 A
Output power rating 70°C	24.6 VDC at 9.0 A
Input	4.2 A (24V supply)
Inrush current	40/25 A maximum (hot/cold start)
Hold-up time	20 ms (from 90 to 264 VAC input)
Ripple and Noise	1% PK to PK max (Bandwidth 20 MHz)
Output overvoltage protection	110% - 120%
Power factor	0.98 at full rated load
Input protection	Internally fused, non-replaceable fuses. Note: The internal fuse is for an internal fault condition only. Shorts and overload will not cause the fuse to fail.
Alarm relay contact rating	30 VDC at 2.0 A, 250 VAC at 2.0 A
Redundancy output isolation diode	Integrated in unit. External Isolation diode not required
Relative humidity	5 to 95%, non-condensing
Airborne contaminants	ISA-S71.04-1985 airborne contaminants class G3
Shock	MIL-STD-810D Method 516.3, Procedure III
Vibration	MIL-STD-810D Method 514.3, Category 1, Procedure I
Approvals	CSA certified to C22.2 No. 60-950 FM 3611 ATEX cat 3 EN50021 NE21 CE EN61326 ATEX II 3G EexnC IIC T4
Dimensions	
Height (max)	13.5 cm (5.3 in.)
Width (max)	24.0 cm (9.5 in.)
Depth (max)	10.6 cm (4.2 in.)
Weight	6.1 lbs (2.77 kg.)

AC to 12 VDC Bulk Power Supply

The 12 V Bulk Power Supply provides a centralized power supply and distributes power to system power supplies. The DeltaV Bulk AC to 12 VDC Power Supply comes in a 177 W version. It converts 120/230 VAC power to 12 VDC power. The 12 VDC power provides power to the controllers and I/O cards

Description	DIN-rail Mounted Bulk AC to 12 VDC Power Supply Specifications
AC input	120/230 VAC nominal, 90 VAC to 264 VAC range, 47 Hz to 63 Hz, single-phase
Output power rating 60°C	12.3 VDC at 12.0 A
Output power rating 70°C	12.3 VDC at 9.0 A
Input	3.6 A (12V supply)
Inrush current	40/25 A maximum (hot/cold start)
Hold-up time	20 ms (from 90 to 264 VAC input)
Ripple and Noise	1% PK to PK max (Bandwidth 20 MHz)
Output overvoltage protection	110% - 120%
Power factor	0.98 at full rated load
Input protection	Internally fused, non-replaceable fuses. Note: The internal fuse is for an internal fault condition only. Shorts and overload will not cause the fuse to fail.
Alarm relay contact rating	30 VDC at 2.0 A, 250 VAC at 2.0 A
Redundancy output isolation diode	Integrated in unit. External Isolation diode not required
Relative humidity	5 to 95%, non-condensing
Airborne contaminants	ISA-S71.04-1985 airborne contaminants class G3
Shock	MIL-STD-810D Method 516.3, Procedure III
Vibration	MIL-STD-810D Method 514.3, Category 1, Procedure I
Approvals	CSA certified to C22.2 No. 60-950 FM 3611 ATEX cat 3 EN50021 NE21 CE EN61326 ATEX II 3G EexnC IIC T4
Dimensions	
Height (max)	13.5 cm (5.3 in.)
Width (max)	24.0 cm (9.5 in.)
Depth (max)	10.6 cm (4.2 in.)
Weight	6.1 lbs (2.77 kg.)



Bulk Power Supply illustrating wiring connections and electrical certifications.

Using Multiple Bulk Power Supplies

The DIN rail mounted Bulk AC to 24 VDC and Bulk AC to 12 VDC Power Supplies can be used in systems requiring load sharing as well as redundancy. The DIN rail-mounted Bulk Power Supplies have an integrated OR-ing diode. If the DIN rail-mounted Bulk Power Supply is used in a system that requires redundancy or load sharing, connect the SHARE terminals on the top of the power supplies as shown in the installation manual.

Connecting the DIN Rail-Mounted Bulk Power Supply for Redundancy or Load Sharing

The following table shows the current provided to the system based on the number of DIN rail-mounted Bulk Power Supplies (AC to 12 and 24 VDC) and whether simplex or redundant power is used in the configuration.

Bulk Power Provided to the System

Number of Bulk Power Supplies (AC to 24 VDC and AC to 12 VDC)	System Current Provided by Simplex Power	System Current Provided by Redundant Power
1	12 A	N/A
2	24 A	12 A
3	36 A	24 A
4	48 A	36 A
5	-	48 A

Ordering Information

Description	Model Number
DIN-rail Mounted Bulk AC to 24 VDC Power Supply	VE5011
DIN-rail Mounted Bulk AC to 12 VDC Power Supply	VE5012

To locate a sales office near you, visit our website at:
www.EmersonProcess.com/DeltaV
Or call us at:
Asia Pacific: 65.777.8211
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North America, Latin America: +1 800.833.8314 or
+1 512.832.3774

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