

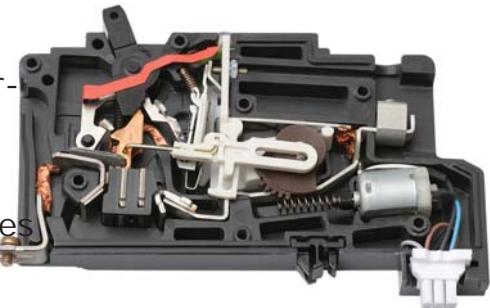
# LynTec RPC Series Panels

## THE MOST COMPLETE SELF-CONTAINED ELECTRICAL CONTROL PANEL AVAILABLE

The patent pending RPC control system is available for controllable circuit breaker panels based on the Square D PowerLink hardware platform. Every RPC panel is shipped as a complete hardware/software package and ready to install.

Standard Features on all RPC panels include:

- Built-in web server with browser interface for super-easy set up and smart phone, tablet or computer control and monitoring
- No on-site commissioning required, and LynTec takes the trouble calls direct.
- Built in scheduling program with astronomical clock and up to 84 available schedules.
- Built in contact closure inputs for wall or sensor operation (up to 38 inputs).
- Can be interfaced with any control system that communicates individual circuit addresses in DMX, sACN, HTTP, Telnet, BacNET or RS-232.
- Seamless integration into existing building management systems.
- Circuit selectable load-shedding feature standard
- Circuit level sequencing with selectable step-rates standard (sequence reverses off)
- Circuit selectable auto-on egress lighting feature standard
- Brownout (under-voltage) protection with automatic shut-down and controlled restart.
- Motorized breakers available in 15, 20, and 30 amps, 1, 2, and 3 poles.
- ETL Listed to UL standards 459, 508A, & 924



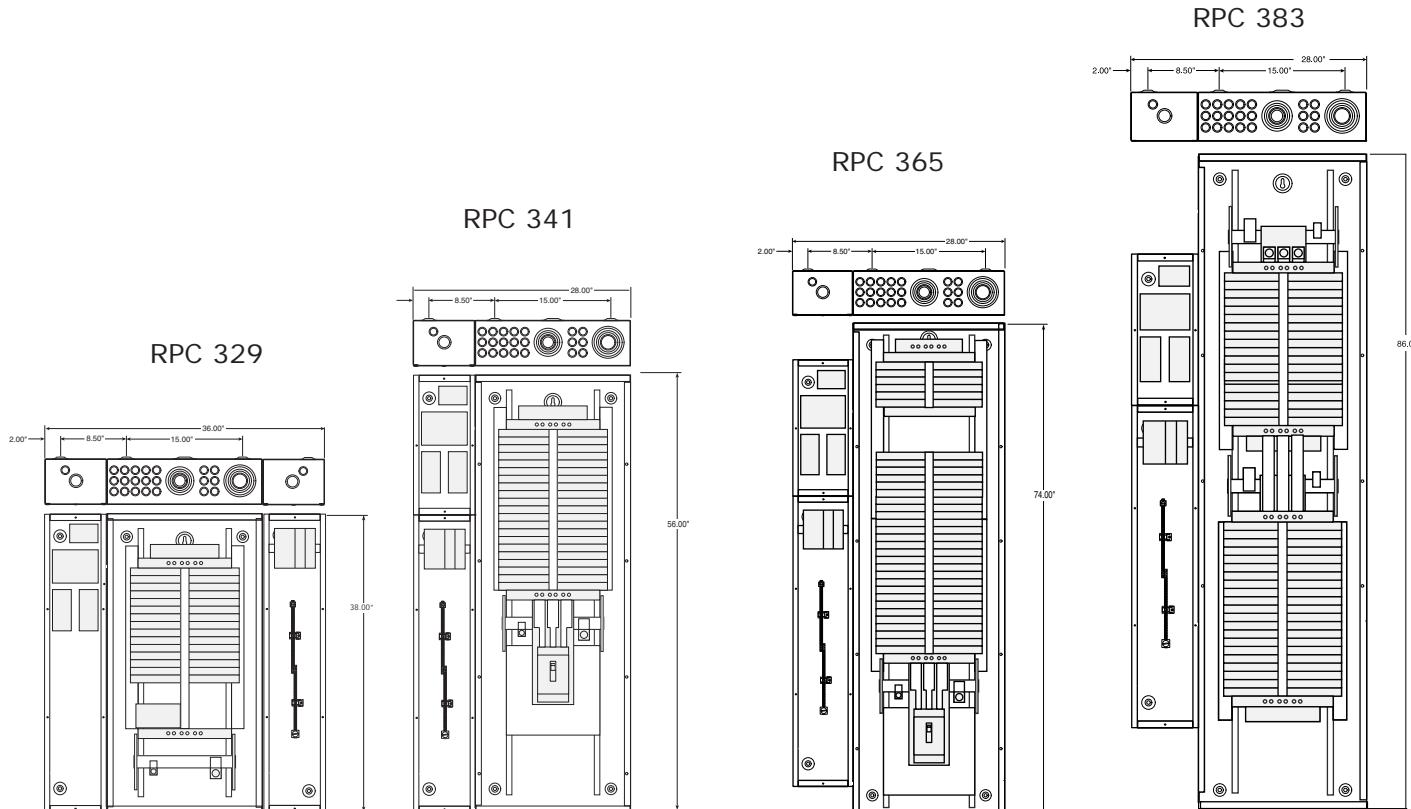
Plugs in - NO EXTRA WIRING



# OPTIONAL FEATURES

- Branch circuit current monitoring and reporting via Modbus or IP
- SurgeX in-panel surge elimination modules
- Contactor control via optional I/O-R outbound signaling relay card
- Outlet control via optional I/O-R outbound signaling relay card
- NEMA 3R outdoor enclosure
- Feed-thru lugs
- Sub-feed lugs (MLO panels only)
- Integrated Power Centers (IPC) with built-in transformer
- 100-600A MLO and MCB panels
- 30-84 space panels
- Integrated whole panel surge protection (SPD)

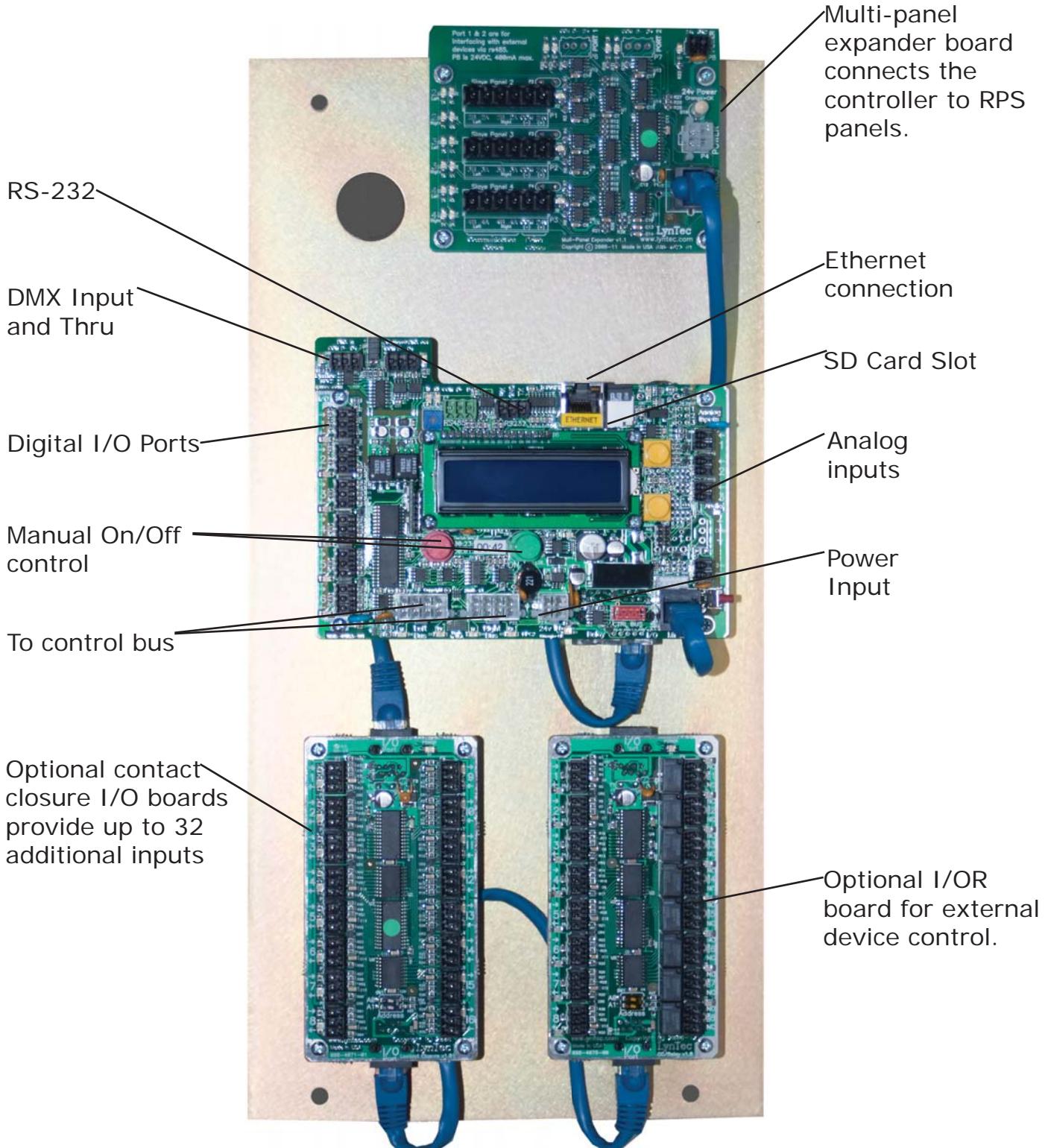
## STANDARD RPC CONFIGURATIONS



# RPC CONTROLLER

The LynTec controller increases interface options, simplifies programming, and adds remote status monitoring.

Easy setup for sequential system control for audio systems, or individual circuit control for non-dimmed lighting circuits.



# RPC 341

G3 circuit breaker is rated for 200,000 on/off/on cycles--surpassing UL requirements.

LynTec controller provides built-in web server for remote setup, control and monitoring

I/O contact closure boards and I/OR relay board

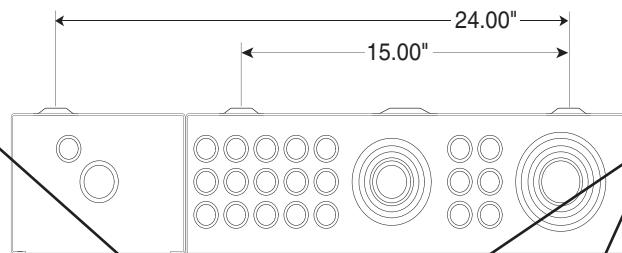
Power supply and buffer improves system performance and provides for automatic load shedding and brownout protection.

200% Neutrals standard

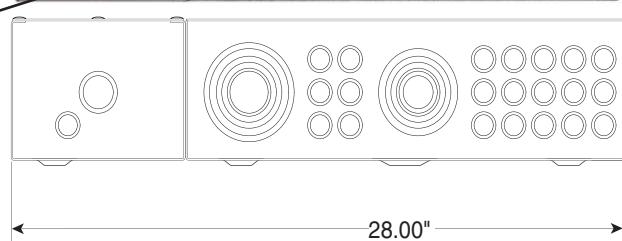
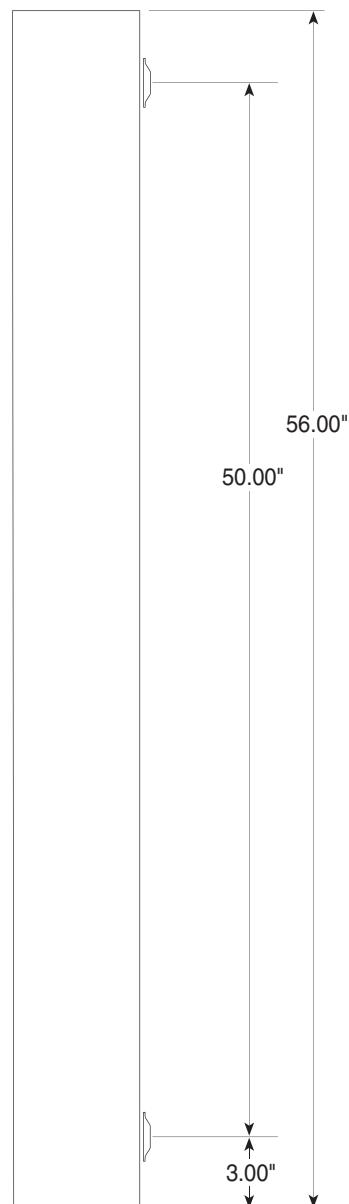
225A Main Standard (MLO and other MCB sizes optional)

Isolated technical ground bar reduces electrical noise and improves sound system performance

Removable electrical interior to assist installation



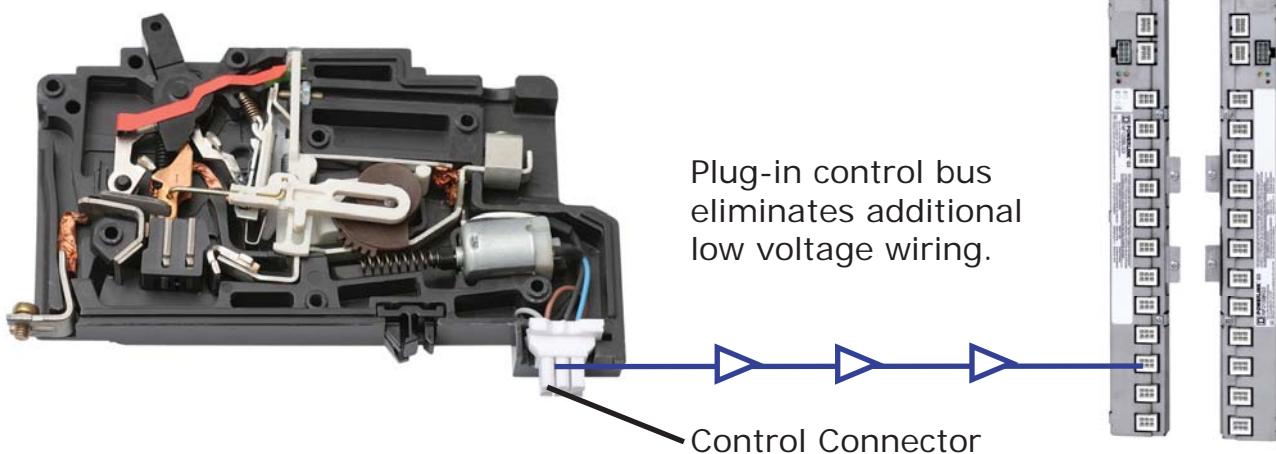
Plug-on control bus strips simplify wiring and installation.



# SQUARE D MOTORIZED BREAKER TECHNOLOGY

Square D Powerlink G3 Control Buses provide the interface between the system controller and remotely operated circuit breakers. Specifically, they distribute 24Vdc switching power and control signals to switch remotely operated circuit breakers and report circuit breaker status back to the system controller.

Square D G3 motorized breakers are available in denominations of 15, 20 and 30 Amps in one, two or three poles. Each G3 motorized breaker requires no control wiring.



## TECHNICAL INFORMATION

### Breaker Information

Voltage	120Vac	240Vac	480/277Vac
Interrupting Capacity	65 kAIR	65 kAIR	14 kAIR
Terminals	(1) #14 - 8 AL or (1) #14 - 8 CU		
Standards	UL Listed 489, NEMA Standard AB-1-1986, CSA Standard 22.5		

### Control Bus Information

Operating Temperature (external panelboard ambient)	23°F to 104°F (-5°C to 40 °C)
Storage Temperature	-4°F to 185°F (-20°C to 85°C)
Operating Humidity	5% to 95% (non-condensing)
ESD Immunity	IEC 1000, Level 4
RF Susceptibility	IEC 1000, Level 3
Electrical Fast Transient Susceptibility	IEC 1000, Level 3
Electrical Surge Susceptibility, power line	IEC 1000, Level 4
Electrical Surge Susceptibility, interconnection lines	IEC 1000, Level 3

# MODELS AND OPTIONS

## 30 CIRCUIT PANELS

### **Master Panel:**

- RPC 329 (100A main standard, max main size 125A, MLO available)

### **Slave Panels:**

- RPS 330
- RPS 330 ITG (Isolated Technical Ground)

## 42 CIRCUIT PANELS

### **Master Panels:**

- RPC 338 (for main breakers <100A)
- RPC 341 (125A, 150A, 175A, 200A, 225A and MLO available)
- RPC 341 M400 (400A main breaker and MLO available)

### **Slave Panels:**

- RPS 339 (for main breakers <100A)
- RPS 342 (125A, 150A, 175A, 200A, 225A and MLO available)
- RPS 342 M400 (400A main breaker or MLO)
- RPS 339 ITG (for main breakers <100A)
- RPS 342 ITG (125A, 150A, 175A, 200A, 225A and MLO available) (includes isolated technical ground)
- RPS 342 ITG M400 (400A main breaker and MLO available) (includes isolated technical ground)

## 66 CIRCUIT PANELS

### **Master Panel:**

- RPC 365 (125A, 150A, 175A, 200A, 225A and MLO available)
- RPC 365 M400 (400A main breaker and MLO available)

### **Slave Panel:**

- RPS 366 (125A, 150A, 175A, 200A, 225A and MLO available)
- RPS 366 M400 (400A main breaker or MLO)
- RPS 366 ITG (125A, 150A, 175A, 200A, 225A and MLO available) (includes isolated technical ground)
- RPS 366 ITG M400 (400A main breaker and MLO available) (includes isolated technical ground)
- 

## 84 CIRCUIT PANELS

### **Master Panel:**

- RPC 383 (400A MLO)

### **Slave Panel:**

- RPS 384 (400A MLO )

# WEB ENABLED USER INTERFACE

Every RPC controller has a web server built in, so there is no software to buy, load or program. Simply plug in a network connection to the RPC controller, take the IP code off the LCD screen, and any browser enabled device on the network can load the IP address and access the RPC user interface (provided they have the user name and password).

## CONTROL IS AS EASY AS CLICKING A BUTTON!

Global controls allow you to easily control all breakers regardless of zone.

Status indicators show which emergency features are activated.

Easy to read breaker status shows if the breaker is on, off, tripped, manually overridden or failed.

Empty spaces or unmotorized breakers indicated

Circuit address color corresponds to the assigned zone. Individually control zones by DMX, sACN, IP or contact closure

Click here to control the zone

One click individual circuit control

Multi-pole breakers

External devices can be integrated into the RPC interface using the I/OR board

**Relevant system information**

Remote Power Controller (RPC-2) LynTec Test Job 4/24/2015 14:26:38 Master panel temp: 80°F / 27.0°C	Hardware Version: 2.30c Web Version: Network: Connected	Monitored VAC: 121.0 VAC Logic Core(3.3v): 3.3 v Peripherals(5.0v): 5.0 v Cap Buffer(24.0v): 24.0 v	DMX512: Inactive sACN: Inactive AC Monitoring: Disabled SD Storage: Enabled
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**Global Controls**

- All Circuits On
- All Circuits Off
- Hurry-Off

**Status**

- E-Shutoff
- E-Lighting

**Circuit Legend**

Status Only
ON
OFF
TRIPPED
MANUAL ON
FAILURE
Controllable
ON
OFF
TRIPPED

**Panel Numbering Circuit Address**

**Breaker Status Grid**

	CIR	ADDR		CIR	ADDR	
1	Breaker 01	1	ON	22	Breaker 16	2
3	Breaker 02	2	ON	23	Breaker 17	4
5	Breaker 03	3	ON	24	Breaker 18	6
7	Breaker 04	4	ON	25	Breaker 19	8
9	Breaker 05	5	ON	26	Breaker 1A	10
11	Breaker 06	6	ON	27	Breaker 1B	12
13	Breaker 07	7	ON	28	Breaker 1C	14
15	Breaker 08	8	ON	29	Breaker 1D	16
17	Breaker 09	9	OFF	30	Breaker 1E	18
19	Breaker 0A	10	OFF	31	Breaker 1F	20
21	Breaker 0B	11	ON	32	Breaker 20	22
23	Breaker 0C	12	ON	33	Breaker 21	24
25	Breaker 0D	13	ON	34	Breaker 22	26
27	Breaker 0E	14	ON	35	Breaker 23	28
29	Breaker 0F	15	ON	36	Breaker 24	30
31	Breaker 10	16	ON	37	Breaker 25	32
33	Breaker 11	17	ON	38	Breaker 26	34
35	Breaker 12	18	ON	39	Breaker 27	36
37	Breaker 13	19	NON/EMPTY	40	Breaker 28	38
39	Breaker 14	20	ON	41	Breaker 29	40
41	Breaker 15	21	ON	42	Breaker 2A	42

**Zone Control**

ON	1	Zone 01
ON	2	Zone 02
ON	3	Zone 03
ON	4	Zone 04

**IOR Trigger Controls**

	CIR	ADDR	
ON	43	APC UPS	1
ON	44	Switched Outlet	2
ON	45	LynTec PDS-10	3
ON	46	Sequencer	4
ON	47		5
ON	48		6
ON	49	High Current	7
ON	50	Latching Contact	8

# RPC USER INTERFACE SETUP PAGE

Setting up global commands, circuit zones, sequencing queues, schedules etc. is so simple with the RPC interface that no commissioning is required by the factory. Watch our set-up videos and you're certified! All of the set up commands are clicking boxes and picking out options from drop-down menus. Here are a few examples from our setup/panels page.

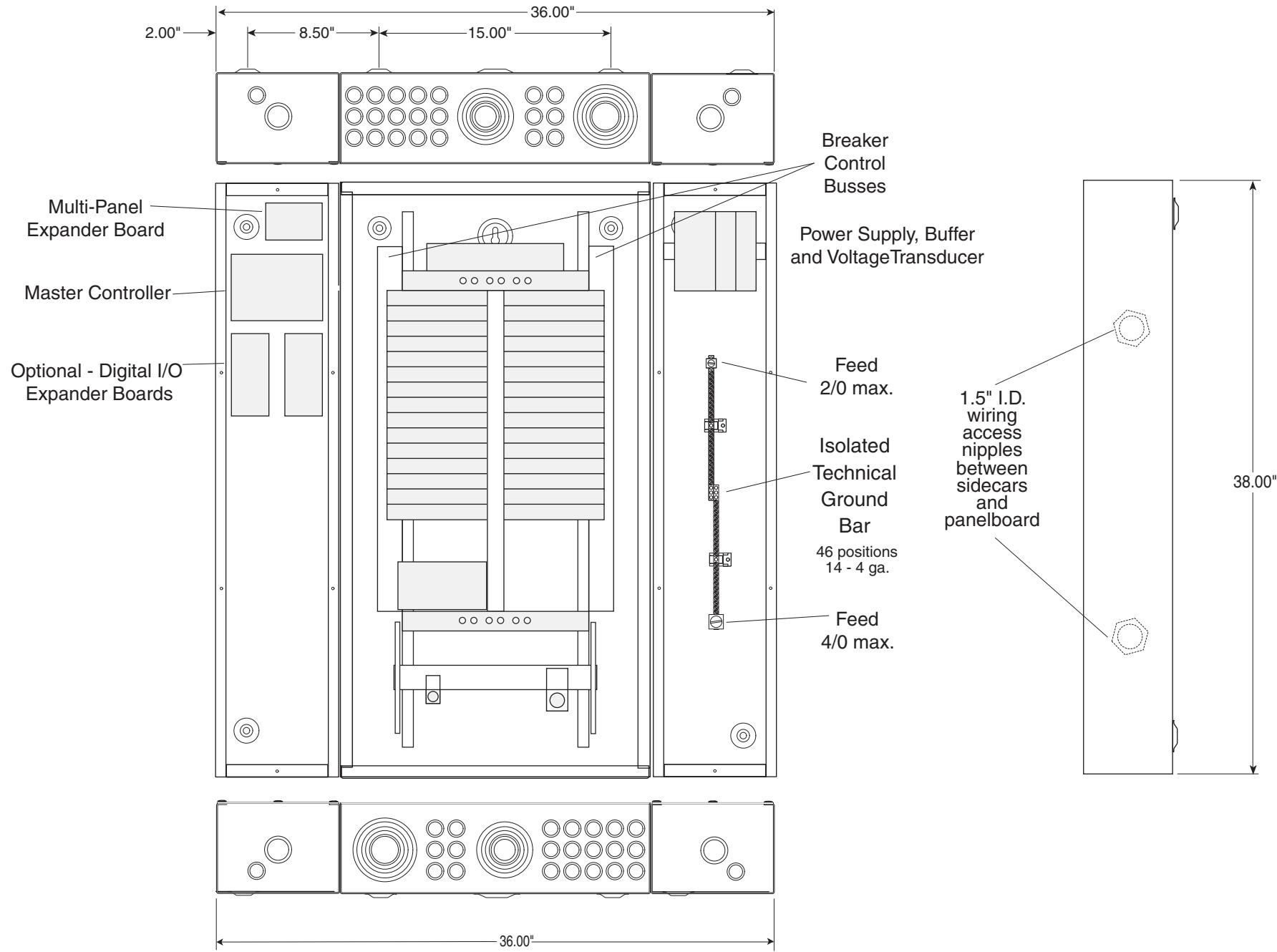
The screenshot shows the LynTec Remote Power Controller (RPC-2) User Interface. The top navigation bar includes Status, Control, Setup, Support, Event Log, Logout, and tabs for Setup Home, Network, and Alerts. The main area displays the following sections:

- Panel: Panel A**: Shows a grid of breakers (CIR, Description, ADDR, B, L, E) with various status indicators (green, yellow, red) and sequencing logic (e.g., [1] 1 sec, [2] 2 sec). A tooltip indicates "Choose which breakers open or close in the event of an emergency or brownout".
- Zone Control**: A table listing zones (Name/Seq, Options) with buttons for Edit, Test, Zone Mode, and Schedules. A tooltip indicates "Zones can be assigned to contact closers or schedules".
- Brownout VAC**: Setters for Nominal (120), Low (-20%) (96), and Recovery (+10%) (108).
- Circuit Legend**: Non-Motorized or Empty, with a legend for B (Blue), L (Green), and E (Red).
- IOR Trigger Controls**: A table listing triggers (RELAY, E, L, B ADDR, DESCRIPTION, CIR, RELAY, E, L, B ADDR, DESCRIPTION, CIR) with sequencing logic. A tooltip indicates "External devices may be assigned to zones just like breakers".

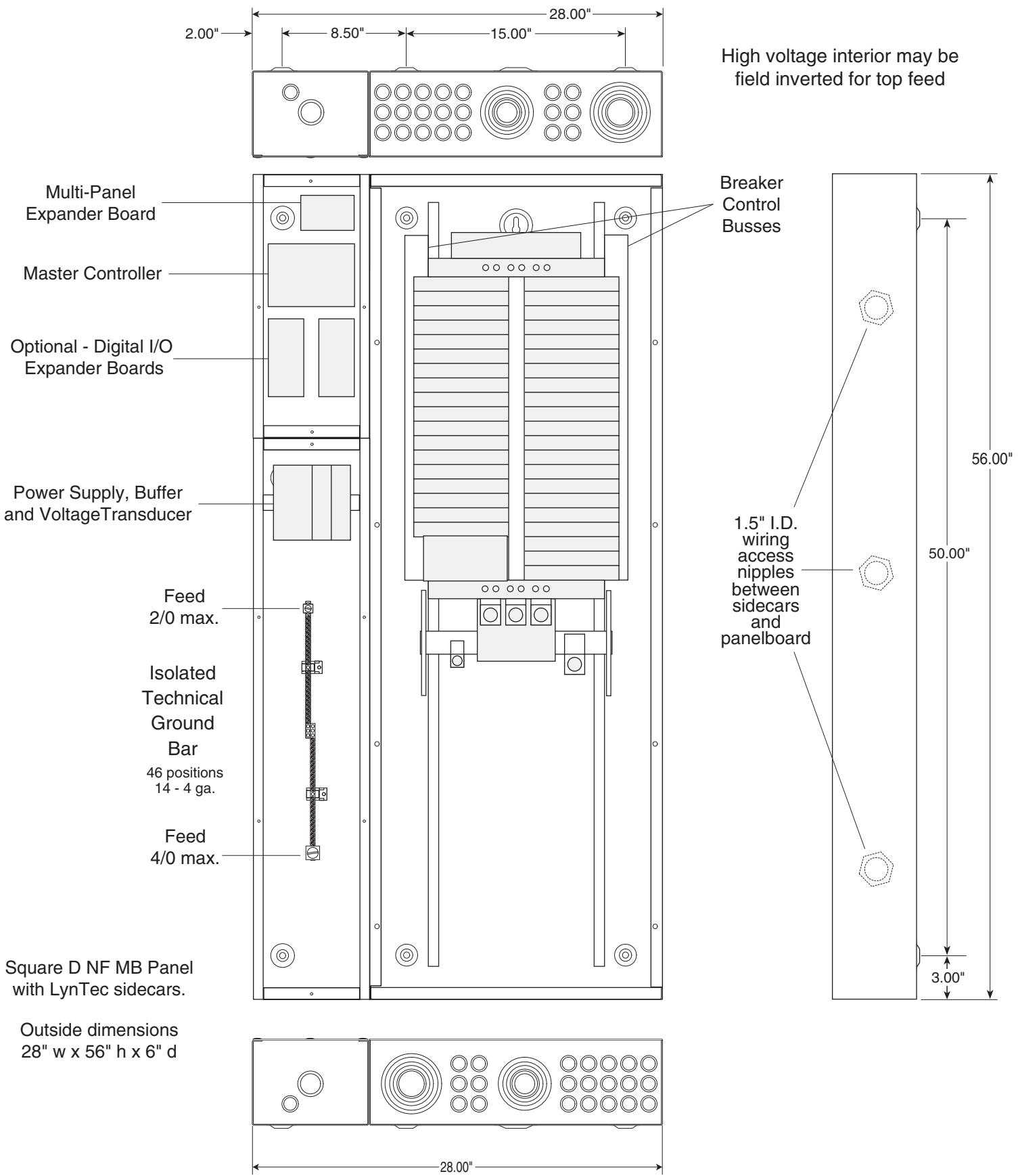
Annotations with arrows point to specific features:

- "One click saves changes" points to the "Logout" button in the top right.
- "Choose the numbering and addressing scheme to fit your design" points to the "Addressing Scheme" section on the left.
- "Select which global controls and emergency features to utilize" points to the "Global Controls" section on the left.
- "Choose which breakers open or close in the event of an emergency or brownout" points to the "Panel: Panel A" grid.
- "Zones can be assigned to contact closers or schedules" points to the "Zone Control" table.
- "Add breakers to a zone by clicking the "Edit Zone" button and then clicking the breaker" points to the "Edit Zone" button in the "Zone Control" table.
- "Enable up to 12 zones" points to the "Zone Control" table.
- "Editable text fields" points to the "Brownout VAC" and "Circuit Legend" sections.

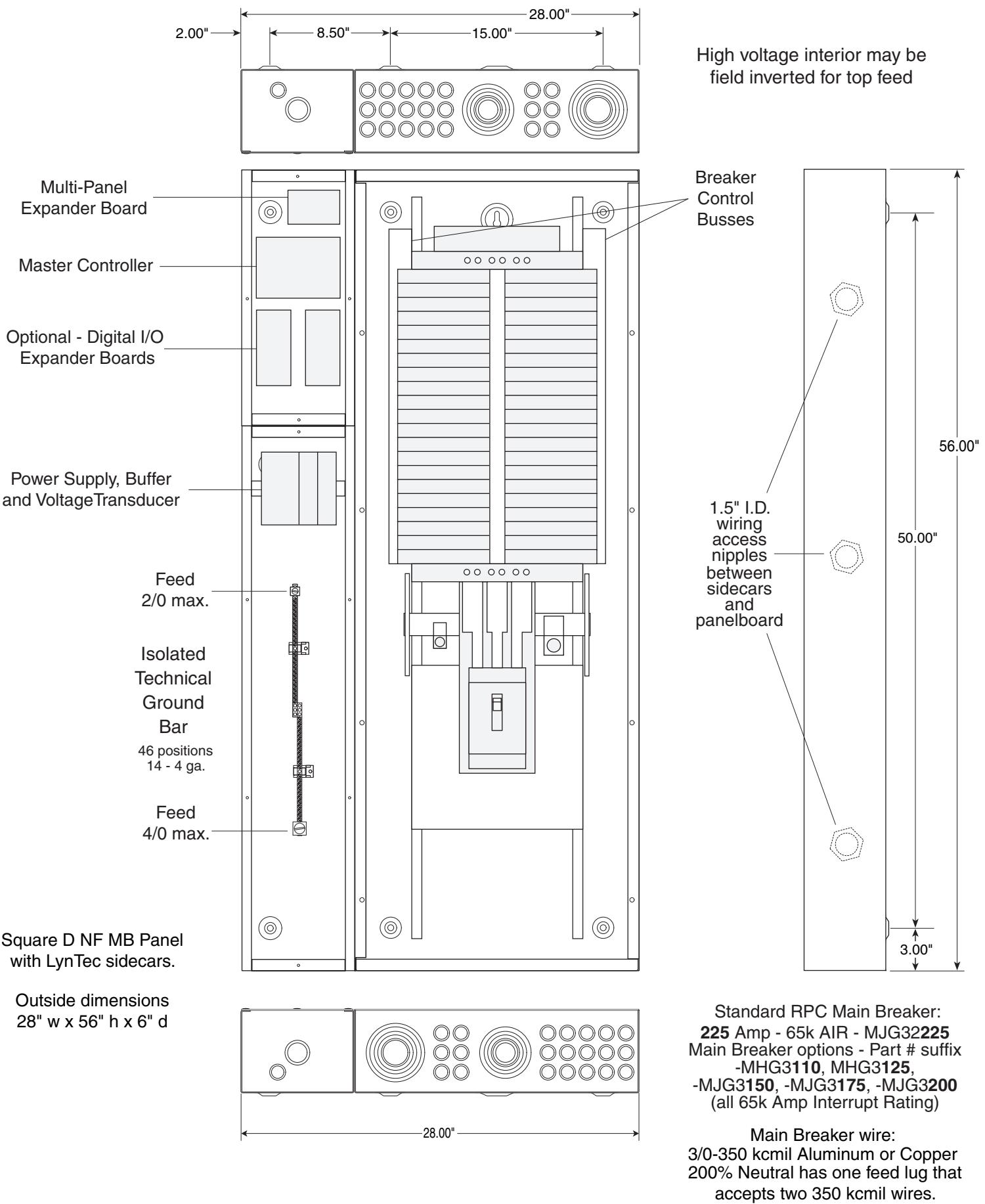
# LynTec RPC 329 Mechanical



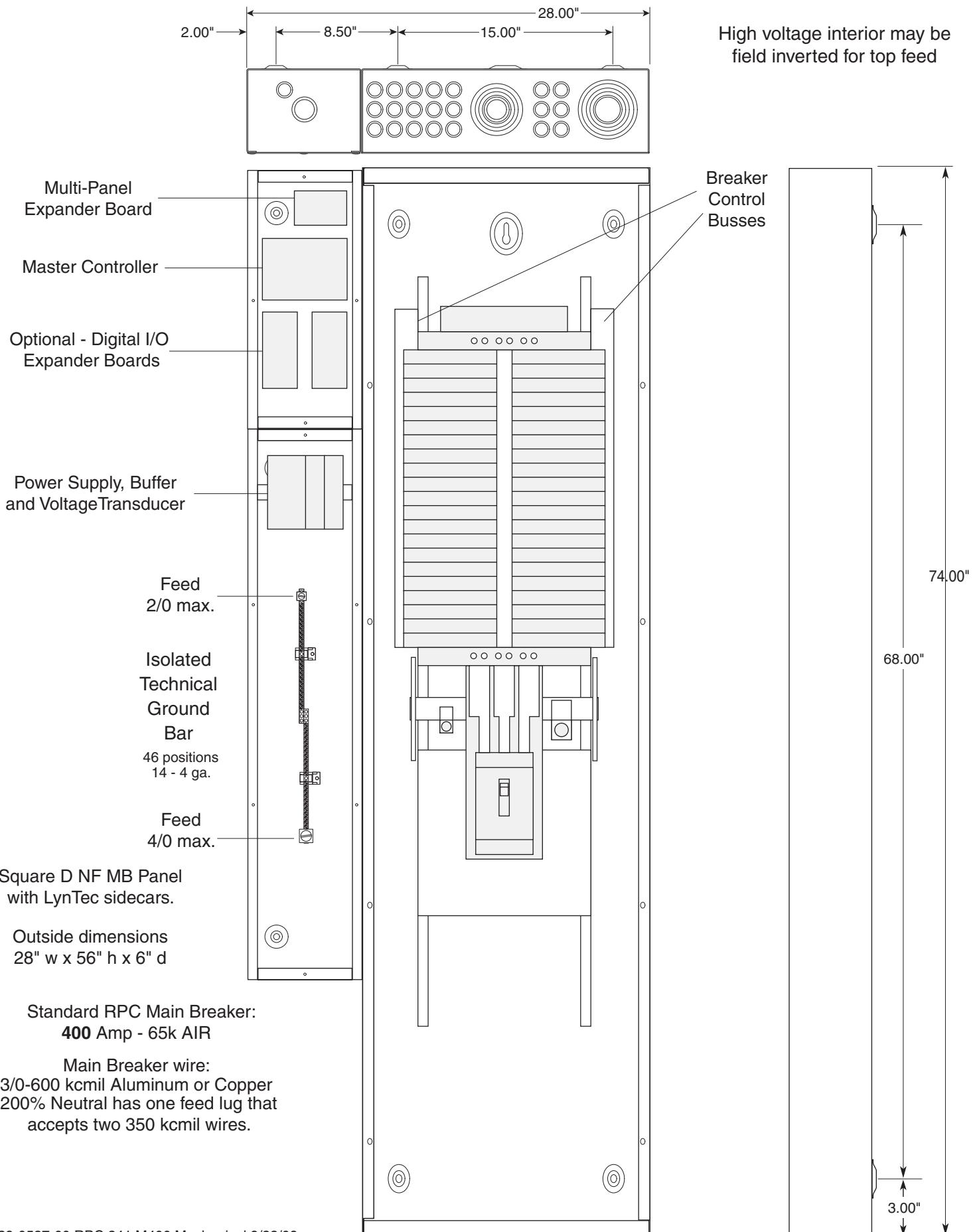
# LynTec RPC 338 Mechanical



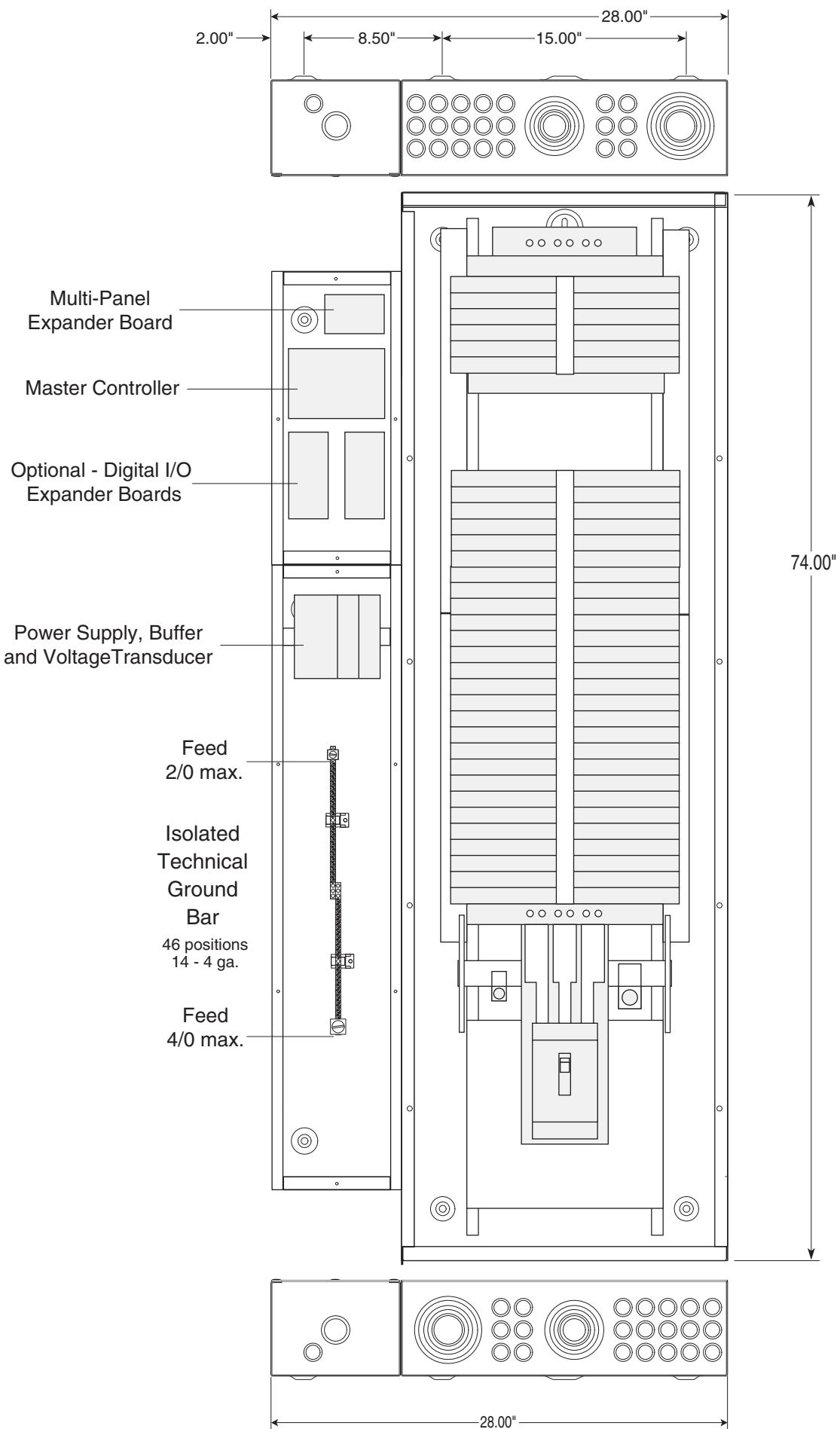
# LynTec RPC 341 Mechanical



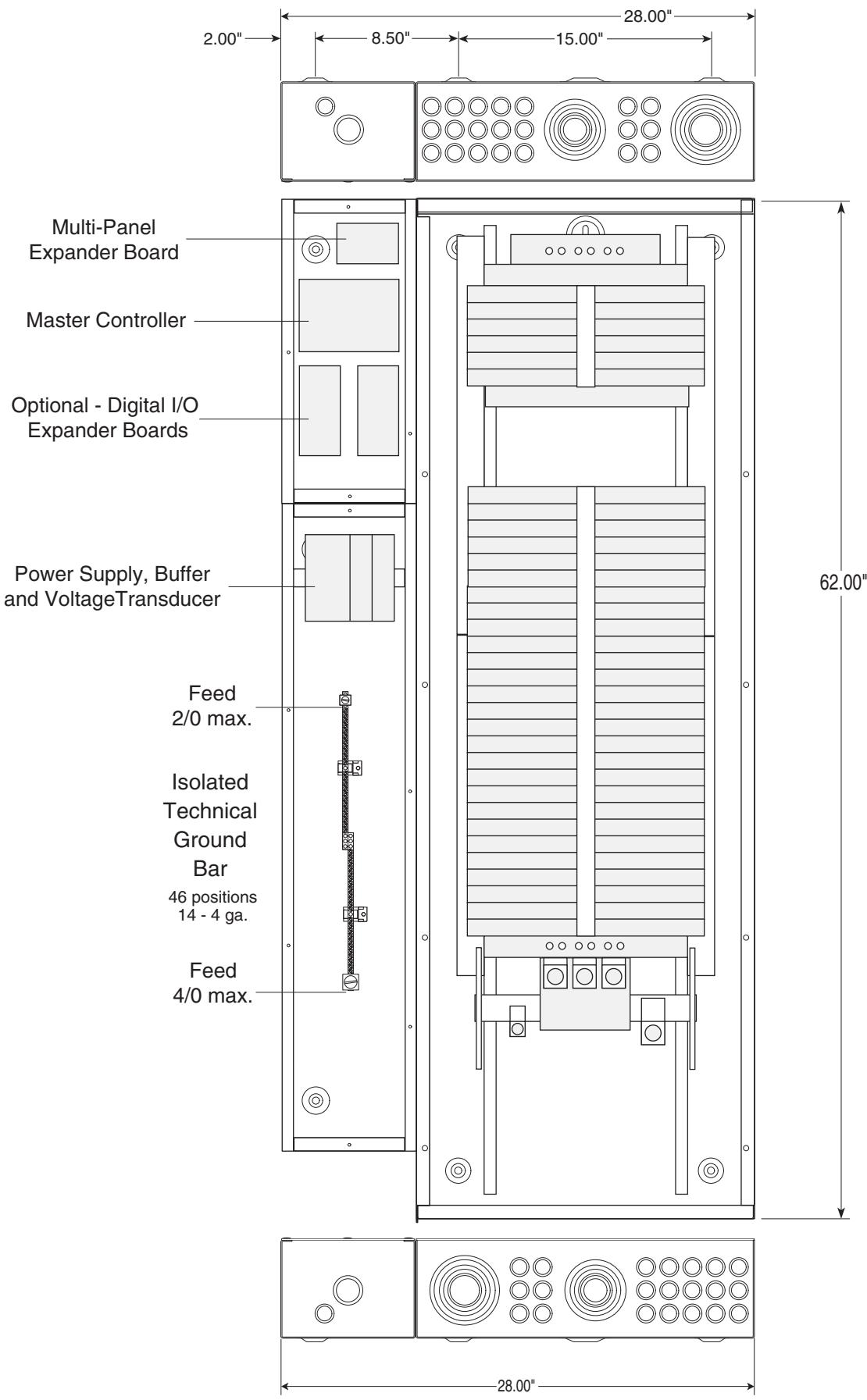
# LynTec RPC 341-M400 Mechanical



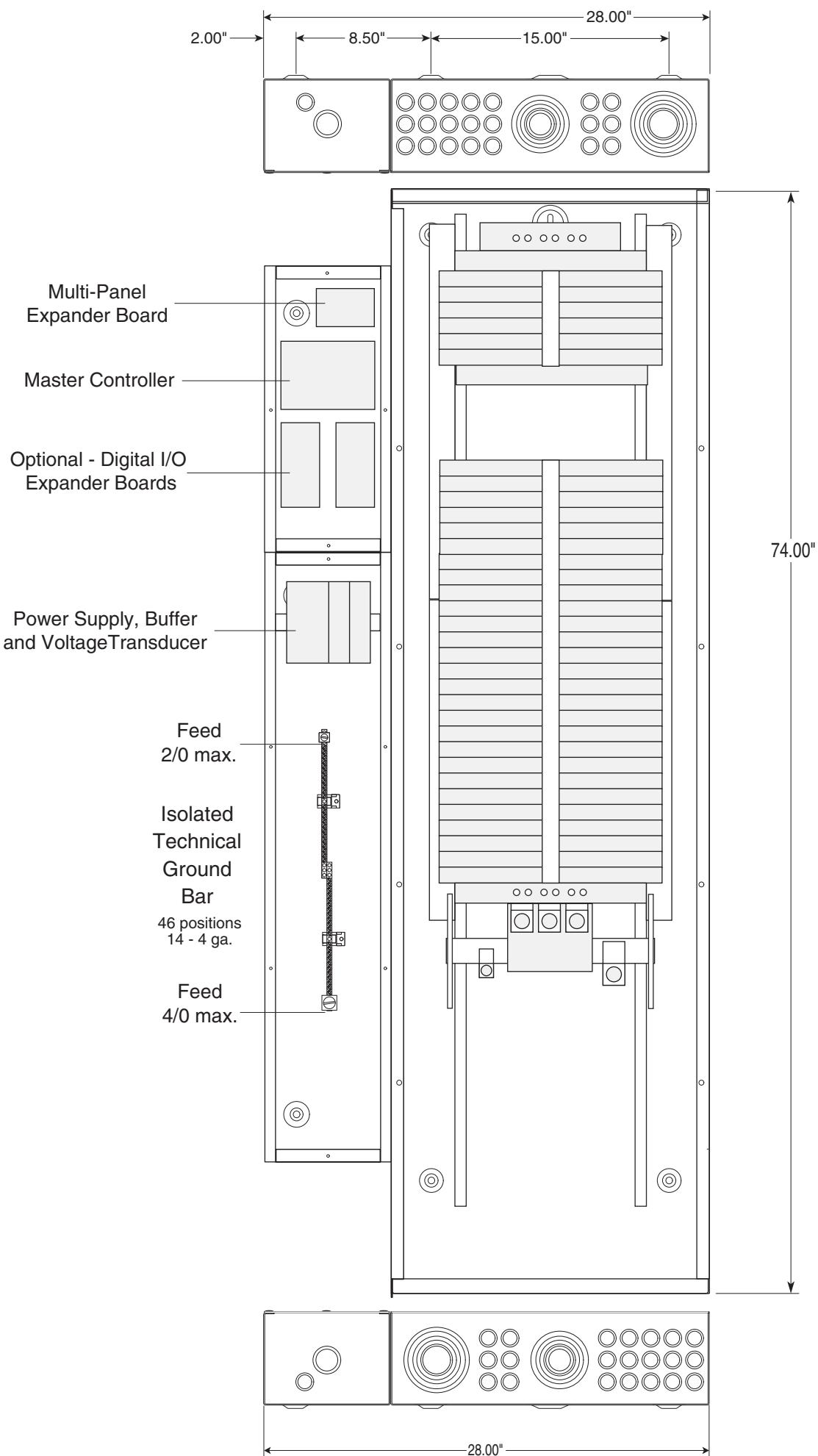
# LynTec RPC 365 Mechanical



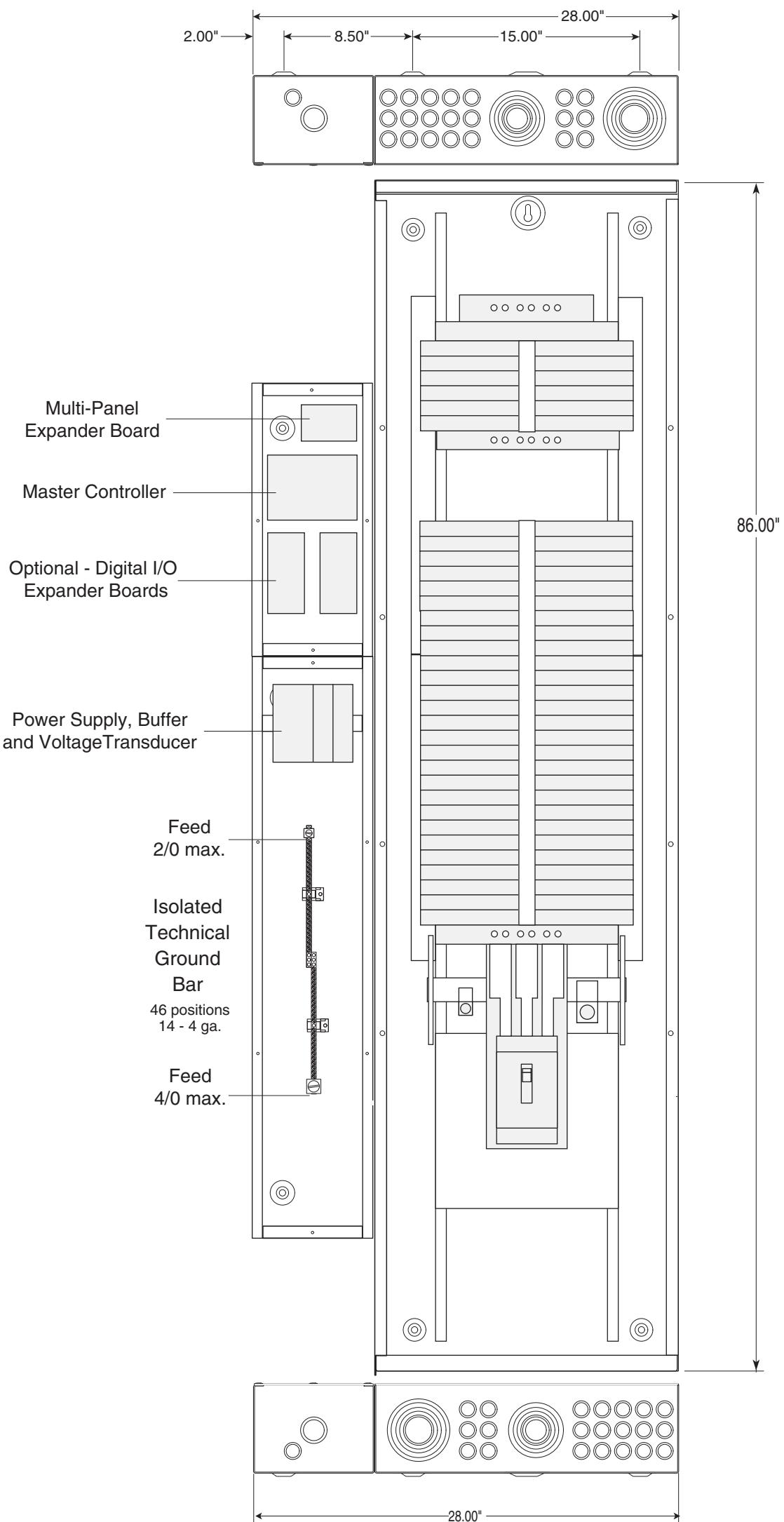
# LynTec RPC 365 MLO Mechanical



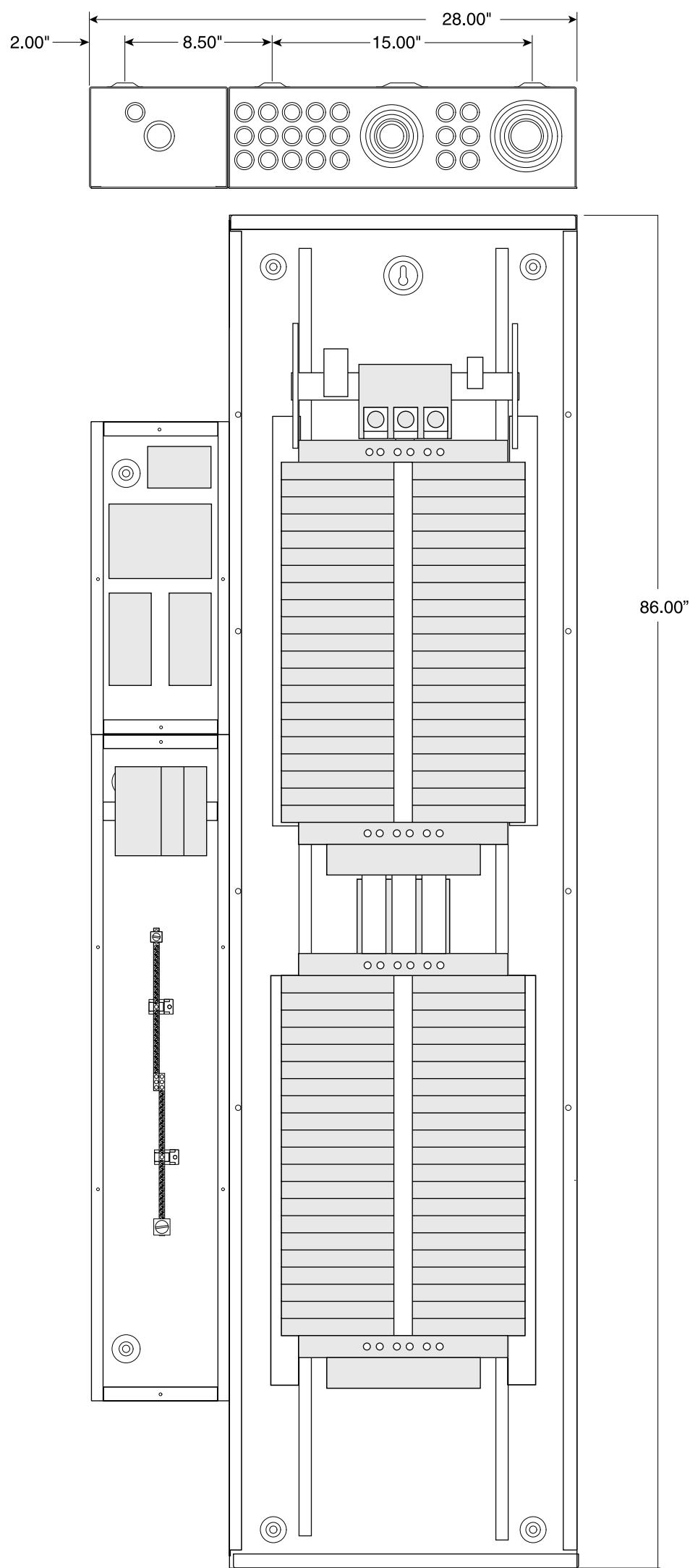
# LynTec RPC 365 MLO 400 Mechanical



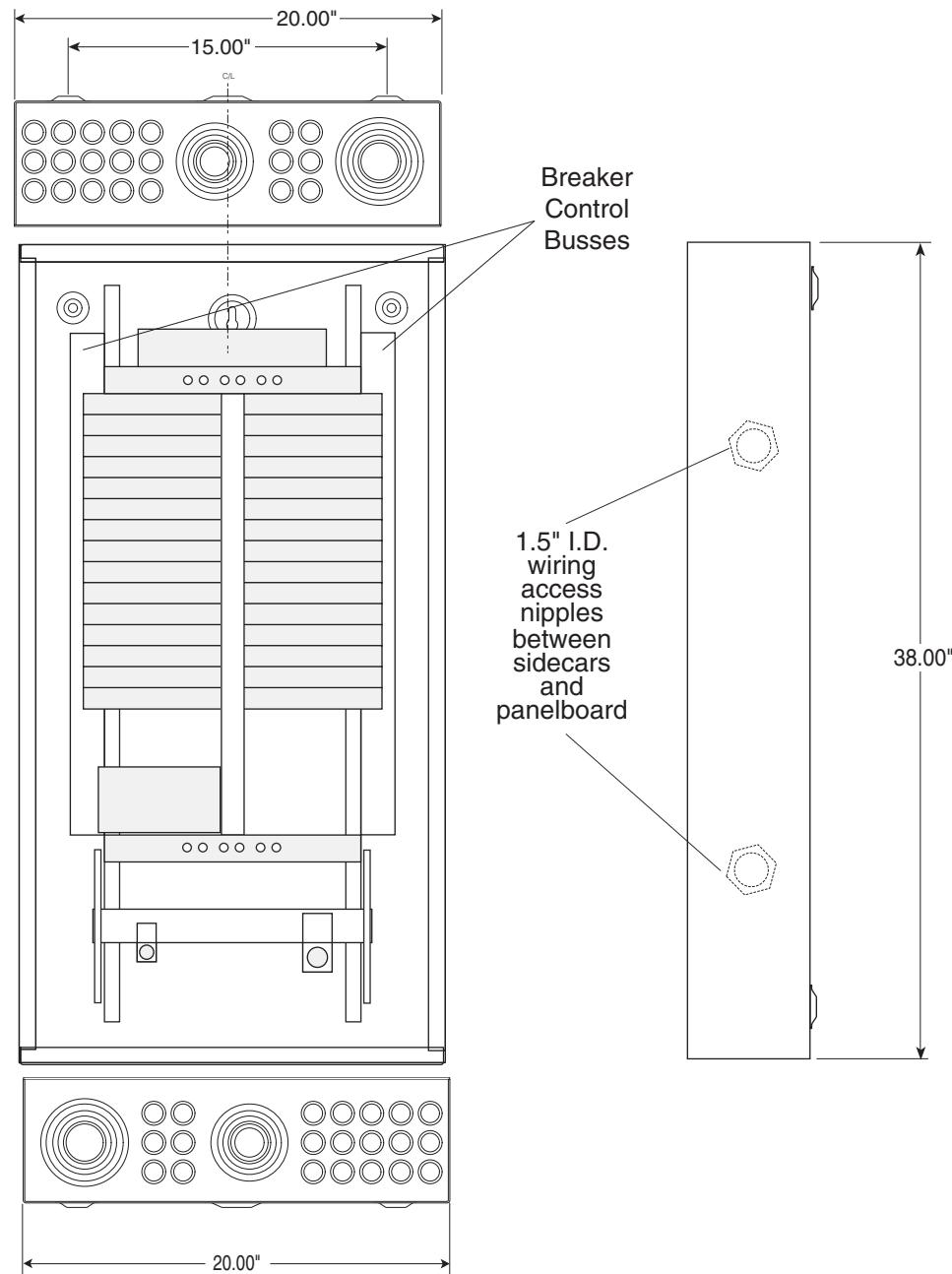
# LynTec RPC 365 M400 Mechanical



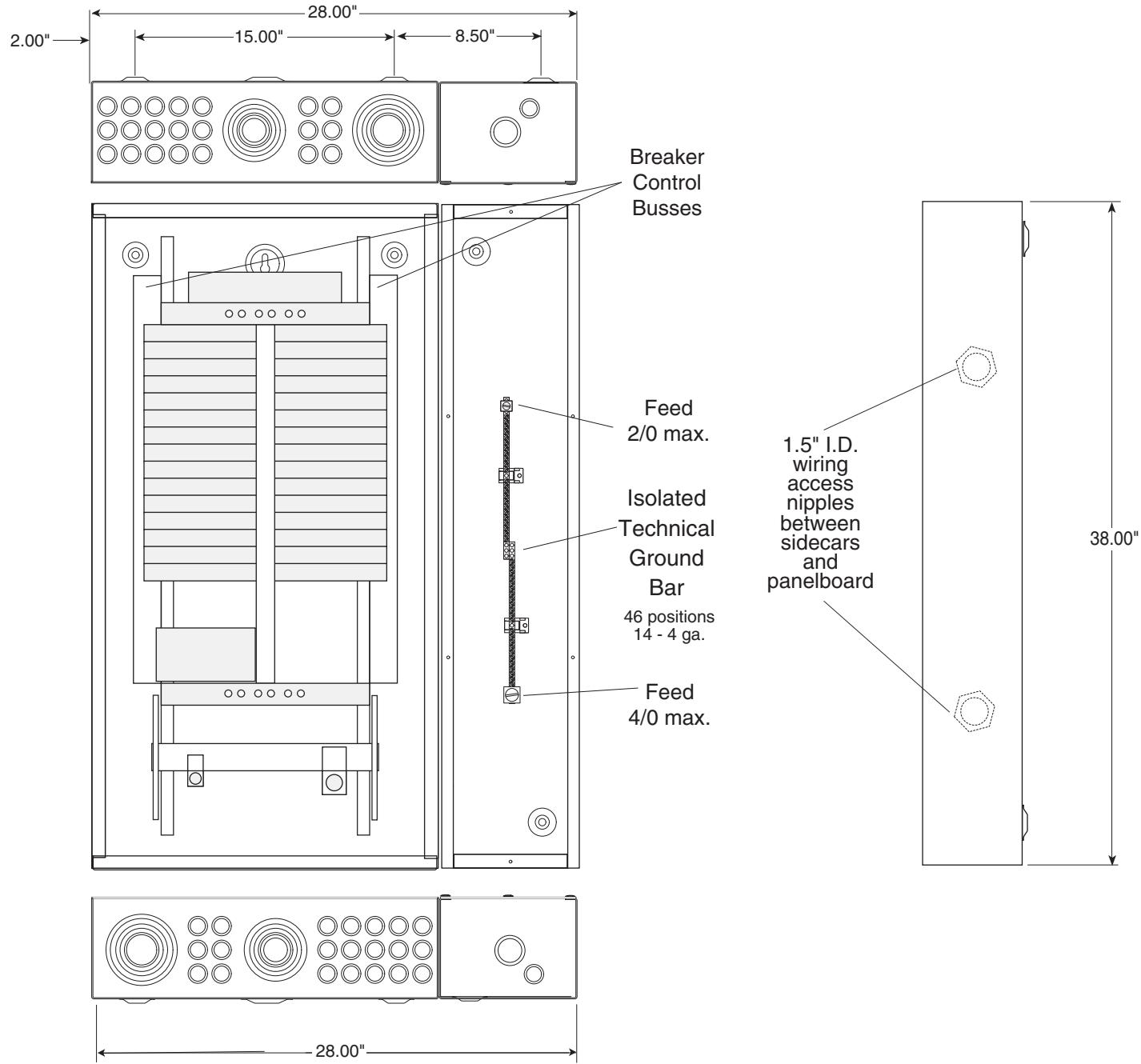
# LynTec RPC 383 MLO Mechanical



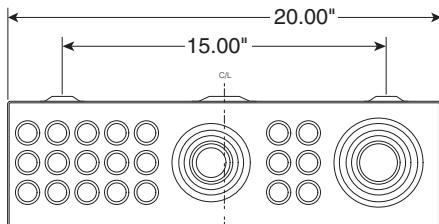
# LynTec RPS 330 Mechanical



# LynTec RPS 330 ITG Mechanical

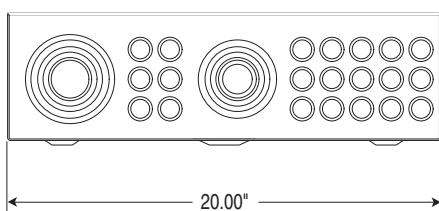
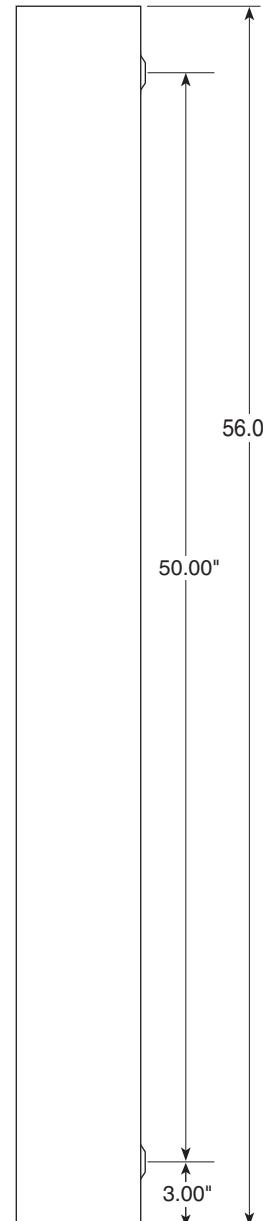
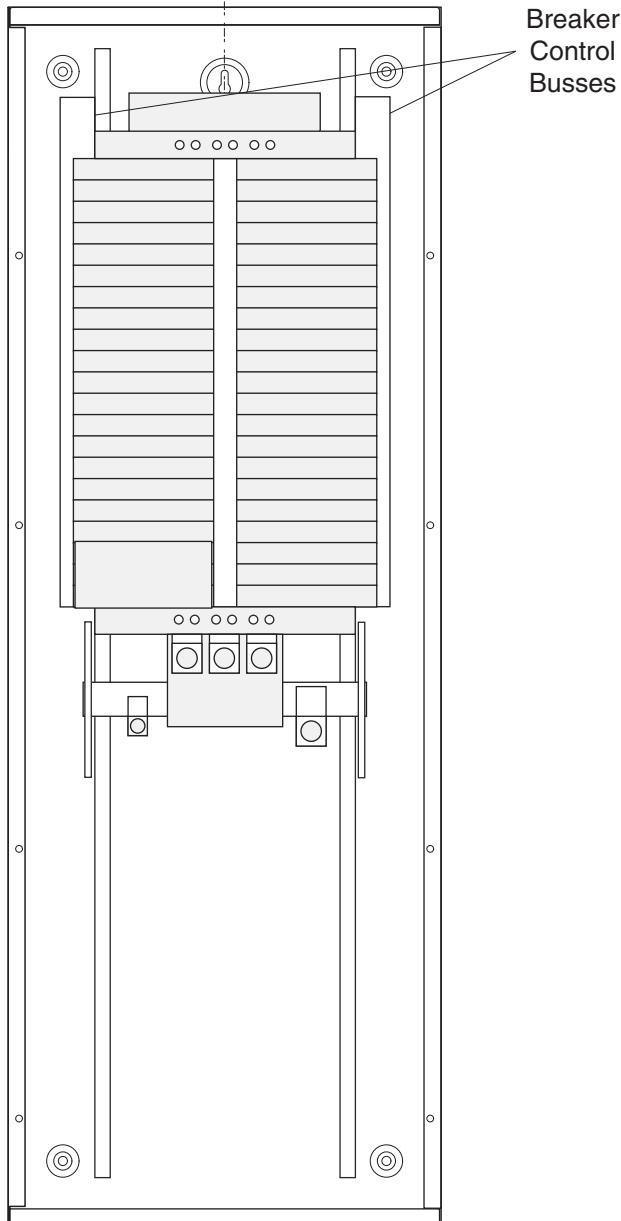


# LynTec RPS 339 Mechanical



Square D NF MLO Panel  
Outside dimensions  
20" w x 56" h x 6" d

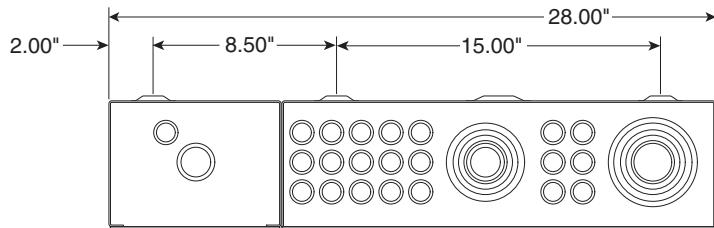
High voltage interior may be  
field inverted for top feed



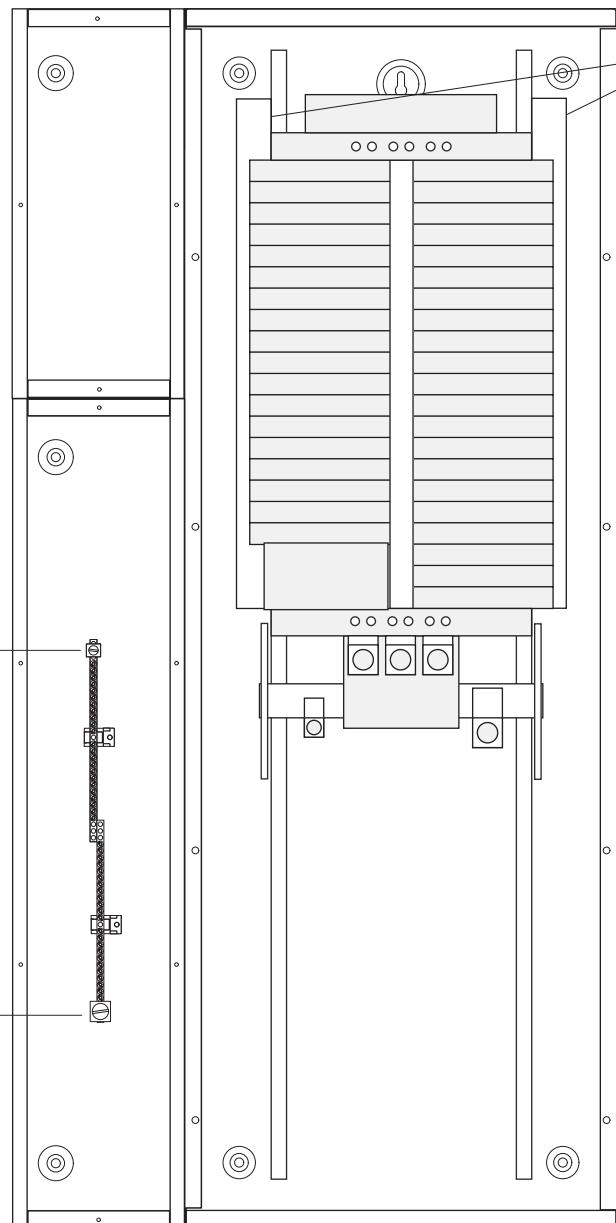
Main Lug wire:  
3/0-350 kcmil Aluminum or Copper  
200% Neutral has one feed lug that  
accepts two 350 kcmil wires.

Standard RPS Main Breaker:  
**100A or Smaller Backfed Main Breaker**

# LynTec RPS 339 ITG Mechanical

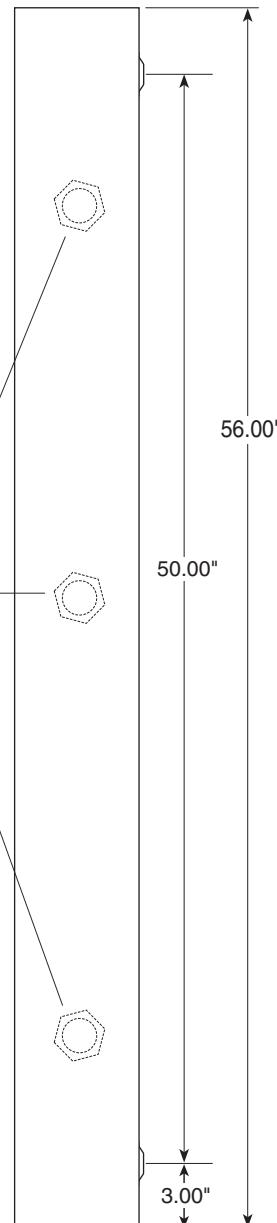
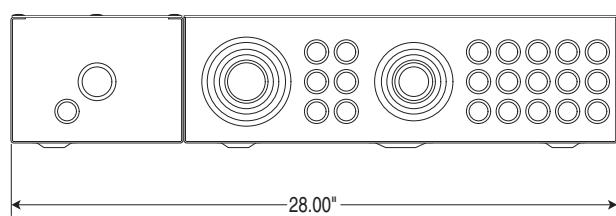


High voltage interior may be field inverted for top feed

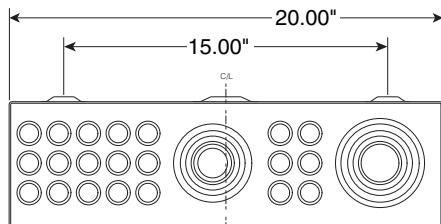


Square D NF MB Panel with LynTec sidecars.

Outside dimensions  
28" w x 56" h x 6" d

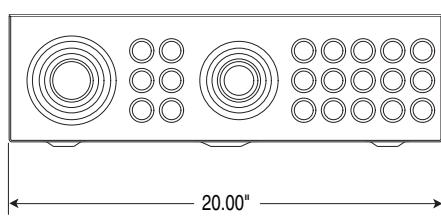
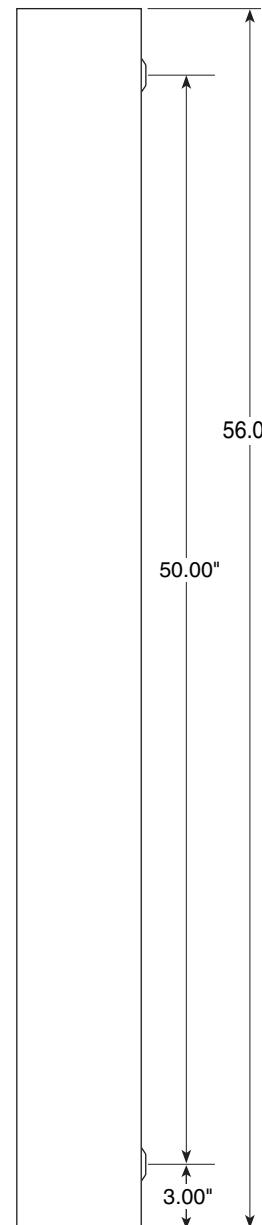
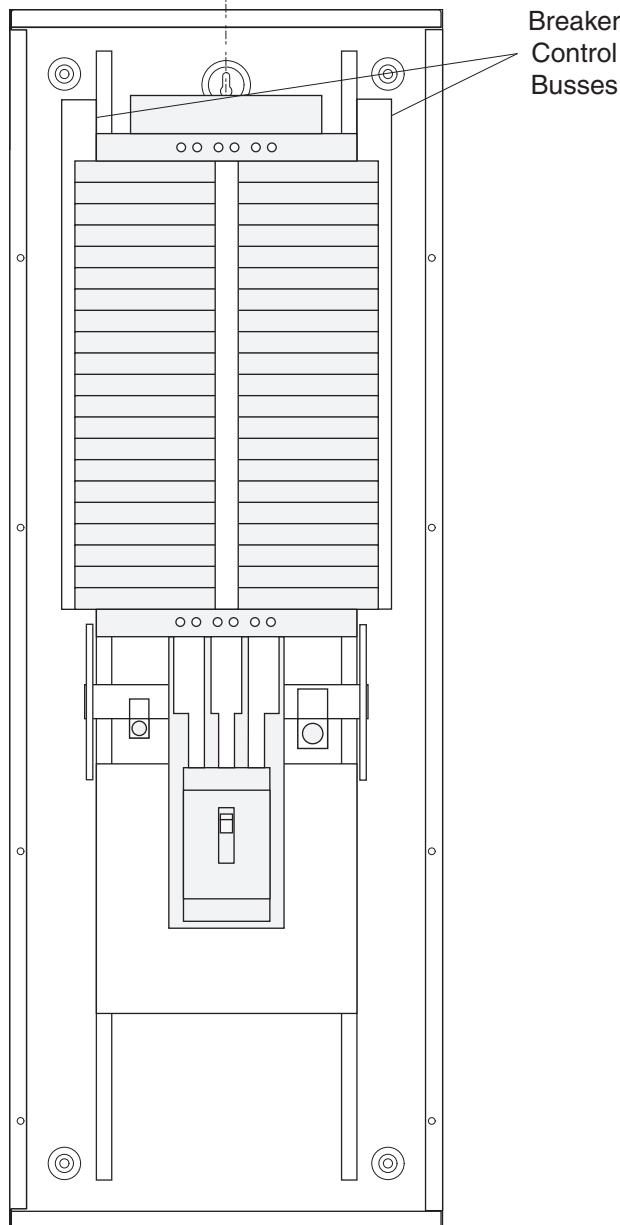


# LynTec RPS 342 Mechanical



Square D NF MB Panel  
Outside dimensions  
20" w x 56" h x 6" d

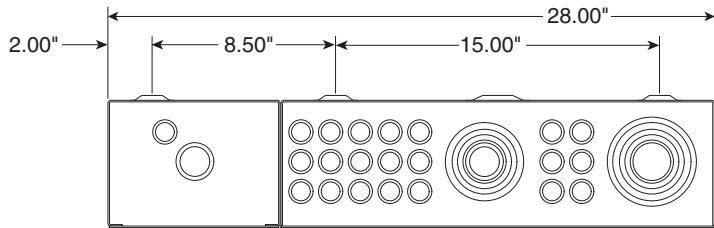
High voltage interior may be  
field inverted for top feed



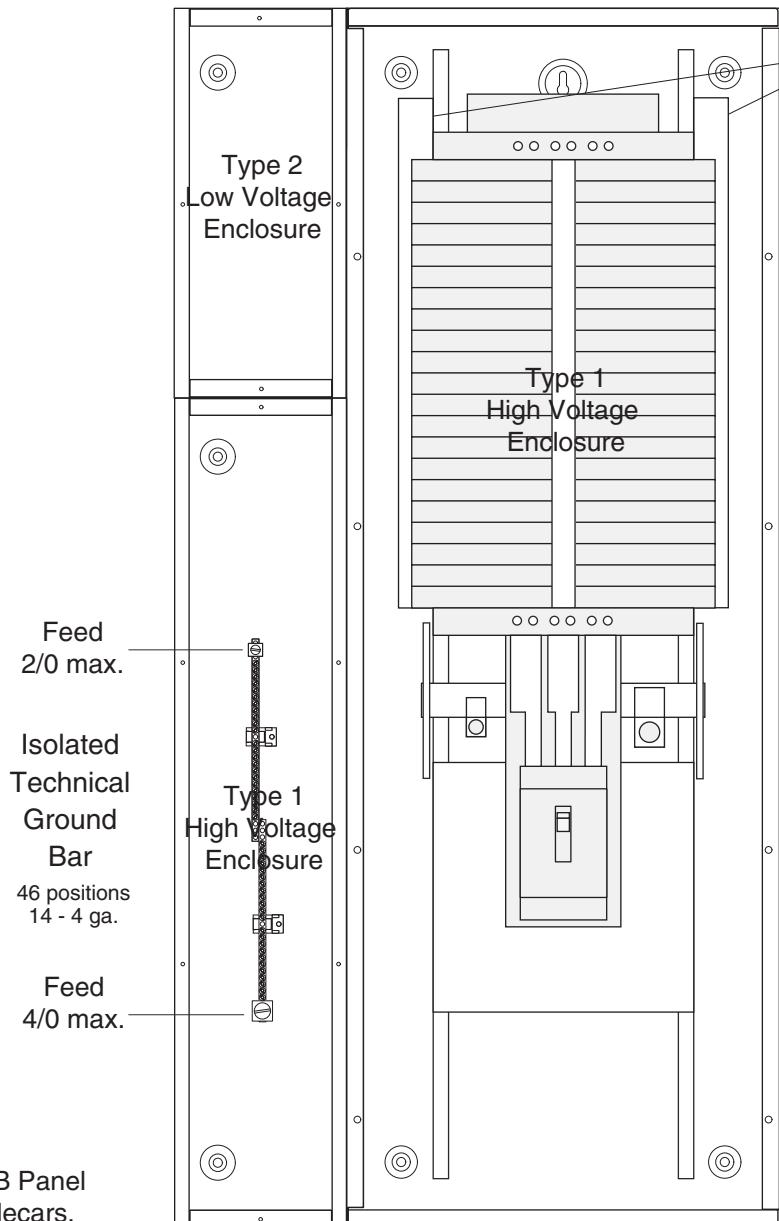
Standard RPS Main Breaker:  
**225 Amp - 65k AIR - MJG32225**  
Main Breaker options - Part # suffix  
-MHG3110, MHG3125,  
-MJG3150, -MJG3175, -MJG3200  
(all 65k Amp Interrupt Rating)

Main Breaker wire:  
3/0-350 kcmil Aluminum or Copper  
200% Neutral has one feed lug that  
accepts two 350 kcmil wires.

# LynTec RPS 342 ITG Mechanical

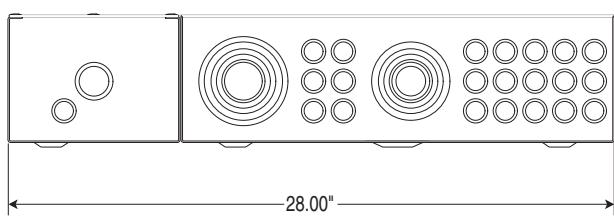


High voltage interior may be field inverted for top feed



Square D NF MB Panel  
with LynTec sidecars.

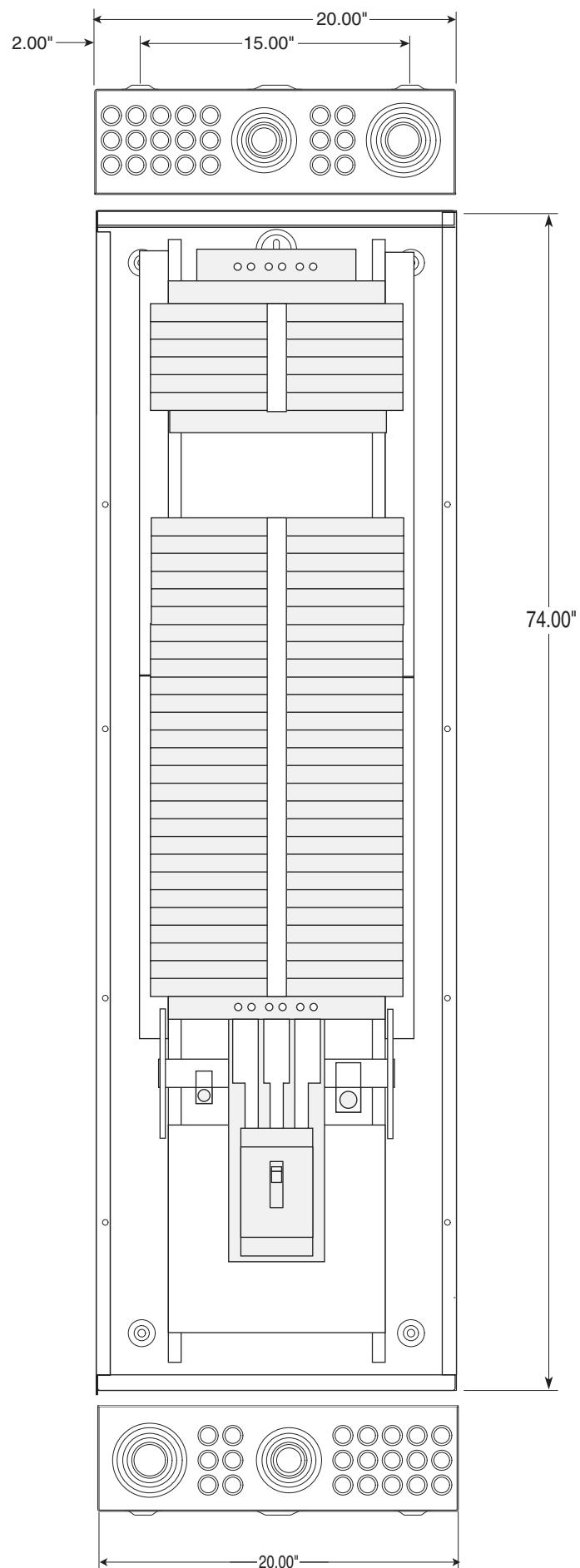
Outside dimensions  
28" w x 56" h x 6" d



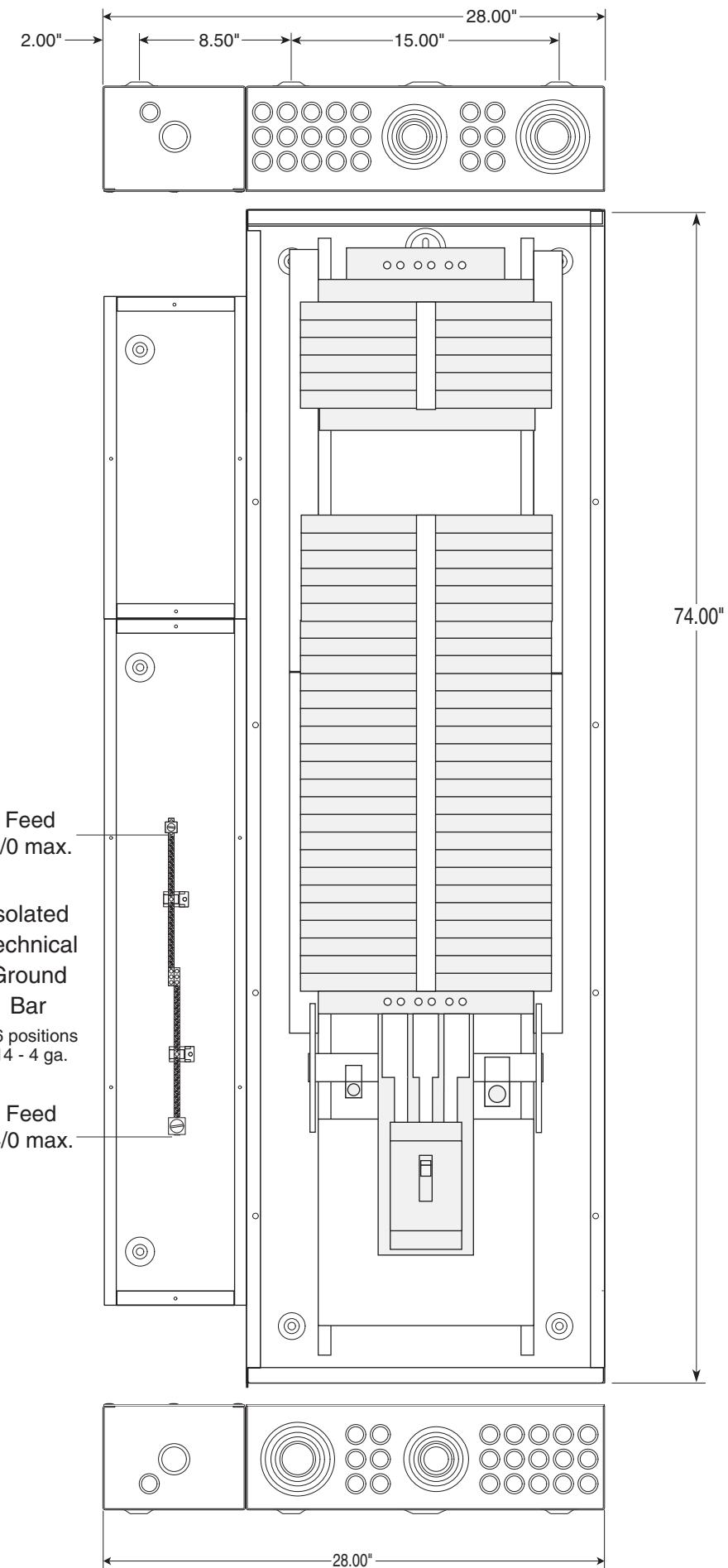
Standard RPC Main Breaker:  
**225 Amp - 65k AIR - MJG32225**  
Main Breaker options - Part # suffix  
-MHG3110, MHG3125,  
-MJG3150, -MJG3175, -MJG3200  
(all 65k Amp Interrupt Rating)

Main Breaker wire:  
3/0-350 kcmil Aluminum or Copper  
200% Neutral has one feed lug that  
accepts two 350 kcmil wires.

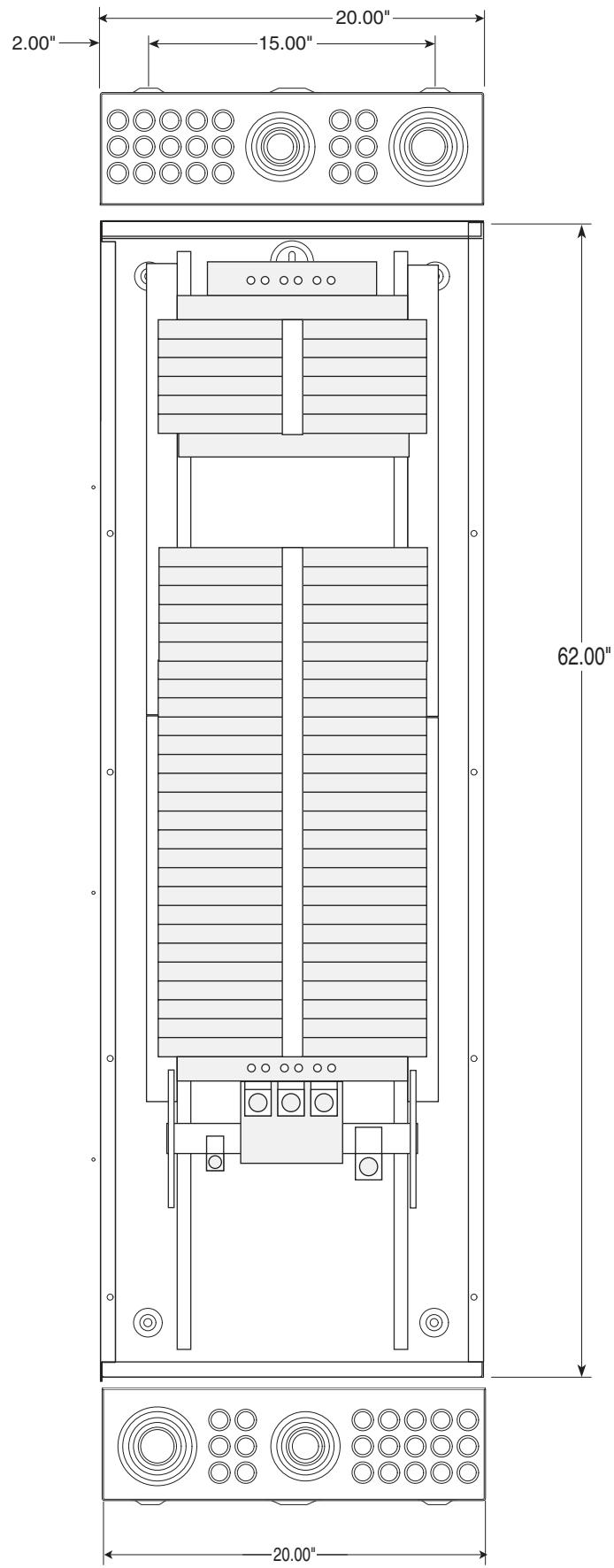
# LynTec RPS 366 Mechanical



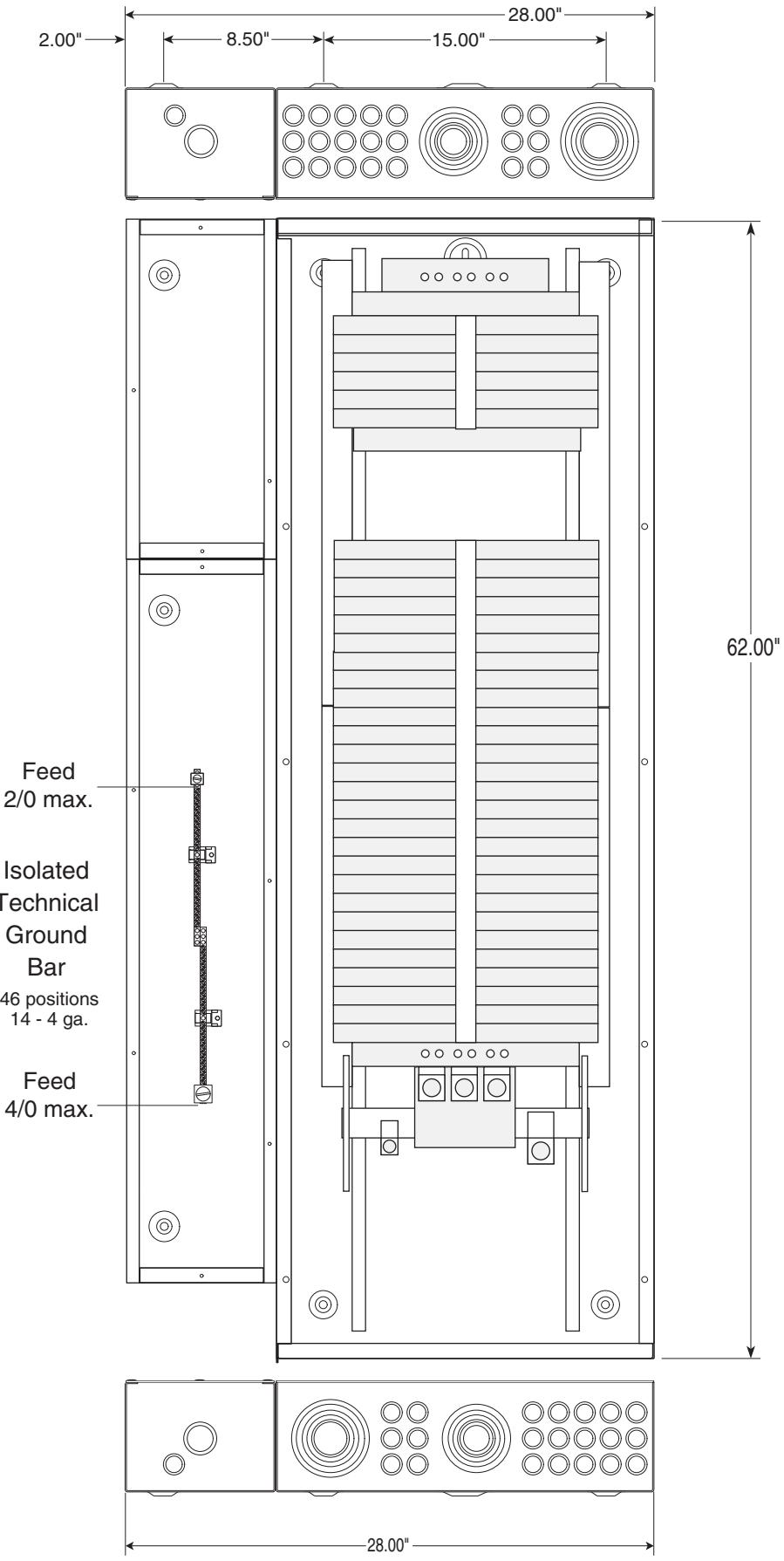
# LynTec RPS 366 ITG Mechanical



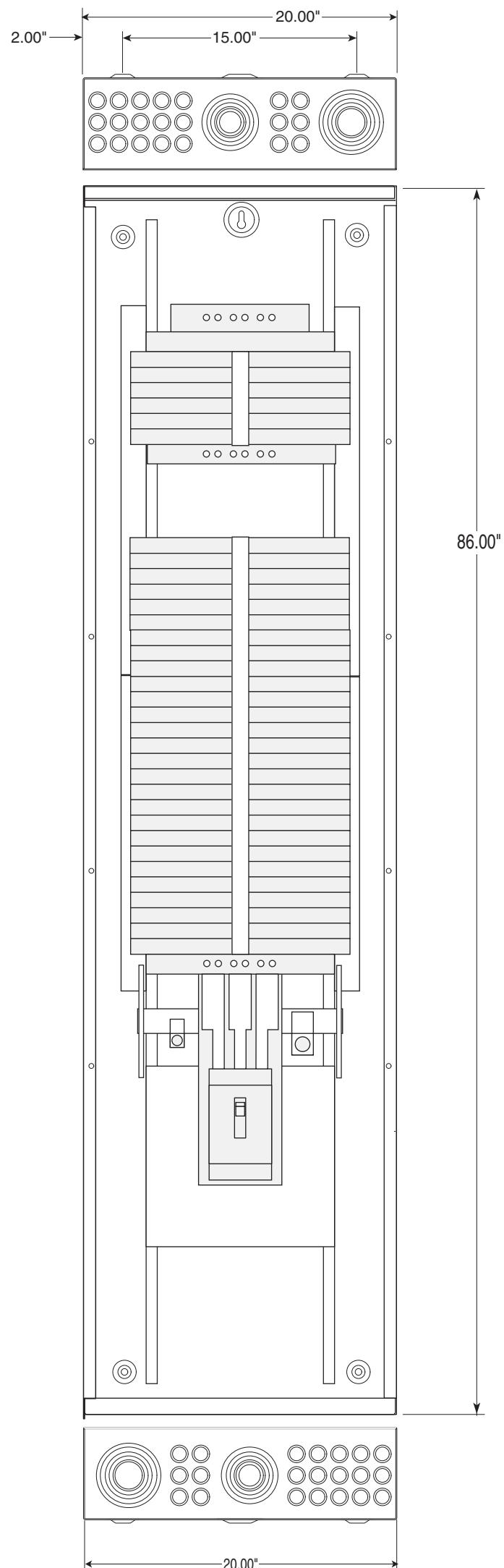
# LynTec RPS 366 MLO Mechanical



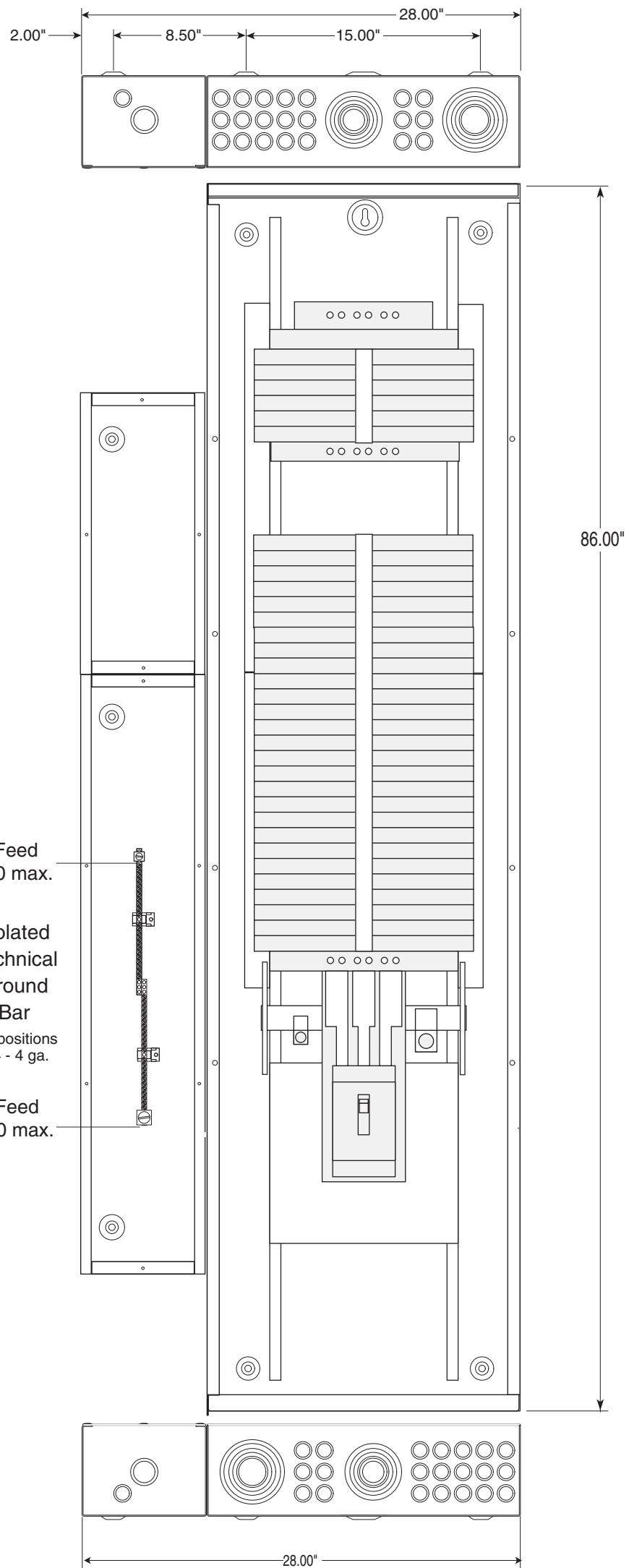
# LynTec RPS 366 MLO ITG Mechanical



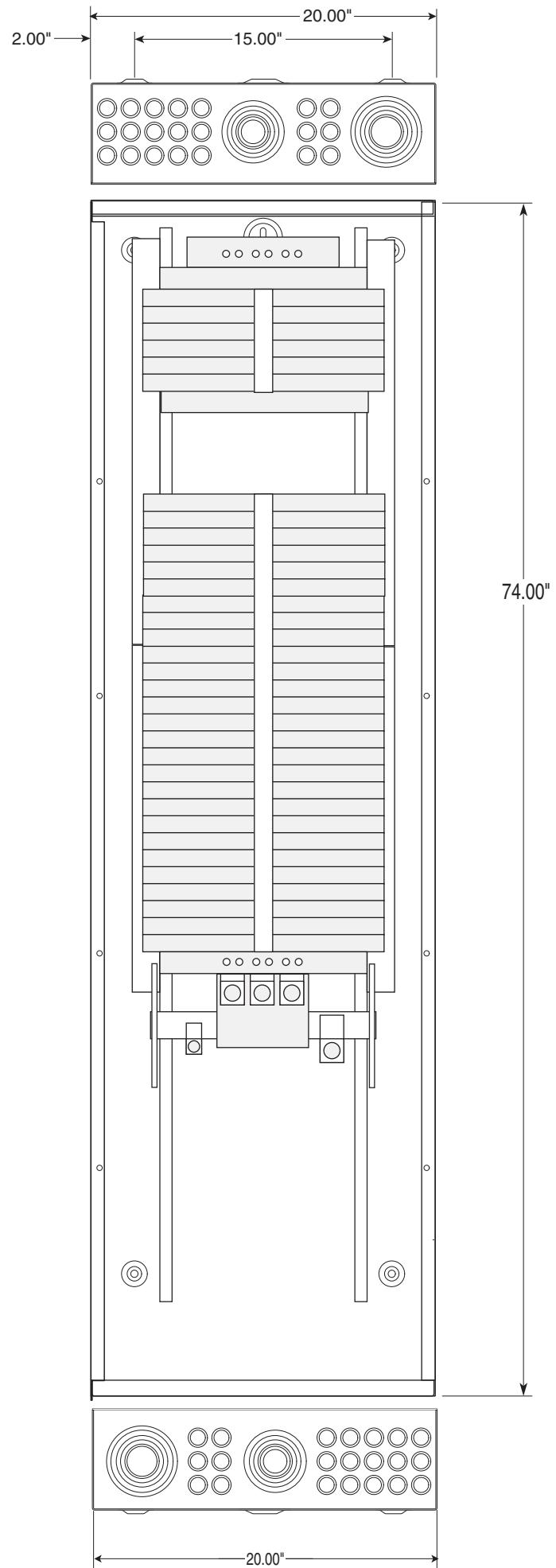
# LynTec RPS 366 M400 Mechanical



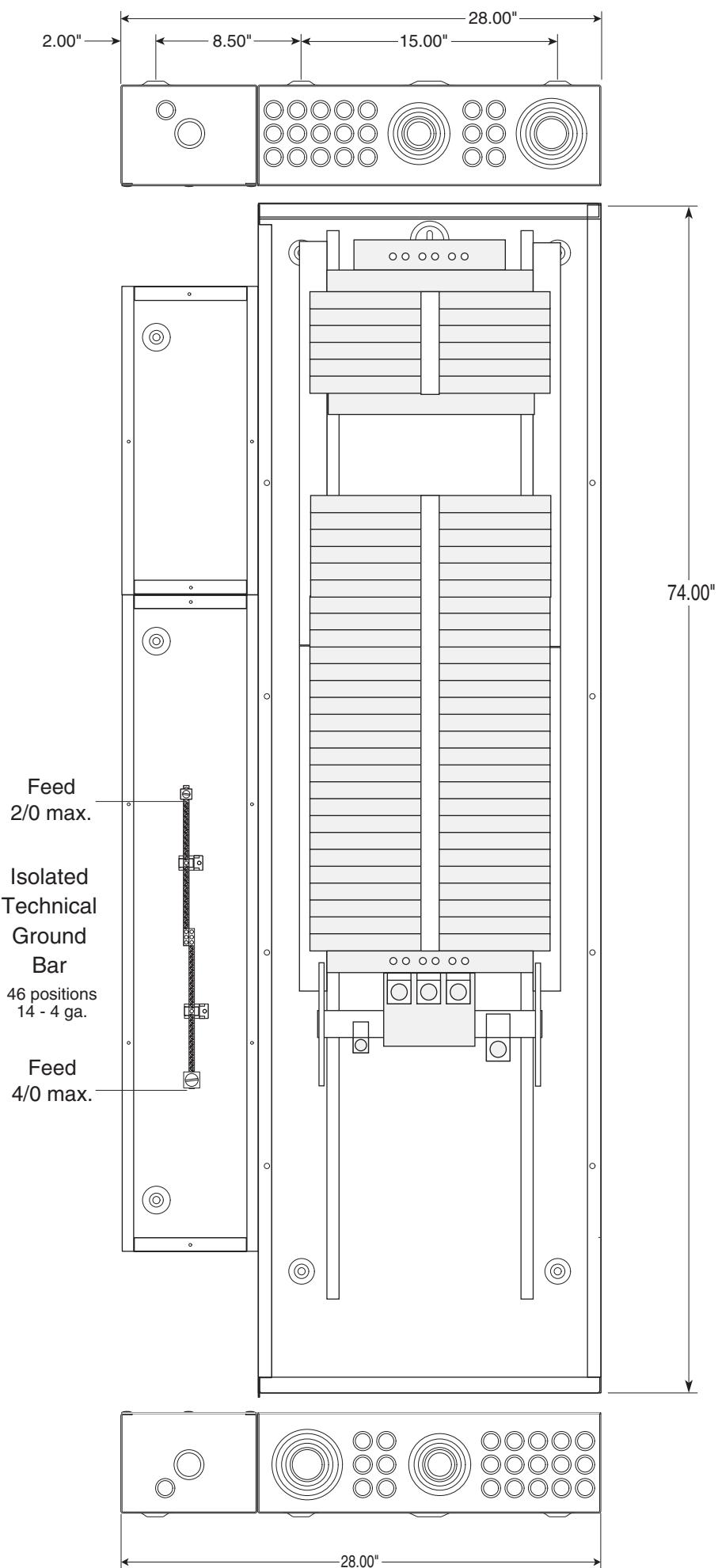
# LynTec RPS 366 M400 ITG



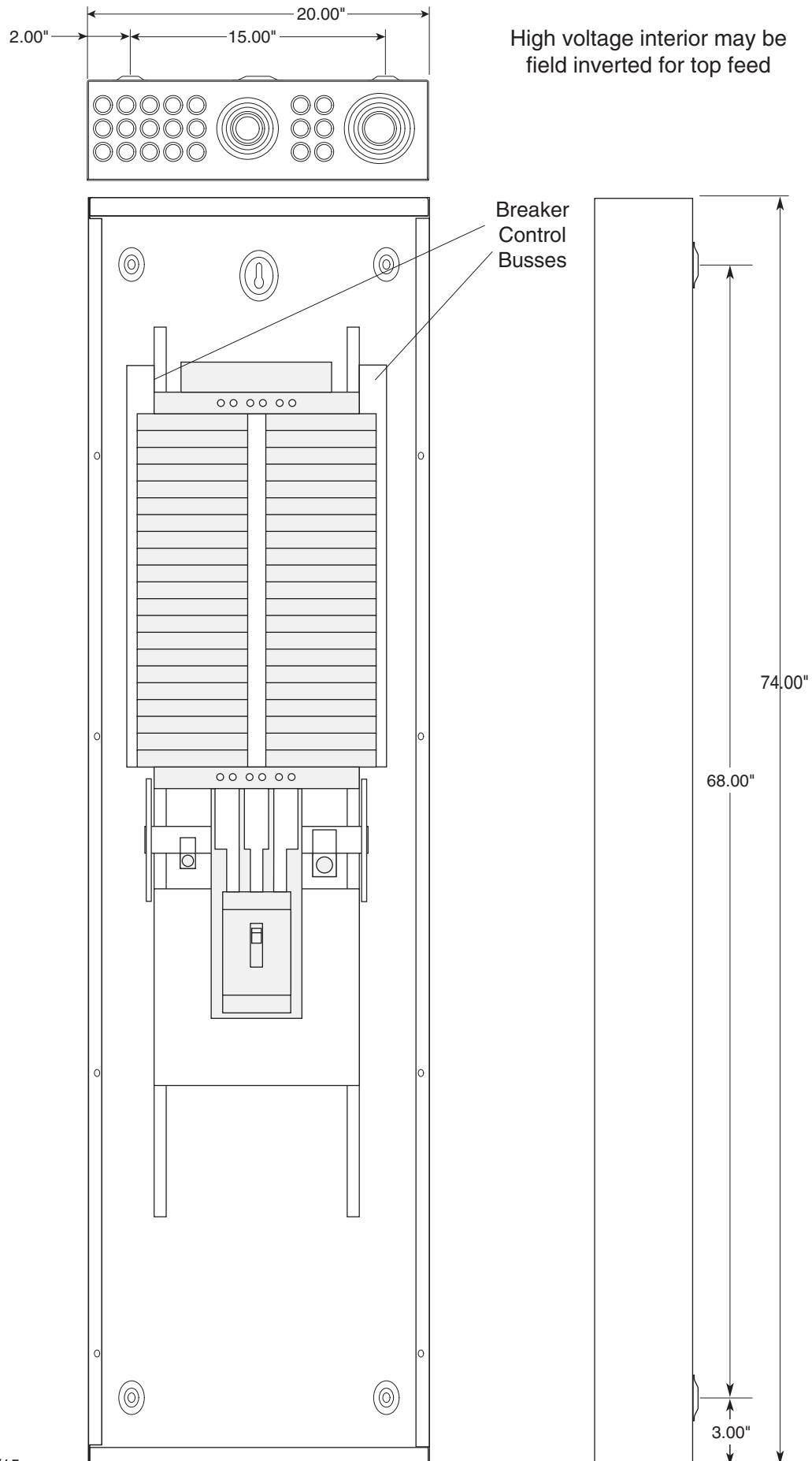
# LynTec RPS 366 MLO 400 Mechanical



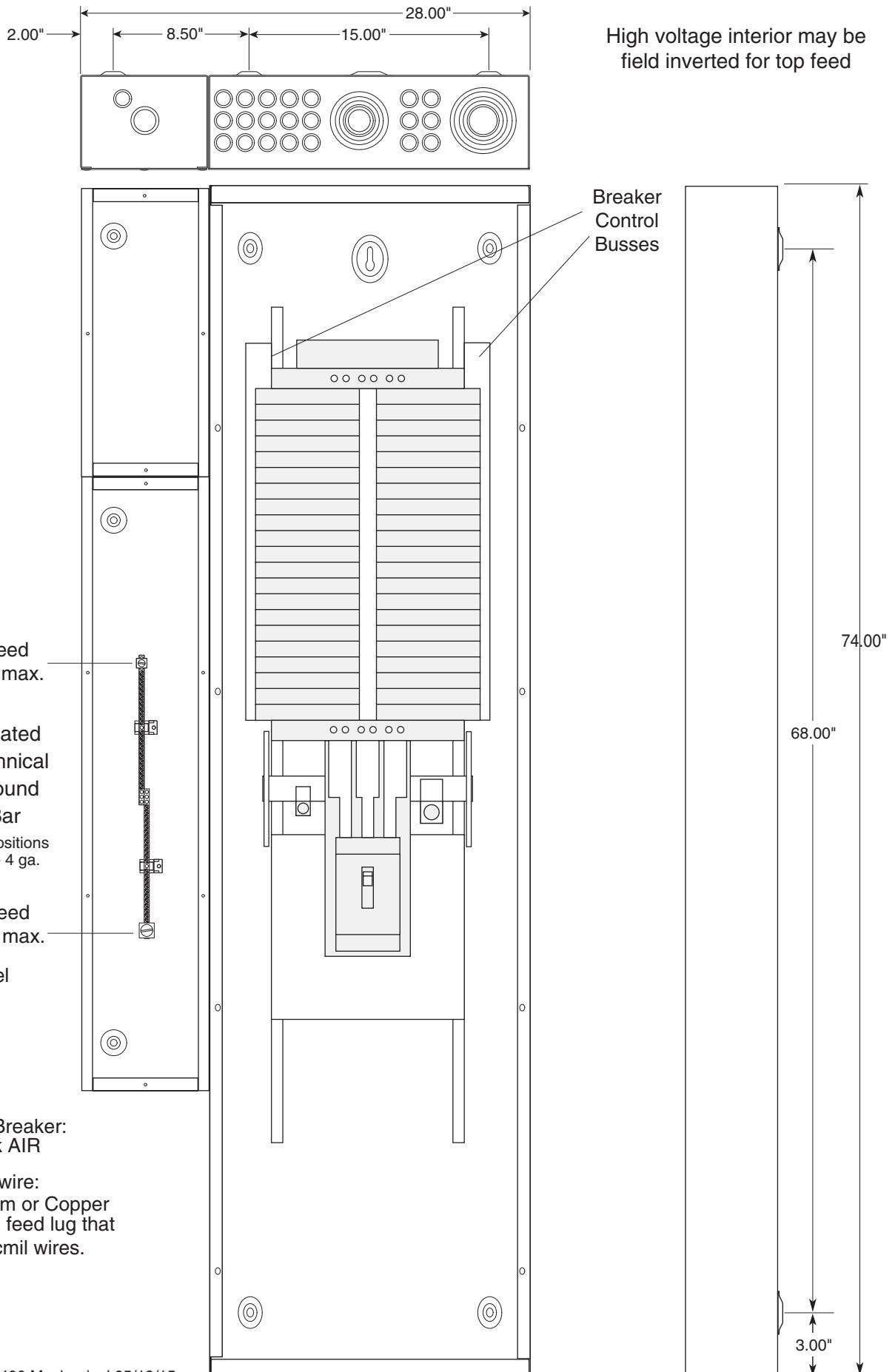
# LynTec RPS 366 MLO 400 ITG Mechanical



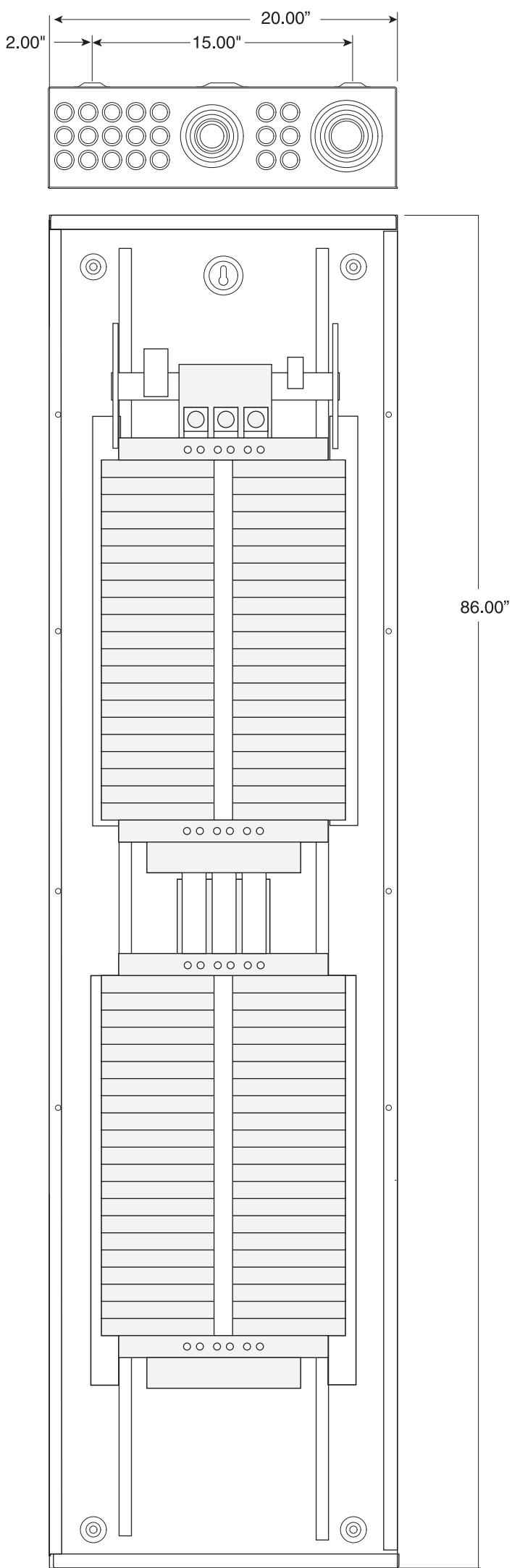
# LynTec RPS 342 M400 Mechanical



# LynTec RPS 342 ITG M400 Mechanical



# LynTec RPS 384 MLO Mechanical





## Selection Information

H- and J- frame Thermal-magnetic Molded Case  
150 and 250 Ampere Frame — Class 611

150 A H-frame				250 A J-frame			
				<b>LynTec</b> <b>LCP341-xx</b> <b>MSP 341-xx</b> Main breaker suffix  <b>-MHG3110 = 110 A</b> <b>-MHG3125 = 125 A</b>  Special Order Option <b>NCNR</b> Non Cancellable			
Circuit Breaker Type	HD	HG	HJ	HL	JD	JG	JJ
Number of Poles	2,3	2,3	2,3 ■	2,3 ■	2,3 ■	2,3 ■	2,3 ■
Current Range	15–150 A	15–150 A	15–150 A	15–150 A	150–250 A	150–250 A	150–250 A
<b>Interrupting Ratings</b>							
UL/ CSA/ NOM 50/60 Hz	240 V	25	65	100	125	25	65
	480Y/277 Vac	18	35	65	100	18	35
	480 Vac	18	35	65	100	18	35
	600Y/347 Vac	14	18	25	50	14	18
	600 Vac	14	18	25	50	14	18
DC Ratings	125/250 Vdc	20	20	20	20	20	20
	500 Vdc	TBD	TBD	TBD	TBD	TBD	TBD
IEC 947-2 Icu/lcs	220/240 Vac	25/25	65/65	100/100	125/125	25/25	65/65
	380/415 Vac	18/18	35/35	65/65	100/100	18/18	35/35
	500/525 Vac	14/14	18/18	25/25	50/50	14/14	18/18
<b>Special Ratings</b>							
Fed. Specs W-C-375B/GEN	✓	✓	✓	✓	✓	✓	✓
HACR (2, 3-pole)	✓	✓	✓	✓	✓	✓	✓
<b>Connections/Terminations</b>							
Unit Mount	✓	✓	✓	✓	✓	✓	✓
I-Line®	✓	✓	✓	✓	✓	✓	✓
Rear Connection	✓▲	✓▲	✓	✓	✓	✓	✓
Drawout	✓▲	✓▲	✓	✓	✓	✓	✓
Optional Lugs	✓▲	✓▲	✓	✓	✓	✓	✓
Unit Mount	✓	✓	✓	✓	✓	✓	✓
<b>Accessories and Modifications</b>							
Shunt Trip	✓	✓	✓	✓	✓	✓	✓
Undervoltage Trip	✓	✓	✓	✓	✓	✓	✓
Auxiliary Switches	✓	✓	✓	✓	✓	✓	✓
Alarm Switch	✓	✓	✓	✓	✓	✓	✓
Motor Operator	✓▲	✓▲	✓	✓	✓	✓	✓
Handle Operators	✓▲	✓▲	✓	✓	✓	✓	✓
Handle Padlock Attachment	✓▲	✓▲	✓	✓	✓	✓	✓
Handle Mechanical Interlocks	✓▲	✓▲	✓	✓	✓	✓	✓
Optional GF Protection	...	...	...	...	...	...	...
<b>Trip System Type</b>							
Thermal-magnetic	✓	✓	✓	✓	✓	✓	✓
Instantaneous-only (MCP)	...	...	...	...	...	...	...
Molded Case Switch (Automatic)	✓	✓	✓	✓	✓	✓	✓
Electronic	...	...	...	...	...	...	...
<b>Dimensions</b>							
Dimensions (3P Unit Mount)	Height IN (mm)	6.4 (163)			7.5 (191)		
	Width IN (mm)	4.1 (104)			4.1 (104)		
	Depth IN (mm)	3.4 (86)			3.4 (86)		

▲ Not available in HD and HG two-pole rating (2-pole module)

■ 2-pole in a 3-pole module.

12/01/05

## For Branch Breaker Series Ratings

see [http://www.lyntec.com/139-0407\\_Series\\_Ratings.pdf](http://www.lyntec.com/139-0407_Series_Ratings.pdf)



## ECB-G3 POWERLINK™ G3 Remotely Operated Circuit Breaker

### Interruptor automático de funcionamiento remoto ECB-G3 POWERLINK™ G3

### Disjoncteur manœuvrable à distance ECB-G3 POWERLINK™ G3

#### CIRCUIT BREAKER FEATURES

ECB-G3 POWERLINK™ remotely operated circuit breakers are for use in POWERLINK G3 systems. They provide overcurrent protection and have an integral operator which can turn the circuit breaker on or off.

The circuit breaker works with a POWERLINK G3 controller, power supply and control bus in the panelboard.

#### FUNCIONES DEL INTERRUPTOR AUTOMÁTICO

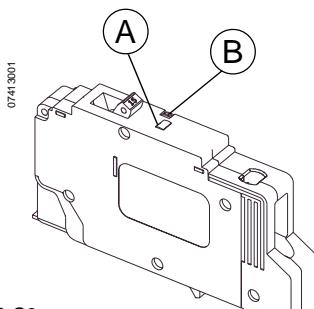
Los interruptores automáticos de funcionamiento remoto ECB-G3 POWERLINK™ han sido diseñados para utilizarse en los sistemas POWERLINK G3. Éstos proporcionan protección contra sobrecorrientes y vienen con un operador integrado el cual conecta y desconecta el interruptor automático.

Este interruptor automático funciona con un controlador, una fuente de alimentación y un bus de control POWERLINK G3 instalados en el tablero.

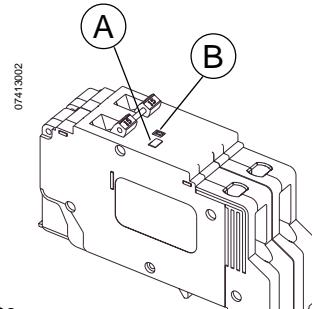
#### CARACTÉRISTIQUES DU DISJONCTEUR

Les disjoncteurs manœuvrables à distance ECB-G3 POWERLINK™ s'utilisent dans les systèmes POWERLINK G3. Ils fournissent la protection contre les surintensités et sont munis d'un opérateur intégré qui peut mettre le disjoncteur en marche ou à l'arrêt.

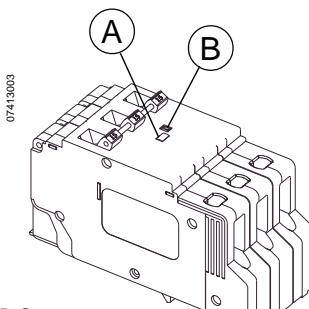
Le disjoncteur fonctionne avec un contrôleur, une alimentation et un bus de commande POWERLINK G3 installés sur le panneau de distribution.



ECB-G3  
1-pole Circuit Breaker /  
Interruptor automático de un polo /  
Disjoncteur unipolaire



ECB-G3  
2-pole Circuit Breaker /  
Interruptor automático de dos polos /  
Disjoncteur bipolaire



ECB-G3  
3-pole Circuit Breaker /  
Interruptor automático de tres polos /  
Disjoncteur tripolaire

The status window (A) shows the circuit breaker status. White indicates that the circuit breaker is in the on (I) position. Green indicates that the circuit breaker is in the off (O) position. Red indicates that the circuit breaker has tripped. To turn a tripped circuit breaker on, move the handle to the off (O) position to reset it, then turn the handle to the on (I) position.

The override button (B) is used to choose either the automatic or manual mode. In automatic, the circuit breaker responds to signals from the controller. In manual mode, the circuit breaker will not remotely open or close and assumes the status indicated by its handle.

La ventana de estado (A) indica el estado del interruptor automático. Blanco indica la posición de cerrado (I), verde la posición de abierto (O) y rojo la posición de disparado. Para colocar un interruptor automático en la posición de disparado, mueva la palanca a la posición de abierto (O) para restablecerlo, luego coloque la palanca en la posición de cerrado (I).

El botón de sobrecontrol (B) se utiliza para elegir entre modo automático o manual. En automático, el interruptor automático responde a las señales del controlador; en modo manual, no abrirá ni cerrará remotamente y asume el estado indicado por su palanca.

La fenêtre d'état (A) indique l'état du disjoncteur. Le blanc indique que le disjoncteur est à la position de marche (I). Le vert indique que le disjoncteur est à la position d'arrêt (O). Le rouge indique que le disjoncteur s'est déclenché. Pour remettre en marche un disjoncteur déclenché, mettre la manette à la position d'arrêt (O) afin de le réarmer, puis mettre la manette à la position de marche (I).

Le bouton de forçage (B) est utilisé pour choisir entre le mode automatique et le mode manuel. En mode automatique, le disjoncteur répond aux signaux du contrôleur. En mode manuel, le disjoncteur ne s'ouvre pas à distance et assume l'état indiqué par la manette.

No control wiring is required to install the circuit breaker. Remote control signals are sent by means of plug-on connections (A), that are connected when the circuit breaker is installed in the panelboard.

For remote operation of the circuit breaker, other POWERLINK G3 components (controller, power supply and control bus) must be installed in the panelboard. The control bus (B) must be installed before circuit breaker installation.

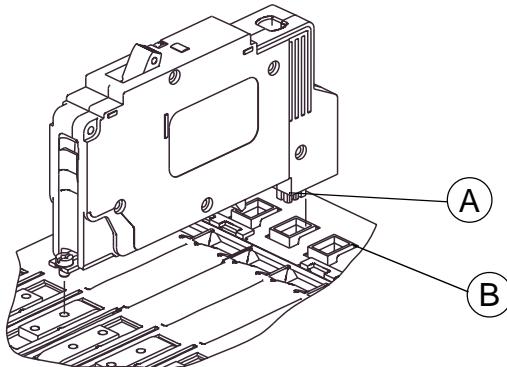
No se necesita cableado de control para instalar el interruptor automático. Las señales de control remoto se envían a través de conexiones enchufables (A) las cuales se encuentran disponibles cuando se instala el interruptor automático en el tablero.

Si desea hacer funcionar remotamente el interruptor automático, deberá instalar otros componentes del sistema POWERLINK G3 (controlador, fuente de alimentación y bus de control). El bus de control (B) deberá instalarse antes de instalar el interruptor automático.

Aucun câblage de commande n'est nécessaire pour installer le disjoncteur. Les signaux à distance sont envoyés au moyen de raccordements enfichables (A), qui sont raccordés lorsque le disjoncteur est installé sur le panneau de distribution.

Pour manœuvrer le disjoncteur à distance, d'autres composants POWERLINK G3 (contrôleur, alimentation et bus de commande) doivent être installés sur le panneau de distribution. Le bus de commande (B) doit être installé avant le disjoncteur.

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## INSTALLATION

## INSTALACIÓN

## INSTALLATION

### **⚠ DANGER / PELIGRO / DANGER**

#### **HAZARD OF ELECTRIC SHOCK, BURN, OR EXPLOSION**

- This equipment must be installed and serviced only by qualified electrical personnel.
- Turn off all power supplying this equipment before working on or inside equipment.
- Always use a properly rated voltage sensing device to confirm power is off.
- Replace all devices, doors and covers before turning on power to this equipment.

**Failure to follow these instructions will result in death or serious injury.**

#### **PELIGRO DE DESCARGA ELÉCTRICA, QUEMADURAS O EXPLOSIÓN**

- Solamente el personal eléctrico especializado deberá instalar y prestar servicio de mantenimiento a este equipo.
- Desenergice el equipo antes de realizar cualquier trabajo en él.
- Siempre utilice un dispositivo detector de tensión nominal adecuado para confirmar la desenergización del equipo.
- Vuelva a colocar todos los dispositivos, las puertas y los frentes antes de energizar el equipo.

**El incumplimiento de estas precauciones podrá causar la muerte o lesiones serias.**

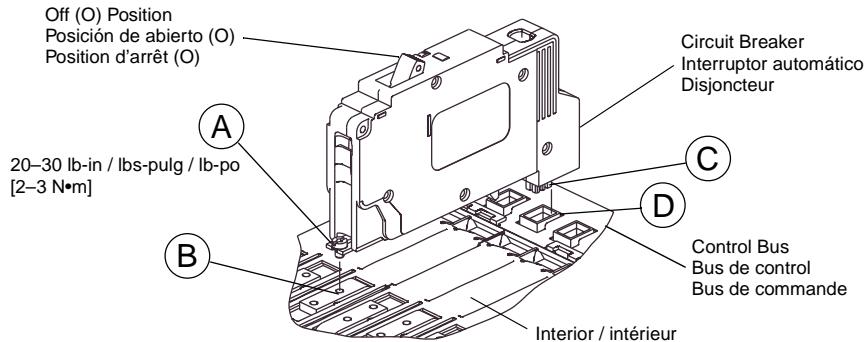
#### **RISQUE D'ÉLECTROCUTION, DE BRÛLURES OU D'EXPLOSION**

- L'installation et l'entretien de cet appareil ne doivent être effectués que par du personnel qualifié.
- Coupez toute alimentation de cet appareil avant d'y travailler.
- Utilisez toujours un dispositif de détection de tension à valeur nominale appropriée pour s'assurer que l'alimentation est coupée.
- Replacez tous les dispositifs, les portes et les couvercles avant de mettre l'appareil sous tension.

**Si ces précautions ne sont pas respectées, cela entraînera la mort ou des blessures graves.**

- |   |   |   |
|---|---|---|
| <ol style="list-style-type: none"> <li>Turn off all power supplying this equipment before working on or inside equipment.</li> <li>Remove panelboard cover and deadfront. Verify power is off with voltage meter before proceeding.</li> <li>Remove panelboard control bus connector cover if necessary. Circuit breaker may be installed in panelboard positions as shown.</li> <li>Turn handle to the off (O) position before installing circuit breaker.</li> <li>Align terminal screw (A) with the tapped hole in the panelboard bus (B) and align the motor connector (C) to the control bus connector (D).</li> </ol> | <ol style="list-style-type: none"> <li>Desenergice el equipo antes de realizar cualquier trabajo en él.</li> <li>Retire la cubierta del tablero y el frente muerto. Utilice un medidor de tensión para verificar la desenergización del equipo antes de proceder.</li> <li>Si es necesario, retire la cubierta del conector del bus de control del tablero. Es posible instalar el interruptor automático en el tablero en las posiciones mostradas.</li> <li>Coloque la palanca del interruptor automático en la posición de abierto (O) antes de instalarlo.</li> <li>Alinee el tornillo de terminal (A) con el agujero roscado en el bus del tablero (B) y alinee el conector del motor (C) con el conector del bus de control (D).</li> </ol> | <ol style="list-style-type: none"> <li>Couper toute alimentation de cet appareil avant d'y travailler.</li> <li>Retirer le couvercle et l'écran isolant du panneau de distribution. Vérifier si l'alimentation est coupée à l'aide d'un voltmètre avant de continuer.</li> <li>Retirer le couvercle du connecteur du bus de commande du panneau de distribution si nécessaire. Le disjoncteur peut être installé sur les positions du panneau de distribution indiquées.</li> <li>Mettre la manette à la position d'arrêt (O) avant d'installer le disjoncteur.</li> <li>Aligner la vis de borne (A) avec le trou taraudé dans le bus du panneau de distribution (B) et aligner le connecteur du moteur (C) avec le connecteur du bus de commande (D).</li> </ol> |
|---|---|---|

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- Push circuit breaker onto mounting rail.
- Tighten terminal screw into tapped hole in panelboard bus. Tighten screw(s) to 20–30 lb-in (2–3 N•m).

*NOTE: Do not unsnap circuit breaker from panelboard if line terminal screw(s) are fastened.*

- Encage el interruptor automático en el riel de montaje.
- Apriete el tornillo de terminal en el agujero roscado en el bus del tablero. Apriete los tornillos de 2 a 3 N•m (20 a 30 lbs-pulg).

*NOTA: No desenganche el interruptor automático del tablero cuando esté bien fijo con el (los) tornillo(s) de la terminal de línea.*

- Engager le disjoncteur sur le rail de montage.
- Serrer la vis de borne dans le trou taraudé dans le bus du panneau de distribution. Serrer la ou les vis au couple de 2 à 3 N•m (20 à 30 lb-po).

*REMARQUE : Ne pas déboîter le disjoncteur du panneau de distribution si la ou les vis de borne du secteur sont fixées.*

## WIRE INSTALLATION

## INSTALACIÓN DE CONDUCTORES

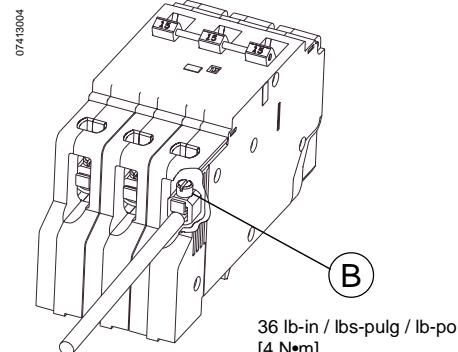
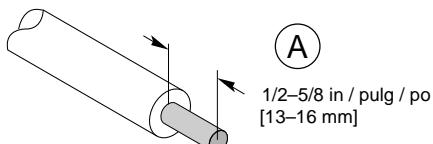
## INSTALLATION DES CÂBLES

### CAUTION / PRECAUCIÓN / ATTENTION

HAZARD OF EQUIPMENT DAMAGE	PELIGRO DE DAÑO AL EQUIPO	RISQUE DE DOMMAGES MATÉRIELS
<p><b>DAMAGE</b>                      Do not allow conductor strands to interfere with threads of wire binding screws.</p> <p><b>Failure to follow this instruction can result in equipment damage.</b></p>	<p><b>PELIGRO DE DAÑO AL EQUIPO</b>                      No permita que los hilos del conductor interfieran con las rosas de los tornillos de sujeción de cables.</p> <p><b>El incumplimiento de esta precaución puede causar daño al equipo.</b></p>	<p><b>RISQUE DE DOMMAGES MATÉRIELS</b>                      Ne permettez pas que les torons du conducteur s'engagent dans les filetages de la vis de fixation de fil.</p> <p><b>Si cette précaution n'est pas respectée, cela peut entraîner des dommages matériels.</b></p>

- |   |  |  |
|---|--|--|
| 1. Strip branch circuit wire(s) (A).<br>2. For each circuit breaker pole:<br>Loosen wire binding screw (B) and fully insert wire in lug.<br>While holding the wire in place, torque wire binding screw (B). | 1. Pele el o los cables (A) del circuito derivado.<br>2. Para cada polo del interruptor automático:<br>Afloje el tornillo de sujeción de cables (B) e inserte completamente el cable en la zapata.<br>Mientras sostiene el conductor en su lugar, apriete el tornillo de sujeción de cables (B). | 1. Dénuder le ou les fils du circuit d'artère (A).<br>2. Pour chaque pôle du disjoncteur :<br>Desserrer la vis de fixation de fil (B) et insérer le fil complètement dans une cosse.<br>Tout en maintenant le fil en place, resserrer la vis de fixation de fil (B). |
|---|--|--|

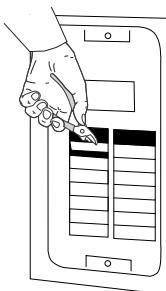
Strip Length /  
 Sección sin aislamiento /  
 Longueur de dénudage



3. Remove the twistout in the panelboard deadfront which corresponds with the circuit breaker position to allow circuit breaker face to protrude through the deadfront. Replace the panelboard deadfront and cover.

3. Retire el rectángulo removible en el frente muerto del tablero correspondiente a la posición del interruptor automático para permitir que salga la parte frontal del interruptor automático a través del frente muerto. Vuelva a colocar el frente muerto y la cubierta del tablero.

3. Retirer la plaquette à tordre de l'écran isolant du panneau de distribution, qui correspond à la position du disjoncteur, pour permettre à ce dernier de faire face à la saillie au travers de l'écran isolant. Replacer l'écran isolant et le couvercle du panneau de distribution.



**AUTOMATIC CIRCUIT BREAKER OPERATION**

Place the circuit breaker in automatic mode by pushing the override button (A) in and to the left until button locks in place and is flush with the circuit breaker.

*NOTE: When in automatic mode, a remotely operated circuit breaker with closed contact can still be manually opened by moving the handle to the off (O) position. A remotely operated circuit breaker cannot be closed remotely with the handle in the off (O) or tripped position.*

**MANUAL CIRCUIT BREAKER OPERATION**

1. Place the circuit breaker in manual mode by pushing the override button (A) in and to the right until button pops up.
2. Turn circuit breaker handle to desired position. Status window (B) will display circuit breaker status.

**FUNCIONAMIENTO AUTOMÁTICO DE UN INTERRUPTOR AUTOMÁTICO**

Coloque el interruptor automático en modo automático oprimiendo el botón de sobrecontrol (A) y deslizándolo hacia la izquierda hasta bloquearlo en su sitio y hasta que se encuentre nivelado con el interruptor automático.

*NOTA: Es posible abrir manualmente un interruptor automático de funcionamiento remoto con contactos cerrados, aun cuando esté en modo automático, moviendo la palanca a la posición de abierto (O). No es posible cerrar un interruptor automático de funcionamiento remoto con la palanca en la posición de abierto (O) o disparado.*

**FUNCIONAMIENTO MANUAL DE UN INTERRUPTOR AUTOMÁTICO**

1. Coloque el interruptor automático en modo manual oprimiendo el botón de sobrecontrol (A) y deslizándolo hacia la derecha hasta botarlo.
2. Coloque la palanca del interruptor automático en la posición deseada. La ventana de estado (B) mostrará el estado del interruptor automático.

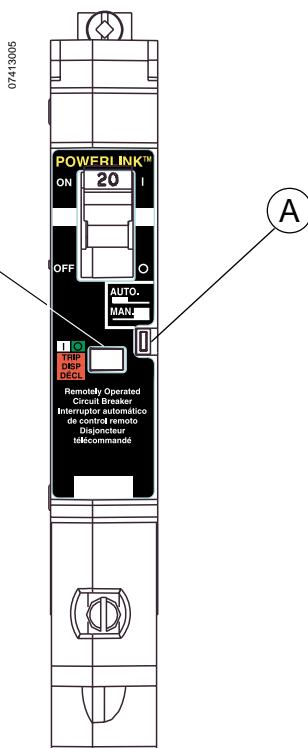
**FONCTIONNEMENT AUTOMATIQUE DU DISJONCTEUR**

Mettre le disjoncteur en mode automatique en enfonçant le bouton de forçage (A) et en le faisant glisser à gauche jusqu'à ce qu'il se bloque et soit aligné avec le disjoncteur.

*REMARQUE : En mode automatique, un disjoncteur manœuvrable à distance avec contacts fermés peut être encore ouvert manuellement en mettant la manette à la position d'arrêt (O). Un disjoncteur manœuvrable à distance ne peut pas être fermé à distance si la manette est à la position d'arrêt (O) ou déclenchée.*

**FONCTIONNEMENT MANUEL DU DISJONCTEUR**

1. Mettre le disjoncteur en mode manuel en enfonçant le bouton de forçage (A) et en le faisant glisser à droite jusqu'à ce qu'il remonte.
2. Tourner la manette du disjoncteur à la position désirée. La fenêtre d'état (B) afficher l'état du disjoncteur.



## CIRCUIT BREAKER REMOVAL

Remove circuit breaker in reverse order of installation.

## TROUBLESHOOTING

If problems occur during installation, refer to the following guide. If trouble persists, contact the field office.

## DESMONTAJE DEL INTERRUPTOR AUTOMÁTICO

Retire el interruptor automático en el orden inverso al de su instalación.

## REPARACIÓN DE AVERÍAS

En caso de que suceda algún problema durante la instalación, consulte la guía a continuación. Si el problema persiste, póngase en contacto con la oficina local.

## DÉMONTAGE DU DISJONCTEUR

Démonter le disjoncteur dans l'ordre inverse de l'installation.

## DÉPANNAGE

Si des problèmes surviennent pendant l'installation, se reporter aux consignes suivantes. Si les problèmes persistent, contacter le bureau de service local.

Condition / Condición / Condition	Possible Cause / Causas posibles / Causes possibles	Solution / Solución / Solution
Circuit breaker fails to stay closed. El interruptor automático no permanece cerrado.  Le disjoncteur ne reste pas fermé.	Short circuit or overload on system. Existe un cortocircuito o sobrecarga en el sistema.  Un court-circuit ou surcharge est présent dans le système.	Check system for short circuit or overload. Revise el sistema para ver si encuentra un cortocircuito o una sobrecarga. Rechercher un court-circuit ou une surcharge dans le système.
Circuit breaker fails to automatically switch. El interruptor automático no puede cambiar automáticamente.  Le disjoncteur ne change pas automatiquement.	Circuit breaker in manual mode. El interruptor automático se encuentra en modo manual.  Le disjoncteur est en mode manuel.	Switch circuit breaker to automatic mode. Cambie el interruptor automático a modo automático.  Mettre le disjoncteur en mode automatique.
Circuit breaker fails to automatically switch. El interruptor automático no puede cambiar automáticamente.  Le disjoncteur ne change pas automatiquement.	Circuit breaker in tripped or off (O) position. El interruptor automático se ha disparado o se encuentra en posición de abierto (O).  Le disjoncteur est déclenché ou à la position d'arrêt (O).	Reset and turn on circuit breaker. Restablezca y vuelva a conectar el interruptor automático.  Réarmer et mettre le disjoncteur à la position de marche.

Electrical equipment should be serviced only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

Solamente el personal de mantenimiento eléctrico especializado deberá prestar servicios de mantenimiento al equipo eléctrico. La Compañía no asume responsabilidad alguna por las consecuencias emergentes de la utilización de este material.

L'entretien du matériel électrique ne doit être effectué que par du personnel qualifié. La Société n'assume aucune responsabilité des conséquences éventuelles découlant de l'utilisation de ce matériel.

Square D Company  
PO Box 3069  
3700 Sixth St SW  
Cedar Rapids IA 52406-3069 USA  
1-888-SquareD (1-888-778-2733)  
www.SquareD.com

Importado en México por:  
Schneider Electric México, S.A. de C.V.  
Calz. Javier Rojo Gómez 1121-A  
Col. Gpe. del Moral 09300 México, D.F.  
Tel. 5804-5000  
www.schneider-electric.com.mx

Schneider Canada Inc.  
19 Waterman Avenue, M4B 1 Y2  
Toronto, Ontario  
1-800-565-6699  
www.schneider-electric.ca

# 480Y/277 Vac EDB, EGB and EJB Lighting Panelboard Circuit Breakers



*EDB 1-pole  
Circuit Breaker*

*EDB 2-pole  
Circuit Breaker*

*EDB 3-pole  
Circuit Breaker*

## EDB, EGB and EJB 125A Frame Lighting Panelboard Circuit Breakers

- 1-, 2- and 3-pole bolt-on construction for use in Square D NF panelboards
- Current ratings: 15–125A
- 480Y/277 Vac
- Optional factory-installed electrical accessories include; 120 Vac shunt trip, 1A/1B auxiliary switch and normally open alarm switch
- Optional handle padlock attachment
- Optional copper and compression lugs
- VISI-TRIP® feature
- HACR rated (15–125A, 1-, 2-, and 3-pole)
- Tested to UL 489 bus condition test
- UL Listed — file #E84967
- CSA Certified — file #LR92886
- NOM 117 Certified
- In compliance with Federal Specification W-C-375B/GEN

### Ampere Interrupting Ratings

Interrupting Rating Level	@ 240V	@ 480Y/277V
D	25kA	18kA
G	65kA	35kA
J	100kA	65kA

Interrupting Rating Level	Ampere Rating	Catalog Number			Standard AI Lug Wire Range
		1-pole 277 Vac	2-pole♦ 480Y/277 Vac	3-pole 480Y/277 Vac	
D	15	EDB14015▲●	EDB24015▲	EDB34015▲	#12 – #6 AWG AI or #14 – #6 AWG Cu
	20	EDB14020▲●	EDB24020▲	EDB34020▲	
	25	EDB14025▲	EDB24025▲	EDB34025▲	
	30	EDB14030▲	EDB24030▲	EDB34030▲	
	35	EDB14035	EDB24035	EDB34035	
	40	EDB14040	EDB24040	EDB34040	
	45	EDB14045	EDB24045	EDB34045	
	50	EDB14050	EDB24050	EDB34050	
	60	EDB14060	EDB24060	EDB34060	
	70	EDB14070	EDB24070	EDB34070	#12 – #2/0 AWG AI or #14 – #2/0 AWG Cu
	80	—	EDB24080	EDB34080	
	90	—	EDB24090	EDB34090	
	100	—	EDB24100	EDB34100	
	110	—	EDB24110	EDB34110	
	125	—	EDB24125	EDB34125	

▲ UL Listed as HID (High Intensity Discharge) rated

● UL Listed as SWD (Switching Duty) rated

♦ UL Listed for use on 240 V corner-grounded delta systems (grounded B phase)

*Continued on next page*



## **Class 0515**

# **480Y/277 Vac EDB, EGB and EJB Lighting Panelboard Circuit Breakers**

*Continued*

Interrupting Rating Level	Ampere Rating	Catalog Number			Standard AI Lug Wire Range
		1-pole 277 Vac	2-pole◆ 480Y/277 Vac	3-pole 480Y/277 Vac	
G	15	EGB14015▲●	EGB24015▲	EGB34015▲	#12 – #6 AWG AI or #14 – #6 AWG Cu
	20	EGB14020▲●	EGB24020▲	EGB34020▲	
	25	EGB14025▲	EGB24025▲	EGB34025▲	
	30	EGB14030▲	EGB24030▲	EGB34030▲	
	35	EGB14035	EGB24035	EGB34035	
	40	EGB14040	EGB24040	EGB34040	
	45	EGB14045	EGB24045	EGB34045	
	50	EGB14050	EGB24050	EGB34050	
	60	EGB14060	EGB24060	EGB34060	
	70	EGB14070	EGB24070	EGB34070	
	80	—	EGB24080	EGB34080	
	90	—	EGB24090	EGB34090	
J	100	—	EGB24100	EGB34100	#12 – #2/0 AWG AI or #14 – #2/0 AWG Cu
	110	—	EGB24110	EGB34110	
	125	—	EGB24125	EGB34125	
	15	EJB14015▲●	EJB24015▲	EJB34015▲	
	20	EJB14020▲●	EJB24020▲	EJB34020▲	
	25	EJB14025▲	EJB24025▲	EJB34025▲	
	30	EJB14030▲	EJB24030▲	EJB34030▲	
J	35	EJB14035	EJB24035	EJB34035	#12 – #2/0 AWG AI or #14 – #2/0 AWG Cu
	40	EJB14040	EJB24040	EJB34040	
	45	EJB14045	EJB24045	EJB34045	
	50	EJB14050	EJB24050	EJB34050	
	60	EJB14060	EJB24060	EJB34060	
	70	EJB14070	EJB24070	EJB34070	

▲ UL Listed as HID (High Intensity Discharge) rated

● UL Listed as SWD (Switching Duty) rated

◆ UL Listed for use on 240 V corner-grounded delta systems (grounded B phase)

# 480Y/277 Vac EDB, EGB and EJB Lighting Panelboard Circuit Breakers

## TO SELECT A CIRCUIT BREAKER

1. Select a catalog number from the preceding table
2. For special applications, modify the catalog number as follows:

E	D	B	3	4	0	7	0	-----
↑								
<b>Factory Installed Options▲</b>								
Option	Meaning							
AABA	1A1B Aux. Switch, Normally-open Alarm Switch Package							
AABASA	1A1B Aux. Switch, Normally-open Alarm Switch, 120 Vac Shunt Trip Package							
SA	120 Vac Shunt Trip Package							
CA	Special Ambient Temperature: 50°C (Not UL, CSA or NOM Certified)							
LC	Copper Lugs							
LH	High Ampere Standard Lugs							

▲Factory installed options must be listed in the catalog number in the sequence shown above.

### EXAMPLE:

To order a 3-Pole 480Y/277 Vac, 70 Ampere, "D" interrupting rating level circuit breaker with factory-installed copper lugs and an auxiliary switch and alarm switch package:

Order EDB34070AABALC

## Mechanical Lug Kit Information

Kit Catalog Number	Circuit Breaker Application			Number of Wires Per Lug and Wire Range	Torque	Lugs Per Kit
	Standard Ampere Rating	Optional Ampere Rating				

### AI Lugs for Use with AI or Cu Wire

AL30FD	EDB, EGB, EJB	15 – 30	–	–	(1) #12 – #6 AWG AI or (1) #14 – #6 AWG Cu	30 lb-in (3.4 N•m)	3
AL100FD	EDB, EGB, EJB	35 – 125	EDB, EGB, EJB	15 – 30	(1) #12 – #2/0 AWG AI or (1) #14 – #2/0 AWG Cu	35 lb-in (4.0 N•m) #14 – #10 50 lb-in (5.5 N•m) #8 – #2/0	3

### Cu Lugs for Use with Cu Wire Only

CU100FD	EDB, EGB, EJB	15 – 125	–	–	(1) #14 – #1/0 AWG Cu	35 lb-in (4.0 N•m) #14 – #10 40 lb-in (4.5 N•m) #8 45 lb-in (5.1 N•m) #6 – #4 50 lb-in (5.7 N•m) #3 – #1/0	3
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### Compression Lug Kit Information■

Circuit Breaker Type	VERSATile™ System Range	Dimension A	VERSASA-CRIMP™ Tool Type	Max. Lugs Per Terminal	Kit Catalog Number	Lugs Per Kit
		in.	mm			

#### Aluminum Compression Lug Kits

EDB, EGB, EJB	#8 – #1/0 AWG	1.375	35	VC-6 Series	1	VC100FD	3
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#### Copper Compression Lug Kits

EDB, EGB, EJB	#6 – #1/0 AWG Cu	1.375	35	VC-6 Series	1	CVC100FD	3
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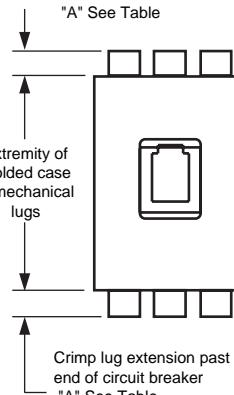
■Terminal insert kit, TIKFD, is required for application of compression lugs.

## Handle Accessories

Circuit Breaker Type	Catalog Number
Handle Padlock Attachment (locks ON or OFF)	
EDB, EGB, EJB	HPAFD

## Terminal Insert Kit

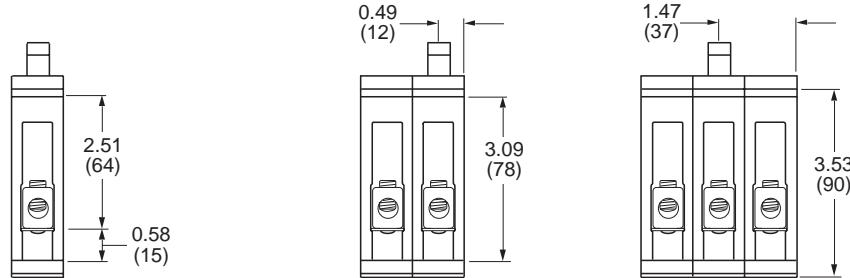
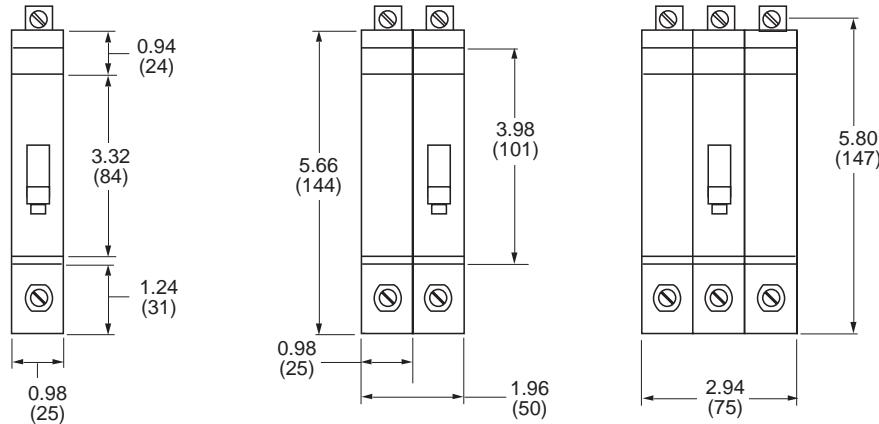
Circuit Breaker Type	Catalog Number	Inserts Per Lug
EDB, EGB, EJB	TIKFD	3



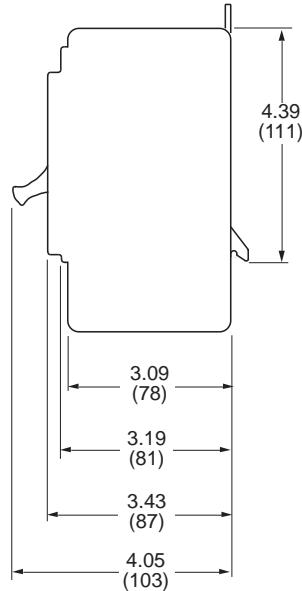
## Class 0515

# 480Y/277 Vac EDB, EGB and EJB Lighting Panelboard Circuit Breakers

EDB, EGB and EJB  
Circuit Breaker Dimensions



Dual Dimensions: in.  
(mm)



EX1000A.3

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Order No. 0500HO9602R11/97