



PRODUCT SPECIFICATIONS

DXL SERIES

VARIABLE FREQUENCY DRIVE

Six Pulse | Three-Phase

7.5 HP to 400 HP

PHASE



DXL SERIES

VARIABLE FREQUENCY DRIVE

Six Pulse | Three-Phase

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DXL SERIES

Easy Setup Wizards

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

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
- Made in the USA

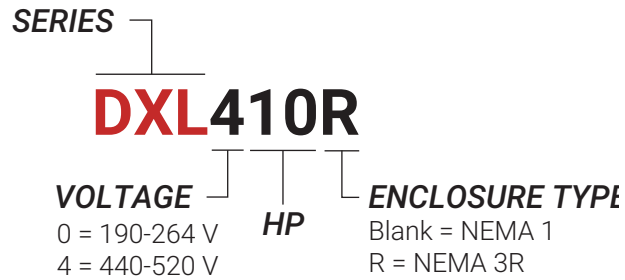
Industry Best Lead Times

- Expedite options available

Table Of Contents

Section	Page #	Section	Page #	Section	Page #
DXL SERIES Overview	2	I/O Specifications.....	4	Fuse Breaker Recommendations	8
Nomenclature.....	3	Wiring Diagram	5	Line Drawings	9
Technical Specifications	3	Models.....	6		

Nomenclature



Technical Specifications

Physical / Environmental	
Operating Temperature Range	—40 °C – 40 °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 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	100 V – 270V 200 V — 530 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
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, Expandable
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, Expandable
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	4 Pin Connector
Ethernet	
Communication	BACnet
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

User Interface



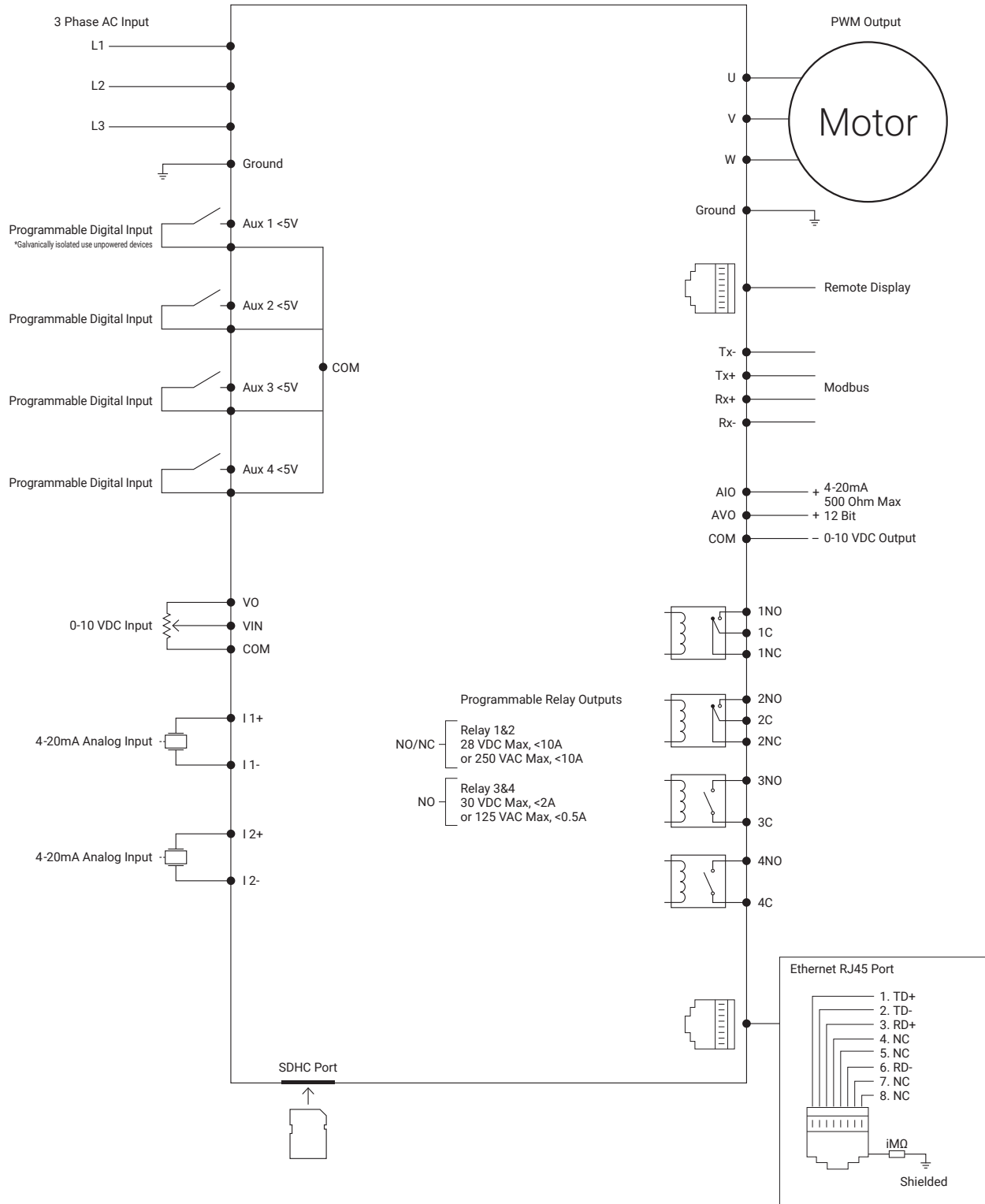
SDHC card reader for import/export of parameter set



Eight button keypad and digital display standard on all DXL models

Wiring Diagram

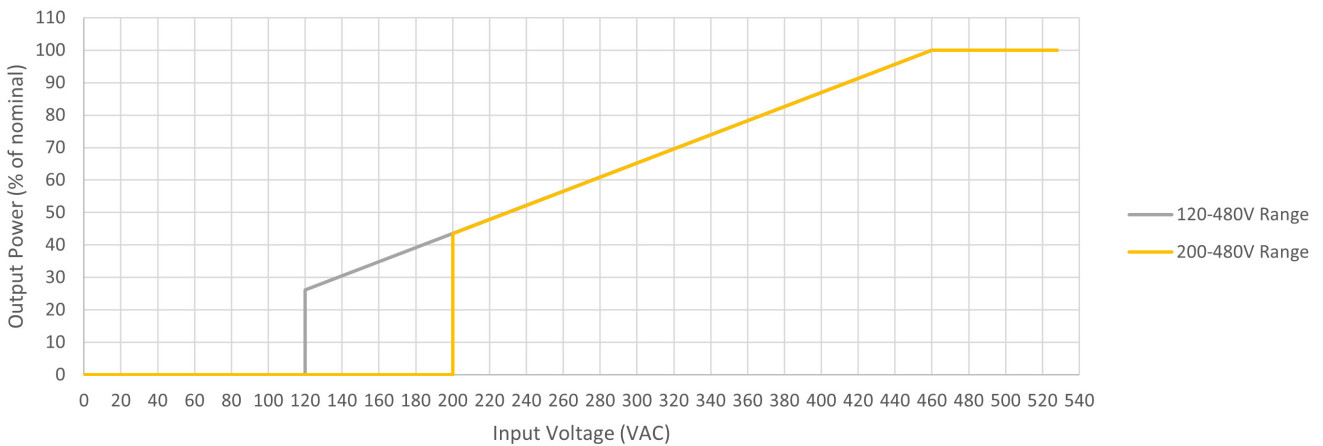
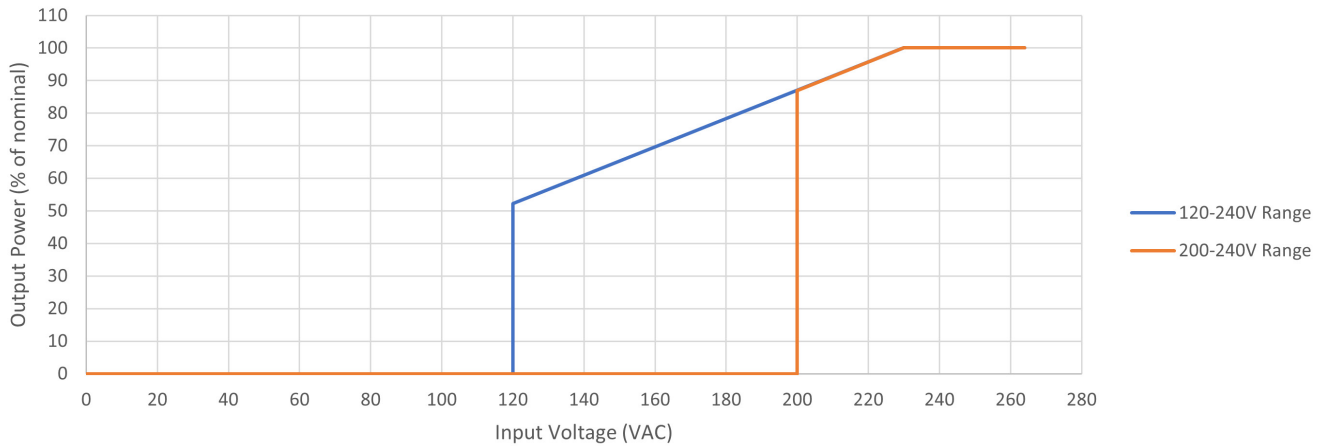
DXL
SERIES *Wiring Diagram*



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	19.5 x 7 x 13 in.	-
DXL010	10 HP	31 A	31 A	15.5 A	19.5 x 7 x 13 in.	-
DXL015	15 HP	46 A	46 A	23 A	19.5 x 7 x 13 in.	-
DXL020	20 HP	61 A	61 A	30.5 A	19.5 x 7 x 13 in.	-
DXL025	25 HP	75 A	75 A	37.5 A	19.5 x 7 x 13 in.	-
DXL030	30 HP	91 A	91 A	45.5 A	19.5 x 7 x 13 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	19.5 x 7 x 13 in.	-
DXL410	10 HP	18 A	18 A	9 A	19.5 x 7 x 13 in.	-
DXL415	15 HP	24 A	24 A	12 A	19.5 x 7 x 13 in.	-
DXL420	20 HP	31 A	31 A	15.5 A	19.5 x 7 x 13 in.	-
DXL425	25 HP	38 A	38 A	19 A	19.5 x 7 x 13 in.	-
DXL430	30 HP	46 A	46 A	23 A	19.5 x 7 x 13 in.	-
DXL440	40 HP	61 A	61 A	3.5 A	19.5 x 7 x 13 in.	-
DXL450	50 HP	77 A	77 A	38.5 A	19.5 x 7 x 13 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	50.75 x 20.5 x 15.75 in.	-
DXL4350	350 HP	415 A	415 A	207.5 A	50.75 x 20.5 x 15.75 in.	-
DXL4400	400 HP	478 A	478 A	239 A	50.75 x 20.5 x 15.75 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

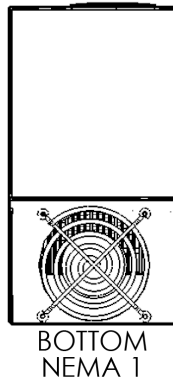
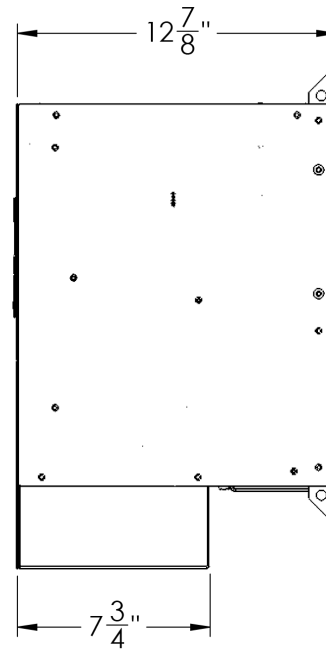
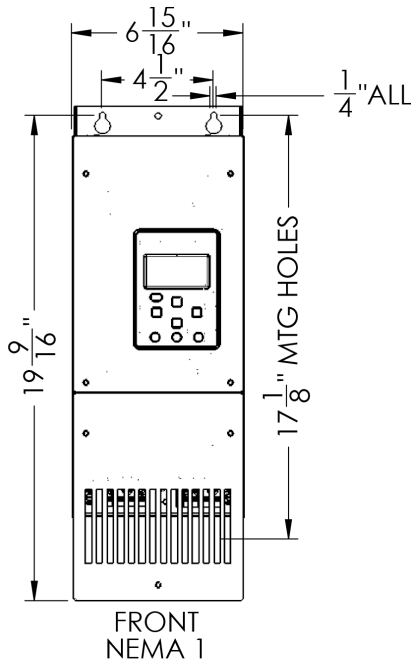


Line Drawings

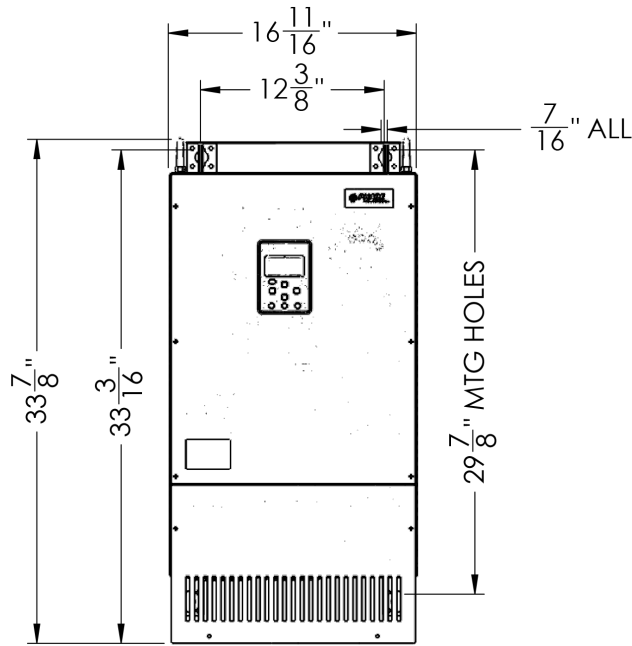


D1

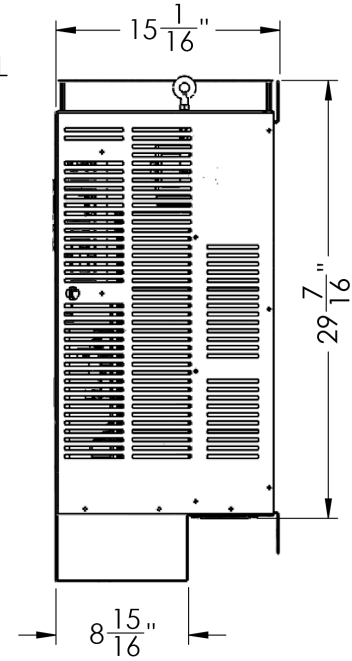
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DXL007
DXL010
DXL015
DXL020
DXL025
DXL030
DXL407
DXL410
DXL415
DXL420
DXL425
DXL430
DXL440
DXL450



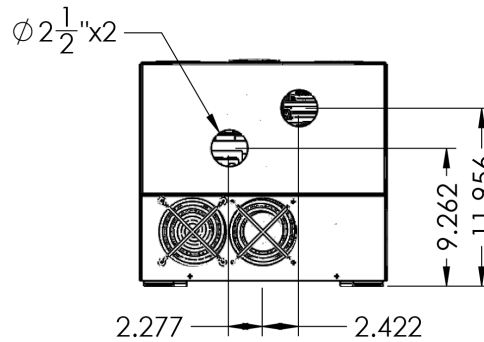
Line Drawings



FRONT
NEMA 1



SIDE
NEMA 1

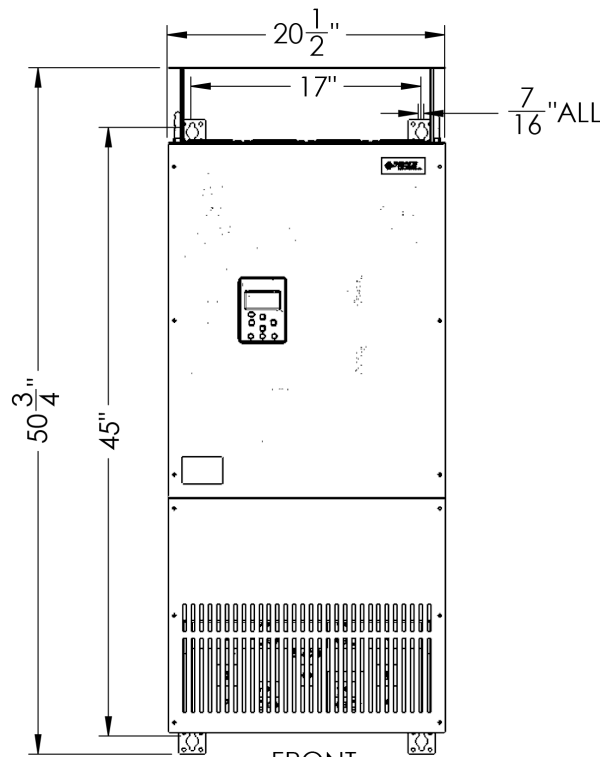
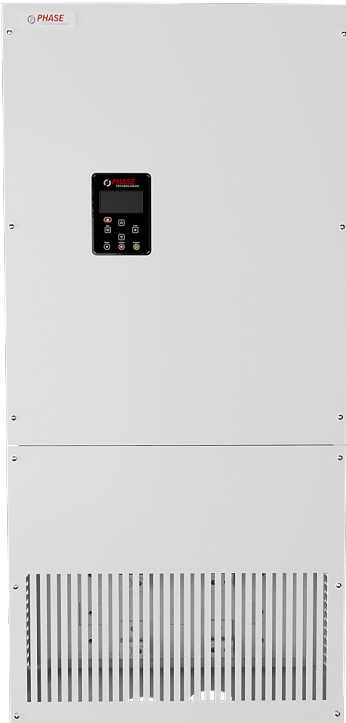


BOTTOM
NEMA 1

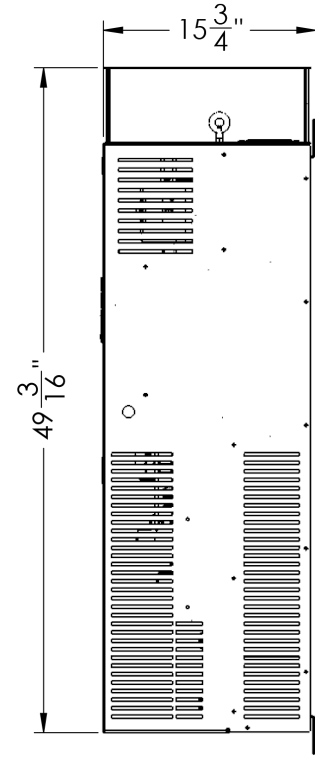
D3

Model Number
DXL460
DXL475
DXL4100
DXL4125
DXL4150
DXL4200
DXL4250

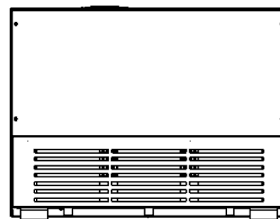
Line Drawings



FRONT
TYPE 1



SIDE
TYPE 1



BOTTOM
TYPE 1

D4

Model Number
DXL4300
DXL4350
DXL4400

Notes
