

Overview

Square D® brand QMB fusible power distribution panelboards are for use on AC or DC systems. They are UL® Listed under File E6294 and File E33139 and marked cULus.



QMB Panelboard Main Lugs and Solid Neutral Compartment

Features

QMB panelboards are engineered with the following features:

- Main Lugs ratings 100–1200 A
- Main Fusible Switch ratings 100–800 A
- Main lugs or main switch interiors are suitable for top or bottom feed
- Main switch factory-mounted on bus assembly (cannot back-feed branch switch)
- Main lugs and solid neutral mounted in same compartment
- Bolted cover isolates main lugs compartment from branch switches
- Type 1 enclosures are 38.00 inches wide by 11.5 inches deep
- Type 3R/12 enclosures are 38.89 inches wide by 14.90 inches deep

Service Entrance Equipment

The following are suitable for use as service entrance equipment:

- All main fusible switch panelboards (Canadian Service Entrance solutions are not available)
- All main lug panelboards with six disconnects or less.
- A solid neutral that is insulated, but may be bonded to the box with a ground strap.

Fuses

QMB switches are designed to accept the following fuse classes:

- QMB Switch rated 30–600 A — Class H, R, or J fuses
- QMB Switch rated 601–800 A — Class L fuses
- QMB Switch rated 400–800 A — Class T fuses
- QMJ Switch rated 30–600 A — Class J fuses only



QMB Panelboard Main Switch and Solid Neutral Compartment

QMB Fusible Panelboards

Overview

Standards

QMB fusible panelboards are designed, manufactured and tested to meet the requirements of the latest revisions of the following standards:

- UL 50; Enclosures for Electrical Equipment
- UL 67; Standard for Panelboards
- CSA C22.2, No. 29-1989; Panelboards and Enclosed Panelboards
- NEMA PB 1; Panelboards
- NFPA 70; National Electrical Code (NEC)
- Federal Specification W-P115C Type II Class 1; Fusible Switch Panelboards
- International Building Code (IBC), NFPA 5000, ASCE/SE17 - Seismically Qualification

QMB Fusible Switch Units

- UL 98; Enclosed and Deadfront Switches. UL Listed File E34358
- NEMA KS1; Enclosed Switches
- Federal Specification WC-865C; Fusible Switches
- CSA; File LL-48755

QMJ Fusible Switch Units

- UL 98; Enclosed and Deadfront Switches. UL Listed File E34358
- NEMA KS1; Enclosed Switches
- Federal Specification WC-865C; Fusible Switches
- CSA; File LR-48755

QMB Circuit Breaker Units

- UL 50; Enclosed for Electrical Equipment. UL Listed File E34358
- UL489; Molded Case Circuit Breakers
- NEMA AB1; Molded Case Circuit Breakers and Molded Case Switches
- Federal Specification WC-375B/Gen; Molded Case Circuit Breakers
- CSA; File 048755

Service

- 1 ϕ 2W, 240 Vac
- 1 ϕ 3W, 120/240 Vac
- 3 ϕ 3W, 240 Vac
- 3 ϕ 3W, 240 Vac corner ground delta
- 3 ϕ 4W, 208Y/120 Vac
- 3 ϕ 4W, 480Y/277 Vac
- 3 ϕ 3W, 480 Vac
- 3 ϕ 4W, 600Y/347 Vac
- 3 ϕ 3W, 600 Vac
- 2W, 250 Vdc
- 3W, 125/250 Vdc

Enclosure Types

Type 1 Enclosure

- Fronts; Standard, four-piece, without door with gray-baked enamel finish (ANSI 49)
- Enclosure; with removable endwalls with knockouts.

Type 2 Enclosures

- Type 1 with driphood

Type 3R, 5, and 12 Enclosures

- Gasketed door with keyed vault handle
- Self-adhesive directory card holder
- Gray-baked enamel finish (ANSI 49)
- No knockouts

Table 1: Enclosure Options

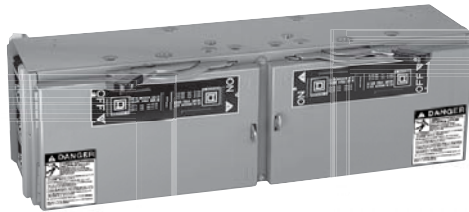
| NEMA Type | Environment | Provides Protection Against |
|------------------|--------------------|--|
| Type 1 | Indoor | Contact with the enclosed equipment |
| Type 2 | Indoor | Type 1, plus: • Dripping / light splashing of non-corrosive liquids |
| Type 3R | Outdoor | Type 2, plus: • Rain, snow, and sleet |
| Type 5 | Indoor | Type 2, plus: • Settling airborne dust, lint, fibers, and flyings |
| Type 12 | Indoor | Type 2, plus: • Circulating dust, lint, fibers, and flyings • Settling airborne dust, lint, fibers, and flyings • Oil and coolant seepage |

QMB Switches

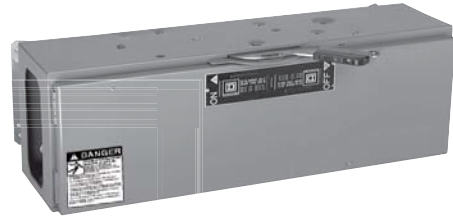
QMB switches are designed for use in panelboards and switchboards to provide a means for disconnecting a load from its source, open and close a circuit, and to provide overcurrent and short circuit protection.

30–100 A Fusible Twin Switch Units—UL Listed Ratings

- 600 Vac maximum
- 250 Vdc maximum—2-pole construction only
- 30–100 A twin-mounted switch units
- For use with Class H, R, or J fuses
- UL Listed for use on systems with up to 200,000 rms symmetrical amperes available fault current when used with Class R fuses, and the appropriate Class R fuse kit installed, or Class J fuses installed.



Typical QMB Fusible Twin Switch Unit



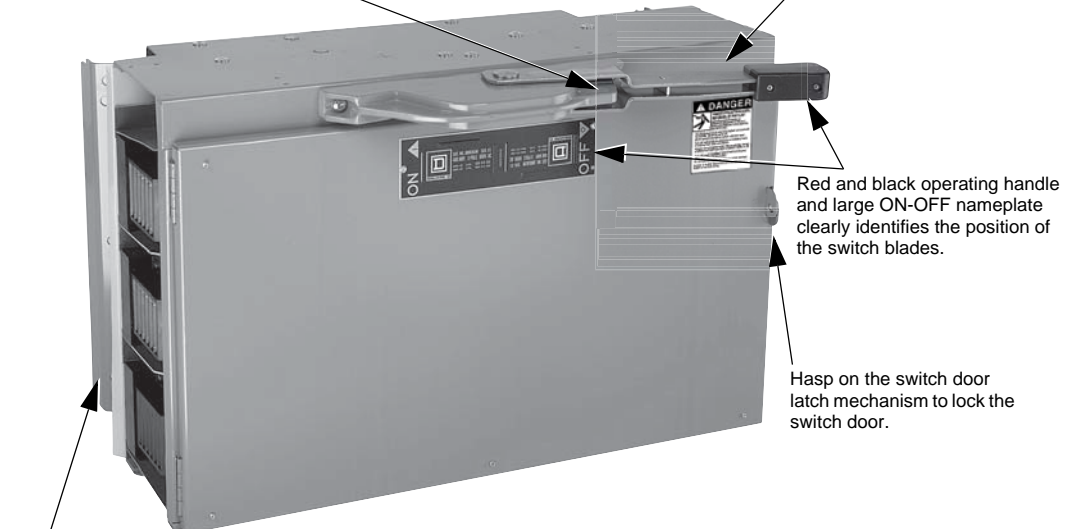
Typical QMB Fusible Single Switch Unit

200–800 A Fusible Single Switch Units—UL Listed Ratings

- 600 Vac maximum
- 250 Vdc maximum—2-pole construction only
- For use with Class H, R, J, L, or 600 Vac Class T fuses
- UL Listed for use on systems with up to 200,000 rms symmetrical amperes available fault current with Class R fuses, and the appropriate Class R fuse kit installed, or Class J, L, or T fuses installed.

Positive lock-off means with provisions for three 3/8-inch shackle padlocks.

Dual-cover interlock

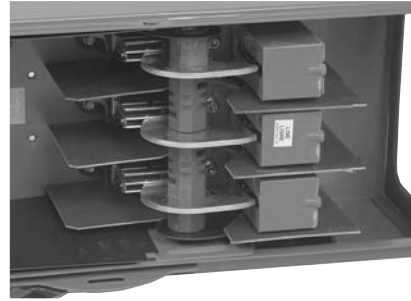


Features of a Typical QMB Switch

QMB Fusible Panelboards QMB Switches

Visible Blades

- 30–800 A QMB switches
- Provides positive identification of the position of the switch blades



Visible Blades

Class R Fuse Kits

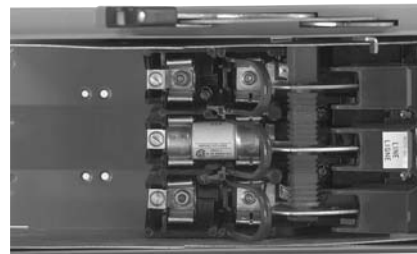
- 30–600 A QMB switches
- With kit installed, the QMB switch accepts only Class R fuses
- Available for field installation



Class R Fuse Kits

Class J Fuse Provisions

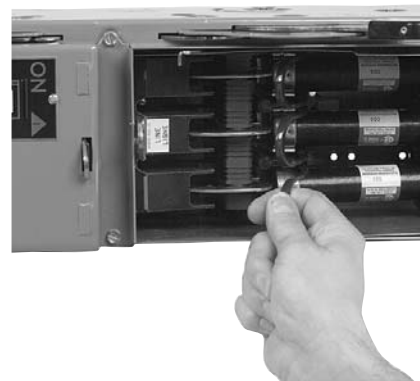
- 30–600 A QMB switches only, 600 Vac maximum
- For field modification, move load-side base to position indicated in switch



Class J Fuse Provisions

Fuse Pullers

- 30–100 A QMB switches only
- Convenient aid for removing fuses



Fuse Pullers

Versa-Crimp® Lugs

- 100–800 A QMB switches only
- Available for field installation
- Accepts either Cu or Al wire



Versa-Crimp Lugs (installed)



Versa-Crimp Lugs

Electrical Interlocks

- 30–200 A QMB switches only
- For use on motor control circuits or auxiliary functions
- Available for field installation



Electrical Interlocks

QMB Fusible Panelboards

QMB Switches

Application Data

Table 4: QMB Branch Switch Units

| Unit Ampere Rating | Unit Height in. (mm) | Catalog Number | Class R Fuse Kits | | Electrical Interlock Kit | Horsepower Ratings | | | | | | | | | | | | 250 Vdc |
|-----------------------------------|--|----------------|-------------------|----------------|--------------------------|--------------------|---------|----|------|----|---------|----|------|----|---------|----|----|---------|
| | | | No. Kits Req. | Catalog Number | | Catalog Number ▲ | 240 Vac | | | | 480 Vac | | | | 600 Vac | | | |
| | | | | | Std. | | Max. | | Std. | | Max. | | Std. | | Max. | | | |
| | | | | | 1φ | | 3φ | 1φ | 3φ | 1φ | 3φ | 1φ | 3φ | 1φ | 3φ | 1φ | 3φ | |
| 2-Pole, 240 Vac, 250 Vdc | | | | | | | | | | | | | | | | | | |
| 30-30 | 4.5 (114) | QMB221TW | 2 | HRK30 | QMB300EK-(1 or 2) | 1½ | 3 | 3 | 7½ | — | — | — | — | — | — | — | 5 | |
| 30-Blank | | QMB221HW■ | 1 | | | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 60-60 | 4.5 (114) | QMB222TW | 1 | QMB36R | QMB300EK-(1 or 2) | 3 | 7½ | 10 | 15 | — | — | — | — | — | — | — | 10 | |
| 60-Blank | | QMB222HW■ | | | | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 100-100 | 6 (152) | QMB223TW | 1 | QMB100R | QMB610EK-(1 or 2) | 7½ | 15 | 15 | 30 | — | — | — | — | — | — | — | 20 | |
| 100-Blank | | QMB223HW■ | | | | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 200 | 9 (229) | QMB224W | 1 | HRK1020 | QMB200EK-(1 or 2) | — | 25 | 15 | 60 | — | — | — | — | — | — | — | 40 | |
| 400 | 15 (381) | QMB225W | 1 | QMB4060R | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| | 9 (229) | QMB225WT3◆ | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| 600 | Use 3-pole devices for 2-pole application. | | | | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| 3-Pole, 240 Vac | | | | | | | | | | | | | | | | | | |
| 30-30 | 4.5 (114) | QMB321TW | 2 | HRK30 | QMB300EK-(1 or 2) | — | 3 | — | 7½ | — | — | — | — | — | — | — | — | |
| 30-Blank | | QMB321HW■ | 1 | | | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 60-60 | 4.5 (114) | QMB322TW | 1 | QMB36R | QMB300EK-(1 or 2) | — | 7½ | — | 15 | — | — | — | — | — | — | — | — | |
| 60-Blank | | QMB322HW■ | | | | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 100-100 | 6 (152) | QMB323TW | 1 | QMB100R | QMB610EK-(1 or 2) | — | 15 | — | 30 | — | — | — | — | — | — | — | — | |
| 100-Blank | | QMB323HW■ | | | | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 200 | 9 (229) | QMB324W | 1 | HRK1020 | QMB200EK-(1 or 2) | — | 25 | — | 60 | — | — | — | — | — | — | — | — | |
| 400 | 15 (381) | QMB325W | 1 | QMB4060R | — | — | 50 | — | 125 | — | — | — | — | — | — | — | — | |
| | 9 (229) | QMB325WT3◆ | — | — | — | — | 50 | — | — | — | — | — | — | — | — | — | — | |
| 600 | 15 (381) | QMB326W | 1 | QMB4060R | — | — | 75 | — | 150 | — | — | — | — | — | — | — | — | |
| | 15 (381) | QMB326WT3◆ | — | — | — | — | 75 | — | — | — | — | — | — | — | — | — | — | |
| 800 | 15 (381) | QMB327WT3◆ | — | — | — | — | 75 | — | — | — | — | — | — | — | — | — | — | |
| 2-Pole, 600 Vac, 250 Vdc ★ | | | | | | | | | | | | | | | | | | |
| 30-30 | 4.5 (114) | QMB261TW | 1 | QMB36R | QMB300EK-(1 or 2) | 1½ | — | 3 | — | 3 | 5 | 7½ | 15 | 3 | — | 10 | — | 5 |
| 30-Blank | | QMB261HW■ | | | | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 60-60 | 6 (152) | QMB262TW | 1 | QMB60R | QMB610EK-(1 or 2) | 3 | — | 10 | — | 5 | 15 | 20 | 30 | 10 | — | 25 | — | 10 |
| 60-Blank | | QMB262HW■ | | | | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 100-100 | 7.5 (191) | QMB263TW | 2 | HRK1020 | QMB610EK-(1 or 2) | 7½ | — | 15 | — | 10 | 25 | 30 | 60 | 15 | — | 40 | — | 20 |
| 100-Blank | | QMB263HW■ | 1 | | | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 200 | 9 (229) | QMB264W | 1 | HRK1020 | QMB200EK-(1 or 2) | 15 | — | — | — | 25 | 50 | 50 | 125 | 30 | — | 50 | — | 40 |
| 400 | Use 3-pole devices for 2-pole application. | | | | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 600▼ | Use 3-pole devices for 2-pole application. | | | | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

QMB Fusible Panelboards QMB Switches

Table 4: QMB Branch Switch Units (continued)

| Unit Ampere Rating | Unit Height in. (mm) | Catalog Number | Class R Fuse Kits | | Electrical Interlock Kit | Horsepower Ratings | | | | | | | | | | | | 250 Vdc |
|--------------------------|-------------------------------|-------------------|----------------------|--------------------------|-----------------------------|--------------------|----|------|----|---------|------|------|-----|---------|-----|------|-----|------------|
| | | | No. Kits Req. | Catalog Number | Catalog Number ▲ | 240 Vac | | | | 480 Vac | | | | 600 Vac | | | | |
| | | | | | | Std. | | Max. | | Std. | | Max. | | Std. | | Max. | | |
| | | | | | | 1φ | 3φ | 1φ | 3φ | 1φ | 3φ | 1φ | 3φ | 1φ | 3φ | 1φ | 3φ | |
| 3-Pole, 600 Vac ★ | | | | | | | | | | | | | | | | | | |
| 30-30 | 4.5 (114) | QMB361TW | 7½ | QMB36R | QMB300EK-(1 or 2) | — | 3 | — | 7½ | — | 5 | — | 15 | — | 7½ | — | 20 | — |
| 30-Blank | | QMB361HW■ | | | | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 60-60 | 6 (152) | QMB362TW | 1 | QMB60R | QMB610EK-(1 or 2) | — | 7½ | — | 15 | — | 15 | — | 30 | — | 15 | — | 50 | — |
| 60-Blank | | QMB362HW■ | 7½ | | | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 60-30 | 6 (152) | QMB362T21W △ | 1 ea. | QMB60R and QMB36R | QMB610EK-(1 or 2) | — | 7½ | — | 15 | — | 15 | — | 30 | — | 15 | — | 50 | — |
| 100-100 | 7.5 (191) | QMB363TW | 2 | HRK1020 | QMB610EK-(1 or 2) | — | 15 | — | 30 | — | 25 | — | 60 | — | 30 | — | 75 | — |
| 100-Blank | | QMB363HW■ | 1 | | | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 100-30 | 7.5 (191) | QMB363T31W △ | 1 ea. | HRK1020 and QMB36R | QMB610EK-(1 or 2) | — | 15 | — | 30 | — | 25 | — | 60 | — | 30 | — | 75 | — |
| 100-60 | 7.5 (191) | QMB363T32W △ | 1 ea. | HRK1020 and QMB60R | QMB610EK-(1 or 2) | — | 15 | — | 30 | — | 25 | — | 60 | — | 30 | — | 75 | — |
| 200 | 9 (229) | QMB364W | 1 | HRK1020 | QMB200EK-(1 or 2) | — | 25 | — | 60 | — | 50 | — | 125 | — | 60 | — | 150 | — |
| 400 | 15 (381) | QMB365W□ | 1 | QMB4060R | — | — | — | — | — | — | 100 | — | 250 | — | 125 | — | 350 | 50 |
| | 9 (229) | QMB365WT6◇ | — | — | — | — | 50 | — | — | — | 100★ | — | — | — | 125 | — | — | — |
| 600▼ | 15 (381) | QMB366W□ | 1 | QMB4060R | — | — | — | — | — | — | 150 | — | 400 | — | 250 | — | 500 | — |
| 800▽ | 15 (381) | QMB367W | — | — | — | — | — | — | — | — | 150 | — | 400 | — | 250 | — | 500 | — |

- ▲ “-1” indicates one normally open and one normally closed contact. “-2” indicates two normally open and two normally closed contacts.
- Blank units cannot be modified to accept a switch interior.
- ◆ Use 300 Vac Class T fuses only.
- ★ Class J fuse provisions—to field modify switch, move load side fuse base to positions indicated in switch. Not available on 100-30, 100-60, or 800 A switch units.
- ▼ To adapt switch for 600 Vac Class T fuses, order kit Catalog Number QMB600T6. (Use T6 fuses with standard horsepower ratings only.)
- △ See corresponding standard switch for horsepower ratings.
- 250 Vdc rating.
- ◇ Use 600 Vac Class T fuses only.
- ☆ Horsepower rating applicable to 480Y/277 V system only.
- ▽ To adapt switch for 600 Vac Class T fuses, order kit Catalog Number QMB800T6. (Use T6 fuses with standard horsepower ratings only.)

QMB Fusible Panelboards

QMB Switches

Table 5: QMB Branch Switches Optional Lugs

| QMB Switches | | Aluminum Mechanical | | Copper Mechanical | | Aluminum Crimp | | Copper Crimp | |
|---------------------------------|-------------|---------------------|------------------------|-------------------|------------------------|-----------------|------------------------|------------------|------------------------|
| Amp | Catalog No. | Standard Lug | Wire Range (AWG/kcmil) | Optional Lug | Wire Range (AWG/kcmil) | Optional Lug | Wire Range (AWG/kcmil) | Optional Lug | Wire Range (AWG/kcmil) |
| 2-Pole, 240 Vac, 250 Vdc | | | | | | | | | |
| 30 | QMB221TW | 40251-016-51 | #12-#2 | 40256-034-50 | #14-#4 | Not Available | — | Not Available | — |
| | QMB221HW | | | | | | | | |
| 60 | QMB222TW | 40251-016-51 | #12-#2 | 40256-034-50 | #14-#4 | Not Available | — | Not Available | — |
| | QMB222HW | | | | | | | | |
| 100 | QMB223TW | Not Replaceable | #12-1/0 | Not Available | — | Not Available | — | Not Available | — |
| | QMB223HW | | | | | | | | |
| 200 | QMB224W | 40251-162-50 | #6-300 | 40560-270-50 | #6-250 | VCEL030516H1 | #4-300 | VCELC03038H1 | 2/0-300 |
| 400 | QMB225W | (2) 40251-287-50 | 3/0-600 | Not Available | — | (2) VCEL05012H1 | 2/0-500 | (2) VCELC05012H1 | 250-500 |
| | QMB225WT3 | Not Replaceable | #1-600 | | | (2) VCEL07512H1 | 500-750 | (2) VCELC07512H1 | 400-750 |
| | | | | | | Not Available | — | Not Available | — |
| 3-Pole, 240 Vac | | | | | | | | | |
| 30 | QMB321TW | 40251-016-51 | #12-#2 | 40256-034-50 | #14-#4 | Not Available | — | Not Available | — |
| | QMB321HW | | | | | | | | |
| 60 | QMB322TW | 40251-016-51 | #12-#2 | 40256-034-50 | #14-#4 | Not Available | — | Not Available | — |
| | QMB322HW | | | | | | | | |
| 100 | QMB323TW | Not Replaceable | #12-1/0 | Not Available | — | Not Available | — | Not Available | — |
| | QMB323HW | | | | | | | | |
| 200 | QMB324W | 40251-162-50 | #6-300 | 40560-270-50 | #6-250 | VCEL030516H1 | #4-300 | VCELC03038H1 | 2/0-300 |
| 400 | QMB325W | (2) 40251-287-50 | 3/0-600 | Not Available | — | (2) VCEL05012H1 | 2/0-500 | (2) VCELC05012H1 | 250-500 |
| | QMB325WT3 | Not Replaceable | #1-600 | | | (2) VCEL07512H1 | 500-750 | (2) VCELC07512H1 | 400-750 |
| | | | | | | Not Available | — | Not Available | — |
| 600 | QMB326W | (2) 40251-287-50 | 3/0-600 | Not Available | — | (2) VCEL05012H1 | 2/0-500 | (2) VCELC05012H1 | 250-500 |
| | QMB326WT3 | Not Replaceable | (2) 3/0-600 | | | (2) VCEL07512H1 | 500-750 | (2) VCELC07512H1 | 400-750 |
| | | | | | | Not Available | — | Not Available | — |
| 800 | QMB327WT3 | (3) 40251-287-50 | 3/0-600 | Not Available | — | (3) VCEL05012H1 | 2/0-500 | (3) VCELC05012H1 | 250-500 |
| | | | | | | (3) VCEL07512H1 | 500-750 | (3) VCELC07512H1 | 400-750 |
| 100-30 | QMB363T31W | 40251-018-50 | #12-1/0 | 40256-014-50 | #14-1/0 | VCEL02114S1 | #8-1/0 | VCELC02114S1 | #6-1/0 |
| | | 40251-016-51 | #12-#2 | 40256-034-50 | #14-#4 | Not Available | — | Not Available | — |
| 100-60 | QMB363T32W | 40251-018-50 | #12-1/0 | 40256-014-50 | #14-1/0 | VCEL02114S1 | #8-1/0 | VCELC02114S1 | #6-1/0 |
| | | 40251-016-51 | #12-#2 | 40256-034-50 | #14-#4 | Not Available | — | Not Available | — |
| 200 | QMB364W | 40251-162-50 | #6-300 | 40560-270-50 | #6-250 | VCEL030516H1 | #4-300 | VCELC03038H1 | 2/0-300 |
| 400 | QMB365W | (2) 40251-287-50 | 3/0-600 | Not Available | — | (2) VCEL05012H1 | 2/0-500 | (2) VCELC05012H1 | 250-500 |
| | QMB365WT6 | Not Replaceable | (2) 3/0-600 | | | (2) VCEL07512H1 | 500-750 | (2) VCELC07512H1 | 400-750 |
| | | | | | | Not Available | — | Not Available | — |
| 600 | QMB366W | (2) 40251-287-50 | 3/0-600 | Not Available | — | (2) VCEL05012H1 | 2/0-500 | (2) VCELC05012H1 | 250-500 |
| 800 | QMB367W | (3) 40251-287-50 | 3/0-600 | Not Available | — | (3) VCEL05012H1 | 2/0-500 | (2) VCELC05012H1 | 250-500 |
| | | | | | | (3) VCEL07512H1 | 500-750 | (2) VCELC07512H1 | 400-750 |