



Open Drives



TYPE 1 AND TYPE 12

- Standard TYPE 1 and TYPE 12 enclosure and drive solutions reduce product installation costs
- Compatibility with current and future Johnson Controls network architecture - LonWorks®, N2, BACnet®, SA Bus, XT Bus
- User-friendly start-up wizard designed for HVAC applications: duct static, building static, pressure control, temperature control, remote input and generic PI
- UL listed and CuL listed
- Run-permissive damper control in drive or bypass mode
- Standard 2-year warranty terms; 3-year warranty with certified start-up
- Plenum rated
- Integrated 3% line reactors
- EMI/RFI filter up to FR9
- Drive current rating of 100kAIC
- Standard I/O boards include: 6 DI, 2 AI, 1 DO, 1 AO and 2 form C relays

VARIABLE SPEED DRIVE SERIES OPEN DRIVES - TYPE 1 / TYPE 12

SELECTION CHART	CODE NUMBER	v	s							-				
BASE PRODUCT	VS = VARIABLE SPEED DRIVE PREFIX													
HORSEPOWER (VT) ¹	001 = 1.0 HP TO 250 = 250 HP ²													
VOLTAGE ³	2 = 230V 4 = 480V 5 = 575V													
ENCLOSURE RATING	1 = TYPE 1 2 = TYPE 12													
ENCLOSURE STYLE	0 = NONE (OPEN DRIVE)													
REVISION NUMBER	A = REV. 1 (AMERICAS) C = REV. 2 (CANADA)													
SEPARATOR														
COMMUNICATIONS	0 = NONE N = N2/XT/SA BUS COMM (N2 BY DEFAULT) L = LONWORKS® NETWORK													
OPTION 1	00 = NONE													
OPTION 2	00 = NONE													

1 All horsepower ratings are Variable Torque (VT).
 2 1 to 75 Hp @ 230V; 1.5 to 250 Hp @ 450V; 3 to 200 Hp @ 575V.
 3 Voltage Ratings : 230V = 208 - 240V; 480V = 380 - 500V; 575V = 525 - 690V.



MicroDrives



MICRODRIVES

- The microdrives come with standard features that can be programmed to tailor performance to suit a wide variety of application requirements
- Overload rating: 150% for 60 seconds constant torque load
- Motor control: Sensorless vector or v/Hz
- Programmable outputs
- NEMA 12 keypad with optional remote mount capability
- Built in speed potentiometer on key pad
- PID Controller: PID Process Control
- 2 analog inputs
- 6 digital inputs
- Form C relay
- Standard ModBus communications
- UL listed and CuL listed
- Standard IP20 enclosure; NEMA TYPE 1 enclosure is optional
- 115V single phase input (option 0) results in 230V three phase output (single phase output not available)
- 230V MicroDrive 1 to 3 Hp can operate with single phase input. Three phase output only.

VARIABLE SPEED DRIVE SERIES MICRODRIVES

SELECTION CHART	CODE NUMBER	V	S	M				0	0	A	-	0	0	0	0	0
BASE PRODUCT	VSM = VARIABLE SPEED MICRODRIVE PREFIX															
HORSEPOWER (VT/CT) ¹	F2 = 0.25 HP ¹ F5 = 0.5 HP 01 = 1.0 HP ¹ 02 = 2.0 HP 03 = 3.0 HP 05 = 5.0 HP 07 = 7.5 HP ² 10 = 10 HP ³															
VOLTAGE ⁴	0 = 115V ⁵ 2 = 230V ⁵ 4 = 480V ⁵ 5 = 575V ⁵															
ENCLOSURE RATING	0 = IP20															
ENCLOSURE STYLE	0 = NONE (OPEN DRIVE)															
REVISION NUMBER	A = REV. 1 (AMERICAS) C = REV. 1 (CANADA)															
SEPARATOR																
COMMUNICATIONS	0 = NONE															
OPTIONS	0000 = NONE															

¹ 115V only. ² 230V only. ³ 480V only. ⁴ Voltage ratings : 230V = 200 - 240V; 480V = 380 - 480V; 575V = 550 - 600V. ⁵ Three phase output only. All horsepower ratings are constant torque.

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IntelliPass Drives



VARIABLE SPEED DRIVE INTELLIPASS

- Bypass Rating 65kAIC, drive rating 100kAIC
- Two or three contactor TYPE 1 bypass with circuit breaker disconnect
- Full control of drive and bypass through network
- Software parameters utilize engineering units for easy setup
- Compatibility with current and future Johnson Controls network architecture - LonWorks®, N2, BACnet®, SA Bus, XT Bus
- IntelliDisconnect option is lower cost; includes drive integrated circuit breaker (no bypass)
- Network compatibility
- User-friendly HVAC start-up wizard
- HOA and drive/bypass selector on keypad
- Two +24 VDC power sources to ensure redundancy
- Standard 3% AC input line reactor
- Plenum rated
- Serial communication can control drive and bypass
- EMI/RFI on drives up to FR9
- Run permissive damper control
- UL and cUL listed
- Removable top and bottom conduit plates for ease of installation
- IntelliFast program available for next day shipments when required (480V 1-75 Hp, 208/230V 1-30 Hp)
- UL 508C approved

VARIABLE SPEED DRIVE SERIES INTELLIPASS DRIVES

SELECTION CHART	CODE NUMBER	v	s								-					
BASE PRODUCT	VS = VARIABLE SPEED DRIVE PREFIX															
HORSEPOWER (VT) ¹	001 = 1.0 HP TO 075 = 75 HP ²															
VOLTAGE	1 = 208V 2 = 230V 4 = 480V															
ENCLOSURE RATING	1 = TYPE 1															
ENCLOSURE STYLE	1 = INTELLIPASS ⁵ 4 = INTELLIDISCONNECT ⁴															
REVISION NUMBER	A = REV. 1															
SEPARATOR																
COMMUNICATIONS	0 = NONE N = N2/XT/SA BUS COMM (N2 BY DEFAULT) L = LONWORKS® NETWORK X = XT COMM W/DX-9100															
OPTION 1	SEE OPTIONS LIST ³															
OPTION 2	SEE OPTIONS LIST															

OPTIONS LIST

00 = none P6 = Third Contactor Drive Isolation

1 All horsepower ratings are Variable Torque (VT).

2 1 to 30 Hp @ 208/230V; 1 to 75 Hp @ 480V.

3 All VSD Series IntelliPass Drives incorporate two factory-installed Auxiliary Contacts (formerly the "K9" option).

4 Drive with input circuit breaker, no bypass.

5 IntelliPass offered in 2 or 3 contactor bypass.

