



PRODUCT SPECIFICATIONS

DXL SERIES

VARIABLE FREQUENCY DRIVE

Six Pulse | Three-Phase

7.5 HP to 400 HP

PHASE



DXL SERIES

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Six Pulse | Three-Phase

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DXL
SERIES

Easy Setup Wizards

- Constant Pressure
- Flow Control
- Tank Level Control
- Pump Down
- Suction Pump

Fully Featured Drive

- Advanced motor protection & PID Control
- V/f Control or Torque Control
- Downloadable parameters
- Intuitive user interface
- Large backlit graphic display
- Intuitive menus written in clear English

Superior Design

- Rugged all steel enclosure
- NEMA 1, NEMA 3R
- Made in the USA

Industry Best Lead Times

- Expedite options available

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Nomenclature



SERIES
DXL410R

VOLTAGE
0 = 230 V
4 = 460 V

HP

ENCLOSURE TYPE
Blank = NEMA 1
R = NEMA 3R

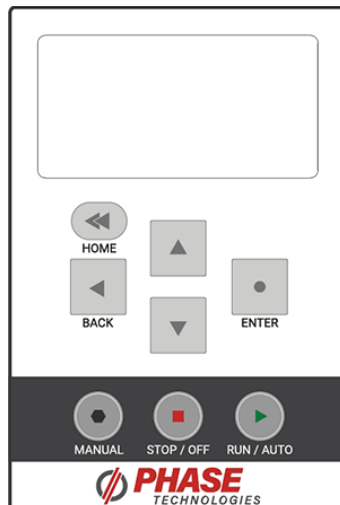
Technical Specifications

Physical / Environmental	
Operating Temperature Range	−40 °C – 40 °C (−40 °F – 104 °F) <i>*Heater in enclosure may be required below −40 °C, de-rating required above 40 °C.</i>
Storage Temperature Range	−40 °C – 57 °C (−40 °F – 135 °F)
Enclosure	NEMA Open, NEMA Type 1: Indoor
Altitude	Derate by 5 °C every 2000 ft over 5500 ft of elevation
Input Power	
Input Phase	single-phase or three-phase
Input Voltage	230 V 460 V
Input Voltage Range	190 V – 264 V 440 V – 520 V
Input Frequency	50/60 Hz
Output Power	
Output Phase	three-phase
Nominal Output Voltage	230 V 460 V
Output Voltage Range	190 V – 264V 440 V – 520 V
Output Frequency	5 Hz – 590 Hz
Horsepower	7.5 HP – 400 HP
Output Power	1.5 - 300 kW
Switching Frequency	2 kHz – 5 kHz
Output	V/f Control or Torque Control
Integrated Output Filter	None
Electrical	
Short Circuit Withstand Rating	65 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
Input Filter	DC Link Choke in all models 30 HP and above

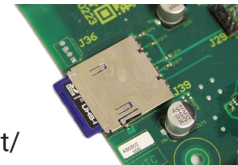
Input/Output Specifications

Analog Inputs	
Quantity	(3) Programmable
Current Reference	4 – 20 mA, (2) Inputs
Voltage Reference	0 – 10 VDC, (1) Input
Terminal Block Size	26 – 12 AWG
Digital Inputs	
Quantity	(4) Programmable
Ratings	< 5 V, galvanically isolated
Terminal Block Size	26 – 12 AWG
Analog Outputs	
Quantity	(2) Programmable
Current Reference	4 – 20 mA, (1) Output
Voltage Reference	0 – 10 VDC, (1) Output
Terminal Block Size	26 – 12 AWG
Relay Outputs	
Quantity	(4) Programmable
Rating	Relay 1 : 28 VDC, 10 A or 250 VAC, 10 A Relay 2 : 28 VDC, 10 A or 250 VAC, 10 A Relay 3 : 30 VDC, 2 A or 125 VAC, 0.5 A Relay 4 : 30 VDC, 2 A or 125 VAC, 0.5 A
Terminal Block Size	26 – 12 AWG
Modbus	
Communication	RTU, RS-485, 4-wire or 2-wire
Connection Type	RJ-45
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)

User Interface



SDHC card reader for import/
export of parameter set

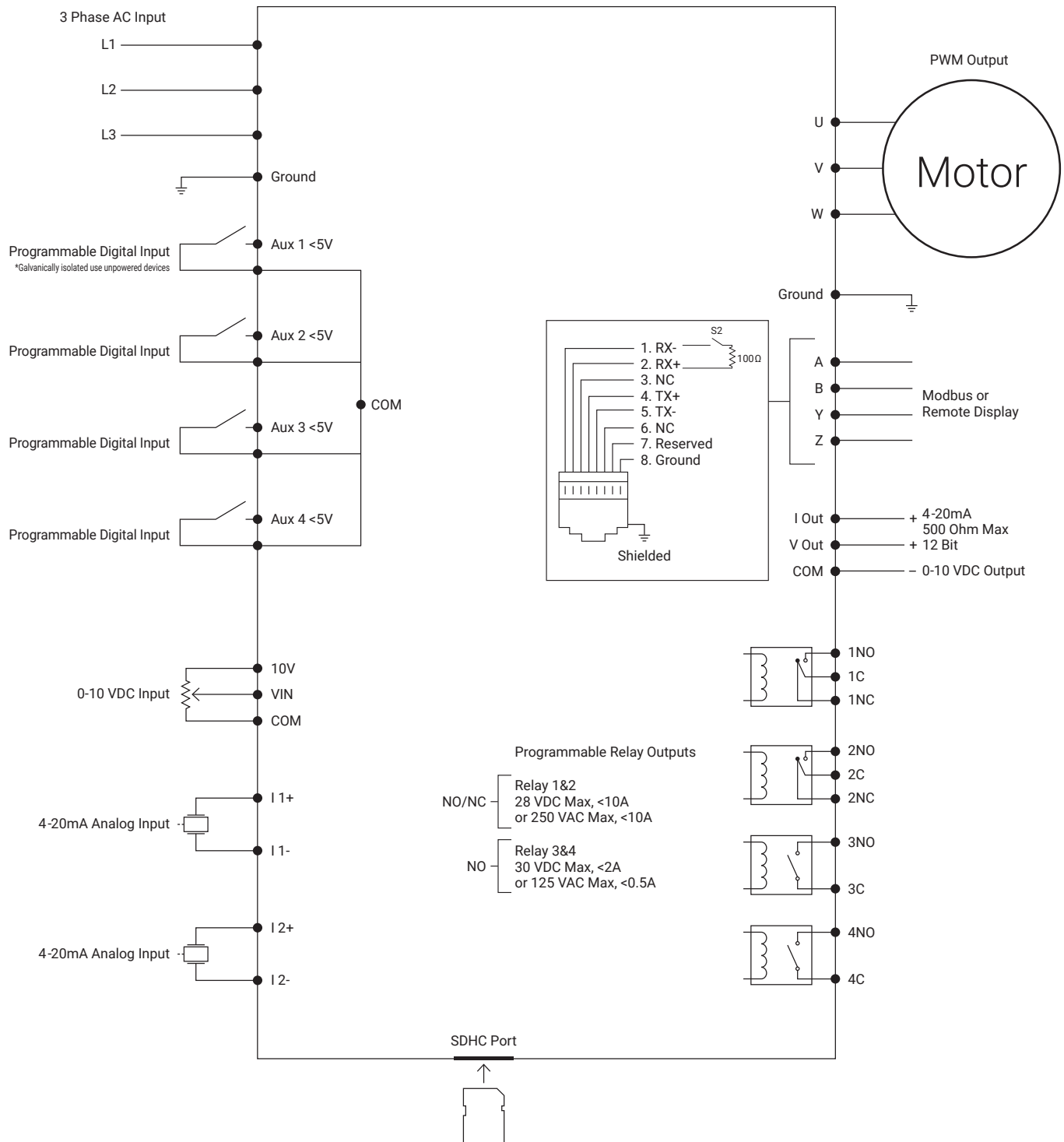


Eight button keypad and digital display
standard on all DXL models

Wiring Diagram

DXL
SERIES

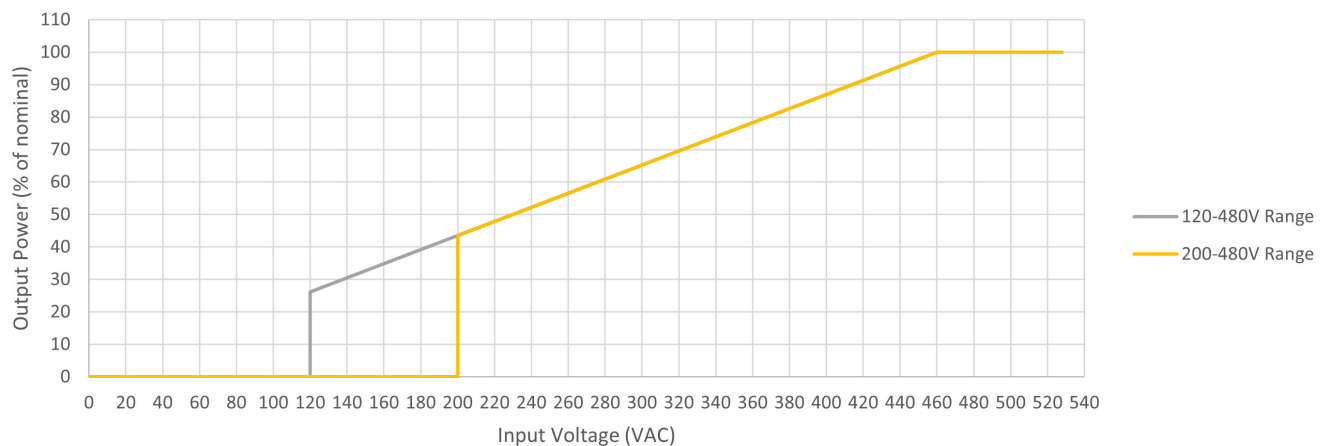
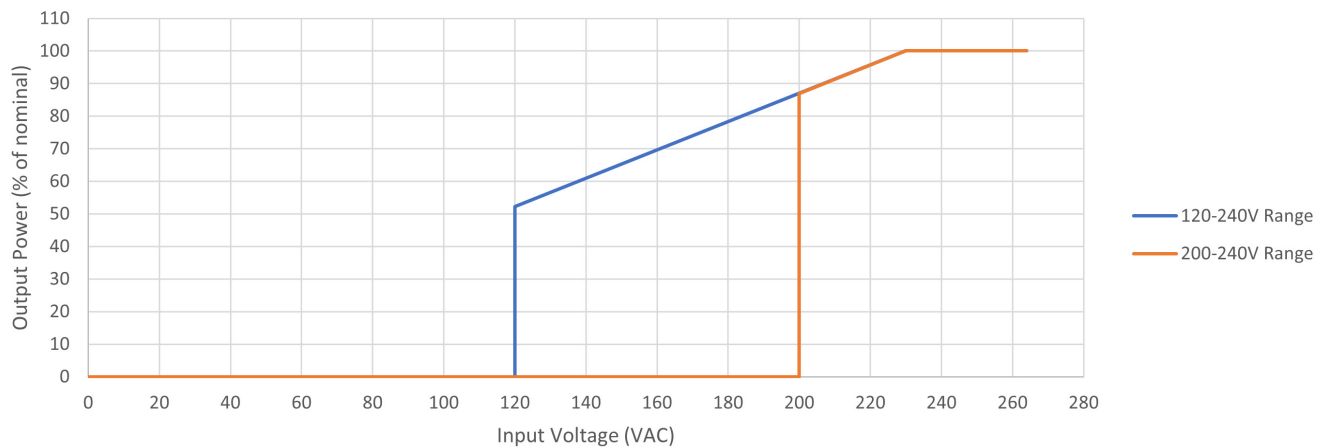
Wiring Diagram



Models

Single-Phase Input

Part Number	HP	Rated Input Current	Rated Output Current	Rated Output Current	Dimensions (H x W x D)	Weight
DXL — 208 V/230 V Input Three-Phase 208 V/230 V Output Three-Phase *Derate by one size for 208 V input.						
DXL007	7.5 HP	24 A	24 A	12 A	19.9 x 13.3 x 7 in.	-
DXL010	10 HP	31 A	31 A	15.5 A	19.9 x 13.3 x 7 in.	-
DXL015	15 HP	46 A	46 A	23 A	19.9 x 13.3 x 7 in.	-
DXL020	20 HP	61 A	61 A	30.5 A	23.5 x 15 x 7 in.	-
DXL025	25 HP	75 A	75 A	37.5 A	23.5 x 15 x 7 in.	-
DXL030	30 HP	91 A	91 A	45.5 A	23.5 x 15 x 7 in.	-



Models - continued

Single-Phase Input

Part Number	HP	Rated Input Current	Rated Output Current	Rated Output Current	Dimensions (H x W x D)	Weight
DXL — 460 V Input Three—Phase 460 V Output Three—Phase						
DXL407	7.5 HP	13 A	13 A	6.5 A	19.9 x 13.3 x 7 in.	-
DXL410	10 HP	18 A	18 A	9 A	19.9 x 13.3 x 7 in.	-
DXL415	15 HP	24 A	24 A	12 A	25.3 x 14.9 x 7.2 in.	-
DXL420	20 HP	31 A	31 A	15.5 A	25.3 x 14.9 x 7.2 in.	-
DXL425	25 HP	38 A	38 A	19 A	25.3 x 14.9 x 7.2 in.	-
DXL430	30 HP	46 A	46 A	23 A	25.3 x 14.9 x 7.2 in.	-
DXL440	40 HP	61 A	61 A	3.5 A	25.3 x 14.9 x 7.2 in.	-
DXL450	50 HP	77 A	77 A	38.5 A	25.3 x 14.9 x 7.2 in.	-
DXL460	60 HP	91 A	91 A	45.5 A	33.9 x 16.7 x 15 in.	-
DXL475	75 HP	107 A	107 A	53.5 A	33.9 x 16.7 x 15 in.	-
DXL4100	100 HP	142 A	142 A	71 A	33.9 x 16.7 x 15 in.	-
DXL4125	125 HP	172 A	172 A	86 A	33.9 x 16.7 x 15 in.	-
DXL4150	150 HP	198 A	198 A	99 A	33.9 x 16.7 x 15 in.	-
DXL4200	200 HP	250 A	250 A	125 A	33.9 x 16.7 x 15 in.	-
DXL4250	250 HP	304 A	304 A	152 A	33.9 x 16.7 x 15 in.	-
DXL4300	300 HP	365 A	365 A	182.5 A	42.8 x 20.5 x 14.8 in.	-
DXL4350	350 HP	415 A	415 A	207.5 A	42.8 x 20.5 x 14.8 in.	-
DXL4400	400 HP	478 A	478 A	239 A	42.8 x 20.5 x 14.8 in.	-

Recommended Breaker Sizes

Model Number	Horsepower	Recommended Fuse Rating Class J	Recommended Circuit Breaker Rating
DXL – 230 V Input Three-Phase 230 V Input Three-Phase			
DXL007	7.5 HP	30 A, 600 V	30 A
DXL010	10 HP	40 A, 600 V	40 A
DXL015	15 HP	60 A, 600 V	60 A
DXL020	20 HP	80 A, 600 V	80 A
DXL025	25 HP	100 A, 600 V	100 A
DXL030	30 HP	125 A, 600 V	125 A
DXL – 460 V Input Three-Phase 460 V Input Three-Phase			
DXL407	7.5 HP	20 A, 600 V	20 A
DXL410	10 HP	30 A, 600 V	30 A
DXL415	15 HP	30 A, 600 V	30 A
DXL420	20 HP	40 A, 600 V	40 A
DXL425	25 HP	50 A, 600 V	50 A
DXL430	30 HP	60 A, 600 V	60 A
DXL440	40 HP	80 A, 600 V	80 A
DXL450	50 HP	100 A, 600 V	100 A
DXL460	60 HP	125 A, 600 V	125 A
DXL475	75 HP	150 A, 600 V	150 A
DXL4100	100 HP	200 A, 600 V	200 A
DXL4125	125 HP	225 A, 600 V	225 A
DXL4150	150 HP	250 A, 600 V	250 A
DXL4200	200 HP	350 A, 600 V	350 A
DXL4250	250 HP	400 A, 600 V	400 A
DXL4300	300 HP	500 A, 600 V	500 A
DXL4350	350 HP	500 A, 500 V	500 A
DXL4400	400 HP	600 A, 600 V	600 A

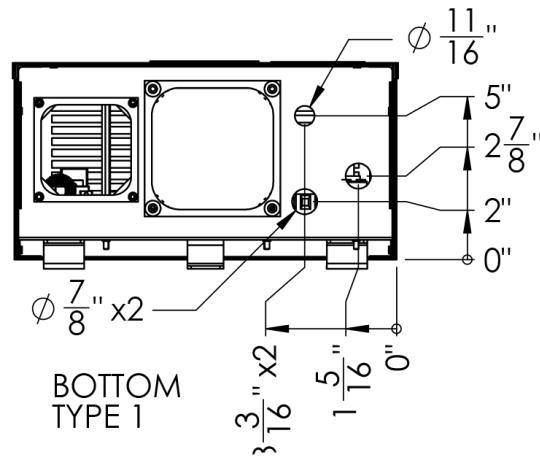
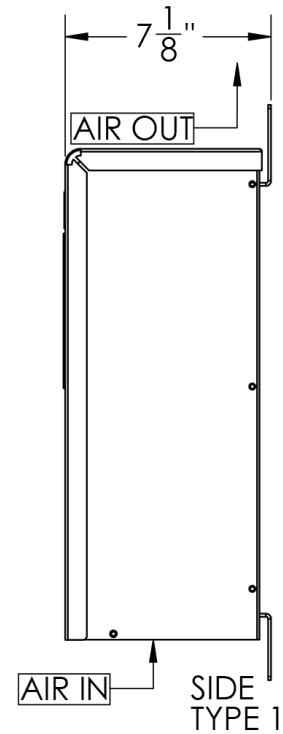
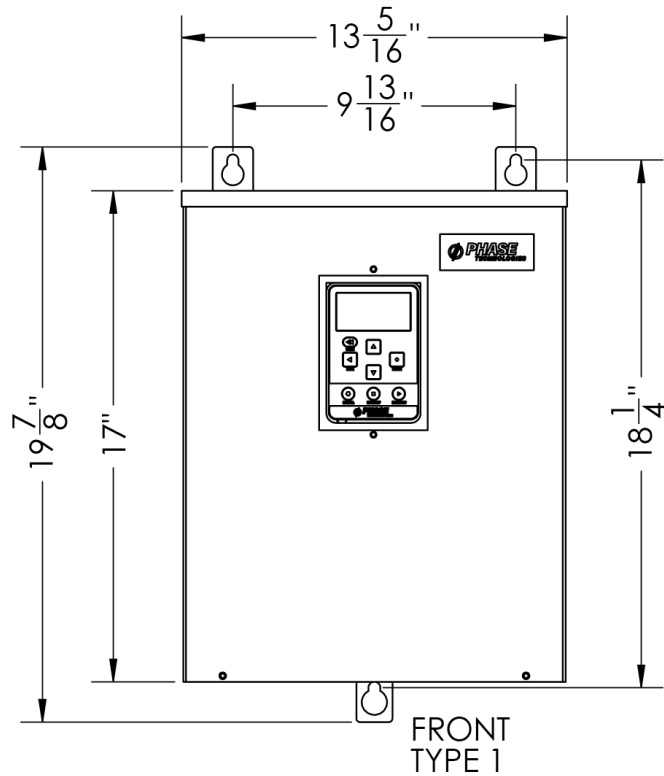


Line Drawings



415

Model Number
DXL007
DXL010
DXL407
DXL410
DXL415

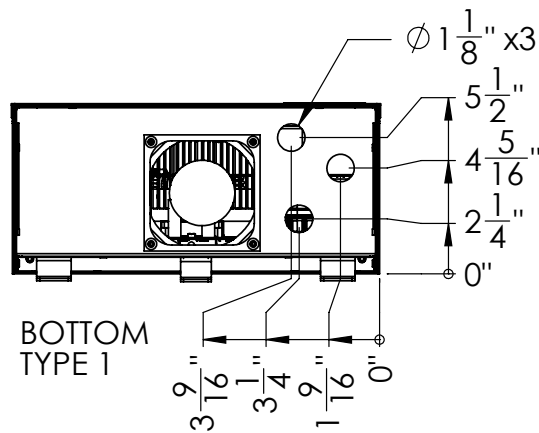
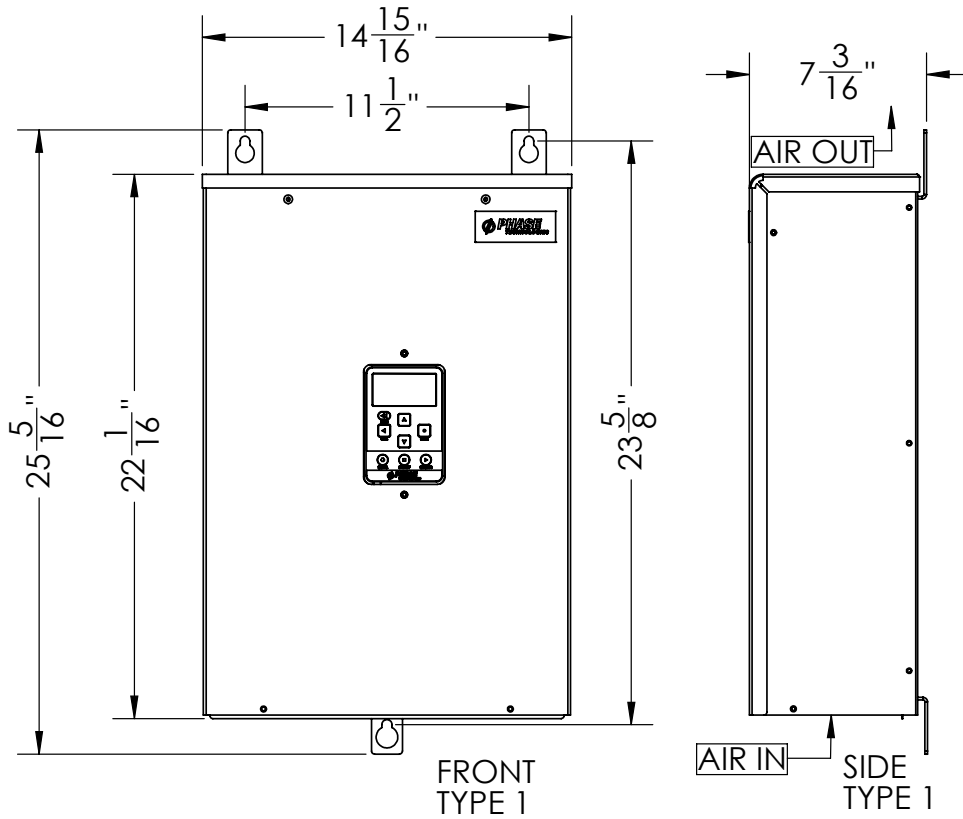


Line Drawings



450

Model Number
DXL015
DXL020
DXL025
DXL030
DXL415
DXL420
DXL425
DXL430
DXL440
DXL450

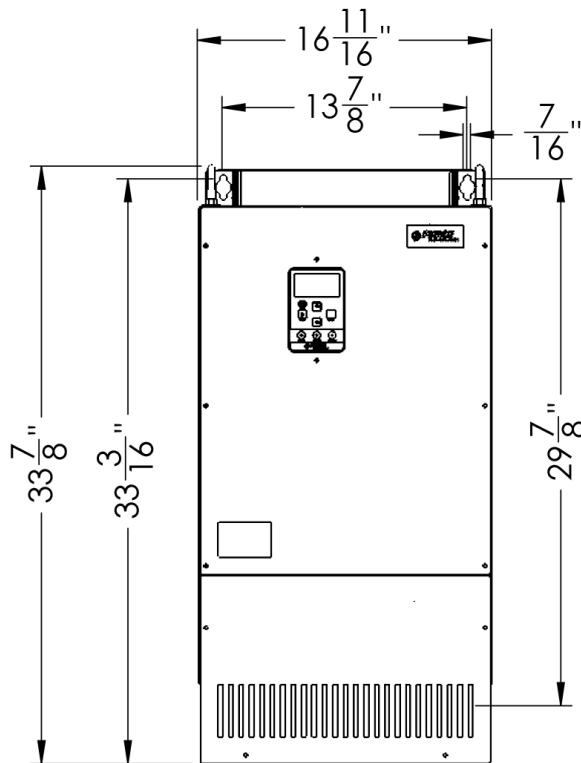


Line Drawings

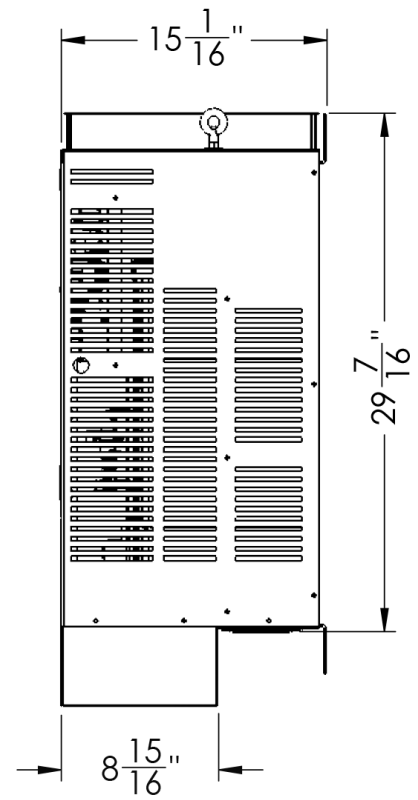


4250

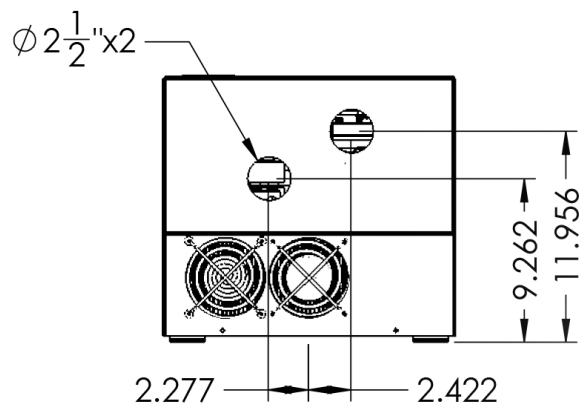
Model Number
DXL460
DXL475
DXL4100
DXL4125
DXL4150
DXL4200
DXL4250



FRONT
NEMA 1



SIDE
NEMA 1



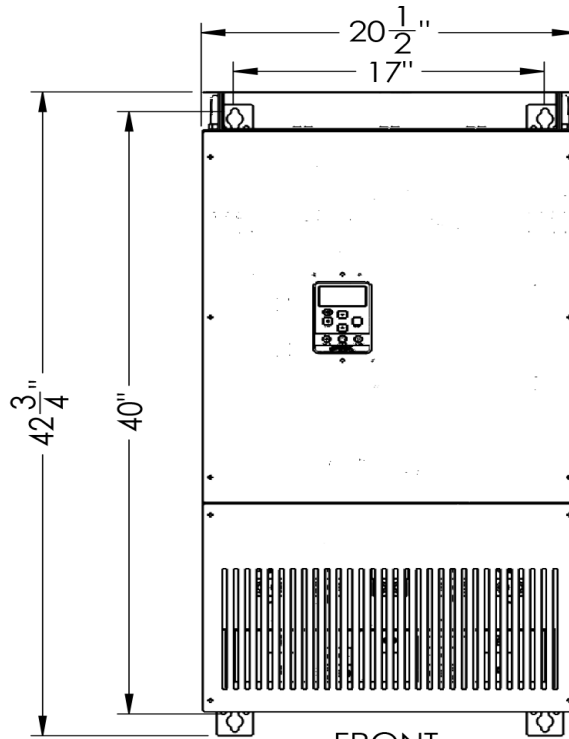
BOTTOM
NEMA 1

Line Drawings

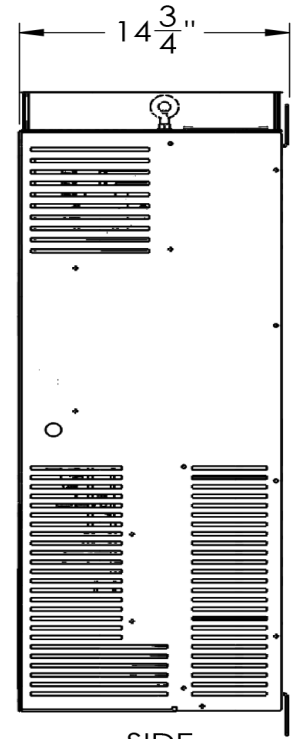


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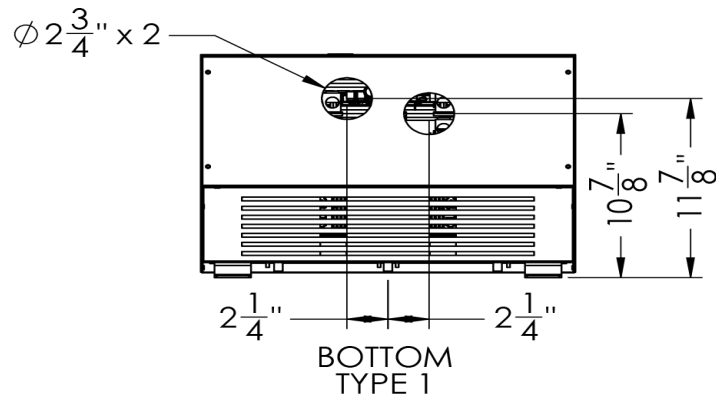
Model Number
DXL4300
DXL4350
DXL4400



FRONT
TYPE 1



SIDE
TYPE 1



BOTTOM
TYPE 1

Notes
