

PowerXL DC1 Series Drives

2



### Contents

#### Description

	<i>Page</i>
PowerXL DC1 Series Drives	
Catalog Number Selection . . . . .	<b>V6-T2-3</b>
Product Selection . . . . .	<b>V6-T2-4</b>
Accessories . . . . .	<b>V6-T2-6</b>
Technical Data and Specifications . . . . .	<b>V6-T2-7</b>
Dimensions . . . . .	<b>V6-T2-9</b>

### Product Description

Eaton’s PowerXL™ DC1 variable frequency drives are the next generation of drives specifically engineered for today’s machinery applications.

The DC1 is compact with only 14 basic parameters, SmartWire-DT™ connectivity, and outstanding ease of mounting and installation. The DC1 is perfect for quick commissioning and is ideal for panel builders. This drive supports single-phase motor applications, and detachable terminal blocks make control wiring much easier.

Models rated at 480 volts, three-phase, 50/60 Hz are available in sizes ranging from 1 to 15 hp. Models rated at 240 volts, single- or three-phase, 50/60 Hz are available in sizes ranging from 0.5 to 7.5 hp. Models rated at 115 volts, single-phase, 50/60 Hz are available in the 0.5 to 3 hp size range.

### Features

- Compact, space-saving design
- Rugged and reliable—175% for 2s, 50°C rated
- DIN rail and screw mountable (FS1 and FS2)
- Side-by-side installation
- Industry-leading efficiency delivers energy savings to the customer
- Optional integrated EMC filters make the unit suitable for commercial and industrial networks
- Brake chopper as standard in frames 2 and higher
- Temperature-controlled fan
- RS-485/Modbus® and CANopen™ as standard
- PI controller as standard
- SmartWire capability
- Removable I/O terminal blocks
- Contactor style power wiring
- Compatibility with single-phase motors

### Standards and Certifications

#### Product

- Complies with EN61800-3 (2004)

#### EMC (At Default Settings)

- EMC Category C1, C2 and C3 at default settings (1m, 5m, 25m)

#### Safety ①

- 61800-5-1
- EN 60529
- CE
- UL
- cUL
- UkrSepro
- c-Tick
- RoHS compliant

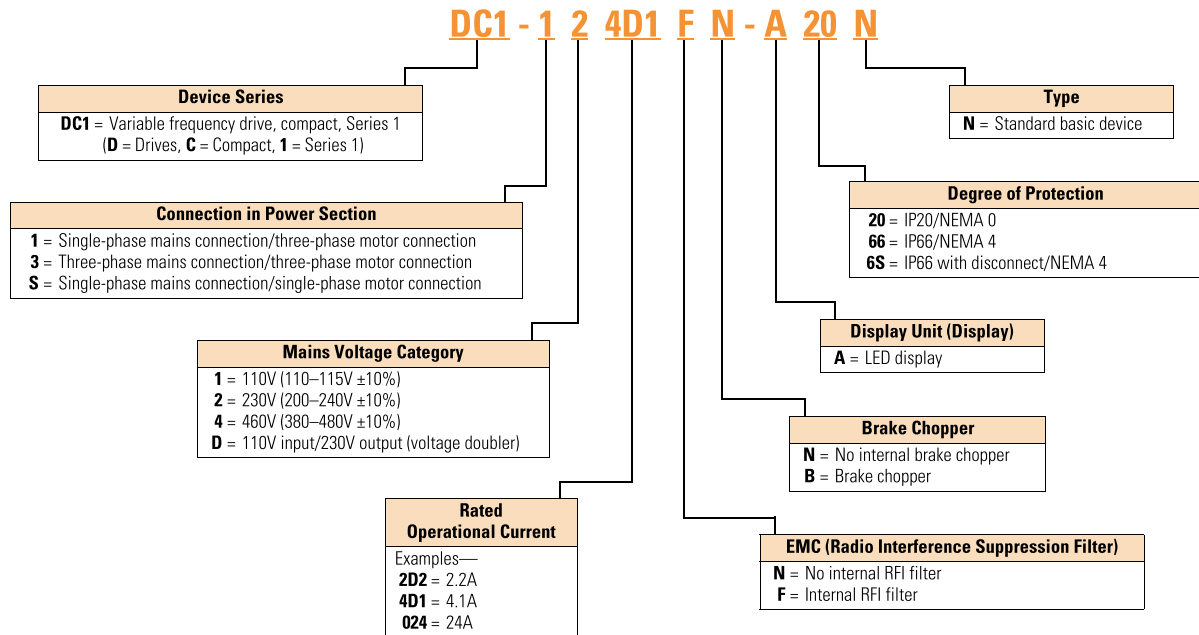


#### Note

① See unit nameplate for more detailed approvals.

## Catalog Number Selection

## DC1 Series Adjustable Frequency AC Drives



# 2.1

## Adjustable Frequency Drives

### PowerXL DC1 Series Drives

#### Product Selection

2

IP20

#### DC1 Series IP20 Enclosure Drives <sup>①</sup>



hp <sup>②</sup>	kW	Volts	100% Continuous Current In (A)	Frame Size <sup>③</sup>	Catalog Number
0.5	0.37	115V single-phase in/ 115V single-phase out	7	1	<b>DC1-S17D0NN-A20N</b>
0.75	0.55		10.5	2	<b>DC1-S1011NB-A20N</b>
0.5	0.37	200–240V single-phase in/ 200–240V single-phase out	4.3	1	<b>DC1-S24D3NN-A20N</b> <sup>④</sup>
1	0.75		7	1	<b>DC1-S27D0NN-A20N</b> <sup>④</sup>
1.5	1.1		10	2	<b>DC1-S2011NB-A20N</b> <sup>④</sup>
0.5	0.37	115V single-phase in/ 230V three-phase out	2.3	1	<b>DC1-1D2D3NN-A20N</b> <sup>④</sup>
1	0.75		4.3	1	<b>DC1-1D4D3NN-A20N</b>
1.5	1.1		5.8	2	<b>DC1-1D5D8NB-A20N</b>
0.5	0.37	200–240V single-phase in/ 230V three-phase out	2.3	1	<b>DC1-122D3NN-A20N</b> <sup>④</sup>
1	0.75		4.3	1	<b>DC1-124D3NN-A20N</b> <sup>④</sup>
2	1.5		7	1	<b>DC1-127D0NN-A20N</b> <sup>④</sup>
2	1.5		7	2	<b>DC1-127D0NB-A20N</b> <sup>④</sup>
3	2.2		10.5	2	<b>DC1-12011NB-A20N</b> <sup>④</sup>
5	4		15	3	<b>DC1-12015NB-A20N</b>
0.5	0.37	200–240V three-phase in/ 230V three-phase out	2.3	1	<b>DC1-322D3NN-A20N</b>
1	0.75		4.3	1	<b>DC1-324D3NN-A20N</b>
2	1.5		7	1	<b>DC1-327D0NN-A20N</b>
2	1.5		7	2	<b>DC1-327D0NB-A20N</b> <sup>④</sup>
3	2.2		10.5	2	<b>DC1-32011NB-A20N</b> <sup>④</sup>
5	4		18	3	<b>DC1-32018NB-A20N</b> <sup>④</sup>
1	0.75	380–480V three-phase in/ 460V three-phase out	2.2	1	<b>DC1-342D2NN-A20N</b> <sup>④</sup>
2	1.5		4.1	1	<b>DC1-344D1NN-A20N</b> <sup>④</sup>
2	1.5		4.1	2	<b>DC1-344D1NB-A20N</b> <sup>④</sup>
3	2.2		5.8	2	<b>DC1-345D8NB-A20N</b> <sup>④</sup>
5	4		9.5	2	<b>DC1-349D5NB-A20N</b> <sup>④</sup>
7.5	5.5		14	3	<b>DC1-34014NB-A20N</b> <sup>④</sup>
10	7.5		18	3	<b>DC1-34018NB-A20N</b> <sup>④</sup>
15	11		24	3	<b>DC1-34024NB-A20N</b> <sup>④</sup>

#### Notes

- ① These are constant torque/high overload rated drives.
- ② For all applications, select the unit such that the motor current is less than or equal to the rated continuous output current.
- ③ Brake chopper circuit available as standard in frames 2 and 3.
- ④ RFI version available. Substitute with DC1-\*\*\*\*\*F\*-\*\*\*\*\* for this option.