

2XD

GENERAL PURPOSE

CONFIGURED PANEL



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The 2XD is a phase converting, voltage doubling, general purpose panel focused on solutions for residential and light commercial constant pressure. Our voltage doubling technology provides significant cable savings, which translates to more affordable drive and pump installations.

Protect your investment with our all-steel, NEMA 3R enclosures, guaranteed to keep out the elements while allowing your drive to operate at peak performance. All our enclosures are made in-house at our metal fabrication shop, ensuring the highest quality products, proudly made in America.



GENERAL PURPOSE CONFIGURED PANEL



**12-DAY
LEAD TIMES**



**MADE IN THE
USA**



PUMPING APPLICATIONS

- ▶ Constant pressure from source to liquid distribution point
- ▶ Phase Converting and Voltage Doubling capabilities for easy 460V three-phase power
- ▶ Easy Set Up Wizards preprogrammed in your system for quick and easy startup
- ▶ Great of all residential and commercial pumping applications

Common Applications

AGRICULTURE	<ul style="list-style-type: none"> ▶ Irrigation ▶ Livestock
MUNICIPAL	<ul style="list-style-type: none"> ▶ Sewer Bypass ▶ Lift Stations
MINING & CONSTRUCTION	<ul style="list-style-type: none"> ▶ Dewatering ▶ Slurry & Tailings Removal ▶ Wasterwater Reuse ▶ Dust & Fire Supression ▶ Evaporation Equipment ▶ Process Water
OIL & GAS	<ul style="list-style-type: none"> ▶ Water, Oil & Mud Transfer ▶ Drilling Mud Recirculation ▶ Fuel Storage Tank Booster ▶ Downhole Pumps



CRAFT YOUR CONFIGURED PANEL

Our 2XD drives come in both NEMA 1 and NEMA 3R enclosure options so no matter your need or use, Phase Technologies has a drive that can be catered to your specific operation.

General Purpose VFD

Our 2XD model is a high-performance variable frequency drive (VFD) designed for controlling and optimizing motor speed in various pumping applications. With phase converting and voltage doubling capabilities, you're power needs are easily met across many pumping applications.

Known for its robust design, the 2XD offers advanced motor control, energy efficiency, and protection features. It is particularly effective in applications requiring constant pressure.

Panel Shop Additional Options

- ▶ MCCB - Service Rated
- ▶ HOA & Speed Pot
- ▶ Run & Fault Light
- ▶ Output Filters
- ▶ Surge Protection
- ▶ Leg Kit

Nomenclature

VFD Series		HP	Enclosure Type	Voltage
2XD		215	R	
DXLL, SDX, DXL, DX = General Purpose			Blank = NEMA Type 1	0 = 208V - 230V
LHX, 1LH, 3LH = Low Harmonic			R = NEMA Type 3R	2 = Voltage Doubling
ES, SD, 2XD = Aqua Phase				4 = 460V



Physical / Environmental

Operating Temperature Range	-40 °C – 50 °C (-40 °F – 104 °F) *Heater in enclosure may be required below –40 °C, de-rating required above 40 °C
Storage Temperature Range	-40 °C – 57 °C (-40 °F – 135 °F)
Enclosure	NEMA type 1 : Indoor, Nema type 3R : Outdoor
Altitude	Altitude Derate by 1% every 400 ft above 3300 ft elevation

Input Power

Input Phase	Single-Phase
Input Voltage	230 V
Input Voltage Range	190 V – 275 V
Input Frequency	60 Hz

Output Power

Output Phase	Three-Phase
Nominal Output Voltage	460 V
Output Voltage Range	440 V – 530 V
Output Frequency	5 Hz – 300 Hz
Horsepower	5 HP - 15 HP
Output Power	7-12 kW
Switching Frequency	2 kHz – 8 kHz
Output	V/f control or torque Control (Optional)

Electrical

Short Circuit Withstand Rating	25 kA RMS symmetrical Amps
Efficiency	> 98%
Startup Ramp Time	1 – 120 s
Shutdown Ramp Time	1 – 120 s or Coast to Stop
Overload Capacity	110% for 60 s



Analog Inputs

Current Reference	4 – 20 mA, (2) Inputs
Voltage Reference	0 – 5 VDC, (1) Input
Terminal Block Size	26 - 12 AWG

Digital Inputs

Quantity	(2) Programmable, Expandable
Ratings	< 5 V, galvanically isolated
Terminal Block Size	26 - 12 AWG

Relay Outputs

Quantity	(2) Programmable
Rating	Relay 1: 28 VDC, 10 A or 250 VAC, 10 A Relay 2: 30 VDC, 2 A or 125 VAC, 0.5 A
Terminal Block Size	26 - 12 AWG

Features

Certification	ETL listed to UL 61800-5-1 and CSA C22.2 No. 274-17
User Interface	Push button membrane keypad with backlit graphic display
Available Feature Sets	AquaPhase™ (pump control)



INTUITIVELY ENGINEERED



**DIGITAL PHASE
CONVERTERS**

**VARIABLE
FREQUENCY
DRIVES**

**MOTOR
PROTECTION**

**STARTER
PANELS**

OUR MISSION

Relentlessly seek to provide Uncommon Value, solutions, innovation, and support for the industries that we serve.

