# 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 degredation 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-voltate 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.*

MicroMod
AUTOMATION & CONTROLS

## 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

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