

Power-Style® QED-2, Series 2

Low Voltage Switchboards

Catalog

2742CT1001

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2010

Class 2742



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by Schneider Electric

Product Description



**PowerPact® R-frame Main Circuit Breaker with
I-Line® Distribution Section**

Power-Style® QED-2, Series 2 General and Application Information

Features

- Sections rated to 2,500 A horizontal, 2,500 A vertical
- Single mains to 2,500 A
- Voltage to 600 Vac
- Suitable for service entrance or distribution
- NEMA Type 1 or Type 3R enclosures
- Front accessible
- 91.5 in. (2,324 mm) high with base channels
- Section widths available: 30 in. (762 mm), 36 in. (914 mm), 42 in. (1,067 mm), or 48 in. (1,219 mm) wide
- Frame depths available: 24 in. (610 mm)
- Factory assembled
- Customer metering
- Surge protective devices (SPD)

Power-Style® QED-2, Series 2 switchboards provide a convenient and economical means of distributing electric power. These enclosed, free-standing structures contain circuit breaker or fusible overcurrent protection for services rated up to 2,500 A with a maximum voltage of 600 Vac. Power-Style QED-2, Series 2 switchboards are custom-made for use as service entrance equipment or as distribution centers in commercial, institutional, and industrial applications.

The instrument compartments (ICs) for individually mounted main sections and I-Line® single-row, 2000 and 2500 A distribution sections are hinged for access to bussing and other components that may be located behind the IC.

An SPD can be mounted in the side of the individually mounted device section IC with an ON/OFF mechanism extending up into the compartment for easy access. The SPD can be partially withdrawn from the compartment to simplify module replacement.

The neutral through bus is located remotely from the mid-mount phase through bus. The feeder neutral for I-Line and QMB distribution sections is mounted on the neutral through bus. The ground bar is located in the front of the switchboard section. Both the neutral through bus and the ground bar will be located at the top or bottom of the section to match the incoming conductors.

Switchboards with utility compartments or feed types other than line-side lug/load-side through bus are currently not available in Series 2 construction.



PowerPact R-Frame Main Circuit Breaker
with PowerLogic Power Meter

Main Sections

The main devices for overcurrent/short circuit protection and disconnect purposes are available as circuit breakers or fusible switches in Power-Style QED-2, Series 2 switchboards. These individually mounted main disconnect sections can contain PowerPact® M-, P-, and R-frame molded case circuit breakers to a maximum of 2,500 A. Bolt-Loc® BP fusible switch mains are available to a maximum of 2,500 A. Ground fault protection is available through Micrologic® trip units on the PowerPact P- and R-frame circuit breakers. Ground fault protection is available on Bolt-Loc BP fusible switch mains with the Type GC ground fault system. Section width varies with mains and options.

Available Features

- 2,500 A maximum disconnects
- 600 Vac maximum
- Individually mounted mains—middle location is standard
 - PowerPact MG or MJ circuit breakers (800 A max.)
 - PowerPact PG, PJ, PK, or PL circuit breakers (1,200 A max.)
 - PowerPact RG, RK, RJ, or RL circuit breakers (2,500 A max.)
 - Bolt-Loc BP fusible switches (electric or manual trip; 2,500 A max.)
- Top or bottom feed
- Suitable for use as service entrance
- Ground fault protection (not available on PowerPact M-frame circuit breakers)
 - Micrologic trip unit (residual)
 - Bolt-Loc Ground-Censor Type GC (zero sequence)
- Customer metering
 - PowerLogic circuit monitor (communications available)
Display is located in the top IC
 - PowerLogic power meter (communications available)
Display is located on the door
- Surge protective device in instrument compartment
 - Partially withdrawable for module replacement
 - Display is located in the top IC

Instrument Compartment Contents

Monitoring Circuits

120 Vac Control Power Transformer (CPT)

- Trip unit 24 Vdc power supply
- Communications 24 Vdc power supply
- Surge protection device circuits
- Power meter circuits
- Circuit monitor circuits
- Programmable contact module M8C

Bolt-Loc BP Fusible Switch

Protection Circuits 120 Vac CPT

- BP GFP GC200 ground fault relay; display mounted on door
- BP phase monitor relay and capacitor trip unit



Series 2 I-Line Distribution Section

- 2,500 A maximum plated copper vertical bus
- 1,600 A maximum plated aluminum vertical bus
- 63 in. (1,600 mm) panel height to 2,500 A
- 1,200 A maximum circuit breaker
- Single-row—36 in. (914 mm) wide
- Double-row—36 in. (914 mm), 42 in. (1,067 mm), and 48 in. (1,219 mm) wide



Series 2 QMB Distribution Section with Neutral

- 2,500 A maximum vertical bus
- Plated aluminum or copper vertical bus
- 63 in. (1,600 mm) of switch mounting space
- 30–400 A QMB switches mount in 36 in. (914 mm) wide section
- 30–1,200 A QMB switches mount in 42 in. (1,067 mm) or 48 in. (1,219 mm) wide section

Group-Mounted Distribution Sections

Power-Style QED-2, Series 2 switchboard distribution sections are available with either an I-Line or QMB group-mounted distribution panel. Each of these interiors mounts to the frame front corner channels with horizontal mounting rails. Connectors secured to the through bus with the "E" connector assembly bring power into the center of each interior bus. The vertical bus feeds power to each branch disconnect. When a neutral is required, the neutral terminals are located on the neutral through bus.

I-Line Distribution Sections

Schneider Electric molded case circuit breakers are available in I-Line plug-on group construction. In this construction, the line end of the circuit breaker plugs directly onto the I-Line panel bus assembly. Branch circuit breakers can be quickly and efficiently installed and wired from the front of the switchboard.

I-Line circuit breakers are keyed to mounting slots in the support pan to provide automatic alignment and reduced installation time. The circuit breakers are then secured to the pan with screws.

I-Line switchboard sections are available in single-row or double-row construction. Single-row construction permits mounting of circuit breakers only on one side of the I-Line bus assembly, while double-row construction provides for circuit breaker mounting on both sides. In double-row construction, different circuit breakers can be mounted opposite each other.

With the new Series 2 design, the available 2000 and 2500 A, 36 in. (914 mm) wide, single-row interiors provide 63 in. (1,600 mm) of mounting space. The trip unit and communications power supplies and the control power transformer have been moved from the bus assembly to the IC, freeing up 7.5 in. (191 mm) of space for breaker mounting. An I-Line mountable SPD can be placed on the single-row bus assembly, or on either side of the I-Line bus assembly for double-row construction.

QMB Distribution Sections

QMB fusible switches are group mounted in QED-2 switchboards. The QMB switches are mounted to steel rails and electrically connected by plug-on jaws to the vertical bus. QMB switches through 600 A come standard with Class H fuse clips or with Class R, J, or T clips available as an option. Class L fuse clips are standard on 800 A and 1,200 A QMB switches.

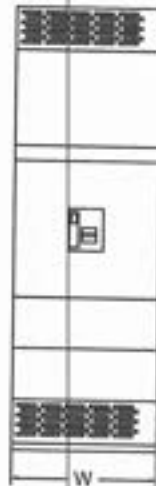
QMJ fusible switches are also available and offer a space saving design. These switches come standard with Class J fuse clips.

Power-Style® QED-2, Series 2
General and Application Information

Quick Layout Guide

Individually Mounted Mains and Group Mounted Distribution Sections (all sections have a depth of 24 in.)

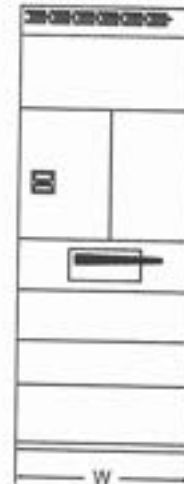
PowerPact M, P, and R



Type	Ampacity (A)	Width (W)
M	800	30 in. (762 mm)
P	1,200	
R	2,500	

Individually Mounted Mains

Bolt-Loc BP Fusible Switch



Ampacity (A)	Width (W)
800-2000	36 in. (914 mm)
2,500	42 in. (1,067 mm)
	48 in. (1,219 mm)

Group Mounted Fusible

QMB Distribution



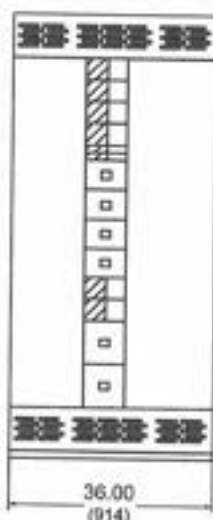
Maximum Switch Ampacity (A)	Width (W)
400	36 in. (914 mm)
1,200	42 in. (1,067 mm)
(2) 1,200	48 in. (1,219 mm)
Mounting space = 63 in. (1,600 mm)	

Quick Layout Guide

Power-Style® QED-2, Series 2 General and Application Information

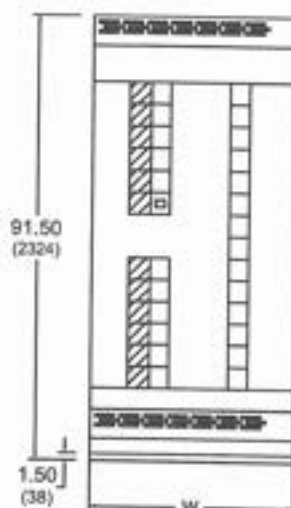
Full-Height I-Line Distribution Sections (all sections have a depth of 24 in.)

2,000–2,500 A Interior *



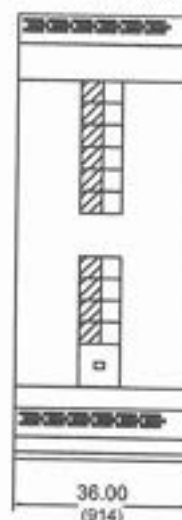
Interior Ampacity (A)	Max. C/B Frame (A)
2,000	R: 1,200
2,500	
Mounting space = 63 in. (1,600 mm)	
Circuit breaker with ground fault protection	

2,000 A Interior *



Width (W)	Max. C/B Frame (A)	
	Left Side	Right Side
36 in. (914 mm)	Q: 250	F: 100
42 in. (1,067 mm)	L: 600	J,Q: 250
48 in. (1,219 mm)	R: 1,200	J,Q: 250
Mounting space: L = 54 in. (1,372 mm)		
R = 63 in. (1,600 mm)		
No circuit breaker with ground fault protection		

1,200–1,600 A Interior *



Interior Ampacity (A)	Max. C/B Frame (A)
1,200	R: 1,200
1,600	
Mounting space = 54 in. (1372 mm)	
No circuit breaker with ground fault protection	

* With unknown loading, the minimum ampacity of the interior bus is as follows per UL 891:

- 1 device = 100% of rating
- 2–3 devices = 80% of sum of ratings
- 4–6 devices = 70% of sum of ratings
- 7–12 devices = 60% of sum of ratings
- 13+ devices = 50% of sum of ratings

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