

PowerXL Series DE1 economic variable speed starter

Simple solution for advanced starter applications with multi-speed capabilities



The PowerXL™ DE1 variable speed starter (VSS) was designed for customers who have basic applications, but still require variable frequency and advanced motor protection. With industry-leading ease of use and a narrow, compact housing, the DE1 design allows customers to simplify their design and reduce installation time.

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Value proposition

- Simple installation and setup
- Increased reliability
- Space-saving design
- Global ratings

Features

- Efficient, simple design without a keypad
- Compact, space-saving design
- Rugged design rated up to 60 °C
- Three indicating LEDs for fault and condition status
- Intuitive configuration module for programming
- DIN rail and screw mountable
- True side-by-side installation
- Low capacitor design for low harmonics
- Removable I/O terminal blocks
 - 3 digital inputs
 - 1 digital/analog (programmable) input
 - 1 relay output
- Contactor style power wiring
- RS-485/Modbus® as standard

Levels of ease of use

1. Common application parameter defaults for plug-in capabilities.
2. Configuration module with capabilities to change five basic parameters.
3. Connectivity with the drivesConnect PC Tool through the Bluetooth Copy/Paste stick.

Product range

- 0.33–3 hp at 230 V (single-phase in and three-phase out)
- 0.33–3 hp at 230 V (three-phase in and three-phase out) ①
- 0.5–10 hp at 460 V (three-phase in and three-phase out)

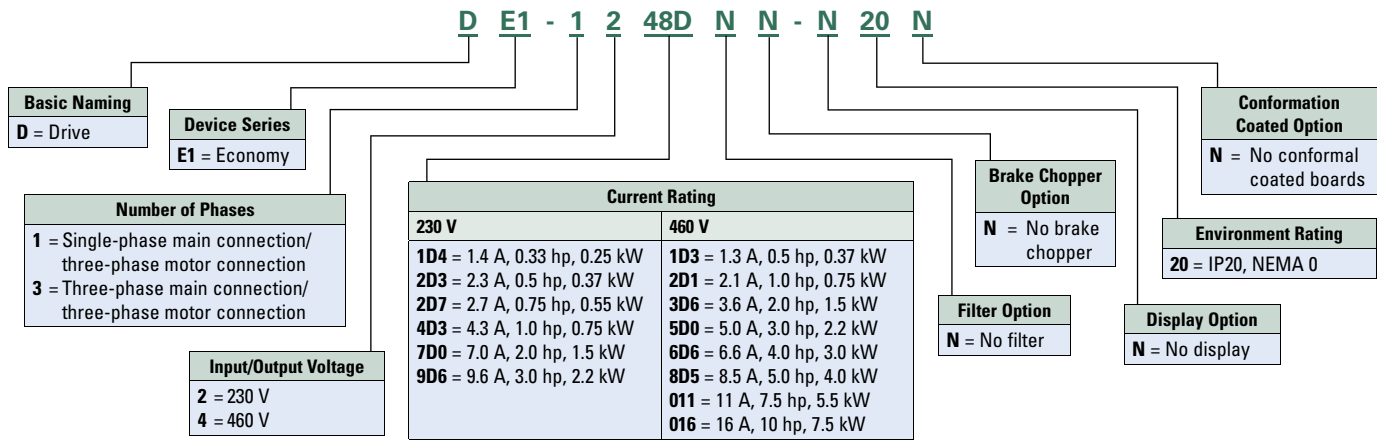
① For 230 V three-phase in applications, please refer to the three-phase to single-phase input application note to properly set up the system.

Standards and certifications

EN 61800-2CE, UL®, cUL®, c-Tick, RoHS, ISO 9001



Catalog numbering selection



Dimensions

Frame	Dimensions in inches (mm)
FR1	1.77 x 9.09 x 6.54 (45.0 x 231.0 x 166.0)
FR2	3.54 x 9.09 x 6.54 (90.0 x 231.0 x 166.0)

Ratings

Description	Specification
Input voltage	200–240 V, 380–480 V, ±10%
Output voltage	0 to V_{in}
Overload	1.5 x I_o (1 min / 10 min) 1.75 x I_o (2 sec / 20 sec)
Short-circuit withstand rating	100 kAIC with Type F fuses 10 kAIC with FAZ breakers 65 kAIC with PKZM/MMP
Operating temperature	–10 °C to +60 °C
Storage temperature	–40 °C to +70 °C
Altitude	0–1000 m above sea level >1000 m with 1% load current derating for every 100 m Maximum 2000 m
Mounting position	Any (except front not facing downward) DE1-121D4... and DE1-122D3... device can only be mounted vertical
Degree of protection	IP20 (NEMA® 0)

Accessories

Image	Descriptions	Device
	Configuration module to set five basic parameters 1. Motor FLA 2. Ramp time 3. Motor frequency 4. I/O configuration 5. Fixed frequency 1 value	DXE-EXT-SET
	Bluetooth copy/paste stick for connection to PC Tool and storing parameter set	DX-COM-STICK
	Three-phase commoning link to connect multiple 460 V devices on the mains side	XTCEXCLK3B XTCEXCLK4B XTCEXCLK5B XTCEXITB

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