

Phoenix DX

SINGLE PHASE AC Drives

True Industrial Drives

Easily Handle Sudden Load Changes

Reduce Line Harmonics

Eliminate Nuisance Trips

- 3 to 500 HP
- Designed for 50°C ambient
- Higher starting torque at lower inrush currents
- Eliminate energy-wasting bus resistors with unique Follower Circuitry
- Available in many horsepower and voltage configurations
- Fixed or variable carrier frequency
- Short-circuit and ground fault protection
- Multiple communications options
- **3-year warranty**



Many locations only have single-phase power available. Applications such as irrigation, agricultural machinery, oil & gas pumping, water injection and extraction.

Until now, using a three-phase AC Drive on Single-Phase power systems meant accepting significant performance degradation and a host of reliability problems.

Single-phase input power puts stress on an AC drive's DC Bus filtering capacitors and the input rectifier, causing premature failures. Nuisance trips due to under-voltage and over-current can prevent the drive from delivering maximum performance.

Phoenix Single-Phase AC Drives have been specifically designed to overcome the problems with Single Phase input power. We're so confident, we offer a 3-year warranty on all our drives.

Standard Features

- Tolerates high input AC line voltages
- Built-in line voltage surge protection
- Motor overload protection meets NEC 430
- Built-in RFI noise filter
- 8 preset speeds with acceleration/deceleration control
- Bi-directional spinning motor pickup
- Power dip ride-through
- KW/KWH metering
- S-Curve acceleration/deceleration control
- Programmable threshold detectors
- Custom V/Hz programming
- Auto-logging fault history
- Auto-restart

Available Options

- Signal Conditioners/Isolators
- Communications Cards: RS-232/422/485, Modbus RTU, Metasys N2
- Analog Signal Conditioner/Isolation Cards
- Hand/Off/Auto, Local/Remote, Auto/Manual Selection
- Many Additional Modifications Available



Phoenix DX AC Drive Dimensions ¹

Input Voltage	Motor HP ²		Nema 1 VFD Only	Nema 12 VFD Only	Nema 1 w Disconnect & Fuses	Nema 12 w Disconnect & Fuses
	High Overload Capacity ³ (CT)	Normal Overload Capacity ⁴ (VT)				
200 - 250 VAC (208/230/240)	3 - 7.5	5 - 10	13.05"x9.0"x10.9"	13.05"x9.0"x10.9"	20.74"x9.0"x10.9"	20.74"x9.0"x10.9"
	10 - 20	15 - 20	13.05"x9.0"x10.9"	13.05"x9.0"x10.9"	20.74"x9.0"x10.9"	20.74"x9.0"x10.9"
	25 - 30	25 - 30	25"x11.6"x11.1"	25"x11.6"x11.1"	25"x11.6"x11.1"	25"x11.6"x11.1"
	40 - 100	40 - 100	32.5"x20.1"x13.5"	32.5"x20.1"x13.5"	32.5"x20.1"x13.5"	32.5"x20.1"x13.5"
	125 - 250	125 - 250	44.2"x31.1"x16.8"	72"x36"x23.5"	86.5"x31.5"x18"	72"x36"x23.5"
380 - 500 VAC (380/400/415/480)	5 - 15	7.5 - 20	13.05"x9.0"x10.9"	13.05"x9.0"x10.9"	20.74"x9.0"x10.9"	20.74"x9.0"x10.9"
	20 - 40	25 - 40	13.05"x9.0"x10.9"	13.05"x9.0"x10.9"	20.74"x9.0"x10.9"	20.74"x9.0"x10.9"
	50 - 60	50 - 60	25"x11.6"x11.1"	25"x11.6"x11.1"	25"x11.6"x11.1"	25"x11.6"x11.1"
	75 - 200	75 - 200	32.5"x20.1"x13.5"	32.5"x20.1"x13.5"	32.5"x20.1"x13.5"	32.5"x20.1"x13.5"
	250 - 500	250 - 500	44.2"x31.1"x16.8"	72"x36"x23.5"	86.5"x31.5"x18"	72"x36"x23.5"
525 - 600 VAC (525/575/600)	5 - 15	7.5 - 20	13.05"x9.0"x10.9"	13.05"x9.0"x10.9"	20.74"x9.0"x10.9"	20.74"x9.0"x10.9"
	20 - 40	25 - 40	13.05"x9.0"x10.9"	13.05"x9.0"x10.9"	20.74"x9.0"x10.9"	20.74"x9.0"x10.9"
	50 - 75	50 - 75	25"x11.6"x11.1"	25"x11.6"x11.1"	25"x11.6"x11.1"	25"x11.6"x11.1"
	100 - 200	100 - 200	32.5"x20.1"x13.5"	32.5"x20.1"x13.5"	32.5"x20.1"x13.5"	32.5"x20.1"x13.5"
	250 - 600	250 - 600	44.2"x31.1"x16.8"	72"x36"x23.5"	86.5"x31.1"x18"	72"x36"x23.5"

(1) All Dimensions in Inches (HxWxD)

(2) Horsepower Rating based on 230, 460 and 575VAC Motors.

(3) High Overload Capacity Drives produce 150% of Rated Drive Output Current for 1 minute.

(4) Normal Overload Capacity Drives produce 120% of Rated Drive Output Current for 1 minute