

# PowerFlex 753 and PowerFlex 755 Pre-Engineered FasTrac Packaged Drives

Catalog Numbers 24F, 24G



LISTEN.  
THINK.  
SOLVE.



## Table of Contents

Topic	Page
Additional Resources	<a href="#">4</a>
Product Overview	<a href="#">4</a>
Catalog Number Explanation	<a href="#">5</a>
PowerFlex 750-Series Drives Pre-engineered FasTrac	<a href="#">5</a>
Additional Catalog Number Notes	<a href="#">8</a>
Specifications	<a href="#">9</a>
Short Circuit Current Rating	<a href="#">9</a>
Duty Cycle	<a href="#">10</a>
Ambient Temperature Rating	<a href="#">10</a>
Options	<a href="#">11</a>
Sample Power Distribution Schemes	<a href="#">11</a>
Power Disconnect	<a href="#">12</a>
Control Power	<a href="#">12</a>
Output Devices	<a href="#">12</a>
Bypass	<a href="#">12</a>
Operator Devices	<a href="#">13</a>
Power Conditioning	<a href="#">14</a>
Agency Certification - Codes and Standards	<a href="#">15</a>
Drawings	<a href="#">15</a>
Enclosure Information	<a href="#">15</a>
Guidelines	<a href="#">15</a>
Approximate Dimensions	<a href="#">15</a>

## Additional Resources

These documents contain additional information concerning related products from Rockwell Automation.

Resource	Description
PowerFlex® 750-Series AC Drives Technical Data, publication <a href="#">750-TD001</a>	Provides detailed information on: <ul style="list-style-type: none"> <li>• Drive specifications</li> <li>• Option specifications</li> <li>• Fuse and circuit breaker ratings</li> </ul>
PowerFlex 750-Series AC Drives Installation Instructions, publication <a href="#">750-IN001</a>	Provides steps for mechanical installation and for connecting incoming power, the motor, and basic I/O to the PowerFlex 750-Series Adjustable Frequency AC drive.
PowerFlex 750-Series AC Drives Programming Manual, publication <a href="#">750-PM001</a>	Provides detailed information on: <ul style="list-style-type: none"> <li>• I/O, control, and feedback options</li> <li>• Parameters and programming</li> <li>• Faults, alarms, and troubleshooting</li> </ul>
Wiring and Grounding Guidelines for Pulse Width Modulated (PWM) AC Drives, publication <a href="#">DRIVES-IN001</a>	Provides basic information needed to properly wire and ground PWM AC drives.
Preventive Maintenance of Industrial Control and Drive System Equipment, publication <a href="#">DRIVES-TD001</a>	Provides a guide to performing preventive maintenance.
Safety Guidelines for the Application, Installation and Maintenance of Solid State Control, publication <a href="#">SGI-1.1</a>	Provides general guidelines for the application, installation, and maintenance of solid-state control.
Product Certifications website, <a href="http://www.ab.com">http://www.ab.com</a>	Provides declarations of conformity, certificates, and other certification details.

You can view or download publications at <http://www.rockwellautomation.com/literature/>. To order paper copies of technical documentation, contact your local Allen-Bradley distributor or Rockwell Automation sales representative.

## Product Overview

Rockwell Automation PowerFlex® 753 and 755 drives are now available in a Pre-Engineered FasTrac Packaged Drive program. The Pre-engineered FasTrac Packaged Drives program provides PowerFlex 750-Series drives packaged with a much larger offering of factory mounted options than what is normally available with a standard drive product. The Pre-engineered FasTrac program lets you receive packaged PowerFlex 753 and 755 drives in as little as 20 business days.

The Pre-engineered FasTrac program is a separate, centrally managed program. It combines the capabilities of Rockwell Automation Low Voltage Drives with the Local Solution Centers. As orders are received, they are immediately released to a manufacturing location based on capacity.

Benefits:

- Proven, tested design
- Quality drives
- Quick turnaround
- Pre-engineered packages to ensure sizing, wiring, and calculations
- Meets CSA requirements
- Available in an assortment of environmental protection enclosures - NEMA 1, 12, or 3R

This document contains information related to the Rockwell Automation PowerFlex 750-Series Pre-Engineered FasTrac Packaged Drives program and is intended to provide drive catalog numbers, specifications, options and accessories, enclosures, and dimension information.

---

**IMPORTANT** While this information may be useful in specifying an application of a Pre-Engineered FasTrac Packaged PowerFlex 750-Series AC drive, be advised that this information is for Reference Only and subject to change at any time.

---

# Catalog Number Explanation

## PowerFlex 750-Series Drives Pre-engineered FasTrac

Contact your Rockwell Automation representative for product option rules.

Position

1...3	4	5	6	7	8...10	11	12	13	14	15	16	17	18...19
<b>24G</b>	<b>1</b>	<b>1</b>	<b>R</b>	<b>D</b>	<b>096</b>	<b>A</b>	<b>A</b>	<b>0</b>	<b>N</b>	<b>N</b>	<b>N</b>	<b>N</b>	<b>- ND</b>
<i>a</i>		<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>		<i>h</i>	<i>i</i>	<i>j</i>	<i>k</i>	<i>l</i>

**a**

Drive	
Code	Type
24F	PF753
24G	PF755

**b**

Input Type	
Code	Type
1	AC & DC Input with Precharge
A	AC Input w/ Precharge, no DC Terminals

**c**

Enclosure Type and Conformal Coating			
Code	Encl. Rating	Encl. Style	Conf. Coating
R	Type 3R	Single Drive	Yes
A	Type 1	Single Drive	Yes
H	Type 12 (F&F)	Single Drive	Yes
S	Frame 1 Type 3R	Single Drive	Yes
I	Frame 1 Type 1	Single Drive	Yes
J	Frame 1 Type 12 (F&F)	Single Drive	Yes

**d**

Version and Voltage Rating			
Code	Input Voltage	Source Type	DC Precharge
D	480 VAC	3 Phase	No
E	600 VAC	3 Phase	No

**e**

Output Amps, Hp Ratings @ 480V AC Input				
Code	Amps	ND Hp	HD Hp	Frame Size
2P1	2.1	1	0.75	1 or 2
3P4	3.4	2	1.5	1 or 2
5P0	5	3	3	1 or 2
8P0	8	5	5	1 or 2
11	11	7.5	5	1 or 2
14	14	10	7.5	1 or 2
22	22	15	10	2
27	27	20	15	3
34	34	25	20	3
40	40	30	25	3
52	52	40	30	4
65	65	50	40	4
77	77	60	50	5
96	96	75	60	5
125	125	100	75	6
156	156	125	100	6
186	186	150	125	6
248	248	200	150	6
302	302	250	200	7
361	361	300	250	7
415	415	350	300	7

## Catalog Number Explanation, Continued

### ***e (cont'd)***

Output Amps, Hp Ratings @ 600V AC Input				
Code	Amps	ND Hp	HD Hp	Frame Size
1P7	1.7	1		3
2P7	2.7	2	1	3
3P9	3.9	3	2	3
6P1	6.1	5	3	3
009	9	7.5	5	3
011	11	10	7.5	3
017	17	15	10	3
022	22	20	15	3
027	27	25	20	4
032	32	30	25	4
041	41	40	30	5
052	52	50	40	5
063	63	60	50	6
077	77	75	60	6
099	99	100	75	6
125	125	125	100	6
144	144	150	125	6
192	192	200	150	7
242	242	250	200	7
289	289	300	250	7

### ***f***

Filtering and Common Mode Capacitor Configuration		
Code	Filtering	Default CM Cap Connection
A	Yes	Jumper Removed
J	Yes	Jumper Installed

### ***g***

Dynamic Braking		
Code	Internal Resistor	Internal Transistor
A	No	Yes
N	No	No

### ***h***

Feedback		
Code	Type	Installation Location
0	None	N/A
1	Standard Encoder	I/O Card

### ***i***

I/O		
Code	Type	Voltage
N	None	N/A
A	Standard	24V DC/AC
B	Standard	115V AC

### ***j***

Communication	
Code	Version
N	None
D	DeviceNet
R	RIO
C	ControlNet (Coax)
F	ControlNet (Fiber)
S	RS485 DF-1
H	RS485 HVAC
P	Profibus DPV1
I	Interbus
E	Ethernet

### ***k***

HIM	
Code	Version
0	No HIM - Blank Plastic Inserted (Drive Mount)
3	Full Numeric LCD HIM (Drive Mounted)
5	Programmer Only LCD HIM (Drive Mounted)
6	Door Mounted Full Numeric LCD HIM
7	Door Mounted Programmer Only LCD HIM

## Catalog Number Explanation, Continued

**I**

Options	
Code	Option
-ND	Normal Duty
-HD	Heavy Duty
Input Devices	
-P3	Circuit Breaker
-P4	Drive/Bypass Mode Circuit Breaker
-P6	Fused Disconnect
-P7	Drive/Bypass Mode Fused Disconnect
Reactors	
-L1	Input Reactor, 3%
-L2	Output Reactor, 3%
-L3	Input Reactor, 5%
-L4	Output Reactor, 5%
Enclosure Options	
-H1	Lexan HIM Cover
-H2	Metallic HIM Cover (Solid Door)
-E5	Enclosure Space Heater

**I (cont'd)**

Options	
Code	Option
Bypass	
-B0	No Bypass
-B1	Manual Bypass
Control Power	
-C1	Drive Only Control Power
Power Filtering	
-F5	Transient Voltage Surge Suppressor
Operator Devices	
-S51	H/O/A Selector Switch (Start/Stop/Spd. Ref.)
-S59W	Run Pilot Light (White)
-S59G	Run Pilot Light (Green)
-S59R	Run Pilot Light (Red)
-S60R	Drive Fault Pilot Light (Red)
-S60A	Drive Fault Pilot Light (Amber)
-S68	Speed Potentiometer (1-Turn)
-S53	Control Power On Pilot Light (White)
-S54	Drive & Bypass Mode Pilot Lights (Amber)
-S66	Drive/Bypass (B1, if present) Disable Mushroom Push button

## Additional Catalog Number Notes

### *Enclosure Types (Position 6/c)*

Pre-Engineered FasTrac Packaged Drives are assembled in NEMA/UL Type 1, 3R, or 12 enclosures. Each enclosure type lends itself to a particular type of protection and environment. The enclosures detailed below do not normally protect electrical equipment from condensation, corrosion or contamination which may occur within the enclosure or enter via the conduit or unsealed openings. Users must make adequate provisions to safeguard against such conditions, and satisfy themselves that the equipment is properly protected.

**NEMA/UL Type 1** enclosures are intended for indoor use primarily to provide a degree of protection against contact with the enclosed equipment in locations where unusual service conditions do not exist. The enclosures are designed to meet the rod entry and rust resistance design tests. Openings in the enclosure door or sides and/or fans on the door(s) or sides allow for free exchange of inside and outside air. Design is based upon 0...40 °C ambient temperature during operation. Refer to PowerFlex 750-Series drive specifications for storage requirements.

- A = NEMA/UL Type 1 - with fans if needed (Frames 2...7 drives)
- I = NEMA/UL Type 1 - with fans if needed (Frame 1 drive)

**NEMA/UL Type 12** enclosures are intended for indoor use primarily to provide a degree of protection against dust, falling dirt and dripping non-corrosive liquids. They are designed to meet drip, dust and rust resistance tests. There may be ventilation openings on the enclosure to allow free exchange of inside and outside air. Closed loop auxiliary cooling may be required for higher horsepower ratings. Specifications calling for NEMA/UL Type 12 ventilated enclosures should be reviewed with the factory. Design is based upon 0...40 °C ambient temperature during operation. Refer to PowerFlex 750-Series drive specifications for storage requirements.

- H = NEMA/UL Type 12 Ventilated - with fans if needed (Frames 2...7 drives)
- J = NEMA/UL Type 12 Ventilated - with fans if needed (Frame 1 drive)

**NEMA/UL Type 3R** enclosures are intended for outdoor use primarily to provide a degree of protection against falling rain, and to reduce potential damage from the formation of ice on the enclosure<sup>(1)</sup>. They are designed to meet rod entry, rain<sup>(2)</sup>, external icing<sup>(3)</sup> and rust-resistance design tests. They are not intended to provide protection against conditions such as dust, internal condensation, or internal icing. Design is based upon -30...40 °C ambient temperature range with power applied and disconnect on. A cabinet space heater is supplied as standard.

- R = NEMA/UL Type 3R - with shrouded fan if required (Frames 2...7 drives)
- S = NEMA/UL Type 3R - with shrouded fan if required (Frame 1 drive)

(1) Evaluation criteria: No water has entered the enclosure during the specified test.

(2) Evaluation criteria: No water shall have reached live parts, insulation, or mechanisms.

(3) Evaluation criteria: The enclosure is undamaged after ice, which accumulates during the specified test, has melted. (Note: The drive is not required to be operable while ice-laden).



## Specifications

In most cases the general specifications of a packaged drive package will match those of a standalone drive. See [Additional Resources on page 4](#) for further information. Also, see [Agency Certification - Codes and Standards on page 15](#).

### Short Circuit Current Rating

Short Circuit Current Rating (SCCR) of the Package - the short circuit current capability of any drive package will be based upon the specific combination of the options chosen as shown in this table.

Rating		No Bypass		With Bypass	
Hp	Duty	CB ISC	Fuse D/S ISC	CB ISC	Fuse D/S ISC
1	ND	35,000	100,000	35,000	100,000
1	HD				
2	ND				
2	HD				
3	ND				
3	HD				
5	ND				
5	HD				
7.5	ND				
7.5	HD				
10	ND				
10	HD				
15	ND				
15	HD				
20	ND				
20	HD				
25	ND				
25	HD				
30	ND				
30	HD				
40	ND				

Rating		No Bypass		With Bypass	
Hp	Duty	CB ISC	Fuse D/S ISC	CB ISC	Fuse D/S ISC
40	HD	35,000	100,000	35,000	100,000
50	ND				
50	HD				
60	ND				
60	HD				
75	ND				
75	HD				
100	ND				
100	HD				
125	ND				
125	HD				
150	ND				
150	HD				
200	ND				
200	HD				
250	ND			50,000	50,000
250	HD				
300	ND				
300	HD				
350	ND				

## Duty Cycle

- ND = Normal Duty Rated.
  - 100% continuous current
  - 110% current for 1 minute
  - 150% for 3 seconds
- HD = Heavy Duty Rated.
  - 100% continuous current
  - 150% current for 1 minute
  - 180% for 3 seconds

---

<b>IMPORTANT</b>	The Packaged Drive duty cycle rating is located on the drive “System” data nameplate. The standard drive is used as a component in the enclosure and may indicate ratings on its nameplate that differ from the “System” data nameplate. The packaged drive system rating may be limited by other components sized for NEC/typical motor ratings. In all cases the system nameplate data supersedes any component nameplate information. Unless otherwise stated, Normal Duty Rated packaged drives cannot be used on Heavy Duty applications.
------------------	--

---

## Ambient Temperature Rating

- NEMA/UL Type 1, 12: 0...40 °C
- NEMA/UL Type 3R: -30°C...40 °C ambient temperature range with power applied and disconnect on

## Maintenance

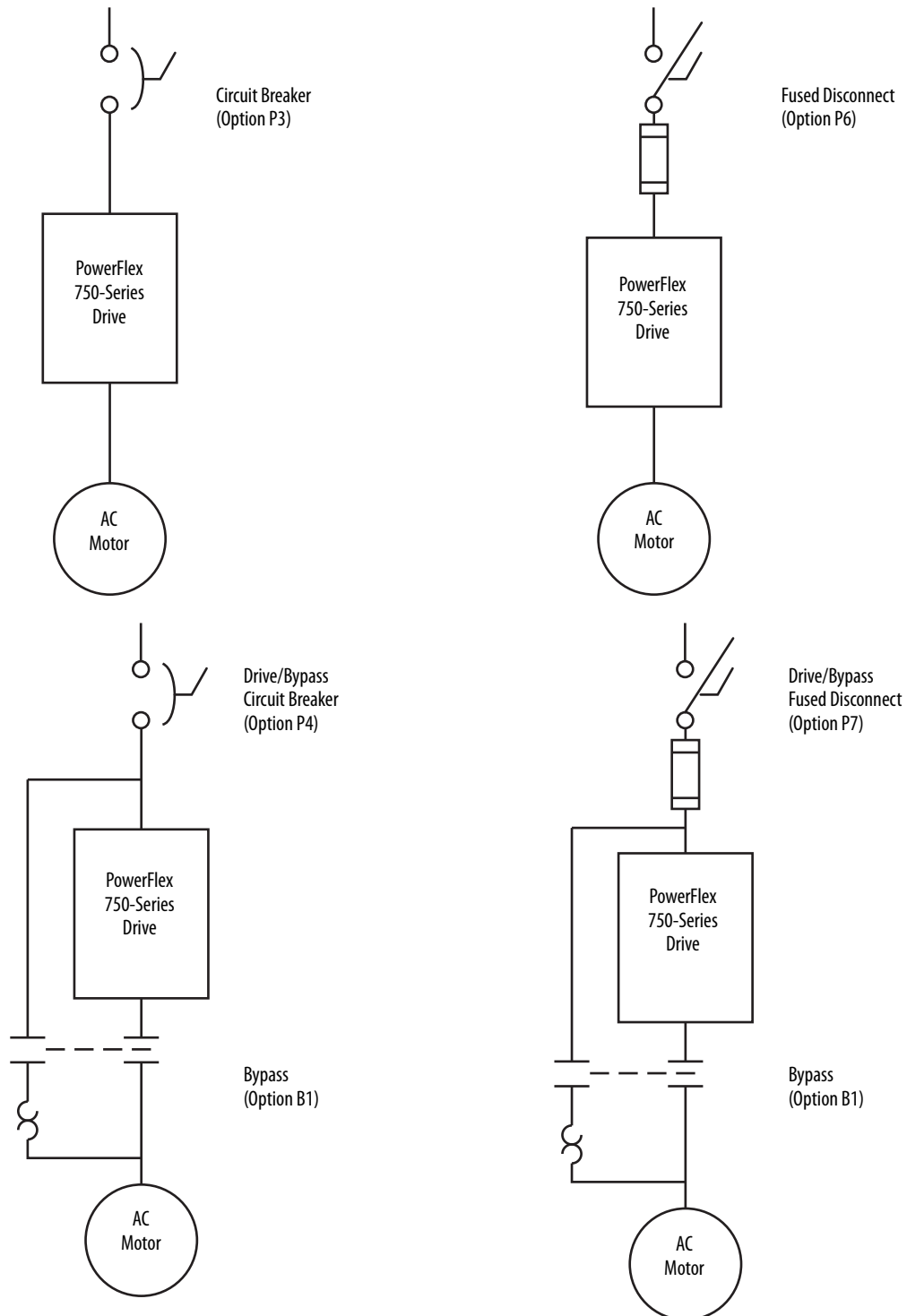
Variable speed drive equipment should be inspected periodically. Inspection intervals should be based on environmental and operating conditions and adjusted as indicated by experience. An initial inspection within three to four months after installation is suggested. See National Electrical Manufacturers Association (NEMA) Standard No. ICS 1.3, Preventive Maintenance of Industrial Control and Systems Equipment, for general guidelines for setting up a periodic maintenance program.

Inspect blowers and fans used for forced air cooling. Replace any that have bent, chipped, or missing blades, or if the shaft does not turn freely. Apply power momentarily to check operation. If unit does not operate, check and replace wiring, fuse, blower or fan motor as appropriate. Clean or change air filters as annually or more often if atmospheric conditions cause an air flow reduction of greater than 10%.

# Options

## Sample Power Distribution Schemes

The power distribution schemes shown below are for typical configurations. Actual specified configurations may vary with accepted design practices or code restrictions.



## Power Disconnect

Option		Description
P3	Drive Circuit Breaker	This option is for disconnecting drive power only. All ratings use a thermal magnetic type breaker. All mechanisms are through the door and include handle operators, door interlocking and are pad-lockable.
P4	Drive/Bypass Mode Circuit Breaker	This option is for disconnecting all input power to the cabinet. Most ratings will use a thermal magnetic type breaker. All mechanisms are through the door and include handle operators, door interlocking and are pad-lockable.
P6	Drive Disconnect Switch and Fuses	This option is for disconnecting drive power only. A through the door pad lockable disconnect switch with fuses is provided.
P7	Drive/Bypass Mode Fused Disconnect Switch	This option is for disconnecting all input power to the cabinet. A through the door pad lockable disconnect switch with fuses is provided.

## Control Power

Option		Description
C1	Drive Only Control Power	This option provides a fused (two primary and one secondary) control power transformer mounted and wired inside the drive enclosure. The transformer is rated for drive and options power only. There is no additional capacity for customer use.

## Output Devices

Common mode output cores are provided as standard on all ratings.

## Bypass

Option		Description
B0	No Bypass	—
B1	Manual Bypass <sup>(1) (2)</sup>	This option provides a means to manually switch a single motor from drive control to bypass (across the line) operation. Separate contactors are provided for drive output and bypass operation. An electronic or bimetallic motor overload is provided for motor protection while operating in the bypass mode. A door-mounted “Drive/Off/Bypass” selector switch is included.

(1) The Bypass Operation capability provided by this option is not intended for maintenance of the drive or entry into the enclosure with power applied while operating in the bypass mode.

(2) Bypass Option includes the required 120V AC control power.

## Operator Devices

Code	Option	Also Requires	Description
S51	Hand/Off/Auto Selector Switch	IB	This switch will be door mounted. For NEMA 3R enclosures with optional HIM cover, it will be located under the cover to the left of the HIM. The drive will run when the switch is in the “Hand” position, and will be stopped when the switch is in “Off” position. In the “Auto” position, the drive will run/stop based upon the closure of a remote dry contact. In order for the drive to run, enable or auxiliary stop/fault reset inputs (if used) must be present. If a drive connected HIM is present, the HIM “stop” will stop the drive regardless of the selector switch position (the HIM “start” button will be non-functional). The Hand/Off/Auto selector switch also determines the origin of the speed reference. Factory default is “Hand” = HIM (unless door mounted pot option is provided) and “Auto” = remote analog reference. (this can be changed to communication option by customer)
S59W	Run Pilot Light	IB	This white pilot light will be door mounted. For NEMA 3R enclosures with optional HIM cover, it will be located outside of the cover. It will be illuminated when the drive option board relay 0 indicates drive is in run mode.
S59G	Run Pilot Light	IB	This green pilot light will be door mounted. For NEMA 3R enclosures with optional HIM cover, it will be located outside of the cover. It will be illuminated when the drive option board relay 0 indicates drive is in run mode.
S59R	Run Pilot Light	IB	This red pilot light will be door mounted. For NEMA 3R enclosures with optional HIM cover, it will be located outside of the cover. It will be illuminated when the drive option board relay 0 indicates drive is in run mode.
S60R	Fault Pilot Light	IB	This red pilot light will be door mounted. For NEMA 3R enclosures with optional HIM cover, it will be located outside of the cover. It will be illuminated when the drive option board relay r1 indicates drive is faulted.
S60A	Fault Pilot Light	IB	This amber pilot light will be door mounted. For NEMA 3R enclosures with optional HIM cover, it will be located outside of the cover. It will be illuminated when the drive option board relay r1 indicates drive is faulted.
S68	Speed Potentiometer (1 Turn)	IB, S51	This potentiometer will be door mounted. For NEMA 3R enclosures with optional HIM cover, it will be located outside of the cover. When the HOA selector switch is in the “Hand” position, this pot will provide the speed reference. (unipolar only)
S53	Control Power On Pilot Light	—	This white pilot light will be door mounted. For NEMA 3R enclosures with optional HIM cover, it will be located outside of the cover. It will be illuminated whenever control power is present.
S54	Drive & Bypass Mode Pilot Lights	B1	These amber pilot lights will be door mounted. For NEMA 3R enclosures with optional HIM cover, it will be located outside of the cover. When the Drive/Off/Bypass switch is in the “Drive” position, the “Drive” light will illuminate. When the Drive/Off/Bypass switch is in the “Bypass” position, the “Bypass” light will illuminate.
S66	Drive/Bypass Disable Mushroom Push Button	S66	This push-pull button will be door mounted. For NEMA 3R enclosures with optional HIM cover, it will be located outside of the cover. When in the depressed position, the drive enable input, drive output contactor, and bypass contactor will be disabled/opened.

### Notes:

- Pilot lights are incandescent transformer type
- All devices operate at 120 VAC unless otherwise specified

## Drive Parameter Settings for Operator Devices

If certain operator devices are selected, the associated drive parameters must be configured as directed in this table to be sure the drive operates correctly.

Option Code	Port	Parameter	Value	Description
S51	0 (Drive)	P163	5000100	Digital Input Run = Port 5 DIO
		P174	5000102	Digital Input Speed Sel 1 = Port 5 DIO
		P550	500050	Speed Ref B Sel = Analog 0 For Auto
		P545	872	Speed Ref A Sel = Door HIM
S68	0 (Drive)	P545	500060	Speed Ref A Sel = Potentiometer
S51, Not 3, 5, 6 or 7		P545	500050	Speed Ref A Sel = Analog 0 for Hand-held HIM
S59	5	P10	93501	Drive Active
S60		P20	93507	Drive Fault

## Power Conditioning

In general, PowerFlex 750-Series drives are suitable for direct connection to a correct voltage AC line that has a minimum impedance of 0.5% relative to the rated drive input kVA. If the line has lower impedance, a line reactor or isolation transformer must be added in front of the drive to increase line impedance. If the line impedance is too low, transient voltage spikes or interruptions can create excessive current spikes that may cause nuisance input fuse blowing or damage to the drive power structure, or both.

The basic rules for determining if a line reactor or isolation type transformer is required are as follows:

- If the AC input power system is not solidly grounded (i.e. high resistive ground or ungrounded) an isolation transformer with the neutral of the secondary grounded is highly recommended. If the line-to-ground voltages on any phase can exceed 125% of the nominal line-to-line voltage, an isolation transformer with the neutral of the secondary grounded, is always required.
- If the AC line supplying the drive has power factor correction capacitors that are switched in and out, an isolation transformer is recommended between the capacitors and drive. If the capacitors are permanently connected and not switched, the general rules for impedance mismatch above apply.
- An isolation transformer or input line reactor is recommended. Line reactors can be ordered installed in the drive enclosure. Isolation transformer are typically installed external to the enclosure.

Option		Description
L1	3% Input Line Reactor	This option provides an open core drive input line reactor that mounts inside the drive enclosure. Typical impedance is 3%.
L2	3% Output Load Reactor	This option provides an open core drive output load reactor, which mounts inside the drive enclosure. Typical impedance is 3%.
L3	5% Input Reactor	This option provides an open core drive input line reactor that mounts inside the drive enclosure. Typical impedance is 5%.
L4	5% Output Reactor	This option provides an open core drive output load reactor, which mounts inside the drive enclosure. Typical impedance is 5%.

## Agency Certification - Codes and Standards

Agency	Description
CSA	CSA Standards

## Drawings

One set of schematics [279 x 432 mm (11 x 17 in.)] is shipped in the cabinet. PDF and AutoCAD versions are available upon request.

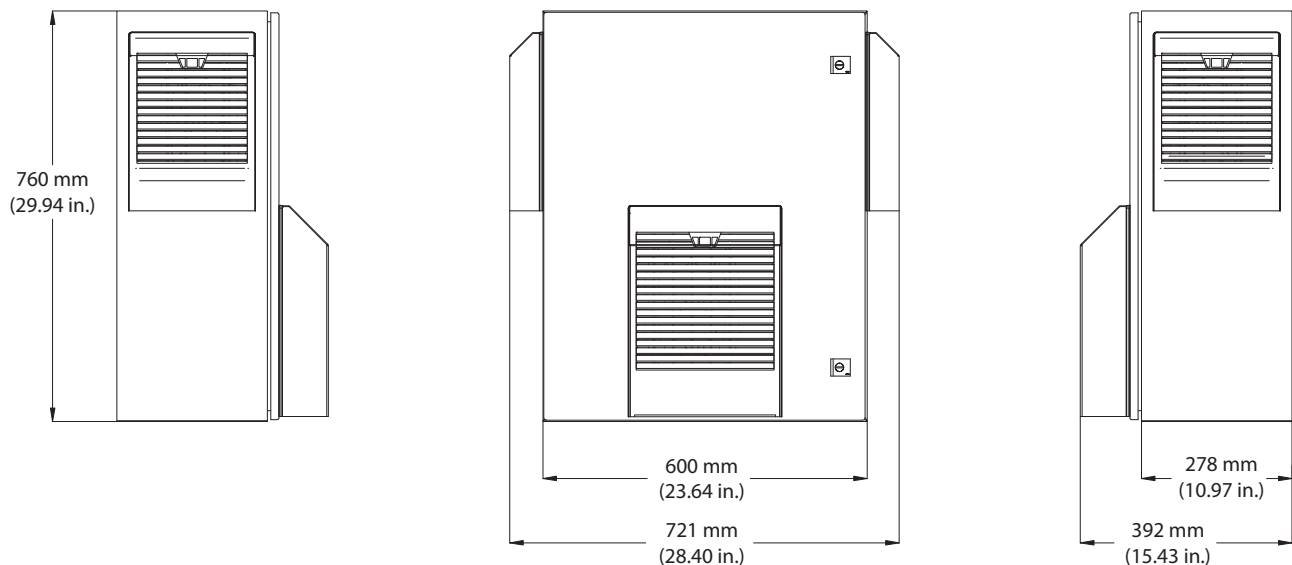
## Enclosure Information

### Guidelines

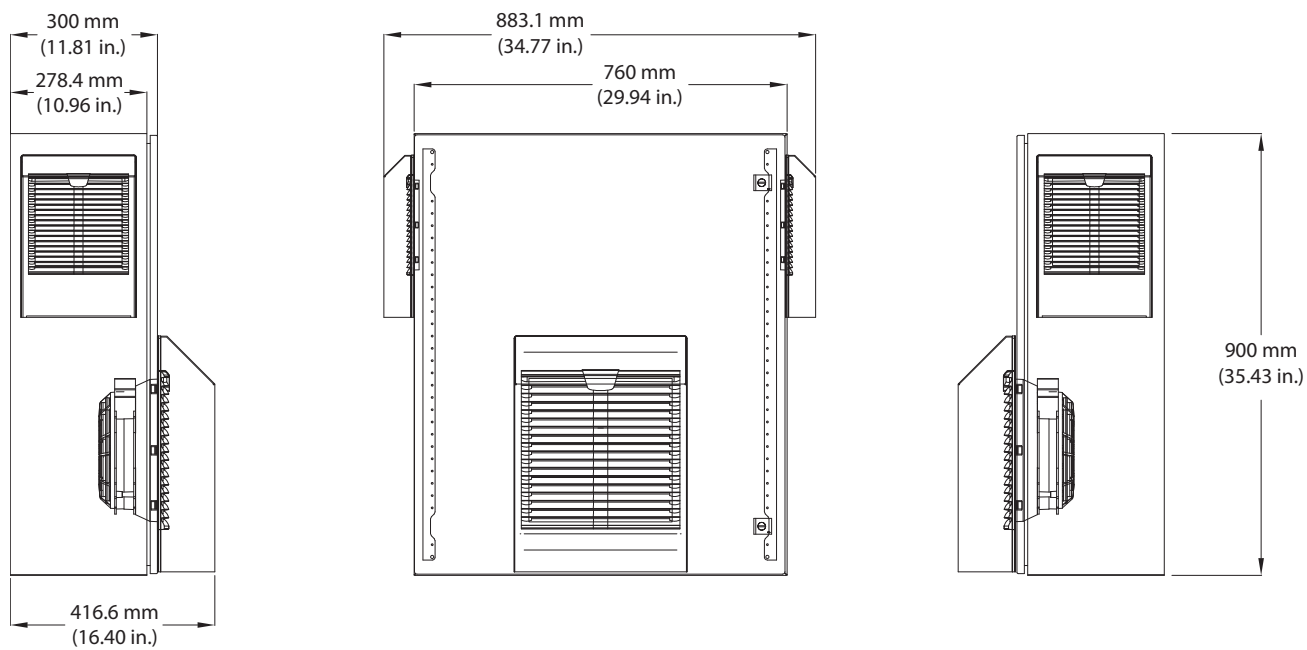
The information in this document may be useful in making some pre-installation decisions. Consideration should be given to enclosure type (environment), enclosure size (mounting area available and mounting convention), panel layouts (customer wiring connection locations and extra customer mounting area), terminal block descriptions and catalog number definition.

### Approximate Dimensions

*NEMA/UL Type 3R, 1 Hp Normal Duty. . . 15 Hp Normal Duty (Families 1 and 2)*

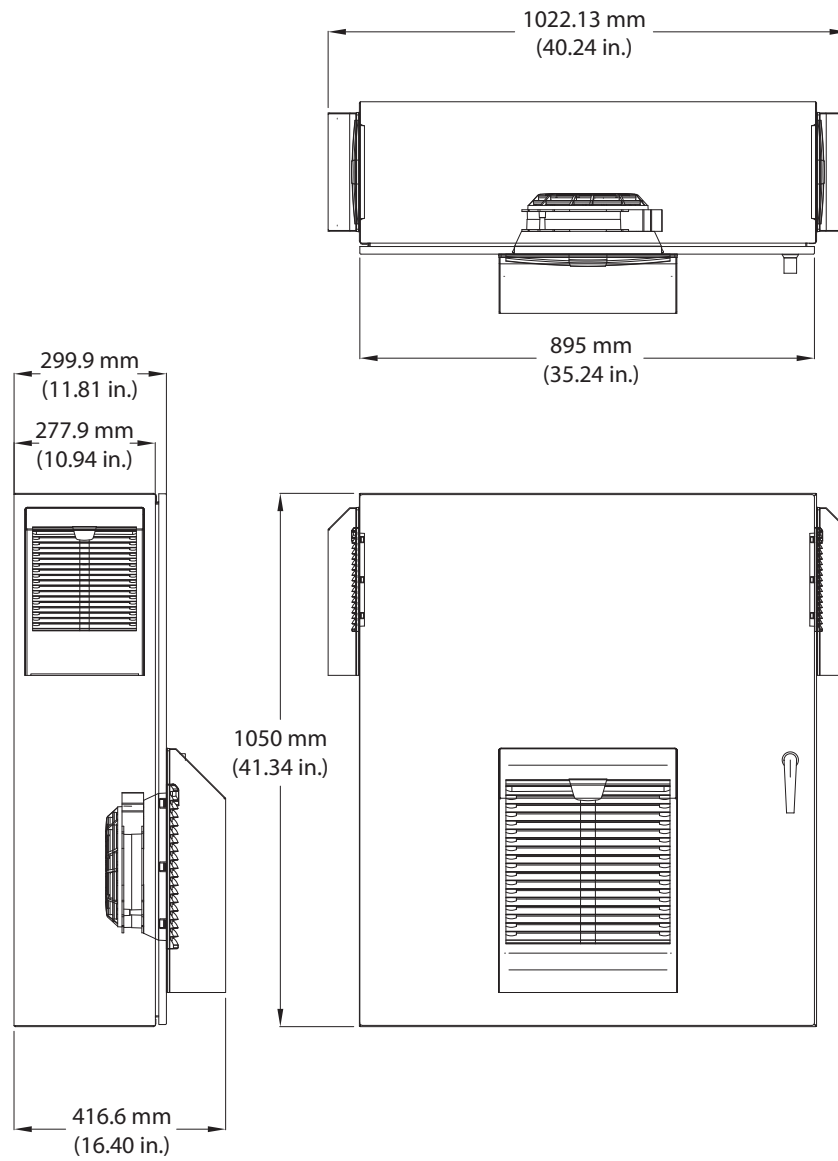


*NEMA/UL Type 3R, 15 Hp Heavy Duty...30 Hp Normal Duty (Family 3)*

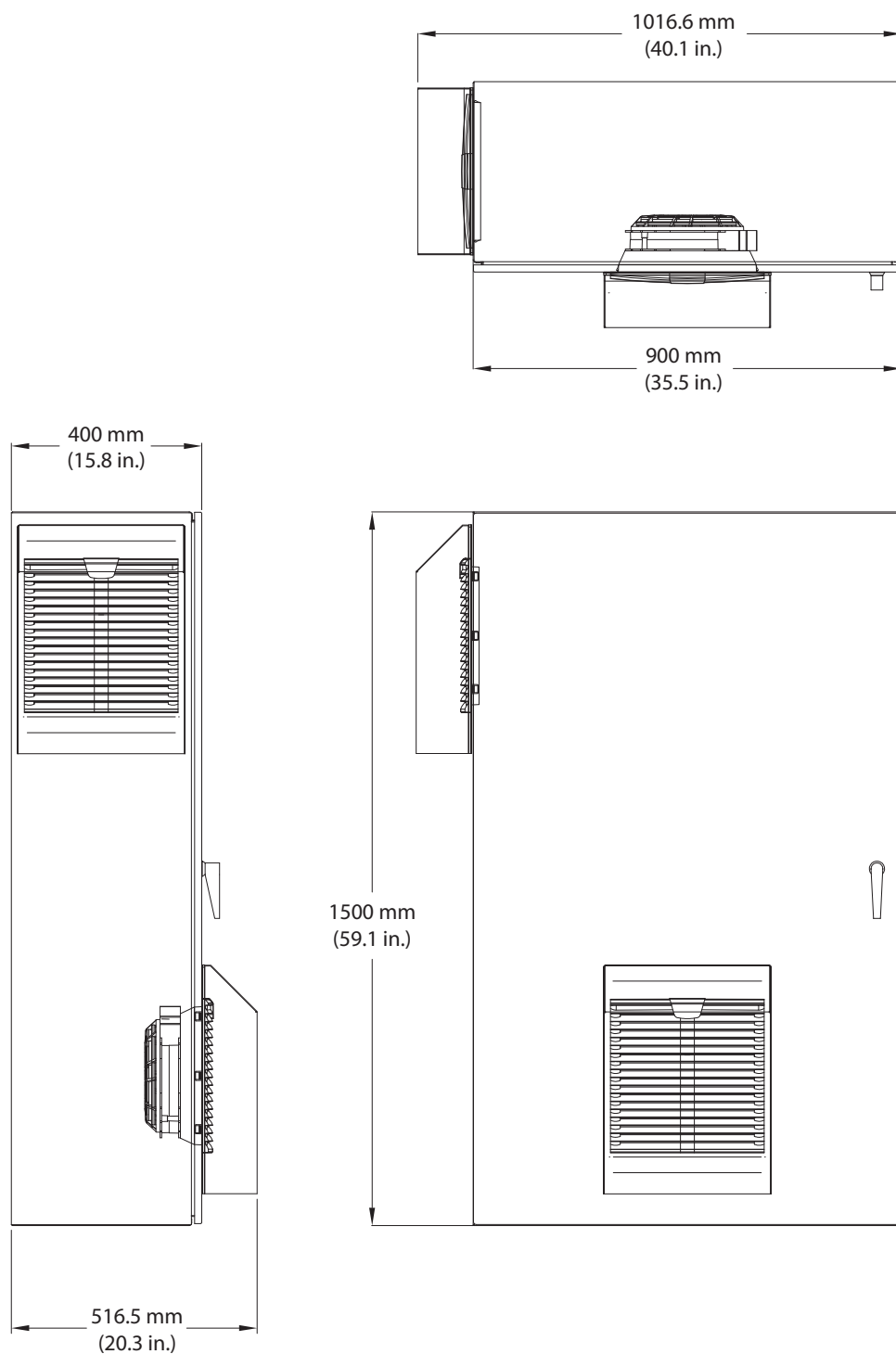




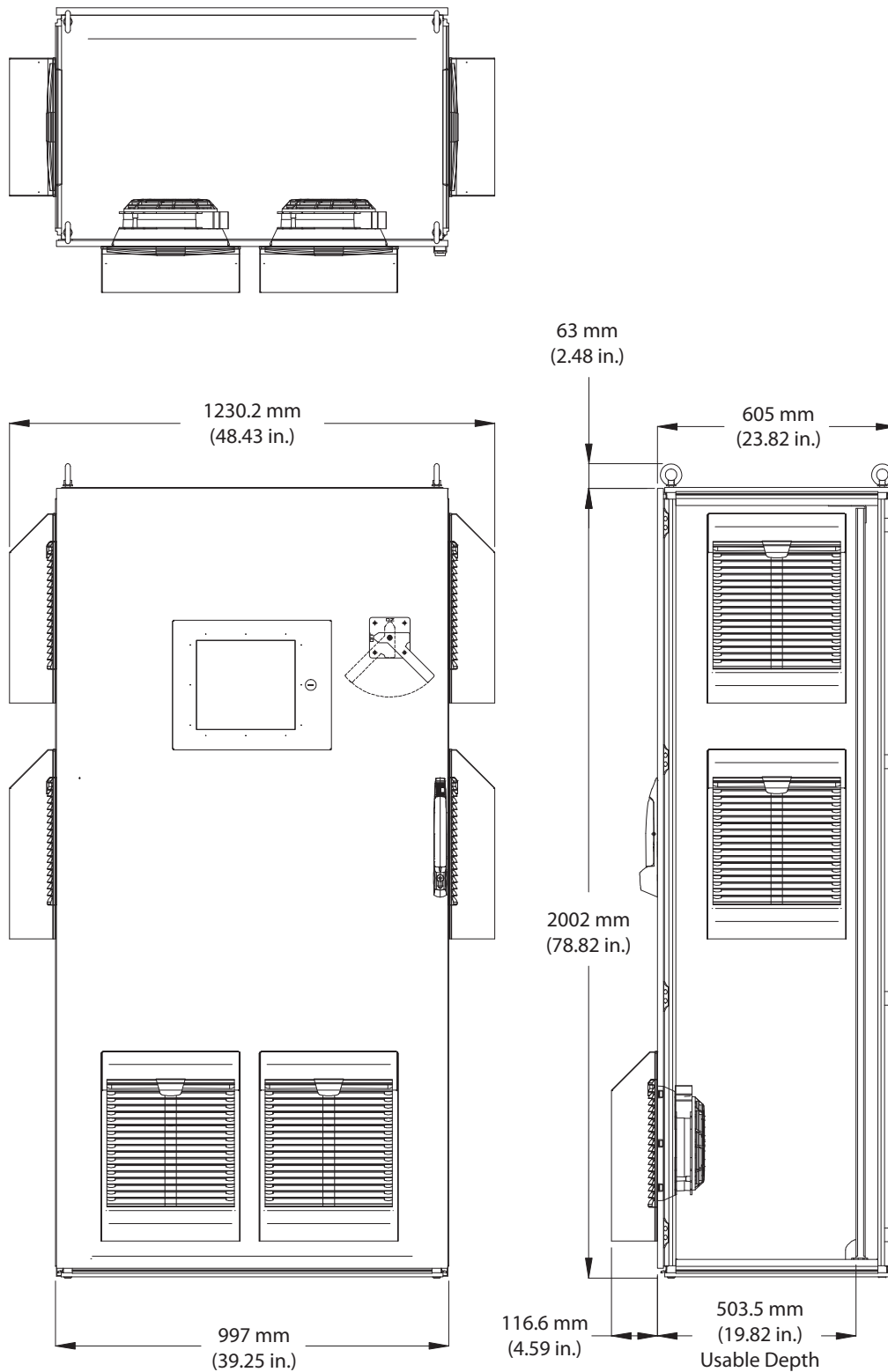
*NEMA/UL Type 3R, 30 Hp Heavy Duty... 50 Hp Normal Duty (Family 4)*



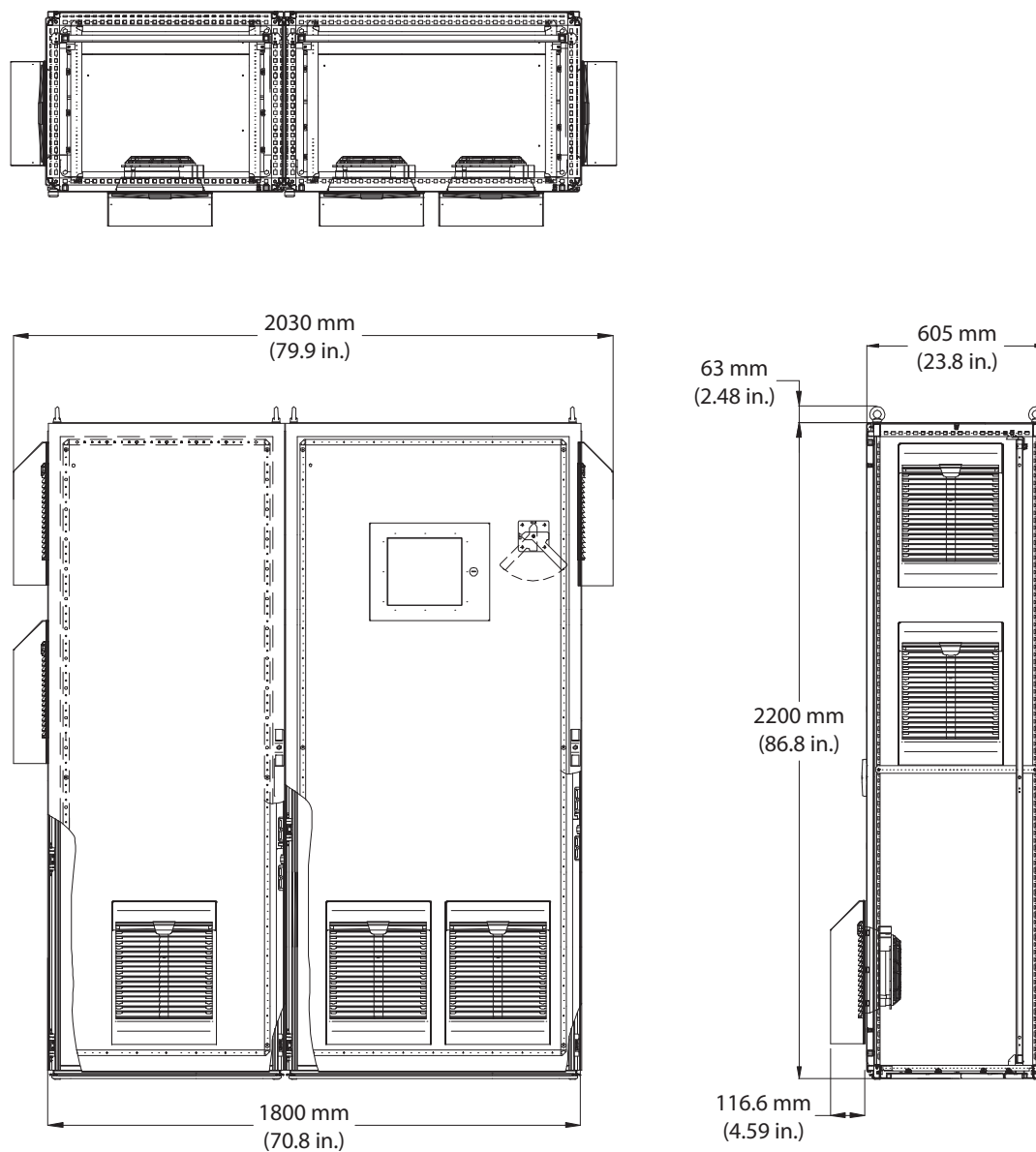
*NEMA/UL Type 3R, 50 Hp Normal Duty... 75 Hp Heavy Duty (Family 5)*



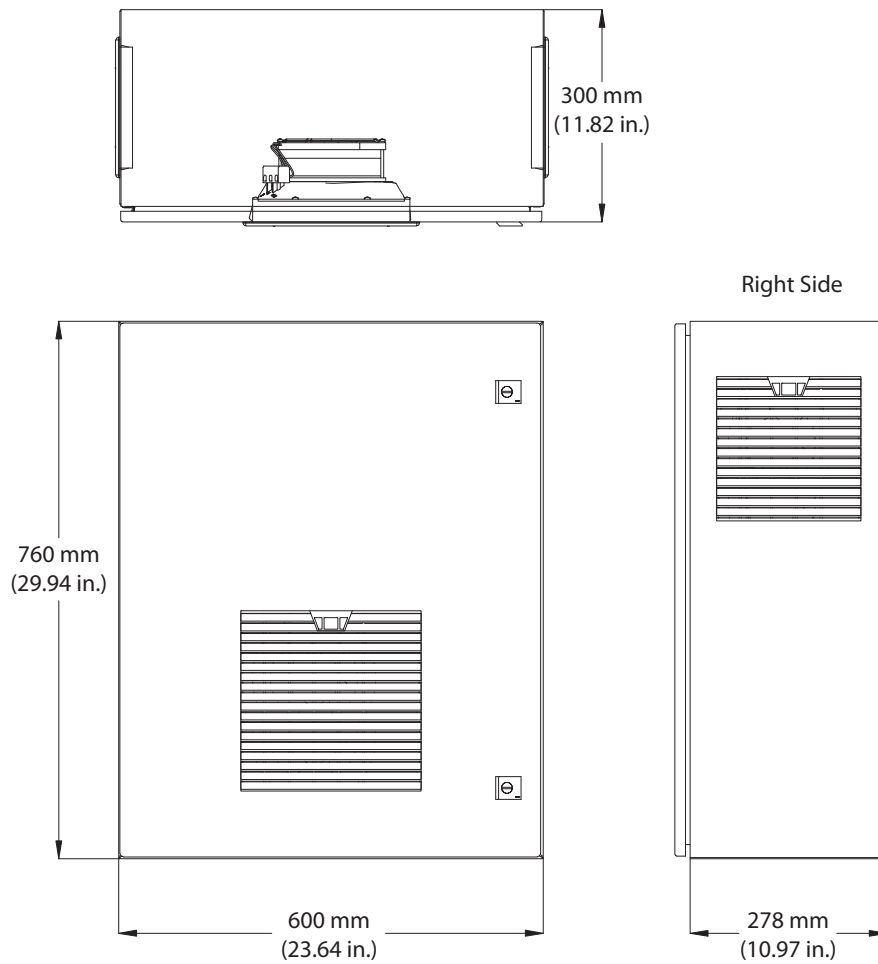
*NEMA/UL Type 3R, 100 Hp Normal Duty...200 Hp Normal Duty (Family 6)*



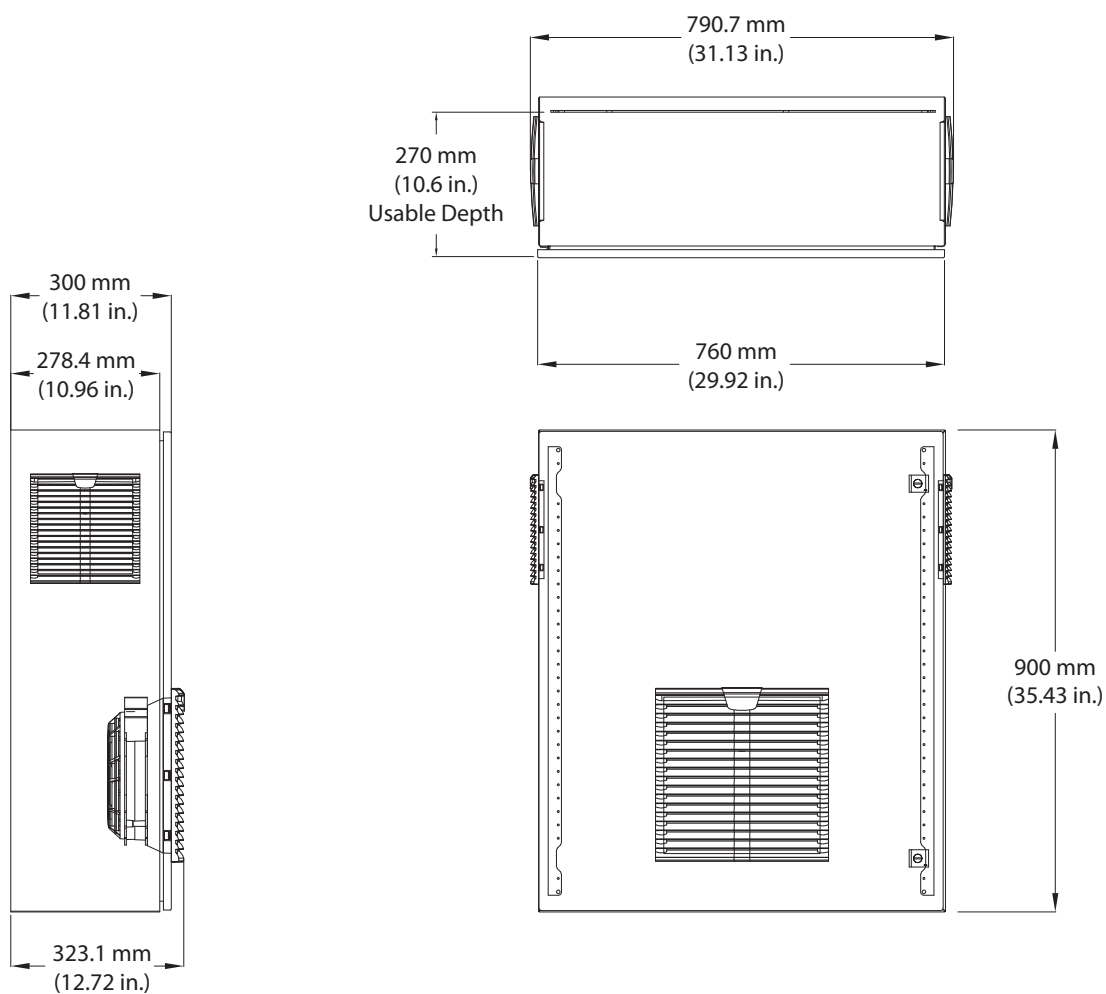
*NEMA/UL Type 3R, 250 Hp Heavy Duty... 350 Hp Normal Duty (Family 7)*

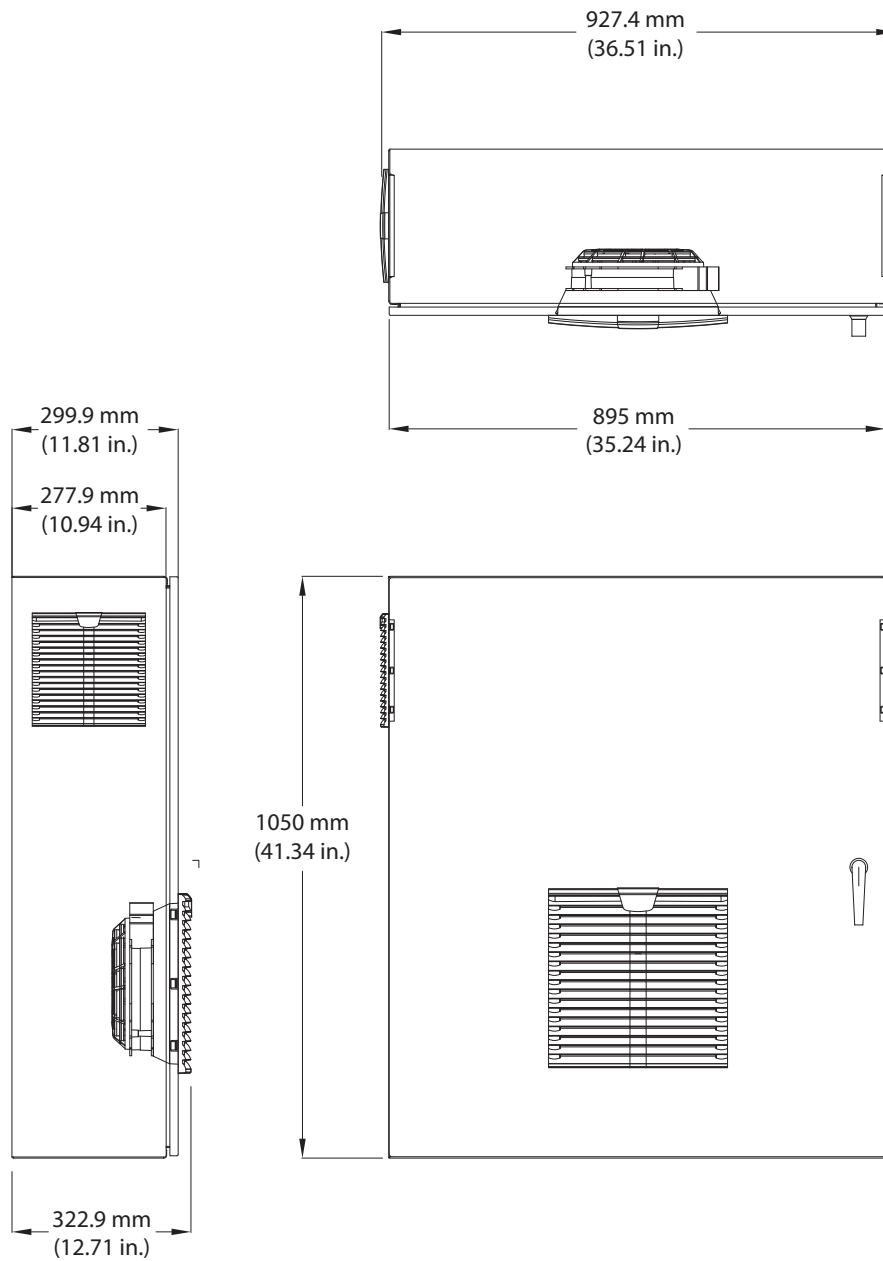


*NEMA/UL Type 1 and 12, 1 Hp Normal Duty... 15 Hp Normal Duty (Families 1 and 2)*

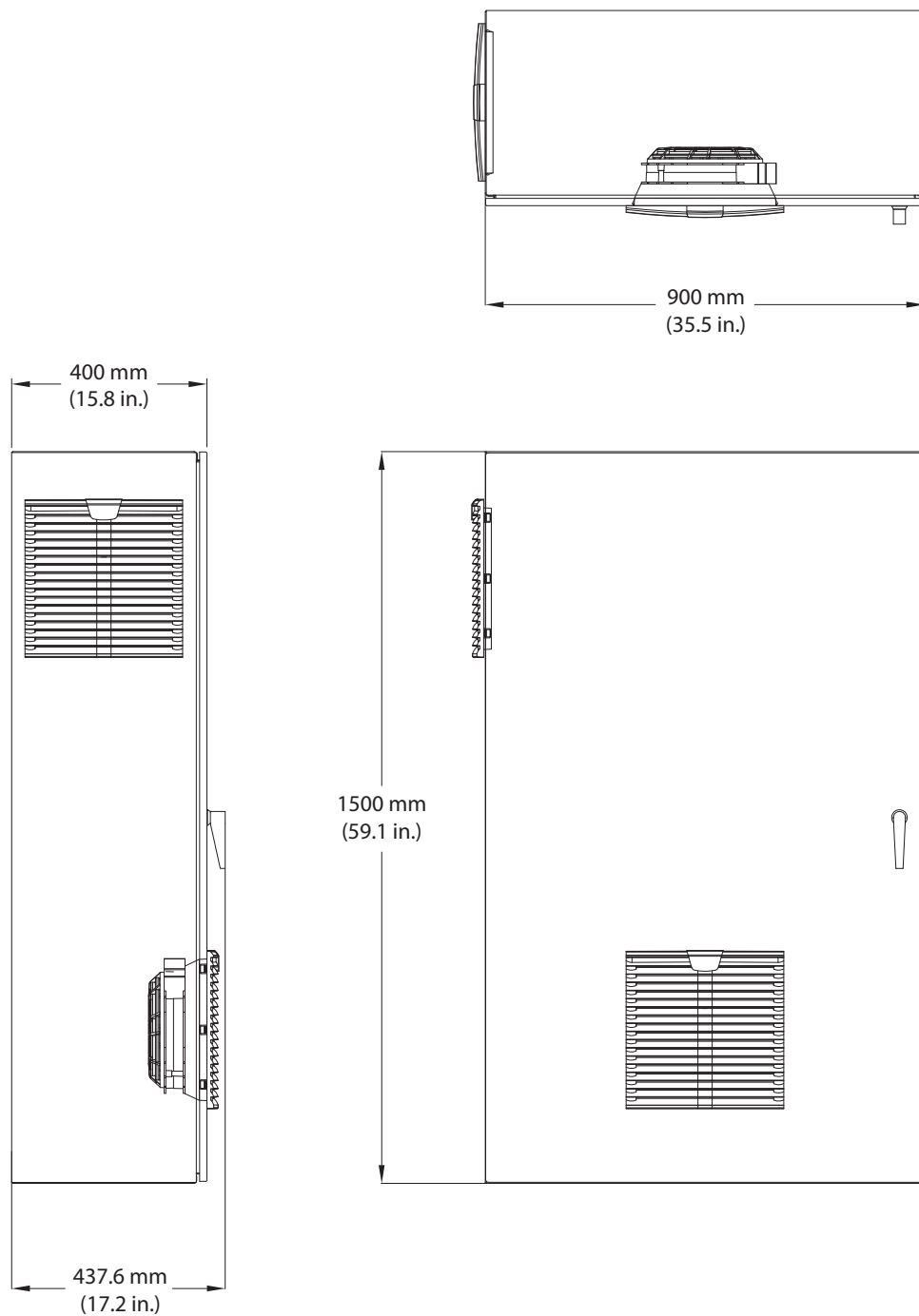


*NEMA/UL Type 1 and 12, 15 Hp Heavy Duty...30 Hp Normal Duty (Family 3)*



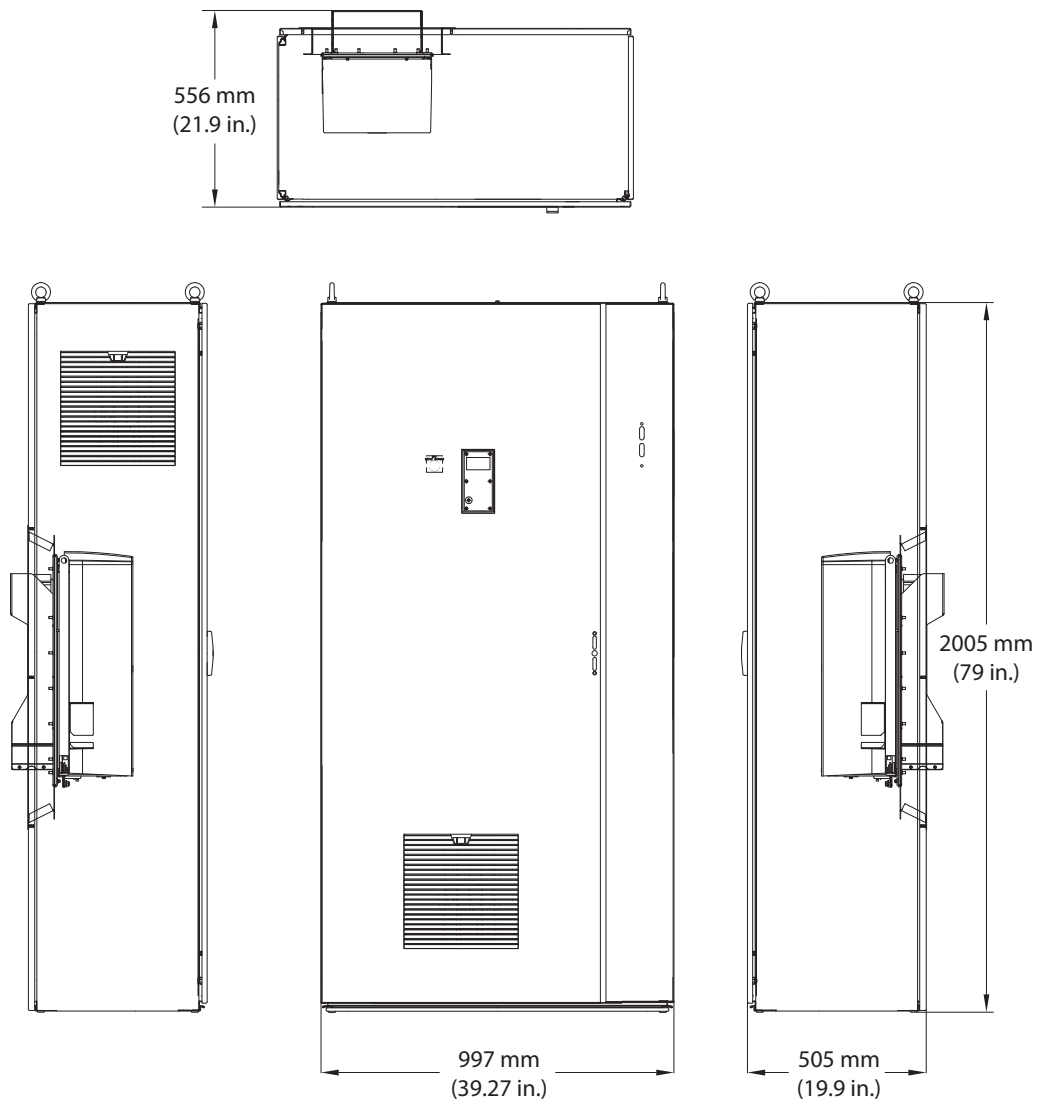
*NEMA/UL Type 1 and 12, 30 Hp Heavy Duty... 50 Hp Normal Duty (Family 4)*

*NEMA/UL Type 1 and 12, 50 Hp Normal Duty...75 Hp Heavy Duty (Family 5)*

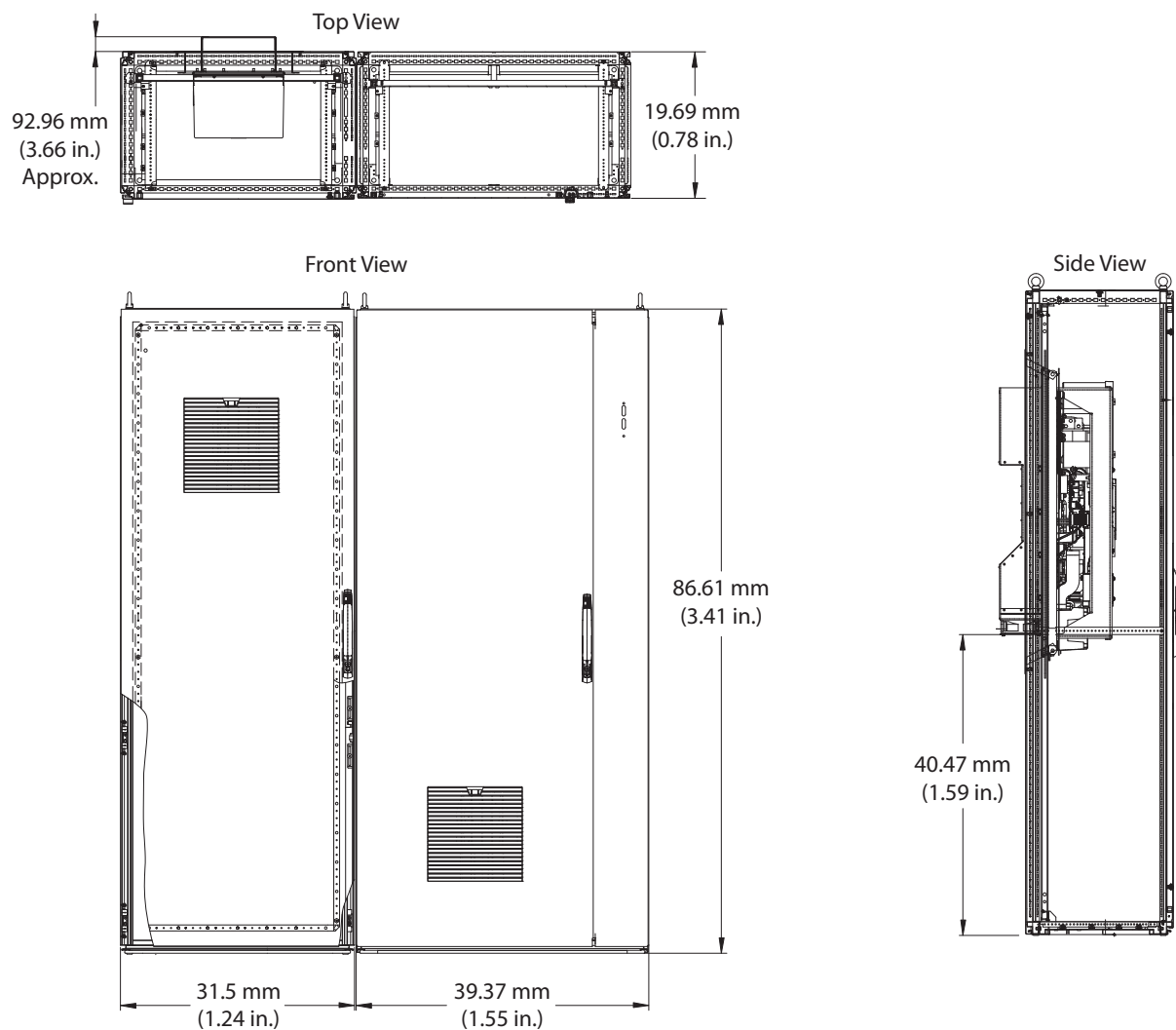




*NEMA/UL Type 1 and 12, 100 Hp Normal...200 Hp Normal Duty (Family 6)*



*NEMA/UL Type 1 and 12, 250 Hp Heavy Duty...350 Hp Normal Duty (Family 7)*





# Rockwell Automation Support

Rockwell Automation provides technical information on the Web to assist you in using its products.

At <http://www.rockwellautomation.com/support>, you can find technical manuals, technical and application notes, sample code and links to software service packs, and a MySupport feature that you can customize to make the best use of these tools. You can also visit our Knowledgebase at <http://www.rockwellautomation.com/knowledgebase> for FAQs, technical information, support chat and forums, software updates, and to sign up for product notification updates.

For an additional level of technical phone support for installation, configuration, and troubleshooting, we offer TechConnect<sup>SM</sup> support programs. For more information, contact your local distributor or Rockwell Automation representative, or visit <http://www.rockwellautomation.com/support/>.

## Installation Assistance

If you experience a problem within the first 24 hours of installation, review the information that is contained in this manual. You can contact Customer Support for initial help in getting your product up and running.

United States or Canada	1.440.646.3434
Outside United States or Canada	Use the <a href="#">Worldwide Locator</a> at <a href="http://www.rockwellautomation.com/rockwellautomation/support/overview.page">http://www.rockwellautomation.com/rockwellautomation/support/overview.page</a> , or contact your local Rockwell Automation representative.

## New Product Satisfaction Return

Rockwell Automation tests all of its products to help ensure that they are fully operational when shipped from the manufacturing facility. However, if your product is not functioning and needs to be returned, follow these procedures.

United States	Contact your distributor. You must provide a Customer Support case number (call the phone number above to obtain one) to your distributor to complete the return process.
Outside United States	Please contact your local Rockwell Automation representative for the return procedure.

## Documentation Feedback

Your comments will help us serve your documentation needs better. If you have any suggestions on how to improve this document, complete this form, publication [RA-DU002](#), available at <http://www.rockwellautomation.com/literature/>.

**Medium Voltage Products**, 135 Dundas Street, Cambridge, ON, N1R 5X1 Canada, Tel: (1) 519.740.4100, Fax: (1) 519.623.8930

Online: [www.ab.com/mvb](http://www.ab.com/mvb)

Allen-Bradley, Rockwell Software, Rockwell Automation, and TechConnect are trademarks of Rockwell Automation, Inc.

Trademarks not belonging to Rockwell Automation are property of their respective companies.

**[www.rockwellautomation.com](http://www.rockwellautomation.com)**

### Power, Control and Information Solutions Headquarters

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444

Europe/Middle East/Africa: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640

Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

Publication 750-TD002B-EN-P - February 2013

Supersedes Publication 750-TD002A-EN-P - October 2012

Copyright © 2013 Rockwell Automation, Inc. All rights reserved. Printed in Canada.