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Ready-to-Install (RTI)—600 Vac, 250 Vdc
Table 13.1: QMB Main Lugs Interiors, Boxes and Fronts

| Total Branch Unit Mounting Space (Inches) | Ampere Rating of Mains |  | Component Selection |  | Box Height (inches) | Box Width (inches) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Interior Assembly-3-pole with Main Lugs | Front (4-piece Standard) | Box |  |  |
|  |  | Catalog No. | Catalog No. | Catalog No. |  |  |
| 60 | 225 | QMB60902 | QM38902TS | QM3890B | 90 | 38 |
| 45 | 400 | QMB45754 | QM38756TS | QM3875B | 75 |  |
| 45 | 600 | QMB45756 | QM38756TS | QM3875B |  |  |
| 45 | 800 | QMB45908 | QM38908TS | QM3890B | 90 | 38 |
| 45 | 1200 | QMB459012 | QM389012TS | QM3890B |  |  |
| 60 | 600 | QMB60906 | QM38906TS | QM3890B |  |  |

Table 13.2: QMB Main Switch Interiors, Boxes and Fronts

| Total Branch Unit Mounting Space (inches) | Ampere Rating of Mains | Maximum Voltage (ac) |  | Component Selection |  | Box Height (inches) | Box Width(inches) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Interior Assembly-3-pole with Main Switch | Front (4-Piece Standard) | Box |  |  |
|  |  |  | Catalog No. | Catalog No . | Catalog No. |  |  |
| 51 | 200 | 240 | QMB5190324M | QM38902TS | QM3890B | 90 | 38 |
| 45 | 400 |  | QMB4590325M | QM38906TS | QM3890B |  |  |
|  | 600 |  | QMB4590326M |  |  |  |  |
| 51 | 200 | 600 | QMB5190364M | QM38902TS | QM3890B | 90 | 38 |
| 45 | 400 |  | QMB4590365M | QM38906TS | QM3890B |  |  |
|  | 600 |  | QMB4590366M |  |  |  |  |

Table 13.3: Accessories ${ }_{[1]}$

| Blanks |  | Solid Neutral Assembly |  |
| :---: | :---: | :---: | :---: |
| Height | Catalog No. | Ampere Rating | Catalog No. |
| 1.5 | QMB1BLW | 225 | QMB2SN |
| 3 | QMB3BLW | 400 | QMB4SN |
| 6 | QMB6BLW | 600 | QMB6SN |
| 15 | QMB15BLW | 800 | QMB8SN |
| - | - | 1200 | QMB12SN |

Table 13.4: QMB Branch Circuit Breaker Units 600 Vac

| Unit Ampere Rating | Unit Height <br> (Inches) | Catalog No. <br> $[2]$ | Description |
| :---: | :---: | :---: | :--- |
| $15-150$ | 6 | QMBHW <br> $[3]$ | Mounts (1) or (2) 3-pole HDL cir- <br> cuit breakers |
| $150-225$ | 6 | QMBJW [4] | Mounts (1) 3-Pole JDL circuit <br> breaker |
| 400 | 7.5 | QMB3400LAW [5] | Includes (1) 3-Pole LAL circuit <br> breaker |


[1] Equipment Ground Bar-PK32DGTA
[2] Circuit breakers not included. Order HDL or JDL circuit breakers from Digest.
[3] Order one catalog number S 37444 for each circuit breaker.
[4] Order catalog number S37445 with QMBJW.
[5] For trip ratings above 400A, contact your local Schneider Electric sales office.

Main Switch Replacement Units
Table 13.5: Main Switch Replacement Units (Replaces Series E1)

| Ampere Rating | Standard-Class H, R, K Fuse Spacing | Class T Fuse Spacing |  | Class J Fuse Spacing |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Catalog No. |  | Catalog No. |  | Catalog No. |
| 3-Pole, 240 Vac |  |  |  |  |  |
| 100 | QMB323MW |  | - |  | - |
| 200 | QMB324MW |  | - |  | - |
| 400 | QMB325MW |  | - |  | - |
| 600 | QMB326MW |  | - |  | - |
| 800 | - |  | - |  | - |
| 3-Pole, 600 Vac |  |  |  |  |  |
| 100 | QMB363MW |  | - |  | - |
| 200 | QMB364MW |  | - |  | - |
| 400 | QMB365MW | \{ | QMB365MW[6] | \{ | QMB365MW[6] |
|  |  |  | QMB400T6 |  | QMB400J |
| 600 | QMB366MW | \{ | QMB366MW[6] | \{ | QMB366MW[6] |
|  |  |  | QMB600T6 |  | QMB600J |
| 800 | QMB367MW | \{ | QMB367MW[6] | - |  |
|  |  |  | QMB800T6 |  |  |
| Example: | \{ QMB365MW |  | es a complete devic |  |  |

Table 13.6: Main Switch Interior Lug Data

| Mechanical Lugs |  |  |  | VCEL Compression Lugs |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mains Ampere Rating | Conductors Per Phase | Wire Range <br> Wire Bending Space per NEC Table 373-6 | Lug Wire Range | Conductors Per Phase | Wire Range <br> Wire Bending Space per NEC Table 373-6 | Catalog No. | Lug Wire Range |
| 200 | (1) | \#6-300 kcmil Al or Cu | \#6-300 kcmil Al or Cu | (1) | \#4-300 kcmil Al or Cu | VCEL030516H1 | \#4-300 kcmil Al or Cu |
| 400 | (2) | $3 / 0-500 \mathrm{kcmil} \mathrm{Al}$ or Cu | $3 / 0-600 \mathrm{kcmil}$ Al or Cu | (2) | 2/0-600 kcmil Al or Cu | VCEL05012H1 | $2 / 0-500 \mathrm{kcmil}$ Al or Cu |
| 400 | (2) | $3 / 0-500 \mathrm{kcmil}$ Al or Cu | 3/0-600 kcmil Al or Cu | (2) | 210-600 kcmil Al or Cu | VCEL07512H1 | $500-750 \mathrm{kcmil} \mathrm{Al}$ |
| 600 | (2) | $3 / 0-500 \mathrm{kcmil} \mathrm{Al}$ or Cu | $3 / 0-600 \mathrm{kcmil} \mathrm{Al}$ or Cu | (2) | 2/0-500 kcmil Al or Cu | VCEL05012H1 | $3 / 0-500 \mathrm{kcmil} \mathrm{Al} \mathrm{or} \mathrm{Cu}$ |
| 800 | (3) | $3 / 0-500 \mathrm{kcmil} \mathrm{Al}$ or Cu | $3 / 0-600 \mathrm{kcmil} \mathrm{Al}$ or Cu | (3) | $2 / 0-500 \mathrm{kcmil} \mathrm{Al}$ or Cu | VCEL05012H1 | $3 / 0-500 \mathrm{kcmil} \mathrm{Al} \mathrm{or} \mathrm{Cu}$ |

## Guidelines

STEP 1: Determine the panelboard interior type. If the date of manufacture is not known, compare your switch with the pictures below to determine the mounting rail direction. Only mounting rails that face outward will accept the Series D2 switch and its required mounting rail extension bracket.
STEP 2: Order a replacement switch from 30-200 A Obsolescent Switch Units—Series D2, page 13-4.

Table 13.7: Panelboard Interiors

| Illustration No. | Interior Catalog No. Prefix | Designed For Switch Type | Switch Availability/Order Information |
| :---: | :---: | :---: | :---: |
| 1 | Type QM in 31 -inch wide box built before 1961. | Series 1-4 30-200 A Maximum | NOT AVAILABLE <br> Series D2 switches are not compatible replacements for this application. |
| 2 | Type QM in 31 -inch wide box built after 1961 and before 1984. | Series 1-4 30-200 A Maximum | NOT AVAILABLE Order Series D2 switch from page 13-4. |
|  |  | Series D2 30-200 A Maximum | Order Series D2 switch from page 13-4. (Many still stocked in DS.) |
| 3 | Type QW in 38 -inch wide box built before 1984 . | Series 1-4 30-200 A Maximum | NOT AVAILABLE <br> Order Series D2 switch and plug-on extension assembly from page 13-4. |
|  |  | $\begin{aligned} & \text { Series } 1-4 \\ & 400-600 \mathrm{~A} \end{aligned}$ | NOTAVAILABLE <br> QMB3400LA available order only from Lexington. |
|  |  | Series D2 30-200 A Maximum | Order Series D2 switch and plug-on extension assembly from page 13-4. |
| 4 | ```Type QMB in 35 -inch or 38 -inch wide box built after 1984.``` | $\begin{aligned} & \text { Series E1 or E2 } \\ & 30-800 \mathrm{~A} \end{aligned}$ | Order from Digest Section 9. |
|  | Type QM (31-inch W Manufactured Before | Mounting rail e) | Type QM (31-inch Wide) <br> Manufactured After 1961 But Before October 1984 |

 are obsolete.

Panelboards manufactured after 1961 have the interior mounting rails facing outward (away from the bus). This interior accepts Series 1-4 switches and Series D2 switches (shown above with required rail extensions). Order the Series D2 switch (includes mounting rail extensions) from page 13-4.


Type QW (38-inch Wide) Manufactured Before 1984
Type QW panelboards were built to accept bolt-on 400 A and 600 A Series 1-4 switches. 30-200 A Series D2 switches may be installed as shown using the plug-on extension assembly from page 13-4.


Type QMB
Manufactured After October 1984
Series E1 panelboards will accept only Series E1 or E2 switches. Order from Digest Section 9.

## 30-200 A Obsolescent Switch Units—Series D2

## Available In DS Stock, except where noted.

All Series D2 switches require that rail extension assemblies be attached to the interior side rails in order to mount the switch. These rail extension assemblies are packaged with every Series D2 switch. If a rail extension is lost or missing, contact the nearest Schneider Electric ${ }^{T M}$ sales office to order a replacement.
Plug-on extension assemblies must also be ordered when installing 30-200 A plug-on units in blank spaces of a QW interior in the 38 -inch wide box. These plug-on extension assemblies (which extend the bus) are NOT the same as the rail extension assemblies packaged with every Series D2 switch (which extend only the mounting rails).

Table 13.8: Branch Units-Three Pole

| Ampere Rating | Unit Height (inches) | Obsolescent [7] Series 1-4 Catalog No. | Replaced By Series D2 Catalog No. | Class R Fuse Kits |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | No. Kits Req'd. | Catalog No. |
| 240 Vac |  |  |  |  |  |
| 30-30 | 4.50 | QMB3203T | QMB321T[8] | 2 | HRK30 |
| 60-60 | 4.50 | QMB306T | QMB322TD | 1 | QMB36R |
| 100-100 | 6.00 | QMB310T | QMB323TD | 1 | QMB100R |
| 200 | 9.00 | QMB3220 | QMB324 | 1 | HRK1020 |
| 600 Vac |  |  |  |  |  |
| 30-30 | 4.50 | QMB3603T | QMB361T[8] | 1 | QMB36R |
| 30-30 | 6.00 |  | QMB362T1 |  |  |
| 60-60 | 6.00 | QMB3606T | QMB362T | 1 | QMB60R |
| 100-100 | 7.50 | QMB3610T | QMB363T | 2 | HRK1020 |
| 200 | 9.00 | QMB3620 | QMB364 | 1 |  |

Table 13.9: Obsolescent Circuit Breaker Units [9]
$\square$ Catalog No.
Table 13.10: Plug-On Extension Assemblies [11]

| Ampere Rating | Switch Mounting Height (inches) | Catalog No. |
| :---: | :---: | :---: |
| $30-30$ Switch | 3 | QMB303LEX |
| $30-30$ Switch | 4.5 | QMB306LEX |
| $30-30$ Switch | 6 | QMB306EX |
| $60-60$ Switch | 4.5 | QMB306LEX |
| $60-60$ Switch | 6 | QMB306EX |
| $100-100$ Switch | 6 | QMB310LEX |
| $100-100$ Switch | 7.5 | QMB310EX |
| 200 Switch | 9 | QMB320EX |
| LA Circuit Breaker | 7.5 | QMB310EX |

Table 13.11: Obsolescent Main Switch Units [12]

| Ampere Rating | Unit Height (inches) | Catalog No. | Replaces Series 4 Unit Catalog No. |
| :---: | :---: | :---: | :---: |
| 3 -pole 240 Vac |  |  |  |
| 100 | 9 | QMB323M[13] | QMB3210M |
| 200 |  | QMB324M | QMB3220M |
| 3-pole 600 Vac |  |  |  |
| 100 | 9 | QMB363M[13] | QMB3610M |
|  |  | QMB363MJ | QMB3610MJ |
| 200 | 9 | QMB364M | QMB3620M |

Table 13.11 Obsolescent Main Switch Units file0000061164__SD17713005_26719_ SD17713005_81352_490_348[13.11] (cont'd.)

| Ampere Rating | Unit Height <br> (inches) | Catalog No. | Replaces Series 4 <br> Unit Catalog No. |
| :---: | :---: | :---: | :---: |
|  |  | QMB364MJ | QMB3620MJ. |

## Application

For use on three-phase ac systems-208, 240, or 480 volts. UL® Listed.

## Starters

Line Voltage Type

- Non-Reversing-Twin Units: Sizes 0 through 3-Class 8536, Types SB, SC, SD and SE.
- Reversing-Single Units: Sizes 0 through 3-Class 8736, Types SB, SC, SD and SE

Table 13.12: Starter Units—Not stocked in DS. Order only from the Peru plant.


QMB Motor Starter Panelboard

| NEMA Size | CoilVoltage [14] | Class 8536-Types SB, SC, SD and SEq Type S-Non-Reversing (see Digest page 16-16) |  | Class 8736-Types SB, SC, SD and SE [15] Reversing (see Digest page 16-51 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Unit Height (Inches) | Twin-Starter Unit (Two Non-Reversing Starters) | Unit Height (Inches) | Single-Starter Unit (One Reversing Starter) |
|  |  |  | $\begin{gathered} \hline \text { Catalog No. } \\ {[16]} \end{gathered}$ |  | $\begin{gathered} \hline \text { Catalog No. } \\ {[16]} \end{gathered}$ |
| 0 | 120 | 9 | QMBS8536100120W | 9 | QMBS873610120W |
|  | 208 |  | QMBS8536100208W |  | QMBS873610208W |
|  | 240 |  | QMBS8536100240W |  | QMBS873610240W |
|  | 480 |  | QMBS8536100480W |  | QMBS873610480W |
| 1 | 120 | 9 | QMBS8536111120W | 9 | QMBS873611120W |
|  | 208 |  | QMBS8536111208W |  | QMBS873611208W |
|  | 240 |  | QMBS8536111240W |  | QMBS873611240W |
|  | 480 |  | QMBS8536111480W |  | QMBS873611480W |
| 2 | 120 | 10-1/2 | QMBS8536222120W | 10-1/2 | QMBS873622120W |
|  | 208 |  | QMBS8536222208W |  | QMBS873622208W |
|  | 240 |  | QMBS8536222240W |  | QMBS873622240W |
|  | 480 |  | QMBS8536222480W |  | QMBS873622480W |
| 3 | 120 | 18 | QMBS8536333120W | 18 | QMBS873633120W |
|  | 208 |  | QMBS8536333208W |  | QMBS873633208W |
|  | 240 |  | QMBS8536333240W |  | QMBS873633240W |
|  | 480 |  | QMBS8536333480W |  | QMBS873633480W |

Table 13.13: UL Listed Short Circuit Ratings @ 600 V Maximum

| Starter Size | Fusible Switch <br> (with Class R or fuse) <br> RMS Sym. Amperes | Thermal-Magnetic <br> Circuit Breaker <br> RMS Sym. Amperes |
| :---: | :---: | :---: |
| 0 | 100,000 | 5,000 |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |

## Selection of Components

1. List required motor starter units (reversing or non-reversing) from the tables above.
2. Specify the HP, voltage, phase, frequency and full load current rating of the motor.
3. Specify the unit mounting space.
4. Determine the circuit breaker or fusible switch rating for motor branch circuits from the selection tables on Digest page.
5. For motor starter voltages other than standard voltages of 120, 208, 240 and 480 volts, contact the nearest Schneider Electric sales office.

## Starter Data

- Line voltage coils are furnished as standard on all starters.
- Twistouts are provided in starter covers for start-stop push buttons, selector switches and pilot lights. See accessories table below.
- Starter door interlocks are furnished with motor starter enclosures.
- Type S starter enclosures include drillings for the next smaller size.
- All Type $S$ starters have provisions for three overload relay thermal units, as required by NEC® Table 430.37 for three phase ac motor circuits.


## Accessories

Accessories listed below are available for field installation on all units. Go to the sections shown for prices.

Table 13.14: Field Installable Accessories

| Description | Digest Section |
| :---: | :---: |
| Push Buttons and Selector Switches: Class 9001, Type K | Pushbuttons and Operator Interface |
| Pilot Lights: Class 9001, Type KP |  |
| Electrical Interlocks: Class 9999, Types SX6, SX7 | NEMA-Definite Purpose Type Contactors and Starters |
| Industrial Control Transformers: Class 9070 <br> Type EO1; Starter Size: 0 and 1, Non-Reversing | Supplemental Digest, Transformers |
| Type EO2; Starter Size: 0, 1 and 2, Reversing |  |
| Type EO3; Starter Size: 3 |  |
| Type EO4; Starter Size: 4 |  |
| Control Circuit Fuse Block: Class 9080, Type PF1 | Terminal Blocks |

Trim Clamps and Screws; Circuit I.D. Numbers; Locks
Table 13.15: Trim Clamps and Screws

| Application | Catalog No. |
| :---: | :---: |
| NEHB Panelboards: All fronts up through 400 A | PK3TC |

Table 13.16: Circuit I.D. Numbers

| Circuit Number Description | NEHB and NEHB <br> Column Width <br> Catalog No. |
| :---: | :---: |
| 1 through 54 | 8004332501 |

Table 13.17: Locks—Type 1 Enclosures

| NEHB Panelboards Application | Catalog No. |
| :--- | :---: |
| All main lug fronts and all main circuit breaker fronts up to 225 A  <br> Lock only PK4FL <br> Complete assembly PK7FL <br> All 400 A main circuit breaker fronts PK5FL <br> Telephone Cabinets PK4FL <br> Fronts on boxes up to 30 inches wide (After November 1997) <br> Fronts on boxes 36 inches or wider PK5FL |  |



## Series Ratings

This page contains UL Tested and Certified series combination ratings for panelboards. These ratings apply to either an integral main located in the same enclosure or a remote main located in a separate enclosure. NOTE: Where QO(B) GFI circuit breakers are shown above, QO (B) EPD circuit breakers may also be used.

Table 13.18: NQOD Series Ratings

| Maximum | Maximum Short Circuit Current Rating (RMS Sym.) | Integral or Remote Main Circuit Breakers and Remote Main Fuses | Branch Circuit Breaker Designations and Allowable Ampere Ranges [2] [3] |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| System Voltage AC [1] |  |  | Type | 1-pole | 2-pole | 3 -pole |
| 120/240 $1 \varnothing$ | 22k | MG | QO (B) | 15-30 A | - | - |
|  | 42k | HD, JD | QO (B) PL | 15-30 A | 15-60 A | 15-30 A |
|  | 65k | HG, JG |  |  |  |  |
|  | 100k | HJ, JJ |  |  |  |  |
|  | 125k | HL, JL |  |  |  |  |
| $\begin{gathered} 120 / 2401 \varnothing \\ 208 \mathrm{Y} / 120 \end{gathered}$ | 100k | DJ 400 A | QO (B) | 15-70 A | 15-125 A | - |
|  |  |  | QO (B) GFI | 15-30 A | 40-60 A | - |
|  |  |  | QO (B) VH | - | 150 A | 15-150 A |
|  |  |  | QO (B) AFI | 15-20 A | - | - |
|  |  | QJ | QO (B) | 15-70 A | 15-125 A | 15-30 A |
|  |  |  | QO (B) AS | 15-30 A | 15-30 A | 15-30 A |
|  |  |  | QO (B) GFI | 15-30 A | 15-60 A | - |
|  |  |  | QO (B) PL | 15-30 A | 15-60 A | 15-30 A |
|  |  |  | QO (B) VH | - | 150 A | 35-150 A |
|  |  |  | QO (B) AFI | 15-20 A | - | - |
| 208Y/120 | 18k | $\begin{aligned} & \hline \text { LA/LH (L) 34200MC, LA/LH (L) } \\ & \text { 34225MC, } \\ & \text { LA/LH (L) 34250MC, LA/LH (L) } \\ & \\ & \\ & \end{aligned}$ | QO (B) | 15-30 A | $15-30 \mathrm{~A}$ | 15-30 A |
| 240 | 22k | QO (B) VH | QO (B) | 15-70 A | 15-125 A | 15-100 A |
|  |  |  | QO (B) AS | 15-30 A | 15-30 A | 15-30 A |
|  |  |  | QO (B) GFI | 15-30 A | 15-60 A | - |
|  |  |  | QO (B) PL | 15-30 A | 15-30 A | - |
|  |  |  | QO (B) AFI | 15-20 A | - | - |
|  |  | Q2-H[4] | QO (B) | 15-70 A | 15-100 A | 15-30 A |
|  |  |  | QO (B) GFI | 15-30 A | 15-30 A | - |
|  |  |  | QO (B) AFI | 15-20 A | - | - |
| 240 | 25k | QD | QO (B) | 15-70 A | 15-125 A | 15-30 A |
|  |  |  | QO (B) AS | 15-30 A | 15-30 A | 15-30 A |
|  |  |  | QO (B) GFI | 15-30 A | 15-60 A | - |
|  |  |  | QO (B) PL | 15-30 A | 15-60 A | 15-30 A |
|  |  |  | QO (B) VH | - | 150 A | 35-150 A |
|  |  |  | QO (B) AFI | 15-20 A | - | - |
|  |  | ED, FD[4] | QO (B) | 15-70 A | 15-125 A | 15-100 A |
|  |  |  | QO (B) GFI | 15-30 A | 15-60 A | - |
|  |  |  | QO (B) AFI | 15-20 A | - | - |
|  |  | $\mathrm{KD}[4]$ | QO (B) | 15-70 A | 15-125 A | 15-100 A |
|  |  |  | QO (B) AS | 15-30 A | 15-30 A | 15-30 A |
|  |  |  | QO (B) GFI | 15-30 A | 15-60 A | - |
|  |  |  | QO (B) AFI | 15-20 A | - | - |
|  |  | HD, JD | QO (B) | 15-70 A | 15-125 A | 15-100 A |
|  |  |  | QO (B) VH | - | - | 35-150 A |
|  |  |  | QO (B) GFI | 15-30 A | 15-60 A | - |
|  |  |  | QO (B) AFI | 15-20 A | - | - |
|  |  |  | QO (B) H | - | $15-100 \mathrm{~A}$ | - |
|  |  |  | QOB2150VH | - | 150 A | - |
| 240 | 42k | LA, MA | Q2L-H[4] | - | 110-225 A | 110-225 A |
|  |  |  | QDL | - | 70-225 A | 70-225 A |
|  |  | MG | QO (B) VH | 15-30 A | 15-30 A | 15-30 A |
|  |  | HD, JD | QO (B) PL | 15-30 A | 15-60 A | 15-30 A |
|  |  |  | QO (B) | 15-70 A[5] | - | - |
|  |  |  | QO (B) VH | 15-30 A | 15-125 A | 15-100 A (3P 208 V Max.) |
|  |  |  | QO (B) GFI | 15-30 A[6] | 15-60 A | - |
|  |  |  | QO (B) AFI | 15-20 A | - | - |
| 240 | 65k | LC 600 A Maximum | QO (B) VH | 15-30 A | 15-125 A | 15-100 A (3P 208 V Max.) |
|  |  |  | QO (B) GFI | 15-30 A[6] | , | ( |
|  |  |  | QO (B) AFI | 15-20 A | - | - |
|  |  | DJ 400 A | QO (B) | 15-70 A | 15-125 A | - |
|  |  |  | QO (B) VH | - | 150 A | 15-150 A |
|  |  |  | QO (B) H | - | 15-100 A | - |
|  |  | EG, FG[4], KG[4] | QO (B) | 15-70 A | 15-125 A | 15-100 A |
|  |  |  | QO (B) GFI | 15-30 A | 15-60 A | - |

[1] For shown circuit breakers rated less than this maximum voltage, the indicated short circuit current rating also applies, but at the voltage rating of the circuit breaker.
[2] Suffixes HID, SWD and SWN may also be applied to the applicable branch circuit breakers shown above, except suffix SWN may NOT be applied in combination with LC main circuit breakers.
[3] Where QO (B) circuit breakers are shown above, $Q O(B) H, Q O(B) V H$, and $Q H(B)$ circuit breakers may also be used
[4] Obsolescent. Contact the Schneider Electric local Field Sales Office for the replacement circuit breaker. One-pole FJ circuit breakers are still available.
[5] Only 15-30 A circuit breakers may be used when the LC circuit breaker is rated 450, 500 or 600 A .
[6] Circuit breakers may not be used when the LC circuit breaker is rated 450, 500 or 600 A .
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Table 13.18 NQOD Series Ratings (cont'd.)

| Maximum | Maximum Short Circuit | Integral or Remote Main Circuit | Branch | aker De | d Allow | ges [2] [3] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AC [1] | Sym.) | Breakers and Remote Main Fuses | Type | 1-pole | 2-pole | 3 -pole |
|  |  |  | QO (B) AFI | 15-20 A | - | - |
|  |  |  | QO (B) | 15-70 A | 15-125 A | 15-30 A |
|  |  | QG | QO (B) AS | 15-30 A | 15-30 A | $15-30 \mathrm{~A}$ |
|  |  |  | QO (B) VH | - | - | 35-150 A |
|  |  |  | QO (B) GFI | 15-30 A | 15-60 A | - |
|  |  | QG, HG, JG | QO (B) PL | 15-30 A | $15-60 \mathrm{~A}$ | 15-30 A |
|  |  |  | QO (B) AFI | 15-30 A | - | - |
|  |  |  | QO (B) | 15-70 A | 15-125 A | 15-100 A |
|  |  | HG JG | QO (B) VH | - | - | 35-150 A |
|  |  | HG, JG | QO (B) H | - | 15-100 A | - |
|  |  |  | QOB2150VH | - | 150 A | - |
|  |  | FC22 | QO (B) | 15-70 A | 15-100 A | 15-100 A |
|  |  | KC22 | QO (B) AS | 15-30 A | $15-30 \mathrm{~A}$ | $15-30 \mathrm{~A}$ |
|  |  | FC32 | QO (B) GFI | 15-30 A | $15-30 \mathrm{~A}$ | - |
|  |  | KC32 | QO (B) AFI | 15-20 A | - | - |
|  |  |  | QO (B) VH | 15-30 A | 15-125 A | 15-100 A |
|  |  | 400 A Max. Class J or T6 Fuses | QOB-VH | - | 150 A | - |
|  |  |  | QO (B) AFI | 15-20 A | - | - |
|  |  | FC24 | QO (B) | 15-70 A | 15-100 A | 15-100 A |
|  |  | KC24 | QO (B) AS | 15-30 A | $15-30 \mathrm{~A}$ | $15-30 \mathrm{~A}$ |
|  |  | FC34 | QO (B) GFI | 15-30 A | $15-30 \mathrm{~A}$ | - |
|  |  | KC34 | QO (B) AFI | 15-20 A | - | - |
|  |  | 200 A Max. Class T3 Fuses | QO (B) AFI | 15-20 A | - | - |
| 240 | 100k |  | QO (B) | 15-70 A | 15-125 A | 15-100 A |
|  |  | EJ, FJ[7] | QO (B) GFI | 15-30 A | 15-60 A | - |
|  |  |  | QO (B) AFI | 15-20 A | - | - |
|  |  |  | QO (B) | 15-70 A | 15-125 A | 15-100 A |
|  |  | HJ, JJ | QO (B) VH | - | - | 35-150 A |
|  |  |  | QO (B) GFI | 15-30 A | 15-60 A | - |
|  |  |  | QO (B) PL | 15-30 A | $15-60 \mathrm{~A}$ | 15-30 A |
| 240 | 125k | HL. JL | QO (B) AFI | 15-20 A | - | - |
| 240 | 125k | HL. JL | QO (B) H | - | 15-100 A | - |
|  |  |  | QOB2150VH | - | 150 A | - |
| 240 | 200k | FI, KI | QO (B) | 15-70 A | 15-125 A | 15-100 A |
|  |  |  | QO (B) AS | 15-30 A | 15-30 A | 15-30 A |
|  |  |  | QO (B) GFI | 15-30 A | $15-60 \mathrm{~A}$ | - |
|  |  |  | QO (B) AFI | 15-20 A | - | - |
|  |  | Maximum Fuses 200 A Class J or T6 400 A Class T3 | QO (B) | 15-70 A | 15-125 A | 15-100 A |
|  |  |  | QO (B) AS | 15-30 A | 15-30 A | 15-30 A |
|  |  |  | QO (B) GFI | 15-30 A | $15-60 \mathrm{~A}$ | - |

NQOD Merchandised Pricing Procedure

1. List circuit breakers required, either plug-on or bolt-on. See appropriate pages for catalog numbers.
2. Determine equivalent number of pole spaces required.
3. Select proper main lugs interior or main lugs interior and main circuit breaker adapter kit based on equivalent number of poles and ampere rating from appropriate page. Interiors include solid neutral and are field convertible to top feed.
4. Select enclosure from appropriate page.

Type 1-Select box and front catalog number corresponding to interior catalog number. Types 3R, 5, 12-Select enclosure, front included.
5. For complete price, add the component prices. Include panelboard accessories.
6. Apply appropriate discount schedule.

## NQOD Merchandised Example

Table 13.19: 208Y/120 Vac, 3ø4W, 10 kAIR, 225 A, MLO, Type 1 surface mount, bolton branch circuit breakers, main sub-feed lugs

| Branches | Page No. | Catalog Number | Spaces |
| :---: | :---: | :---: | :---: |
| 225 A MLO Interior | NQOD 20-inch Wide <br> Enclosures-240 Vac, 48 <br> Vdc, page 13-9 | NQOD430L225CU | 30 |
| Box | NQOD 20-inch Wide <br> Enclosures-240 Vac, 48 <br> Vdc, page 13-9 | MH32 | - |
| Cover | NQOD 20-inch Wide <br> Enclosures-240 Vac, 48 <br> Vdc, page 13-9 | MHC32S | - |
| Main Sub-Feed Lugs | NQOD 20-inch Wide <br> Enclosures-240 Vac,48 <br> Vdc, page 13-9 | NQOD225SFL | - |

For shown circuit breakers rated less than this maximum voltage, the indicated short circuit current rating also applies, but at the voltage rating of the circuit breaker. breakers.
[3] Where QO (B) circuit breakers are shown above, QO (B) H, QO (B) VH, and QH (B) circuit breakers may also be used.
[7] Obsolescent. Contact the Schneider Electric local Field Sales Office for the replacement circuit breaker. One-pole FJ circuit breakers are still available.

NQOD 20-inch Wide Main Lug Interiors and NQOD Accessories
Table 13.20: Main Lug Interiors—Accepts plug-on and bolt-on circuit breakers

| Max. No. of Single Pole QO ${ }^{\text {™ }} / \mathrm{QOB}$ Circuit Breakers | Mains Rating | Interior Only <br> (Order Branch Circuit Breakers Separately) | Type 1 Enclosure |  | Types 3R, 5, 12 Enclosures |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Box 20 "W x 5.75"D/8] | Mono-Flat ${ }^{\text {TM }}$ Front[8] | Enclosure 20 "W x 6.5"D |  |
|  |  | Catalog No.[9][10] | Catalog No.[10] | Catalog No.[10] | Catalog No.[10] | (In.) |
| 20" Wide Cabinet-Single Phase 3-Wire |  |  |  |  |  |  |
| 20 | 100 | NQOD20L100CU | MH23 | MHC23 ( ) | MH23WP | 23 |
| 30 | 225 | NQOD30L225CU | MH32 | MHC32 ( ) | MH32WP | 32 |
| 42 |  | NQOD42L225CU | MH35 | MHC35 ( ) | MH35WP | 35 |
| 42 |  | NQOD42L225CUTF[11] | MH41 | MHC41 ( ) | MH41WP | 41 |
| 54 |  | NQOD54L225CU | MH41 | MHC41 ( ) | MH41WP | 41 |
| 30 | 400 | NQOD30L400CU | MH50 | MHC50V ( ) | MH50WP | 50 |
| 42 |  | NQOD42L400CU | MH53 | MHC53V ( ) | MH53WP | 53 |
| 54 |  | NQOD54L400CU | MH59 | MHC59V ( ) | MH59WP | 59 |
| 30 | 600 [12] | NQOD30L600 | MH53 | MHC53V ( ) | MH656WP | 53/65 |
| 42 |  | NQOD42L600 | MH56 | MHC56V ( ) | MH686WP | 56/68 |
| 42 |  | NQOD42L600TFL[11] | MH62 | MHC62V ( ) | MH746WP | 62/74 |
| 54 |  | NQOD54L600 | MH62 | MHC62V ( ) | MH746WP | 62/74 |
| 20" Wide Cabinet -Three Phase 4-Wire |  |  |  |  |  |  |
| 24 | 100 | NQOD424L100CU | MH23 | MHC23 ( ) | MH23WP | 23 |
| 30 |  | NQOD430L100CU | MH26 | MHC26 ( ) | MH26WP | 26 |
| 30 | 225 | NQOD430L225CU | MH23 | MHC32 ( ) | MH32WP | 32 |
| 42 |  | NQOD442L225CU | MH35 | MHC35 ( ) | MH35WP | 35 |
| 42 |  | NQOD442L225CUTF[11] | MH41 | MHC41 ( ) | MH41WP | 41 |
| 54 |  | NQOD454L225CU | MH41 | MHC41 ( ) | MH41WP | 41 |
| 30 | 400 | NQOD430L400CU | MH50 | MHC50V ( ) | MH50WP | 50 |
| 42 |  | NQOD442L400CU | MH53 | MHC53V ( ) | MH53WP | 53 |
| 54 |  | NQOD454L400CU | MH59 | MHC59V ( ) | MH59WP | 59 |
| 30 | 600 [12] | NQOD430L600 | MH53 | MHC53V ( ) | MH656WP | 53/65 |
| 42 |  | NQOD442L600 | MH56 | MHC56V ( ) | MH686WP | 56/68 |
| 42 |  | NQOD442L600TFL[11] | MH62 | MHC62V ( ) | MH746WP | 62/74 |
| 54 |  | NQOD454L600 | MH62 | MHC62V ( ) | MH746WP | 62/74 |

Table 13.21: NQOD Accessories[13]

| Description | Catalog No. | Schedule |
| :---: | :---: | :---: |
| Sub-feed lug kits-main lugs only-1Ø or 3Ø[14] |  |  |
| - 100 A | NQOD100SFL | PE1A |
| - 225 A | NQOD225SFL | PE1A |
| Sub-feed: Bolt-on: 2-pole | QOB2125SL | DE2 |
| - 3-pole | QOB3125SL | DE2 |
| Equipment ground bars: 12 circuit 225 A max. | PK9GTA | DE3A |
| - 20 circuit 225 A max. | PK12GTA | DE3A |
| - 24 circuit 225 A max | PK15GTA | DE3A |
| - 30 circuit 225 A max. | PK18GTA | DE3A |
| - 54 circuit 225 A max. | PK23GTA | DE3A |
| - 54 circuit 600 A max | PK27GTA | DE3A |
| - PK15GTA with \#1 to 4/0 Al/Cu lug | PK15GTAL | DE3A |
| - PK18GTA with \#1 to 4/0 Al/Cu lug | PK18GTAL | DE3A |
| - PK23GTA with \#1 to 4/0 Al/Cu lug | PK23GTAL | DE3A |
| Ground bar insulator kit | PKGTAB | DE3A |
| Filler plate | QOFP | DE2A |
| Circuit I.D. number strips |  |  |
| - 1-102 odd/even (left side numbered 1,3,5 ...101) | NQ102OE | PE1A |
| - 103-204 odd/even (left side numbered 103,105,107 ... 203) | NQ204OE | PE1A |
| - 1-102 sequential (left side numbered 1,2,3 ... 102) | NQ102S | PE1A |
| - 103-204 sequential (left side numbered 103,104,105 ... 204) | NQ204S | PE1A |
| Directory cards | 8003115801 | PE1A |
| Plastic stick-on directory pouch | 8003115901 | PE1A |
| - Lock-for Mono-Flat fronts | PK22FL | PE1A |
| - Key-NSR-251 (for all locks) | LP9618 | PE1A |
| - Touch-up paint USAS \#49 Gray (Aerosol can) | PK49SP | DE1 |
| Handle attachments-branch circuit breakers: |  |  |
| - Handle lock-off | HLO1 | DE2E |
| - Handle tie - (QO and QOB only) | Q01HT | DE2E |

[8] Embossed mounting holes add a 0.25 inch standoff to back of MH box.
 interior.
[10] Add "F" for flush, "S" for surface.
[11] Feed-thru lug interior.
[12] Copper bus standard on 600 A interiors.
[13] For Door-in-door (hinged) trim see the Supplemental \& Obsolescence Digest, Section 4.
[14] 42 circuit MLO panelboard requires MH38 box, 54 circuit panelboard requires MH44 box.
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Class 1630 / Refer to Catalog 1630CT0701
Table 13.21 NQOD Accessories ${ }^{[13.21]}$ (cont'd.)

| Description | Catalog No. | Schedule |
| :--- | :---: | :---: |
| $\bullet$ Handle padlock attachment - 1-pole | QO1PA | DE2E |
| $\bullet$ 2- and 3-pole | QO1PL | DE2E |
| $\bullet$ Combination handle tie and lock-off for three 1-pole (QO, QOB) | QO3HT | DE2E |
| Neutral or Ground Lugs: \#10 to \#2 Al or \#14 to \#4 Cu | QO70AN | DE2E |
| $\bullet \# 4$ to\#1/0 Al/Cu | Q1100AN | DE2E |
| $\bullet \# 1$ to \#4/0 AI/Cu | Q1150AN | DE2E |
| Endwalls for MH Boxes | 8011010501 | PE1A |
| $\bullet$ Blank | 8011010401 | PE1A |
| $\bullet$ With Knockouts | 2322000003 | PE1A |
| Elevating Nuts (4 required) |  |  |

## NQOD 20-inch Wide Main Circuit Breaker Interiors and Adapter Kits

Table 13.22: Main Circuit Breaker Interiors-Accepts plug-on and bolt-on circuit breakers

| Max. <br> No. of One-pole QO $^{\text {m }} / \mathrm{QOB}$ Circuit Breakers | Mains <br> Rating | Main Circuit Breaker Adapter Kit | Interior Only(Order BranchCircuit Breakers Separately) | Type 1 Enclosure |  | Types 3R, 5, 12 Enclosures [15] |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \text { Box } \\ 20 " W \text { x } \\ 5.75^{\prime \prime D}[16] \\ \hline \end{gathered}$ | Mono-Flat ${ }^{\text {TM }}$ Front [16] | $\begin{aligned} & \text { Enclosure } \\ & 20^{\prime \prime} \mathrm{W} \times 6.5^{\prime \prime \mathrm{D}} \end{aligned}$ | Height (In.) |
|  |  | Catalog No. | Catalog No. [17] | Catalog No. | Catalog No. | Catalog No. |  |
| 20" Wide Cabinet-Single Phase 3-Wire |  |  |  |  |  |  |  |
| 20 | 100 | Factory Installed <br> Backfed QOB Main Circuit Breaker | NQOD20M100CU | MH26 | MHC26 ( ) | MH26WP | 26 |
| 30 | 225 | NQODQB or NQODJK | NQOD30L225CU | MH44 | MHC44 ( ) | MH44WP | 44 |
| 42 |  |  | NQOD42L225CU | MH50 | MHC50 ( ) | MH50WP | 50 |
| 42 |  |  | NQOD42L225CUTF[18] | MH56 | MHC56 ( ) | MH56WP | 56 |
| 54 |  |  | NQOD54L225CU | MH56 | MHC56 ( ) | MH56WP | 56 |
| 30 | 400 | NQOD4 | NQOD30L400CU | MH65 | MHC65V ( ) | MH65WP | 65 |
| 42 |  |  | NQOD42L400CU | MH68 | MHC68V ( ) | MH68WP | 68 |
| 42 |  |  | NQOD42L600TFL[18] | MH77 | MHC77V ( ) | MH77WP | 77 |
| 54 |  |  | NQOD54L400CU | MH74 | MHC74V ( ) | MH74WP | 74 |
| 20" Wide Cabinet-Three Phase 4-Wire |  |  |  |  |  |  |  |
| 24 | 100 | Factory Installed Backfed QOB Main Circuit Breaker | NQOD424M100CU | MH26 | MHC26 ( ) | MH26WP | 26 |
| 30 |  |  | NQOD430M100CU | MH29 | MHC29 ( ) | MH29WP | 29 |
| 30 | 225 | NQODQB or NQODJK | NQOD430L225CU | MH44 | MHC44 ( ) | MH44WP | 44 |
| 42 |  |  | NQOD442L225CU | MH50 | MHC50 ( ) | MH50WP | 50 |
| 42 |  |  | NQOD442L225CUTF[18] | MH56 | MHC56 ( ) | MH56WP | 56 |
| 54 |  |  | NQOD454L225CU | MH56 | MHC56 ( ) | MH56WP | 56 |
| 30 | 400 | NQOD4 | NQOD430L400CU | MH65 | MHC65V ( ) | MH65WP | 65 |
| 42 |  |  | NQOD442L400CU | MH68 | MHC68V ( ) | MH68WP | 68 |
| 42 |  |  | NQOD442L600TFL[18] | MH77 | MHC77V ( ) | MH77WP | 77 |
| 54 |  |  | NQOD454L400CU | MH74 | MHC74V ( ) | MH74WP | 74 |

Table 13.23: Main Circuit Breaker Adapter Kits (Less Circuit Breaker)

| Amperes | Catalog Number | Circuit |
| :---: | :---: | :---: |
| Breaker Frame[19] |  |  |

NQOD 14-inch Wide Main Lug and Circuit Breaker Interiors
Table 13.24: Main Lug Interiors-Accepts plug-on and bolt-on circuit breakers

| Max.No. ofSinglePoleQOTMQOBBCircuitBreakers | Mains Rating | Interior Only (Order Branch Circuit Breakers Separately) | Type 1 Enclosure |  | Types 3R, 5, 12 Enclosures |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { Box } \\ 14 \mathrm{in} . \mathrm{W} \times 5.75 \mathrm{in} . \mathrm{D} \\ {[20]} \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Mono-Flat }{ }^{\text {MM }} \text { Front [21] } \end{aligned}$ | Enclosure 20 in. W x 6.5 in. D | Height (In.) |
|  |  | Catalog No. [22] | Catalog No. | Catalog No. | Catalog No. |  |
| 14-inch Wide Cabinet-Single Phase 3-Wire |  |  |  |  |  |  |
| 12 | 100 | NQOD12L100CU | NQB520 | NQC20 ( ) | Use 20-inch Wide Enclosure for Types 3R, 5, 12 | 20 |
| 20 |  | NQOD20L100CU | NQB523 | NQC23() |  | 23 |
| 30 | 225 | NQOD30L225CU | NQB532 | NQC32() | Use 20-inch Wide Enclosure for Types 3R, 5, 12 | 32 |
| 42 |  | NQOD42L225CU | NQB535 | NQC35() |  | 35 |
| 54 |  | NQOD54L225CU | NQB541 | NQC41 () |  | 41 |
| 14-inch Wide Cabinet-Three Phase 4-Wire |  |  |  |  |  |  |
| 12 | 100 | NQOD412L100CU | NQB520 | NQC20 ( ) | Use 20-inch Wide Enclosure for Types 3R, 5, 12 | 20 |
| 24 |  | NQOD424L100CU | NQB523 | NQC23() |  | 23 |

[15] Enclosure includes trim kit.
[16] Embossed mounting holes add a 0.25 inch standoff to back of MH box.
[17] "CU" suffix indicates copper bussing. NQOD RTI interiors with aluminum bus are no longer available. Order the copper bussed equivalent with a "CU" suffix when ordering a replacement interior.
[18] Feed-thru lug interior.
[19] Circuit breaker interrupting ratings, see tables starting on DigestThe PowerPact Advantage, page
[20] 14 -inch wide cabinets accept 100 A max. branch circuit breakers.
[21] Add "F" for flush, "S" for surface.
[22] "CU" suffix indicates copper bussing. NQOD RTI interiors with aluminum bus are no longer available. Order the copper bussed equivalent with a "CU" suffix when ordering a replacement interior.

For Non-Linear Loads (200\% Rated Neutral) NQOD Lighting and Appliance Panelboards Class 1630 / Refer to Catalog 1630CT0701
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Table 13.24 Main Lug Interiors—Accepts plug-on and bolt-on circuit breakers (cont'd.)

| Max.No. ofSinglePoleQOCircuitBreakers | Mains Rating | Interior Only (Order Branch Circuit Breakers Separately) | Type 1 Enclosure |  | Types 3R, 5, 12 Enclosures |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { Box } \\ 14 \text { in. } \mathrm{W} \times 5.75 \mathrm{in} . \mathrm{D} \\ {[20]} \\ \hline \end{gathered}$ | $\begin{gathered} \text { Mono-Flat }{ }^{\text {TM }} \\ \text { Front [21] } \end{gathered}$ | Enclosure $20 \text { in. W x } 6.5 \text { in. D }$ | Height (In.) |
|  |  | Catalog No. [22] | Catalog No. | Catalog No. | Catalog No. |  |
| 30 |  | NQOD430L100CU | NQB526 | NQC26 ( ) |  | 26 |
| 30 | 225 | NQOD430L225CU | NQB532 | NQC32 ( ) | Use 20-inch Wide Enclosure for Types 3R, 5, 12 | 32 |
| 42 |  | NQOD442L225CU | NQB535 | NQC35 ( ) |  | 35 |
| 54 |  | NQOD454L225CU | NQB541 | NQC41 ( ) |  | 41 |

Table 13.25: Main Circuit Breaker Interiors—Accepts Plug-On and Bolt-On Circuit Breakers

| Max. No. of One Pole QO QOB Circuit Breakers | Mains Rating | Main Circuit Breaker Adapter Kit | Interior Only <br> (Order Branch Circuit <br> Breakers Separately) | Type 1 Enclosure |  | Types 3R, 5, 12 Enclosure |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { Box } \\ & 14 \mathrm{in} . \\ & \text { W x } 5.75 \mathrm{in} . \\ & \mathrm{D}[20] \end{aligned}$ | Mono-Flat <br> Front [21] | Enclosure $20 \text { in. } W \times 6.5 \text { in. } D$ | Height |
|  |  | Catalog No. | Catalog No. [22] | Catalog No. | Catalog No. | Catalog No. |  |
| 14-inch Wide Cabinet-Single Phase 3-Wire |  |  |  |  |  |  |  |
| 12 | 100 | Factory Installed QOB <br> Main Circuit Breaker | NQOD12M100CU | NQB523 | NQC23 ( ) | Use 20-inch Wide Enclosure for Types 3R, 5, 12 | 23 |
| 20 |  |  | NQOD20M100CU | NQB526 | NQC26 ( ) |  | 26 |
| 30 | 225 | NQODJK or NQODQB | NQOD30L225CU | NQB544 | NQC44 ( ) | Use 20-inch Wide Enclosure for Types 3R, 5, 12 | 44 |
| 42 |  |  | NQOD42L225CU | NQB550 | NQC50 ( ) |  | 50 |
| 54 |  |  | NQOD54L225CU | NQB556 | NQC56 ( ) |  | 56 |
| 14-inch Wide Cabinet-Three Phase 4-Wire |  |  |  |  |  |  |  |
| 12 | 100 | Factory Installed QOB <br> Main Circuit Breaker | NQOD412M100CU | NQB523 | NQC23 ( ) | Use 20-inch Wide Enclosure for Types 3R, 5, 12 | 23 |
| 24 |  |  | NQOD424M100CU | NQB526 | NQC26 ( ) |  | 26 |
| 30 |  |  | NQOD430M100CU | NQB529 | NQC29 ( ) |  | 29 |
| 30 | 225 | NQODJK or NQODQB | NQOD430L225CU | NQB544 | NQC44 () | Use 20-inch Wide Enclosure for Types 3R, 5, 12 | 44 |
| 42 |  |  | NQOD442L225CU | NQB550 | NQC50 ( ) |  | 50 |
| 54 |  |  | NQOD454L225CU | NQB556 | NQC56 ( ) |  | 56 |

Table 13.26: Main Circuit Breaker Adapter Kits (Less Circuit Breaker)

| Amperes | Catalog No. | Circuit <br> Breaker Frame [23] |
| :---: | :---: | :---: |
| 225 | NQODQB | QBL, QDL, QGL, QJL |
| 225 | NQODJK | JDL, JGL, JJL, JLL, KIL |

For Non-Linear Loads (200\% Rated Neutral)
Table 13.27: Main Lug Interiors-Accepts plug-on and bolt-on circuit breakers

| Max. No. of Single Pole QOIQOB Circuit Breakers | Mains Rating | Main Lugs Interior Only <br> (Order Branch Circuit Breakers Separately) | Type 1 Enclosure |  | Types 3R, 5, 12 Enclosures [24] |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{array}{r} \text { Box } 20^{\prime \prime W} \mathrm{~W} \\ 5.75^{\prime \mathrm{D}}[25] \\ \hline \end{array}$ | $\begin{aligned} & \hline \text { MONO-FLAT® Front } \\ & {[26]} \\ & \hline \end{aligned}$ | Enclosure $20^{\circ} \mathrm{W} \times 6.5^{\prime \prime} \mathrm{D}$ | Height (In.) |
|  |  | Catalog No. [27] | Catalog No. | Catalog No. | Catalog No. |  |
| 20" Wide Cabinet-3 Phase 4-Wire |  |  |  |  |  |  |
| 30 | 100 | NQOD430L100CUNL | MH29 | MHC29 () | MH29WP | 29 |
| 42 | 225 | NQOD442L225CUNL | MH38 | MHC38 () | MH38WP | 38 |
| 42 | 400 | NQOD442L400CUNL | MH53 | MHC53V () | MH53WP | 53 |

[20] 14-inch wide cabinets accept 100 A max. branch circuit breakers.
[21] Add "F" for flush, "S" for surface.
[22] "CU" suffix indicates copper bussing. NQOD RTI interiors with aluminum bus are no longer available. Order the copper bussed equivalent with a "CU" suffix when ordering a replacement interior.
[23] Circuit breaker interrupting ratings,on Digest The PowerPact Advantage, page
[24] Enclosure includes trim kit.
[25] Embossed mounting holes add a 0.25 inch standoff to back of MH box.
[26] Add "F" for flush, "S" for surface.
[27] "CU" suffix indicates copper bussing. NQOD RTI interiors with aluminum bus are no longer available. Order the copper bussed equivalent with a "CU" suffix when ordering a replacement interior.

|  | Mains Rating | Main Circuit Breaker Adapter Kit [28] | Main Lugs Interior Only (Order Branch Circuit Breakers Separately) | Type 1 Enclosure |  | Types 3R, 5, 12 Enclosures [29] |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of <br> Single Pole QO/QOB |  |  |  | $\begin{gathered} \text { Box } \\ \hline 20 \mathrm{~W} \times 5.75 \mathrm{D} \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \text { MONO-FLAT } \\ & \text { Front [30] } \\ & \hline \end{aligned}$ | $\begin{gathered} \text { Enclosure } \\ 20^{\prime \prime} \mathrm{W} \times 6.5^{\circ " \mathrm{D}} \end{gathered}$ | Height (In.) |
| Circuit Breakers |  | Catalog No. | Catalog No. [31] | Catalog No. | Catalog No. | Catalog No. |  |
| 20" Wide Cabinet-3 Phase 4-Wire |  |  |  |  |  |  |  |
| 30 | 100 | QOB Main Circuit Breaker | NQOD430M100CUNL | MH32 | MHC32 () | MH32WP | 32 |
| 42 | 225 | $\begin{aligned} & \text { NQODJK } \\ & \text { NQODQB } \\ & \hline \end{aligned}$ | NQOD442L225CUNL | MH50 | MHC50 () | MH50WP | 50 |
| 42 | 400 | NQOD4 | NQOD442L400CUNL | MH68 | MHC68V ( ) | MH68WP | 68 |

Table 13.29: Main Circuit Breaker Adapter Kits (Less Circuit Breaker)[28]

| Amperes | Catalog Number | Circuit Breaker Frame [32] |
| :---: | :---: | :---: |
| 225 | NQODQB | QBL, QDL, QGL, QJL |
| 225 | NQODJK | JDL, JGL, JJL, JLL, KIL |
| 400 | NQOD4 | LAL, LHL |

Table 13.30: NQOD Main Neutral Conductors-Required Size and Quantity [33]

| Panelboard Ampacity | Neutral Conductors Required/34] | Actual Lug Wire Range |
| :---: | :--- | :--- |
| $100 / 125$ | (2) $1 / 0 \mathrm{Cu}$ or Al | (2) \#4-300 kcmil |
| 225 | (2) $4 / 0 \mathrm{Cu}$ or (2) 300 kcmil Al | (2) \#4-300 kcmil |
| 400 | $(4) 3 / 0 \mathrm{Cu}$ or |  |
|  | $(4) 50 \mathrm{kcmil} \mathrm{Al}$ |  |
|  | $(2) 60 \mathrm{kcmil} \mathrm{Cu}$ |  |
| (2) 750 kcmil Al | (2) $1 / 0-300 \mathrm{kcmil}$ or |  |
|  | (1) 750 kcmil |  |

[28] Order main circuit breaker separately
29] Enclosure includes trim kit
30] Add "F" for flush, "S" for surface.
31] "CU" suffix indicates copper bussing. NQOD RTI interiors with aluminum bus are no longer available. Order the copper bussed equivalent with a "CU" suffix when ordering a replacement interior.
[32] Main neutral conductors must be copper or aluminum conductors of minimum size and quantity shown to maintain UL Listing Requirement is based on heat rise testing.
[33] Neutral conductors must be of size and quantity per table above.
[34] Main neutral conductors must be copper or aluminum conductors of minimum size and quantity shown to maintain UL Listing. Requirement is based on heat rise testing

## I-Line HCN

Table 13.31: Interiors, Boxes and Fronts

| Total Circuit Breaker Mounting Space (In.) | Mains Ampere Rating | Interior Assembly (Less Branch Circuit Breakers) <br> Catalog Number | Front [1] |  | Box [2] |  | Box Height (In.) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 4 Piece Trim Without Door | Trim With Door[3] | Type 1 | $\begin{gathered} \text { NEMA } \\ \text { 3R/5/12 [4] } \\ \text { (Includes Front) } \\ \hline \end{gathered}$ |  |
|  |  |  | Catalog Number | Catalog Number | Catalog Number | Catalog Number |  |
| HCN Main Lugs Only <br> 3-pole-Suitable for use as service equipment when |  |  | ain circuit break | HCN52T( )D |  |  |  |
| 27 | 225 A | HCN14522N | HCN52T( ) |  | HC2652B | HC2652WP | 52 |
|  | 400 A | HCN14524 |  |  |  |  |  |
|  | 600 A | HCN14526 |  |  |  |  |  |
| 45 | 225 A | HCN23652N | HCN65T( ) | HCN65T( )D | HC2665B | HC2665WP | 65 |
|  | 400 A | HCN23654 |  |  |  |  |  |
|  | 600 A | HCN23656 |  |  |  |  |  |
| 63 | 225 A | HCN32742N | HCN74T( ) | HCN74T( )D | HC2674B | HC2674WP | 74 |
|  | 400 A | HCN32744 |  |  |  |  |  |
|  | 600 A | HCN32746 |  |  |  |  |  |
| 81 | 225 A | HCN41832N | HCN83T( ) | HCN83T( )D | HC2683B | HC2683WP | 83 |
|  | 400 A | HCN41834 |  |  |  |  |  |
|  | 600 A | HCN41836 |  |  |  |  |  |
| 99 | 225 A | HCN50922N | HCN92T( ) | HCN92T( )D | HC2692B | HC2692WP | 92 |
|  | 400 A | HCN50924 |  |  |  |  |  |
|  | 600 A | HCN50926 |  |  |  |  |  |
| HCN Main Circuit Breaker [6] [7] Includes 3-pole, vertically mounted main circuit breaker-Suitable for use as service equipment |  |  |  |  |  |  |  |
| 27 | 400 A | HCN14654M | HCN65T( ) | HCN65T( )D | HC2665B | HC2665WP | 65 |
| 36 | 100 A | HCN18651MN |  |  |  |  |  |
|  | 225 A | HCN18652MN |  |  |  |  |  |
| 45 | 400 A | HCN23744M | HCN74T( ) | HCN74T( )D | HC2674B | HC2674WP | 74 |
| 54 | 100 A | HCN27741MN |  |  |  |  |  |
|  | 225 A | HCN27742MN |  |  |  |  |  |
| 63 | 225 A | HCN32832MN | HCN83T( ) | HCN83T( )D | HC2683B | HC2683WP | 83 |
|  | 400 A | HCN32834M |  |  |  |  |  |
| 81 | 400 A | HCN41924M | HCN92T( ) | HCN92T( )D | HC2692B | HC2692WP | 92 |
| 90 | 225 A | HCN45922MN |  |  |  |  |  |

[5] Suitable for use as service equipment if equipped with an integral main circuit breaker or when not more than six main disconnecting means are provided and the panelboard is not used as a lighting and appliance branch circuit panelboard.
[6] Bottom feed standard.
17] Circuit breaker interrupt ratings, starting on Digest The PowerPact Advantage, page

## 2 KI breakers

Table 13.32: K-frame-250 A, Thermal-magnetic, Current Limiting ( 600 Vac )

|  | Ampere Rating | AC Magnetic Trip Settings |  | Current Limiting | Terminal Wire Range |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Low | High | Catalog Number |  |
|  | 2-pole, $600 \mathrm{Vac}, 250 \mathrm{Vdc}$ [1] |  |  |  |  |
|  | 110 A | 550 | 1100 | KI26110( ) | AL250KA one \#4 AWG350 kcmil Al or Cu |
|  | 125 A | 625 | 1250 | KI26125( ) |  |
|  | 150 A | 750 | 1500 | KI26150( ) |  |
|  | 175 A | 875 | 1750 | KI26175( ) |  |
|  | 200 A | 1000 | 2000 | KI26200( ) | AL250KI one \#1/0 AWG350 kcmil Al or Cu |
|  | 225 A | 1125 | 2250 | KI26225( ) |  |
|  | 250 A | 1250 | 2500 | KI26250( ) |  |
| - ${ }^{-}$ | 3-pole, $600 \mathrm{Vac}, 250 \mathrm{Vdc}$ |  |  |  |  |
|  | 110 A | 550 | 1100 | KI36110 | AL250KA one \#4 AWG350 kcmil Al or Cu |
| 3E8 | 125 A | 625 | 1250 | KI36125 |  |
|  | 150 A | 750 | 1500 | KI36150 |  |
| $0.00 .90$ | 175 A | 875 | 1750 | KI36175 |  |
|  | 200 A | 1000 | 2000 | KI36200 | AL250KI one \#1/0 AWG350 kcmil Al or Cu |
| KI362502- and 3-pole | 225 A | 1125 | 2250 | KI36225 |  |
| 4.5 in ( 114 mm ) <br> Mounting Height | 250 A | 1250 | 2500 | KI36250 |  |

2 LC, LI
Table 13.33: L-frame-600 A, Thermal-magnetic ( $\mathbf{6 0 0} \mathbf{~ V a c )}{ }_{[2]}$


| Ampere Rating | AC Magnetic Trip Settings |  | Extra High Interrupting | Current Limiting | Terminal Wire Range |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Low | High | Catalog Number | Catalog Number |  |
| 2-pole, 600 Vac[3] |  |  |  |  |  |
| 300 A | 1500 | 3200 | LC26300( ) | LI26300( ) | AL600LI5 <br> two \#4/0 AWG-500 kcmil AL or Cu |
| 350 A | 1750 |  | LC26350( ) | LI26350( ) |  |
| 400 A | 2000 |  | LC26400( ) | LI26400( ) |  |
| 450 A | 2250 | 4200 | LC26450( ) | LI26450( ) |  |
| 500 A | 2500 |  | LC26500( ) | LI26500( ) |  |
| 600 A | 3000 |  | LC26600( ) | LI26600( ) |  |
| 3-pole, 600 Vac |  |  |  |  |  |
| 300 A | 1500 | 3200 | LC36300 | LI36300 | AL600LI5 <br> two \#4/0 AWG-500 kcmil <br> AL or Cu |
| 350 A | 1750 |  | LC36350 | LI36350 |  |
| 400 A | 2000 |  | LC36400 | LI36400 |  |
| 450 A | 2250 | 4200 | LC36450 | LI36450 |  |
| 500 A | 2500 |  | LC36500 | LI36500 |  |
| 600 A | 3000 |  | LC36600 | LI36600 |  |

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[^0]:    [1] 2-pole circuit breaker catalog numbers are completed by adding required phase connection letters as suffix to catalog number. See Digest Section 9
    [2] Type LC and LI circuit breakers are NOT recommended for use on single-motor branch circuits.
    [3] 2-pole circuit breaker catalog numbers are completed by adding required phase connection letters as suffix to catalog number. See Digest Section 9 .

