

Harness high-performance, precision and simplicity

Eaton's PowerXL DX1 is the latest high-performance variable frequency drive (VFD) designed for precise speed and torque control applications across numerous industry segments.

The latest addition to the PowerXL series of VFDs, the PowerXL DX1 is an ideal choice for demanding applications that require precision, reliability, responsiveness and closed-loop control. This high-performance VFD simplifies the commissioning, configuration and diagnostics for applications that require precise speed or torque control with permanent magnet or induction motors. The touchscreen interface utilizes consolidated contextual menus and an improved workflow versus traditional keypads to help save time and provide clarity on drive operation. The onboard PLC and oscilloscope provide customization and confidence for complex applications. Additionally, the SD card slot makes it easy to capture data logging from the oscilloscope and simplifies firmware updates.

Along with simplifying the setup and operating process, the PowerXL DX1 also provides great flexibility for different application demands. There are four easily accessible option card slots for tailoring the drive to specific applications with augmentations such as different encoder cards or I/O expansion. With multiple onboard protocols and available option cards, the PowerXL DX1 is ready to integrate using the most common industrial communication protocols.

This generational leap in capability is still backed by the proven engineering from the PowerXL family. This VFD uses the same parameter structure and fieldbus configuration, making it easy for legacy PowerXL users to adopt into their high-performance applications. Furthermore, out of the box, the PowerXL DX1 helps save on energy costs with the patented Active Energy Control algorithm. This high-performance VFD also shares the same robust design focus with high levels of functional safety, conformal coatings, metal conduit plates and 100 kAIC short circuit ratings to protect the sophisticated motor and drive in any application.

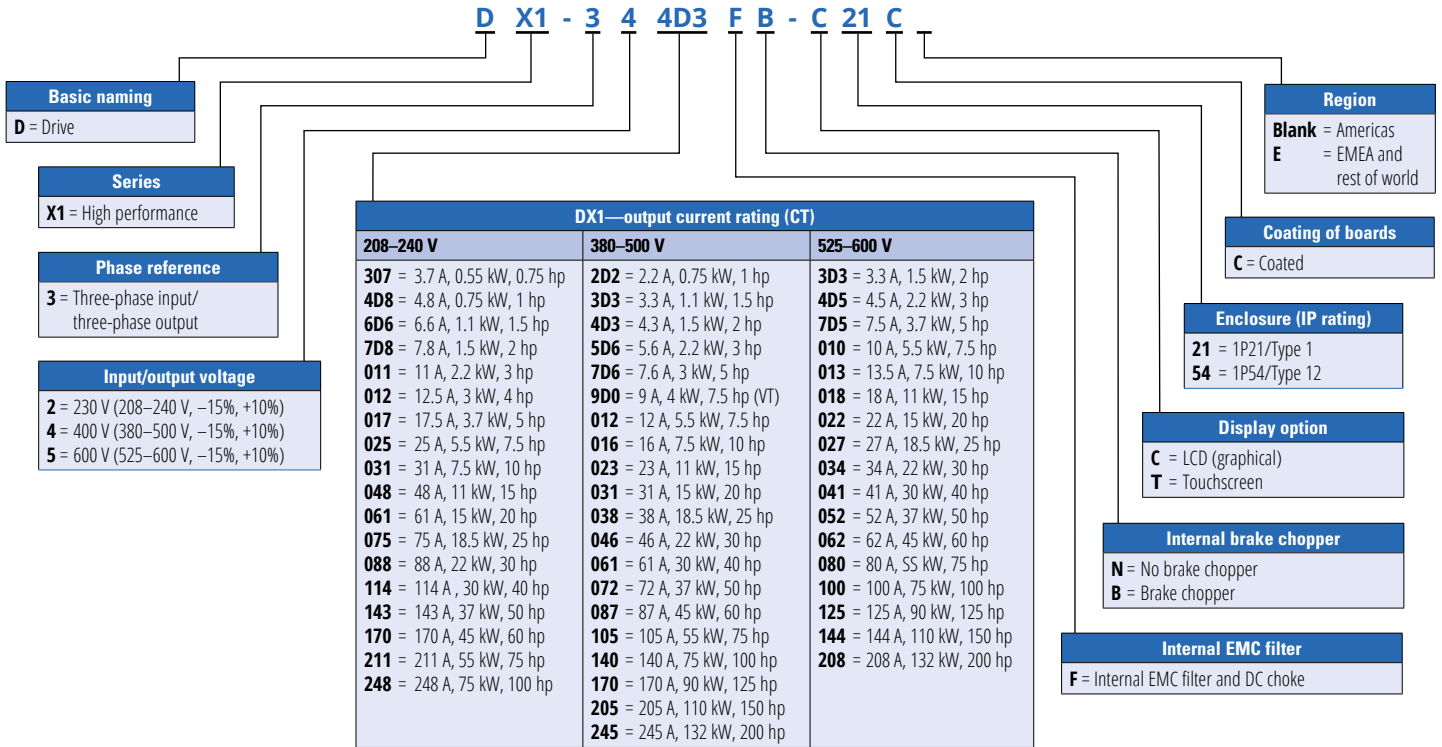
Key benefits

- **Ideal for a wide variety of industries**, including metals and mining, pulp and paper, material handling, automotive and others
- **Simple design** streamlines setup, configuration, maintenance and troubleshooting
- **Delivers speed accuracy** of $\leq 0.01\%$ of rated speed and wide speed range (1000:1)
- **SIL 2, PL d, Cat.3 safe torque off (STO)** integrated safety functions
- **Touchscreen keypad** for ease of use; traditional keypad also available
- **Onboard PLC** for customized logic
- **Cybersecurity IEC/EN 62443-4-2 Level 1** ensures ultimate protection against hackers
- **Includes Industry 4.0 Platform** for most up-to-date IoT specifications

EATON

Powering Business Worldwide

Catalog numbering system



Learn more at Eaton.com/DX1

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