

VSD 575V Series II Variable Speed Open, IntelliPass®, and IntelliDisconnect® Drives

Product Bulletin

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Introduction

The Johnson Controls® VSD 575V Series II Variable Speed Open, IntelliPass, and IntelliDisconnect drives, powered by Eaton® technology, provide an intelligent drive integrated with reliable bypass configuration. The 575V IntelliPass bypass is a three-contactor design using Eaton contactors and power supplies. The IntelliDisconnect variable speed drive combines a premier quality drive with a fused disconnect.

The input/output (I/O) configuration is designed with wiring ergonomics in mind by including removable terminal blocks. Available I/O includes six digital IN, two analog IN, one analog OUT, three relay OUT, and two expansion slots for I/O or communications boards. The available SA-Bus option card can be factory installed on IntelliPass and IntelliDisconnect drives.

Features

- **Patented Active Energy Control Algorithm—**Achieve an additional 2% to 8% energy savings when compared to competitive products.
- **HAND/OFF/AUTO and DRIVE/BYPASS Selector on Keypad—**Simplifies control.
- **Copy/Paste Function—**Allows the transfer of parameter settings from one drive to the next.
- **Versatile Type 12 Keypad—**Displays up to nine monitored parameters simultaneously.
- **Closed-Loop Control Programmed with Engineering —**Provides software parameters using engineering units common to the HVAC industry.
- **BACnet® MS/TP, BACnet IP, MODBUS®, and N2 Network Protocols—**Provide a wide variety of communication protocols to meet the needs of many applications.
- **Drive Programming Capability Using Auxiliary 24 V Power Supply (VS-AUX24V)—**Allows variable speed drive programming (including network communication validation) prior to wiring three-phase power to the drive.

Figure 1: VSD Series II Open Drives



IMPORTANT: Use this VSD Series II Variable Speed Drive only as an operating control. Where failure or malfunction of the drive could lead to personal injury or property damage to the controlled equipment or other property, additional precautions must be designed into the control system. Incorporate and maintain other devices, such as supervisory or alarm systems or safety or limit controls, intended to warn of or protect against failure or malfunction of the drive.

IMPORTANT : Utiliser ce VSD Series II Variable Speed Drive uniquement en tant que dispositif de contrôle de fonctionnement. Lorsqu'une défaillance ou un dysfonctionnement du drive risque de provoquer des blessures ou d'endommager l'équipement contrôlé ou un autre équipement, la conception du système de contrôle doit intégrer des dispositifs de protection supplémentaires. Veiller dans ce cas à intégrer de façon permanente d'autres dispositifs, tels que des systèmes de supervision ou d'alarme, ou des dispositifs de sécurité ou de limitation, ayant une fonction d'avertissement ou de protection en cas de défaillance ou de dysfonctionnement du drive.

VSD Series II Open Drive Features

- Integrated DC link choke standard on drives from frame 4 through frame 9.
- Copy and paste keypad function allows you to transfer parameter settings from one drive to another.
- Standard Type 12 keypad on all drives.
- Keypad displays up to nine monitored parameters simultaneously.
- Anti-trip DC bus regulation.
- Input surge protection against voltage spiked varistor input.
- Additional I/O and communication cards provide plug-and-play functionality.
- Remote-mount keypad kit available.
- NEMA Type 1 and NEMA Type 12 available.
- Real-time clock with PLC functionality.
- Two independent proportional-integral-derivative (PID) functions.
- On-screen troubleshooting diagnostics with embedded manual assistance.
- Quickstart wizard built into programming of drive ensures a smooth startup.
- I/O connections with simple quick connection terminals.
- Standard I/O, 6DI, 2AI, 1AO 2 Form C RO (No/NC), 1 Form A RO (NO).

IntelliPass and IntelliDisconnect Features

- Serial communication interface that can control the drive and all bypass features so the remote operator can fully control the motor at all times.
- Input surge protection against voltage spikes varistor input.
- Hard-wired external/damper interlock.

Additional IntelliPass Only Features

- HAND/OFF/AUTO and DRIVE/BYPASS selector on keypad that simplifies control.
- Electronic or Manual Bypass models.
- Programmable Automatic Restart Options (automatically transfer to Bypass, reset drive only, or reset drive and transfer to Bypass).
- Fully rated, mechanically interlocked contacts.
- Bypass circuit current interrupting rating up to 65 kAIC without fusing.
- Robust steel enclosure for simple installation.

Onboard Network Communication

Metasys® System

Each VSD Series II Variable Speed Open Drive provides communication between the drive and a Johnson Controls *Metasys* N2 Network. With this connection, the drives can be controlled, monitored, and programmed from the *Metasys* system. N2 can be selected and programmed by the drive keypad.

BACnet

The VSD Series II Variable Speed Open Drives provide communication to the BACnet® networks. Data transfer is MS/TP RS-485.

BACnet IP

The drive provides a 100-base T interface.

MODBUS TCP

The drive includes Ethernet-based protocol.

MODBUS RTU

VSD Series II Variable Speed Open Drives provide communication to MODBUS RTU RS-485 as a subordinate on a MODBUS network. Other communication parameters include an address range from 1 to 247, a parity of Non, Odd, or Even with a stop bit of 1.

Table 1: 575V Series Open and Enclosed Drive Selection Chart

	Code Number	V	S	3	D	9	5	1	0	D	0	0	0	0	0
Base Product	VS Series II														
Amps, hp	3D9 = 3.9A, 3 hp 6D1 = 6.1A, 5 hp 9D0 = 9A, 7.5 hp 011 = 11A, 10 hp 018 = 18A, 15 hp 022 = 22A, 20 hp 027 = 27A, 25 hp 034 = 34A, 30 hp 041 = 41A, 40 hp 052 = 52A, 50 hp 062 = 62A, 60 hp 080 = 80A, 75 hp 100 = 100A, 100 hp 125 = 125A, 125 hp 150 = 144A, 150 hp (IntelliPass & IntelliDisconnect) 200 = 208A, 200 hp (IntelliPass & IntelliDisconnect) 144 = 144A, 150 hp (Open drives) 208 = 208A, 208 hp (Open drives)														
Voltage	5 = 575 V														
Enclosure Rating	1 = Open NEMA 1 UL Type 1 (IP21) 2 = Open NEMA 12 UL Type 12 (IP54) 4 = Enclosed NEMA 1 5 = Enclosed NEMA 12 3 = Enclosed NEMA 3R														
Drive Style	0 = Open 1 = IntelliPass 2 = IntelliDisconnect														
Revision	D = Canada														
Communications	0 = BACnet MS/TP/MODBUS S = SA Bus (factory installed on enclosed product)														
Enclosed Configuration	P9 = Fused electronic bypass M1 = Fused mechanical bypass P3 = Fused IntelliDisconnect														
Output Filter	00 = No output filter														
Enclosed Configuration	OF = dV/dT filter														

VSD Series II Open Drives Product Selection

Table 2: 575V Series II Open Drives—Frame Size 5

Code Number	Description	Current (A)
VS3D9510D-00000	VSD II, 3 hp (2.2 kW), 575 V, NEMA Type 1, N2 and BACnet comm	3.9
VS3D9520D-00000	VSD II, 3 hp (2.2 kW), 575 V, NEMA Type 12, N2 and BACnet comm	
VS6D1510D-00000	VSD II, 5 hp (3.7 kW), 575 V, NEMA Type 1, N2 and BACnet comm	6.1
VS6D1520D-00000	VSD II, 5 hp (3.7 kW), 575 V, NEMA Type 12, N2 and BACnet comm	
VS9D0510D-00000	VSD II, 7.5 hp (5 kW), 575 V, NEMA Type 1, N2 and BACnet comm	9
VS9D0520D-00000	VSD II, 7.5 hp (5 kW), 575 V, NEMA Type 12, N2 and BACnet comm	
VS011510D-00000	VSD II, 10 hp (7.5 kW), 575 V, NEMA Type 1, N2 and BACnet comm	11
VS011520D-00000	VSD II, 10 hp (7.5 kW), 575 V, NEMA Type 12, N2 and BACnet comm	

Table 3: 575V Series II Open Drives—Frame Size 6

Code Number	Description	Current (A)
VS018510D-00000	VSD II, 15 hp (11 kW), 575 V, NEMA Type 1, N2 and BACnet comm	18
VS018520D-00000	VSD II, 15 hp (11 kW), 575 V, NEMA Type 12, N2 and BACnet comm	
VS022510D-00000	VSD II, 20 hp (15 kW), 575 V, NEMA Type 1, N2 and BACnet comm	22
VS022520D-00000	VSD II, 20 hp (15 kW), 575 V, NEMA Type 12, N2 and BACnet comm	
VS027510D-00000	VSD II, 25 hp (18.5 kW), 575 V, NEMA Type 1, N2 and BACnet comm	27
VS027520D-00000	VSD II, 25 hp (18.5 kW), 575 V, NEMA Type 12, N2 and BACnet comm	
VS034510D-00000	VSD II, 30 hp (22 kW), 575 V, NEMA Type 1, N2 and BACnet comm	34
VS034520D-00000	VSD II, 30 hp (22 kW), 575 V, NEMA Type 12, N2 and BACnet comm	

Table 4: 575V Series II Open Drives—Frame Size 7

Code Number	Description	Current (A)
VS041510D-00000	VSD II, 40 hp (30 kW), 575 V, NEMA Type 1, N2 and BACnet comm	41
VS041520D-00000	VSD II, 40 hp (30 kW), 575 V, NEMA Type 12, N2 and BACnet comm	
VS052510D-00000	VSD II, 50 hp (37 kW), 575 V, NEMA Type 1, N2 and BACnet comm	52
VS052520D-00000	VSD II, 50 hp (37 kW), 575 V, NEMA Type 12, N2 and BACnet comm	
VS062510D-00000	VSD II, 60 hp (45 kW), 575 V, NEMA Type 1, N2 and BACnet comm	62
VS062520D-00000	VSD II, 60 hp (45 kW), 575 V, NEMA Type 12, N2 and BACnet comm	

Table 5: 575V Series II Open Drives—Frame Size 8

Code Number	Description	Current (A)
VS080510D-00000	VSD II, 75 hp (55 kW), 575 V, NEMA Type 1, N2 and BACnet comm	80
VS080520D-00000	VSD II, 75 hp (55 kW), 575 V, NEMA Type 12, N2 and BACnet comm	
VS100510D-00000	VSD II, 100 hp (75 kW), 575 V, NEMA Type 1, N2 and BACnet comm	100
VS100520D-00000	VSD II, 100 hp (75 kW), 575 V, NEMA Type 12, N2 and BACnet comm	
VS125510D-00000	VSD II, 125 hp (90 kW), 575 V, NEMA Type 1, N2 and BACnet comm	125
VS125520D-00000	VSD II, 125 hp (90 kW), 575 V, NEMA Type 12, N2 and BACnet comm	

Table 6: 575V Series II Open Drives—Frame Size 9

Code Number	Description	Current (A)
VS144510D-00000	VSD II, 150 hp (110 kW), 575 V, NEMA Type 1, N2 and BACnet comm	144
VS144520D-00000	VSD II, 150 hp (110 kW), 575 V, NEMA Type 12, N2 and BACnet comm	
VS208510D-00000	VSD II, 200 hp (150 kW), 575 V, NEMA Type 1, N2 and BACnet comm	208
VS208520D-00000	VSD II, 200 hp (150 kW), 575 V, NEMA Type 12, N2 and BACnet comm	

VSD Series II IntelliDisconnect Drives Product Selection**Table 7: 575V Series II IntelliDisconnect Drives—Box Type AX**

Code Number	Description	Current (A)	Weight (lb)	Drive Frame
VS3D9542D-0P300	VSD II with Disconnect, 3 hp (2.2 kW), 575 V, NEMA Type 1, N2 and BACnet comm	3.9	155	FS5
VS3D9552D-0P300	VSD II with Disconnect, 3 hp (2.2 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS3D9532D-0P300	VSD II with Disconnect, 3 hp (2.2 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		170	
VS6D1542D-0P300	VSD II with Disconnect, 5 hp (3.7 kW), 575 V, NEMA Type 1, N2 and BACnet comm	6.1	155	
VS6D1552D-0P300	VSD II with Disconnect, 5 hp (3.7 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS6D1532D-0P300	VSD II with Disconnect, 5 hp (3.7 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		170	
VS9D0542D-0P300	VSD II with Disconnect, 7.5 hp (5 kW), 575 V, NEMA Type 1, N2 and BACnet comm	9	155	
VS9D0552D-0P300	VSD II with Disconnect, 7.5 hp (5 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS9D0532D-0P300	VSD II with Disconnect, 7.5 hp (5 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		170	
VS011542D-0P300	VSD II with Disconnect, 10 hp (7.5 kW), 575 V, NEMA Type 1, N2 and BACnet comm	11	155	
VS011552D-0P300	VSD II with Disconnect, 10 hp (7.5 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS011532D-0P300	VSD II with Disconnect, 10 hp (7.5 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		170	

Table 8: 575V Series II IntelliDisconnect Drives—Box Type BX

Code Number	Description	Current (A)	Weight (lb)	Drive Frame
VS018542D-0P300	VSD II with Disconnect, 15 hp (11 kW), 575 V, NEMA Type 1, N2 and BACnet comm	18	215	FS6
VS018552D-0P300	VSD II with Disconnect, 15 hp (11 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS018532D-0P300	VSD II with Disconnect, 15 hp (11 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		235	
VS022542D-0P300	VSD II with Disconnect, 20 hp (15 kW), 575 V, NEMA Type 1, N2 and BACnet comm	22	215	
VS022552D-0P300	VSD II with Disconnect, 20 hp (15 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS022532D-0P300	VSD II with Disconnect, 20 hp (15 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		235	
VS027542D-0P300	VSD II with Disconnect, 25 hp (18.5 kW), 575 V, NEMA Type 1, N2 and BACnet comm	27	215	
VS027552D-0P300	VSD II with Disconnect, 25 hp (18.5 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS027532D-0P300	VSD II with Disconnect, 25 hp (18.5 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		235	

Table 9: 575V Series II IntelliDisconnect Drives—Box Type CX

Code Number	Description	Current (A)	Weight (lb)	Drive Frame
VS034542D-0P300	VSD II with Disconnect, 30 hp (22 kW), 575 V, NEMA Type 1, N2 and BACnet comm	34	280	FS6
VS034552D-0P300	VSD II with Disconnect, 30 hp (22 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS034532D-0P300	VSD II with Disconnect, 30 hp (22 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		305	

Table 9: 575V Series II IntelliDisconnect Drives—Box Type CX

Code Number	Description	Current (A)	Weight (lb)	Drive Frame
VS041542D-0P300	VSD II with Disconnect, 40 hp (30 kW), 575 V, NEMA Type 1, N2 and BACnet comm	41	308	FS7
VS041552D-0P300	VSD II with Disconnect, 40 hp (30 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS041532D-0P300	VSD II with Disconnect, 40 hp (30 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		333	
VS052542D-0P300	VSD II with Disconnect, 50 hp (37 kW), 575 V, NEMA Type 1, N2 and BACnet comm	52	308	
VS052552D-0P300	VSD II with Disconnect, 50 hp (37 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS052532D-0P300	VSD II with Disconnect, 50 hp (37 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		333	
VS062542D-0P300	VSD II with Disconnect, 60 hp (45 kW), 575 V, NEMA Type 1, N2 and BACnet comm	62	308	
VS062552D-0P300	VSD II with Disconnect, 60 hp (45 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS062532D-0P300	VSD II with Disconnect, 60 hp (45 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		333	
VS080542D-0P300	VSD II with Disconnect, 75 hp (55 kW), 575 V, NEMA Type 1, N2 and BACnet comm	80	368	FS8
VS080552D-0P300	VSD II with Disconnect, 75 hp (55 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS080532D-0P300	VSD II with Disconnect, 75 hp (55 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		393	
VS100542D-0P300	VSD II with Disconnect, 100 hp (75 kW), 575 V, NEMA Type 1, N2 and BACnet comm	100	368	
VS100552D-0P300	VSD II with Disconnect, 100 hp (75 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS100532D-0P300	VSD II with Disconnect, 100 hp (75 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		393	
VS125542D-0P300	VSD II with Disconnect, 125 hp (90 kW), 575 V, NEMA Type 1, N2 and BACnet comm	125	368	
VS125552D-0P300	VSD II with Disconnect, 125 hp (90 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS125532D-0P300	VSD II with Disconnect, 125 hp (90 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		393	

Table 10: 575V Series II IntelliDisconnect Drives—Box Type DX

Code Number	Description	Current (A)	Weight (lb)	Drive Frame
VS150542D-0P300	VSD II with Disconnect, 150 hp (110 kW), 575 V, NEMA Type 1, N2 and BACnet comm	144	820	FS9
VS150552D-0P300	VSD II with Disconnect, 150 hp (110 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS150532D-0P300	VSD II with Disconnect, 150 hp (110 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		850	
VS200542D-0P300	VSD II with Disconnect, 200 hp (150 kW), 575 V, NEMA Type 1, N2 and BACnet comm	208	820	FS9
VS200552D-0P300	VSD II with Disconnect, 200 hp (150 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS200532D-0P300	VSD II with Disconnect, 200 hp (150 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		850	

VSD Series II IntelliPass Drives Product Selection**Table 11: 575V Series II IntelliPass Drives—Box Type AX¹**

Code Number	Description	Current (A)	Weight (lb)	Drive Frame
VS3D9541D-0__00	VSD II with Bypass, 3 hp (2.2 kW), 575 V, NEMA Type 1, N2 and BACnet comm	3.9	155	FS5
VS3D9551D-0__00	VSD II with Bypass, 3 hp (2.2 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS3D9531D-0__00	VSD II with Bypass, 3 hp (2.2 kW), 575 V, NEMA Type 3R, N2 and BACnet comm 170		170	
VS6D1541D-0__00	VSD II with Bypass, 5 hp (3.7 kW), 575 V, NEMA Type 1, N2 and BACnet comm	6.1	155	
VS6D1551D-0__00	VSD II with Bypass, 5 hp (3.7 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS6D1531D-0__00	VSD II with Bypass, 5 hp (3.7 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		170	
VS9D0541D-0__00	VSD II with Bypass, 7.5 hp (5 kW), 575 V, NEMA Type 1, N2 and BACnet comm	9	155	
VS9D0551D-0__00	VSD II with Bypass, 7.5 hp (5 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS9D0531D-0__00	VSD II with Bypass, 7.5 hp (5 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		170	
VS011541D-0__00	VSD II with Bypass, 10 hp (7.5 kW), 575 V, NEMA Type 1, N2 and BACnet comm	11	155	
VS011551D-0__00	VSD II with Bypass, 10 hp (7.5 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS011531D-0__00	VSD II with Bypass, 10 hp (7.5 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		170	

1. Complete IntelliPass order code with P9 (Electronic Bypass) or M1 (Mechanical Bypass).

Table 12: 575V Series II IntelliPass Drives—Box Type BX¹

Code Number	Description	Current (A)	Weight (lb)	Drive Frame
VS018541D-0__00	VSD II with Bypass, 15 hp (11 kW), 575 V, NEMA Type 1, N2 and BACnet comm	18	215	FS6
VS018551D-0__00	VSD II with Bypass, 15 hp (11 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS018531D-0__00	VSD II with Bypass, 15 hp (11 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		235	
VS022541D-0__00	VSD II with Bypass, 20 hp (15 kW), 575 V, NEMA Type 1, N2 and BACnet comm	22	215	
VS022551D-0__00	VSD II with Bypass, 20 hp (15 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS022531D-0__00	VSD II with Bypass, 20 hp (15 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		235	
VS027541D-0__00	VSD II with Bypass, 25 hp (18.5 kW), 575 V, NEMA Type 1, N2 and BACnet comm	27	215	
VS027551D-0__00	VSD II with Bypass, 25 hp (18.5 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS027531D-0__00	VSD II with Bypass, 25 hp (18.5 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		235	

1. Complete IntelliPass order code with P9 (Electronic Bypass) or M1 (Mechanical Bypass).

Table 13: 575V Series II IntelliPass Drives—Box Type CX¹

Code Number	Description	Current (A)	Weight (lb)	Drive Frame
VS034541D-0__00	VSD II with Bypass, 30 hp (22 kW), 575 V, NEMA Type 1, N2 and BACnet comm	34	280	FS6
VS034551D-0__00	VSD II with Bypass, 30 hp (22 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS034531D-0__00	VSD II with Bypass, 30 hp (22 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		305	

Table 13: 575V Series II IntelliPass Drives—Box Type CX¹

Code Number	Description	Current (A)	Weight (lb)	Drive Frame
VS041541D-0__00	VSD II with Bypass, 40 hp (30 kW), 575 V, NEMA Type 1, N2 and BACnet comm	41	308	FS7
VS041551D-0__00	VSD II with Bypass, 40 hp (30 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS041531D-0__00	VSD II with Bypass, 40 hp (30 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		333	
VS052541D-0__00	VSD II with Bypass, 50 hp (37 kW), 575 V, NEMA Type 1, N2 and BACnet comm	52	308	
VS052551D-0__00	VSD II with Bypass, 50 hp (37 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS052531D-0__00	VSD II with Bypass, 50 hp (37 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		333	
VS062541D-0__00	VSD II with Bypass, 60 hp (45 kW), 575 V, NEMA Type 1, N2 and BACnet comm	62	308	
VS062551D-0__00	VSD II with Bypass, 60 hp (45 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS062531D-0__00	VSD II with Bypass, 60 hp (45 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		333	

1. Complete IntelliPass order code with P9 (Electronic Bypass) or M1 (Mechanical Bypass).

Table 14: 575V Series II IntelliPass Drives—Box Type DX¹

Code Number	Description	Current (A)	Weight (lb)	Drive Frame
VS080541D-0__00	VSD II with Bypass, 75 hp (55 kW), 575 V, NEMA Type 1, N2 and BACnet comm	80	820	FS8
VS080551D-0__00	VSD II with Bypass, 75 hp (55 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS080531D-0__00	VSD II with Bypass, 75 hp (55 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		850	
VS100541D-0__00	VSD II with Bypass, 100 hp (75 kW), 575 V, NEMA Type 1, N2 and BACnet comm	100	820	
VS100551D-0__00	VSD II with Bypass, 100 hp (75 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS100531D-0__00	VSD II with Bypass, 100 hp (75 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		850	
VS125541D-0__00	VSD II with Bypass, 125 hp (90 kW), 575 V, NEMA Type 1, N2 and BACnet comm	125	820	
VS125551D-0__00	VSD II with Bypass, 125 hp (90 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS125531D-0__00	VSD II with Bypass, 5 hp (90 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		850	

Table 14: 575V Series II IntelliPass Drives—Box Type DX¹

Code Number	Description	Current (A)	Weight (lb)	Drive Frame
VS150541D-0__00	VSD II with Bypass, 150 hp (110 kW), 575 V, NEMA Type 1, N2 and BACnet comm	144	820	FS9
VS150551D-0__00	VSD II with Bypass, 150 hp (110 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS150531D-0__00	VSD II with Bypass, 150 hp (110 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		850	
VS200541D-0__00	VSD II with Bypass, 200 hp (150 kW), 575 V, NEMA Type 1, N2 and BACnet comm	208	820	
VS200551D-0__00	VSD II with Bypass, 200 hp (150 kW), 575 V, NEMA Type 12, N2 and BACnet comm			
VS200531D-0__00	VSD II with Bypass, 200 hp (150 kW), 575 V, NEMA Type 3R, N2 and BACnet comm		850	

1. Complete IntelliPass order code with P9 (Electronic Bypass) or M1 (Mechanical Bypass).

VSD Series II IntelliDisconnect Drives with dV/dT Filter Product Selection

Table 15: 575V Series II IntelliDisconnect Drives with dV/dT Filter—Box Type BX

Code Number	Description	Current (A)	Weight (lb)	Drive Frame
VS3D9542D-0P3OF	VSD II with Disconnect, 3 hp (2.2 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	3.9	226	FS5
VS3D9552D-0P3OF	VSD II with Disconnect, 3 hp (2.2 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS3D9532D-0P3OF	VSD II with Disconnect, 3 hp (2.2 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		247	
VS6D1542D-0P3OF	VSD II with Disconnect, 5 hp (3.7 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	6.1	226	
VS6D1552D-0P3OF	VSD II with Disconnect, 5 hp (3.7 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS6D1532D-0P3OF	VSD II with Disconnect, 5 hp (3.7 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		247	
VS9D0542D-0P3OF	VSD II with Disconnect, 7.5 hp (5 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	9	226	
VS9D0552D-0P3OF	VSD II with Disconnect, 7.5 hp (5 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS9D0532D-0P3OF	VSD II with Disconnect, 7.5 hp (5 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		247	
VS011542D-0P3OF	VSD II with Disconnect, 10 hp (7.5 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	11	226	
VS011552D-0P3OF	VSD II with Disconnect, 10 hp (7.5 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS011532D-0P3OF	VSD II with Disconnect, 10 hp (7.5 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		247	

Table 16: 575V Series II IntelliDisconnect Drives with dV/dT Filter—Box Type CX

Code Number	Description	Current (A)	Weight (lb)	Drive Frame
VS018542D-0P3OF	VSD II with Disconnect, 15 hp (11 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	18	235	FS6
VS018552D-0P3OF	VSD II with Disconnect, 15 hp (11 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS018532D-0P3OF	VSD II with Disconnect, 15 hp (11 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		247	
VS022542D-0P3OF	VSD II with Disconnect, 20 hp (15 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	22	235	
VS022552D-0P3OF	VSD II with Disconnect, 20 hp (15 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS022532D-0P3OF	VSD II with Disconnect, 20 hp (15 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		247	
VS027542D-0P3OF	VSD II with Disconnect, 25 hp (18.5 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	27	265	
VS027552D-0P3OF	VSD II with Disconnect, 25 hp (18.5 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS027532D-0P3OF	VSD II with Disconnect, 25 hp (18.5 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		350	
VS034542D-0P3OF	VSD II with Disconnect, 30 hp (22 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	34	294	
VS034552D-0P3OF	VSD II with Disconnect, 30 hp (22 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS034532D-0P3OF	VSD II with Disconnect, 30 hp (22 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		250	
VS041542D-0P3OF	VSD II with Disconnect, 40 hp (30 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	41	323	FS7
VS041552D-0P3OF	VSD II with Disconnect, 40 hp (30 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS041532D-0P3OF	VSD II with Disconnect, 40 hp (30 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		350	
VS052542D-0P3OF	VSD II with Disconnect, 50 hp (37 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	52	323	
VS052552D-0P3OF	VSD II with Disconnect, 50 hp (37 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS052532D-0P3OF	VSD II with Disconnect, 50 hp (37 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		350	
VS062542D-0P3OF	VSD II with Disconnect, 60 hp (45 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	62	323	
VS062552D-0P3OF	VSD II with Disconnect, 60 hp (45 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS062532D-0P3OF	VSD II with Disconnect, 60 hp (45 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		350	

Table 17: 575V Series II IntelliDisconnect Drives with dV/dT Filter—Box Type DX

Code Number	Description	Current (A)	Weight (lb)	Drive Frame
VS080542D-0P3OF	VSD II with Disconnect, 75 hp (55 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	80	861	FS8
VS080552D-0P3OF	VSD II with Disconnect, 75 hp (55 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS080532D-0P3OF	VSD II with Disconnect, 75 hp (55 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		893	
VS100542D-0P3OF	VSD II with Disconnect, 100 hp (75 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	100	861	
VS100552D-0P3OF	VSD II with Disconnect, 100 hp (75 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS100532D-0P3OF	VSD II with Disconnect, 100 hp (75 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		893	
VS125542D-0P3OF	VSD II with Disconnect, 125 hp (90 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	125	861	
VS125552D-0P3OF	VSD II with Disconnect, 125 hp (90 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS125532D-0P3OF	VSD II with Disconnect, 5 hp (90 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		893	
VS150542D-0P3OF	VSD II with Disconnect, 150 hp (110 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	144	861	FS9
VS150552D-0P3OF	VSD II with Disconnect, 150 hp (110 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS150532D-0P3OF	VSD II with Disconnect, 150 hp (110 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		893	
VS200542D-0P3OF	VSD II with Disconnect, 200 hp (150 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	208	861	
VS200552D-0P3OF	VSD II with Disconnect, 200 hp (150 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS200532D-0P3OF	VSD II with Disconnect, 200 hp (150 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		893	

VSD Series II IntelliPass Drives with dV/dT Filter Product Selection

Table 18: 575V Series II IntelliPass Drives with dV/dT Filter—Box Type CX

Code Number	Description	Current (A)	Weight (lb)	Drive Frame
VS3D9541D-0__OF	VSD II with Bypass, 3 hp (2.2 kW), 575 V, NEMA Type 1, N2 and BACnet Comm DVDT filter	3.9	294	FS5
VS3D9551D-0__OF	VSD II with Bypass, 3 hp (2.2 kW), 575 V, NEMA Type 12, N2 and BACnet Comm DVDT filter			
VS3D9531D-0__OF	VSD II with Bypass, 3 hp (2.2 kW), 575 V, NEMA Type 3R, N2 and BACnet Comm DVDT filter		320	
VS6D1541D-0__OF	VSD II with Bypass, 5 hp (3.7 kW), 575 V, NEMA Type 1, N2 and BACnet Comm DVDT filter	6.1	294	
VS6D1551D-0__OF	VSD II with Bypass, 5 hp (3.7 kW), 575 V, NEMA Type 12, N2 and BACnet Comm DVDT filter			
VS6D1531D-0__OF	VSD II with Bypass, 5 hp (3.7 kW), 575 V, NEMA Type 3R, N2 and BACnet Comm DVDT filter		320	
VS9D0541D-0__OF	VSD II with Bypass, 7.5 hp (5 kW), 575 V, NEMA Type 1, N2 and BACnet Comm DVDT filter	9	294	FS5
VS9D0551D-0__OF	VSD II with Bypass, 7.5 hp (5 kW), 575 V, NEMA Type 12, N2 and BACnet Comm DVDT filter			
VS9D0531D-0__OF	VSD II with Bypass, 7.5 hp (5 kW), 575 V, NEMA Type 3R, N2 and BACnet Comm DVDT filter		320	
VS011541D-0__OF	VSD II with Bypass, 10 hp (7.5 kW), 575 V, NEMA Type 1, N2 and BACnet Comm DVDT filter	11	294	
VS011551D-0__OF	VSD II with Bypass, 10 hp (7.5 kW), 575 V, NEMA Type 12, N2 and BACnet Comm DVDT filter			
VS011531D-0__OF	VSD II with Bypass, 10 hp (7.5 kW), 575 V, NEMA Type 3R, N2 and BACnet Comm DVDT filter		320	
VS018541D-0__OF	VSD II with Bypass, 15 hp (11 kW), 575 V, NEMA Type 1, N2 and BACnet Comm DVDT filter	18	294	FS6
VS018551D-0__OF	VSD II with Bypass, 15 hp (11 kW), 575 V, NEMA Type 12, N2 and BACnet Comm DVDT filter			
VS018531D-0__OF	VSD II with Bypass, 15 hp (11 kW), 575 V, NEMA Type 3R, N2 and BACnet Comm DVDT filter		320	
VS022541D-0__OF	VSD II with Bypass, 20 hp (15 kW), 575 V, NEMA Type 1, N2 and BACnet Comm DVDT filter	22	294	
VS022551D-0__OF	VSD II with Bypass, 20 hp (15 kW), 575 V, NEMA Type 12, N2 and BACnet Comm DVDT filter			
VS022531D-0__OF	VSD II with Bypass, 20 hp (15 kW), 575 V, NEMA Type 3R, N2 and BACnet Comm DVDT filter		320	
VS027541D-0__OF	VSD II with Bypass, 25 hp (18.5 kW), 575 V, NEMA Type 1, N2 and BACnet Comm DVDT filter	27	294	
VS027551D-0__OF	VSD II with Bypass, 25 hp (18.5 kW), 575 V, NEMA Type 12, N2 and BACnet Comm DVDT filter			
VS027531D-0__OF	VSD II with Bypass, 25 hp (18.5 kW), 575 V, NEMA Type 3R, N2 and BACnet Comm DVDT filter		320	

Table 19: 575V Series II IntelliPass Drives dV/dT Filter—Box Type DX

Code Number	Description	Current (A)	Weight (lb)	Drive Frame
VS034541D-0__OF	VSD II with Bypass, 30 hp (22 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	34	294	FS6
VS034551D-0__OF	VSD II with Bypass, 30 hp (22 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS034531D-0__OF	VSD II with Bypass, 30 hp (22 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		320	
VS041541D-0__OF	VSD II with Bypass, 40 hp (30 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	41	861	FS7
VS041551D-0__OF	VSD II with Bypass, 40 hp (30 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS041531D-0__OF	VSD II with Bypass, 40 hp (30 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		893	
VS052541D-0__OF	VSD II with Bypass, 50 hp (37 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	52	861	
VS052551D-0__OF	VSD II with Bypass, 50 hp (37 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS052531D-0__OF	VSD II with Bypass, 50 hp (37 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		893	
VS062541D-0__OF	VSD II with Bypass, 60 hp (45 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	62	861	
VS062551D-0__OF	VSD II with Bypass, 60 hp (45 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS062531D-0__OF	VSD II with Bypass, 60 hp (45 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		893	
VS080541D-0__OF	VSD II with Bypass, 75 hp (55 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	80	861	FS8
VS080551D-0__OF	VSD II with Bypass, 75 hp (55 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS080531D-0__OF	VSD II with Bypass, 75 hp (55 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		893	
VS100541D-0__OF	VSD II with Bypass, 100 hp (75 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	100	861	
VS100551D-0__OF	VSD II with Bypass, 100 hp (75 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS100531D-0__OF	VSD II with Bypass, 100 hp (75 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		893	
VS125541D-0__OF	VSD II with Bypass, 125 hp (90 kW), 575 V, NEMA Type 1, N2 and BACnet DVDT filter	125	861	
VS125551D-0__OF	VSD II with Bypass, 125 hp (90 kW), 575 V, NEMA Type 12, N2 and BACnet DVDT filter			
VS125531D-0__OF	VSD II with Bypass, 5 hp (90 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDT filter		893	

Table 19: 575V Series II IntelliPass Drives dV/dT Filter—Box Type DX

Code Number	Description	Current (A)	Weight (lb)	Drive Frame
VS150541D-0__OF	VSD II with Bypass, 150 hp (110 kW), 575 V, NEMA Type 1, N2 and BACnet DVDVT filter	144	861	FS9
VS150551D-0__OF	VSD II with Bypass, 150 hp (110 kW), 575 V, NEMA Type 12, N2 and BACnet DVDVT filter			
VS150531D-0__OF	VSD II with Bypass, 150 hp (110 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDVT filter		893	
VS200541D-0__OF	VSD II with Bypass, 200 hp (150 kW), 575 V, NEMA Type 1, N2 and BACnet DVDVT filter	208	861	
VS200551D-0__OF	VSD II with Bypass, 200 hp (150 kW), 575 V, NEMA Type 12, N2 and BACnet DVDVT filter			
VS200531D-0__OF	VSD II with Bypass, 200 hp (150 kW), 575 V, NEMA Type 3R, N2 and BACnet DVDVT filter		893	

VSD 575V Series II Accessories and Replacement Parts

Table 20: Conversion Kits

Code Number	Description
VS-FS5-N12KIT	Frame 5, Type 1 to Type 12 Conversion Kit—Type 12/IP54 Cover with Gasket and Plastic Plugs
VS-FS6-N12KIT	Frame 6, Type 1 to Type 12 Conversion Kit—Type 12/IP54 Cover with Gasket and Plastic Plugs

Table 21: Keypads and Cables

Code Number	Description
VS-KEYPAD-SER2	VSD Series II Graphic Hands-Off/Auto Keypad
VS-RMT-KEYPAD2	VSD Series II Remote Keypad Kit
VS-REM-USB-LOAD	Remote Download USB to RJ-485 Cable with Software Driver Disk

Table 22: Flange Kits

Code Number	Description
VS-FS5-N12FLKIT	Frame 5, Type 12/IP54 Flange Kit
VS-FS6-N12FLKIT	Frame 6, Type 12/IP54 Flange Kit
VS-FS7-N12FLKIT	Frame 7, Type 12/IP54 Flange Kit

Table 23: Communication and I/O Option Cards

Code Number	Description
VS-XXM-B1	I/O Expander Card, 6 DI/DO, Slot D/E
VS-XXM-B2	I/O Expander Card, 2 RO and Thermistor, Slot D/E
VS-XXM-B4	I/O Expander Card, 1 AI, 2 AO (Isolated), Slot D/E
VS-XXM-B5	I/O Expander Card, 3 RO, Slot D/E
VS-XXM-B9	I/O Expander Card, 1 RO, 5 DI (42 to 240 VAC), Slot D/E
VS-XXM-BF	I/O Expander Card, 1 AO, 1 DO, 1 RO, Slot D/E
VS-XXM-C4	LONWORKS® Communications Card, Slot D/E
VS-XXM-CS	SA Bus Communications Card

Table 23: Communication and I/O Option Cards

Code Number	Description
VS-XX-F1	I/O Expander Card, 3 RO, Slot B
VS-XX-F2	I/O Expander Card, 2 RO and Thermistor Input, Slot B

Table 24: Replacement Cooling Fans

Code Number	Description
VS-FS5-FAN	Frame 5, Main Fan
VS-FS6-FAN	Frame 6, Main Fan
VS-FS7-FAN	Frame 7, Main Fan
VS-FS8-FAN	Frame 8, Main Fan
VS-FS9-FAN	Frame 9, Main Fan
VS-FS5-INT-FAN	Frame 5, Internal Fan
VS-FS6-INT-FAN	Frame 6, Internal Fan
VS-FS7-INT-FAN	Frame 7, Internal Fan
VS-FS8-INT-FAN	Frame 8, Internal Fan
VS-FS9-INT-FAN	Frame 9, Internal Fan

Power Rating for Open Drives

Table 25: Base Drive Ratings with Input Current and Temperature De-Rating

Frame Size	Drive Rating Low Overload Full Load Amps 104°F (40°C)	600V 60Hz Horsepower	Drives Input Amps	De-Rated Low Overload Full Load Amps 122°F (50°C)	Catalog Number
FR5	3.9	3	4.6	3.3	VS3D95_0B-00000
	6.1	5	6.8	5.2	VS6D15_0B-00000
	9	7.5	9	7.7	VS9D05_0B-00000
	11	10	10.5	9.4	VS0115_0B-00000
FR6	18	15	19.9	15.3	VS0185_0B-00000
	22	20	23.3	18.7	VS0225_0B-00000
	27	25	27.2	23	VS0275_0B-00000
	34	30	32.8	28.9	VS0345_0B-00000
FR7	41	40	45.3	34.9	VS0415_0B-00000
	52	50	53.8	44.2	VS0525_0B-00000
	62	60	62.2	52.7	VS0625_0B-00000
FR8	80	75	90	68	VS0805_0B-00000
	100	100	106	85	VS1005_0B-00000
	125	125	127	106.3	VS1255_0B-00000
FR9	144	150	156	122.4	VS1445_0B-00000
	208	200	212	176.8	VS2085_0B-00000

VSD Series II Dimensions

Table 26: 575V Series II Open Frames 5-9 Approximate Dimensions and Weight

HP Range	Frame Size	Height, in. (mm)	Width, in. (mm)	Depth, in. (mm)	Weight, lb
3 to 10	FS5	16.5 (419.0)	5.67 (144)	8.73 (221.6)	10
15 to 30	FS6	21.93 (557.0)	7.68 (195.0)	9.29 (236.0)	20
40 to 60	FS7	25.98 (660.0)	9.06 (230.0)	10.40 (266.5)	38
75 to 125	FS8	38.02 (965.6)	11.26 (268.1)	12.02 (305.4)	70
150 to 200	FS9	45.28 (1150.0)	18.9 (480.0)	12.52 (318.0)	108

Table 27: 575V Series II Enclosed Box Size by HP and Configuration

HP	Fused Disconnect	Electronic Bypass	Mechanical Bypass	Fused Disconnect & DVDT	Electronic Bypass & DVDT	Mechanical Bypass & DVDT
3	AX					
5						
7.5						
10						
15	BX					
20						
25						
30						
40	CX					
50						
60						
75						
100	DX					
125						
150						
200						

Table 28: 575V Series II Enclosed Approximate Dimensions, in. (mm)

	NEMA 1/12			NEMA 3R
Box	H	W	D	H
AX	26 (661.4)	21 (534.2)	19 (483.4)	+8 (203.5)
BX	37 (941.3)			
CX	49 (1246.6)	31 (788.6)	24 (610.6)	
DX	82 (2086.1)			

Wiring for Open Drives

Figure 2: I/O and Main Connections

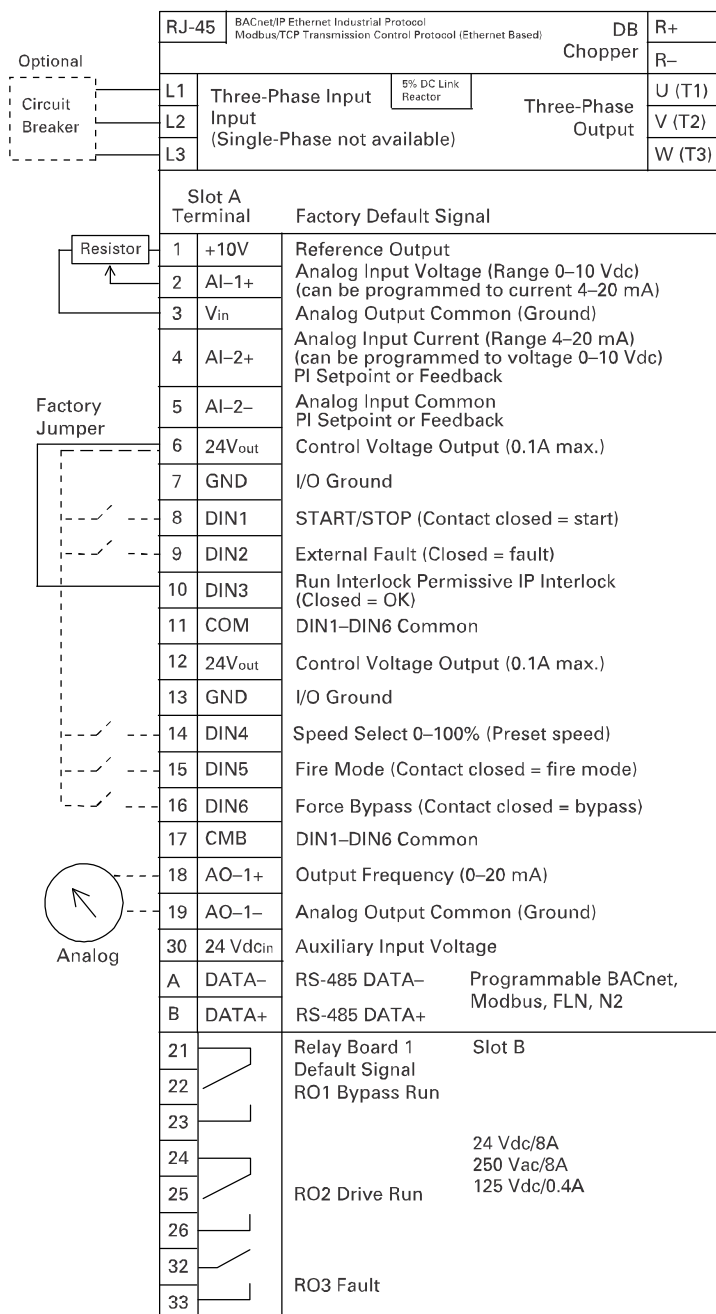


Table 29: Technical Specifications

Description	Specification
Input Voltage	525 to 600 V, -10 to +10%
Input Frequency	50 to 60 Hz, -5 to +10%
Connection to Mains	Once per minute or less
Continuous Output Current	Ambient temperature max. 40°C, up to 50°C with derating, overload 1.1 x IL
Output Frequency	0 to 320 Hz
Frequency Resolution	0.01 Hz
Switching Frequency	FS5 to FS9: 1.5-6 kHz, Default: 2 kHz automatic switching frequency derating in case of overload
Frequency Reference Analog Input	Resolution 0.1% (10-bit), accuracy +1%
Acceleration/Deceleration Time	0.1 to 3000 s
Ambient Operating Temperature	IL: -10°C (no frost) to 40°C, up to 50°C with derating
Storage Temperature	-40° to 70°C
Relative Humidity	0 to 95% RH, non-condensing, non-corrosive
Altitude	100% load capacity (no derating) up to 1000m, 1% derating for each 100 m above 1000 m. Max. 2000 m (TN and IT systems, no corner grounding)
EMC Immunity (As Default Settings)	Fulfills EN61800-3 (2004), first and second environment
Analog Input Voltage	0 to 10 V, R = 200 k ohms Differential Resolution 0.1%; Accuracy ±1%, Dip Switch Selection (voltage/current)
Analog Input Current	0 (4) to 20 mA; Ri - 250 ohms Differential
Digital Inputs	Positive or negative logic; 18 to 30 VDC
Auxiliary Voltage	24 V ±10%, Maximum 250 mA
Output Reference Voltage	10 V +3%, Maximum Load 10 mA
Analog Output	0 to 10 V, 0 (4) to 20 mA; RL max. 500 ohms; resolution 10 bit; accuracy ± 2%, Dip switch selection (voltage/current)
Relay Outputs	3 Programmable, 2 Form C, 1 Form A relay outputs switching capacity: 24 VDC/8 A, 250 VAC/8 A, 125 VDC/0.4 A
Dip Switch Settings Default	AI1: V, AI2: mA, AO: mA, RS-485: Off
Noise Level dB A (Cooling Fan Sounds Pressure)	FS5: 65, FS6: 72, FS7: 73, FS8: 73, FS9: 75
Voltage Trip Limit (High/Low)	600 V drives: 1094 Vdc / 0.8775 x supply voltage (527 V)
Protections	Overvoltage, Undervoltage, Earth Fault, Overcurrent, Overtemperature, Motor Overload, Motor Stall, Motor Underload
	UL Listed File No 508C; cUL Listed
	Safety – EN 61800-5-1 (2007)
	CE Mark – Johnson Controls declares that this product is in compliance with the essential requirements and other relevant provisions of EMC Directive and Low Voltage Directive
	IntelliPass and IntelliDisconnect certified to CAN/CSA Std C22.2 No 14



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