

Square D™ Load Center Short-Circuit Current Ratings

Retain for future use.

Introduction

This document defines fully-rated systems, two-tier series short circuit current protection and three-tier series short circuit current protection. It also addresses NEC® requirements and illustrates series rating labels currently provided with Square D™ multi-metering and load center equipment manufactured by Schneider Electric™. The location of series rating labels applied to Square D load centers is depicted on pages 2 and 3 of this document.

Fully Rated System

In a fully rated system, the interrupting rating of all the overcurrent protective devices must be greater than or equal to the available fault current at the line side terminals of each device.

Series Rated System

The NEC® and UL® permit assigning a short circuit current rating to a tested combination of circuit breakers or fuses that is higher than the individual rating of the downstream overcurrent protective device. Testing by the circuit breaker manufacturer demonstrates that the combination can safely interrupt the available fault current.

NEMA® defines a series rating as follows:

Series Rating—A short-circuit interrupting rating assigned to a combination of two or more overcurrent protective devices which are connected in a series and in which the rating of the downstream device(s) in the combination is less than the series rating.

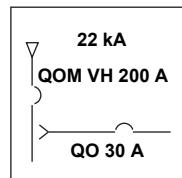
The combination of overcurrent protective devices may be enclosed in a single piece of equipment such as a load center. Three-tier series rated systems are most commonly designed with the supply side device in a separate enclosure, such as metering equipment, that feeds a load center.

NOTE: The load side device is always a circuit breaker. The supply side device may be either a circuit breaker or a set of current limiting fuses.

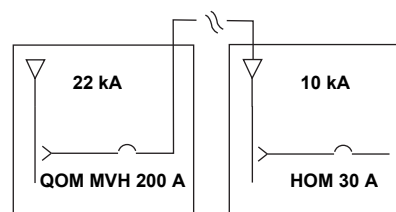
Two-Tier Series Rating

A two-tier series rating can be used within a single enclosure (Example 1) or in separate enclosures (Example 2).

Example 1: QO™ Main Circuit Breaker Load Center



Example 2: MP Meter-Pak™ Feeding Homeline™ Main Lug Load Center



Location of Two-Tier Series Ratings Label in Schneider Electric Equipment

The permitted NEC® and UL® series ratings are found marked in the equipment. Unless the equipment is marked, one cannot be assured the circuit breaker combination will perform appropriately in the enclosure. Schneider Electric marks two-tier series ratings on the inside wall of load centers (See Figure 1). The two-tier series rating labels applied to current production convertible main QO™ and fixed main Homeline™ load centers are depicted in Figures 2 and 5, respectively.

NOTE: The information contained in this data bulletin is current at time of printing; however, ratings may change or additional ratings may be added without notice. Refer to the series-connected ratings marked on the equipment.

Figure 1: Two-Tier Series Ratings Label Application

Two-tier series rating labels are applied to the side wall of current production QO™ and Homeline™ load centers.

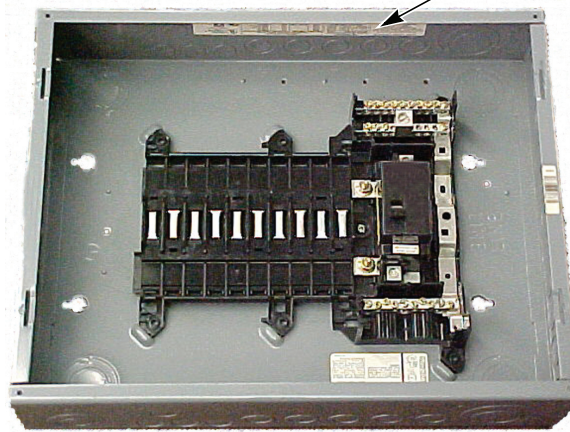


Figure 2: QO Two-Tier Series Ratings Labels for Convertible Main Load Centers




<p>QO™ LOAD CENTER See Panelboard interior for Catalog No. Box / Caja: BX321A Cover / Cubierta: QOC24US or / o QOC24UF Mains max. / Línea principal: 125A See main or service disconnect rating if installed. 240 V~ Max. 3Ø 50 / 60 Hz (UL) circuit max. 24 circuits. Use 415Y/240 V-, 3Ø - 4 wire/hilos (IEC) UI 2,000 volts 50 / 60 Hz (IEC) Type 1 (IP20) Enclosure / Gabinete Tipo 1 For 240 V~ - 3 Ph-3 W system, use only breakers rated 240 V. For 240/120 V-, 3 Ph - 4 W delta systems, "B" phase must be 208 V~ to neutral. Breaker poles connected to phase "B" must be rated 240 V~.</p>	<p>LUG TORQUE DATA SEE CIRCUIT BREAKERS AND FIELD INSTALLED UNITS FOR WIRE RANGE AND TORQUE.</p> <table border="1"> <thead> <tr> <th>Lug Type</th> <th>Wire Range (AWG/kcmil)</th> <th>Torque lb-in</th> </tr> </thead> <tbody> <tr> <td>Line Neutral Lug</td> <td>4 - 2/0 CU/AL</td> <td>50</td> </tr> <tr> <td>Main Lugs</td> <td>6 - 2/0 CU/AL</td> <td>50</td> </tr> <tr> <td>Alternate Main Breaker</td> <td>See Main Breaker</td> <td>See Main Breaker</td> </tr> </tbody> </table>		Lug Type	Wire Range (AWG/kcmil)	Torque lb-in	Line Neutral Lug	4 - 2/0 CU/AL	50	Main Lugs	6 - 2/0 CU/AL	50	Alternate Main Breaker	See Main Breaker	See Main Breaker	<p>SHORT CIRCUIT CURRENT RATING</p> <table border="1"> <thead> <tr> <th>RMS Symmetrical Amperes x 1000 @ 1/2" Max. F 3 @ 240</th> <th>Integral or Remote Main / Catalog Designation or Fuse Class (Max. A)</th> <th>Branch Circuit Breaker Catalog Designation (Max. A)</th> </tr> </thead> <tbody> <tr> <td>10 @ 240</td> <td>QO - VH (100)</td> <td>QO - H QO (125), QO - H QO - VH (125)† QO (100)•</td> </tr> <tr> <td>22 @ 240</td> <td>QO - VH (100)</td> <td>QH QO (125)•</td> </tr> <tr> <td>65 @ 240</td> <td>QD (125)</td> <td>1 pole QO - 2 pole QO (125)• 3 pole QO (30)•</td> </tr> <tr> <td>100 @ 240</td> <td>QJ (125)</td> <td>3 pole QO-VH (100)† QOXD (100) QO - VS (63)</td> </tr> <tr> <td>100 @ 240</td> <td>T3 (125), T6 (125), J (125)</td> <td></td> </tr> <tr> <td>25 @ 240</td> <td>QD (125)</td> <td></td> </tr> <tr> <td>65 @ 240</td> <td>QO (125)</td> <td></td> </tr> <tr> <td>100 @ 208Y/120</td> <td>QJ (125)</td> <td></td> </tr> <tr> <td>3 (4.5 peak) @ 415Y/240</td> <td></td> <td></td> </tr> <tr> <td>10 (17 peak) @ 415Y/240</td> <td></td> <td></td> </tr> </tbody> </table>		RMS Symmetrical Amperes x 1000 @ 1/2" Max. F 3 @ 240	Integral or Remote Main / Catalog Designation or Fuse Class (Max. A)	Branch Circuit Breaker Catalog Designation (Max. A)	10 @ 240	QO - VH (100)	QO - H QO (125), QO - H QO - VH (125)† QO (100)•	22 @ 240	QO - VH (100)	QH QO (125)•	65 @ 240	QD (125)	1 pole QO - 2 pole QO (125)• 3 pole QO (30)•	100 @ 240	QJ (125)	3 pole QO-VH (100)† QOXD (100) QO - VS (63)	100 @ 240	T3 (125), T6 (125), J (125)		25 @ 240	QD (125)		65 @ 240	QO (125)		100 @ 208Y/120	QJ (125)		3 (4.5 peak) @ 415Y/240			10 (17 peak) @ 415Y/240		
	Lug Type	Wire Range (AWG/kcmil)	Torque lb-in																																														
	Line Neutral Lug	4 - 2/0 CU/AL	50																																														
	Main Lugs	6 - 2/0 CU/AL	50																																														
Alternate Main Breaker	See Main Breaker	See Main Breaker																																															
RMS Symmetrical Amperes x 1000 @ 1/2" Max. F 3 @ 240	Integral or Remote Main / Catalog Designation or Fuse Class (Max. A)	Branch Circuit Breaker Catalog Designation (Max. A)																																															
10 @ 240	QO - VH (100)	QO - H QO (125), QO - H QO - VH (125)† QO (100)•																																															
22 @ 240	QO - VH (100)	QH QO (125)•																																															
65 @ 240	QD (125)	1 pole QO - 2 pole QO (125)• 3 pole QO (30)•																																															
100 @ 240	QJ (125)	3 pole QO-VH (100)† QOXD (100) QO - VS (63)																																															
100 @ 240	T3 (125), T6 (125), J (125)																																																
25 @ 240	QD (125)																																																
65 @ 240	QO (125)																																																
100 @ 208Y/120	QJ (125)																																																
3 (4.5 peak) @ 415Y/240																																																	
10 (17 peak) @ 415Y/240																																																	
<p>BRANCH NEUTRAL AND EQUIPMENT GROUND BAR</p> <table border="1"> <thead> <tr> <th rowspan="2">Wire Range (AWG)</th> <th colspan="2">TORQUE (lb-in)</th> <th rowspan="2">Bar with 1 screw size</th> </tr> <tr> <th>BAR WITH 2 SCREW SIZES</th> <th>SMALL</th> </tr> </thead> <tbody> <tr> <td>1/0 - 3 CU / AL</td> <td>50</td> <td>---</td> <td>---</td> </tr> <tr> <td>4 CU / AL</td> <td>45</td> <td>---</td> <td>35</td> </tr> <tr> <td>6 CU / AL</td> <td>45</td> <td>25</td> <td>35</td> </tr> <tr> <td>8 CU / AL</td> <td>40</td> <td>10</td> <td>25</td> </tr> <tr> <td>10-14 CU, 10-12 AL</td> <td>35</td> <td>10</td> <td>20</td> </tr> </tbody> </table>				Wire Range (AWG)	TORQUE (lb-in)		Bar with 1 screw size	BAR WITH 2 SCREW SIZES	SMALL	1/0 - 3 CU / AL	50	---	---	4 CU / AL	45	---	35	6 CU / AL	45	25	35	8 CU / AL	40	10	25	10-14 CU, 10-12 AL	35	10	20																				
Wire Range (AWG)	TORQUE (lb-in)		Bar with 1 screw size																																														
	BAR WITH 2 SCREW SIZES	SMALL																																															
1/0 - 3 CU / AL	50	---	---																																														
4 CU / AL	45	---	35																																														
6 CU / AL	45	25	35																																														
8 CU / AL	40	10	25																																														
10-14 CU, 10-12 AL	35	10	20																																														
<p>EQUIPMENT GROUND COMBINATIONS</p> <table border="1"> <thead> <tr> <th>Wire Range (AWG)</th> <th>Bar with 2 screw sizes</th> <th>Bar with 1 screw size</th> </tr> </thead> <tbody> <tr> <td>(2) 1/0 CU</td> <td>35</td> <td>10</td> </tr> <tr> <td>(2) 1/2 CU / AL</td> <td>35</td> <td>10</td> </tr> <tr> <td>(2) 10 AL</td> <td>35</td> <td>---</td> </tr> </tbody> </table>				Wire Range (AWG)	Bar with 2 screw sizes	Bar with 1 screw size	(2) 1/0 CU	35	10	(2) 1/2 CU / AL	35	10	(2) 10 AL	35	---																																		
Wire Range (AWG)	Bar with 2 screw sizes	Bar with 1 screw size																																															
(2) 1/0 CU	35	10																																															
(2) 1/2 CU / AL	35	10																																															
(2) 10 AL	35	---																																															
<p>SEE CIRCUIT BREAKER FOR VOLTAGE AND INTERRUPTING RATING. The rating is equal to the lowest interrupting rating of any circuit breaker for individual ratings. Additional or replacement branch or main circuit breaker, or service disconnect MUST have an interrupting rating equal to or greater than that of the circuit breaker with the lowest interrupting rating presently installed. See panelboard interior for circuit breaker types.</p>																																																	

Three-Phase QO Load Centers 125 A Max.

<p>QO™ LOAD CENTER See Panelboard interior for Catalog No. Box / Caja Cat. No. BX21D Use Cover Catalog No. Utilice la Cubierta No. de Catalogo: QOC24US or / o QOC24UF Mains 125A max. / Línea principal de 125A max. See main or service disconnect rating if installed. 50 - 60 Hz. 240 V~ Max. - 1 Phase/Fases (UL). Use 240 V~ - 1 Phase/Fases - 2 or 3 wire/hilos (IEC). UI 2,000 volts (IEC) 24 circuits / 24 circuitos max. Type 1 (IP20) Enclosure / Gabinete Tipo 1</p>	<p>LUG TORQUE DATA See circuit breakers and field installed units for wire binding screw torque.</p> <table border="1"> <thead> <tr> <th>Wire Range (AWG)</th> <th>Wire Range (AWG/kcmil)</th> <th>Torque (lb-in)</th> </tr> </thead> <tbody> <tr> <td>Line Neutral Lug</td> <td>4 - 2/0 CU / AL</td> <td>50</td> </tr> <tr> <td>Main Lugs</td> <td>6 - 2/0 CU / AL</td> <td>50</td> </tr> <tr> <td>Alternate Main Breaker</td> <td>See Main Breaker</td> <td>See Main Breaker</td> </tr> </tbody> </table>		Wire Range (AWG)	Wire Range (AWG/kcmil)	Torque (lb-in)	Line Neutral Lug	4 - 2/0 CU / AL	50	Main Lugs	6 - 2/0 CU / AL	50	Alternate Main Breaker	See Main Breaker	See Main Breaker	<p>SHORT CIRCUIT CURRENT RATING</p> <table border="1"> <thead> <tr> <th>RMS Symmetrical Amperes X 1000 @ 1/2" Max.</th> <th>Integral or Remote Main / Catalog Designation or Fuse Class (Max. A)</th> <th>Branch Circuit Breaker Catalog Designation (Max. A)</th> </tr> </thead> <tbody> <tr> <td>15 @ 240</td> <td>-----</td> <td>QO - H</td> </tr> <tr> <td>10 @ 240</td> <td>-----</td> <td>¥ QO (100) & QOT</td> </tr> <tr> <td>22 @ 240</td> <td>-----</td> <td>£ QO - VH (100), ¥ QO (100) & QOT</td> </tr> <tr> <td>25 @ 240</td> <td>QO-VH (125), QOM-VH (125)</td> <td>¥ QO (100) & QOT</td> </tr> <tr> <td>42 @ 240</td> <td>QOH (100)</td> <td>¥ QO (100) & QOT</td> </tr> <tr> <td>65 @ 240</td> <td>QOH</td> <td>QH ¥ QO (100) & QOT</td> </tr> <tr> <td>100 @ 240</td> <td>QO (125)</td> <td>¥ QO (100) & QOT</td> </tr> <tr> <td>100 @ 240</td> <td>QJ (125); T3 (125)</td> <td>¥ QO (100) & QOT</td> </tr> <tr> <td>3 (4.5 peak) @ 240</td> <td>-----</td> <td>QOXD (63)</td> </tr> </tbody> </table>		RMS Symmetrical Amperes X 1000 @ 1/2" Max.	Integral or Remote Main / Catalog Designation or Fuse Class (Max. A)	Branch Circuit Breaker Catalog Designation (Max. A)	15 @ 240	-----	QO - H	10 @ 240	-----	¥ QO (100) & QOT	22 @ 240	-----	£ QO - VH (100), ¥ QO (100) & QOT	25 @ 240	QO-VH (125), QOM-VH (125)	¥ QO (100) & QOT	42 @ 240	QOH (100)	¥ QO (100) & QOT	65 @ 240	QOH	QH ¥ QO (100) & QOT	100 @ 240	QO (125)	¥ QO (100) & QOT	100 @ 240	QJ (125); T3 (125)	¥ QO (100) & QOT	3 (4.5 peak) @ 240	-----	QOXD (63)
	Wire Range (AWG)	Wire Range (AWG/kcmil)	Torque (lb-in)																																											
	Line Neutral Lug	4 - 2/0 CU / AL	50																																											
	Main Lugs	6 - 2/0 CU / AL	50																																											
Alternate Main Breaker	See Main Breaker	See Main Breaker																																												
RMS Symmetrical Amperes X 1000 @ 1/2" Max.	Integral or Remote Main / Catalog Designation or Fuse Class (Max. A)	Branch Circuit Breaker Catalog Designation (Max. A)																																												
15 @ 240	-----	QO - H																																												
10 @ 240	-----	¥ QO (100) & QOT																																												
22 @ 240	-----	£ QO - VH (100), ¥ QO (100) & QOT																																												
25 @ 240	QO-VH (125), QOM-VH (125)	¥ QO (100) & QOT																																												
42 @ 240	QOH (100)	¥ QO (100) & QOT																																												
65 @ 240	QOH	QH ¥ QO (100) & QOT																																												
100 @ 240	QO (125)	¥ QO (100) & QOT																																												
100 @ 240	QJ (125); T3 (125)	¥ QO (100) & QOT																																												
3 (4.5 peak) @ 240	-----	QOXD (63)																																												
<p>BRANCH NEUTRAL and Equipment Ground Bar</p> <table border="1"> <thead> <tr> <th rowspan="2">Wire Range (AWG)</th> <th colspan="2">Torque (lb-in)</th> <th rowspan="2">Bar with 1 screw size</th> </tr> <tr> <th>Large</th> <th>Small</th> </tr> </thead> <tbody> <tr> <td>1/0-3 CU / AL</td> <td>50</td> <td>---</td> <td>---</td> </tr> <tr> <td>4-CU / AL</td> <td>Large 45</td> <td>Small 35</td> <td>35</td> </tr> <tr> <td>6-CU / AL</td> <td>Large 45</td> <td>Small 25</td> <td>35</td> </tr> <tr> <td>8-CU / AL</td> <td>Large 40</td> <td>Small 10</td> <td>25</td> </tr> <tr> <td>10-14-CU, 10-12-AL</td> <td>Large 35</td> <td>Small 10</td> <td>20</td> </tr> </tbody> </table>				Wire Range (AWG)	Torque (lb-in)		Bar with 1 screw size	Large	Small	1/0-3 CU / AL	50	---	---	4-CU / AL	Large 45	Small 35	35	6-CU / AL	Large 45	Small 25	35	8-CU / AL	Large 40	Small 10	25	10-14-CU, 10-12-AL	Large 35	Small 10	20																	
Wire Range (AWG)	Torque (lb-in)		Bar with 1 screw size																																											
	Large	Small																																												
1/0-3 CU / AL	50	---	---																																											
4-CU / AL	Large 45	Small 35	35																																											
6-CU / AL	Large 45	Small 25	35																																											
8-CU / AL	Large 40	Small 10	25																																											
10-14-CU, 10-12-AL	Large 35	Small 10	20																																											
<p>EQUIPMENT GROUND COMBINATIONS</p> <table border="1"> <thead> <tr> <th>Wire Range (AWG)</th> <th>Bar with 2 screw sizes</th> <th>Bar with 1 screw size</th> </tr> </thead> <tbody> <tr> <td>Two 1/4 or 1/2 CU, Two 12 AL</td> <td>35</td> <td>10</td> </tr> <tr> <td>Two 10 AL</td> <td>35</td> <td>---</td> </tr> </tbody> </table>				Wire Range (AWG)	Bar with 2 screw sizes	Bar with 1 screw size	Two 1/4 or 1/2 CU, Two 12 AL	35	10	Two 10 AL	35	---																																		
Wire Range (AWG)	Bar with 2 screw sizes	Bar with 1 screw size																																												
Two 1/4 or 1/2 CU, Two 12 AL	35	10																																												
Two 10 AL	35	---																																												
<p>SEE CIRCUIT BREAKER FOR VOLTAGE AND INTERRUPTING RATING. The rating is equal to the lowest interrupting rating of any circuit breaker for individual ratings. Additional or replacement branch or main circuit breaker, or service disconnect MUST have an interrupting rating equal to or greater than that of the circuit breaker with the lowest interrupting rating presently installed. See panelboard interior for circuit breaker types.</p>																																														

Single-Phase QO Load Centers 125 A Max.

Figure 2: (Continued) QO Two-Tier Series Ratings Labels for Convertible Main Load Centers

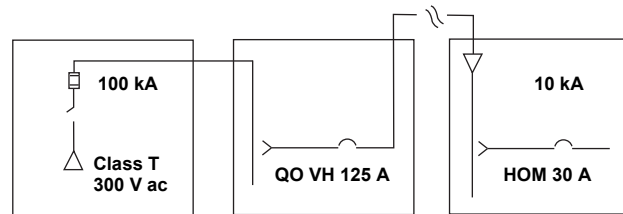
<p>QO™ LOAD CENTER See Panelboard Interior for Catalog No. Box / Caja Cat. No. BX38A Use Cover Catalog No. Utilice la Cubierta No. de Catalogo: QOC42US or/o QOC42UF Mains 225A max. / Línea principal de 225A max. See main or service disconnect rating if installed. 50 - 60 Hz. 240 V~ Max. - 1 Phase/Fases (UL). Ue 240 V~ - 1 Phase/Fases - 2 or 3 wire/hilos (IEC). Ui 2,000 volts (IEC) 42 circuits / 42 circuitos max. Type 1 (IP20) Enclosure / Gabinete Tipo 1</p>	<p>LUG TORQUE DATA See circuit breakers and field installed units for wire binding screw torque.</p> <table border="1"> <tr> <th>Wire Range (AWG/ kcmil)</th> <th>Torque (lb / in.)</th> </tr> <tr> <td>Main & Neutral Lugs 4 - 300 CU / AL</td> <td>250</td> </tr> <tr> <td>Service Ground 6 - 2/0 CU / AL</td> <td>50</td> </tr> <tr> <td>Alternate Main Breaker</td> <td>See Main Breaker</td> </tr> </table>		Wire Range (AWG/ kcmil)	Torque (lb / in.)	Main & Neutral Lugs 4 - 300 CU / AL	250	Service Ground 6 - 2/0 CU / AL	50	Alternate Main Breaker	See Main Breaker	<p>SHORT CIRCUIT CURRENT RATING</p> <table border="1"> <tr> <th>RMS Symmetrical Amperes X 1000 @ V~ Max.</th> <th>Integral or Remote Main / Catalog Designation or Fuse Class (Max. A)</th> <th>Branch Circuit Breaker Catalog Designation (Max. A)</th> </tr> <tr> <td>11 @ 240</td> <td>-----</td> <td>QO - H</td> </tr> <tr> <td>10 @ 240</td> <td>-----</td> <td>¥ QO & QOT</td> </tr> <tr> <td>22 @ 240</td> <td>-----</td> <td>£ QO - VH ,</td> </tr> <tr> <td></td> <td>QO - VH , QOM - VH</td> <td>¥ QO & QOT</td> </tr> <tr> <td>25 @ 240</td> <td>QD (225)</td> <td>¥ QO & QOT</td> </tr> <tr> <td>42 @ 240</td> <td>-----</td> <td>¥ QO (125) & QOT</td> </tr> <tr> <td></td> <td>QOH</td> <td>QOH</td> </tr> <tr> <td>65 @ 240</td> <td>-----</td> <td>QH</td> </tr> <tr> <td></td> <td>QG (225)</td> <td>¥ QO & QOT</td> </tr> <tr> <td>100 @ 240</td> <td>QJ (225); T3 (200)</td> <td>¥ QO & QOT</td> </tr> <tr> <td>3 (4.5 peak) @ 240</td> <td>-----</td> <td>QOXD (63)</td> </tr> </table>		RMS Symmetrical Amperes X 1000 @ V~ Max.	Integral or Remote Main / Catalog Designation or Fuse Class (Max. A)	Branch Circuit Breaker Catalog Designation (Max. A)	11 @ 240	-----	QO - H	10 @ 240	-----	¥ QO & QOT	22 @ 240	-----	£ QO - VH ,		QO - VH , QOM - VH	¥ QO & QOT	25 @ 240	QD (225)	¥ QO & QOT	42 @ 240	-----	¥ QO (125) & QOT		QOH	QOH	65 @ 240	-----	QH		QG (225)	¥ QO & QOT	100 @ 240	QJ (225); T3 (200)	¥ QO & QOT	3 (4.5 peak) @ 240	-----	QOXD (63)	<p>* See circuit breaker for voltage and interrupting rating. The rating is equal to the lowest interrupting rating of any circuit breaker installed. Refer to branch or main circuit breakers for individual ratings. Additional or replacement branch or main circuit breaker, or service disconnect MUST have an interrupting rating equal to or greater than that of the circuit breaker with the lowest interrupting rating presently installed. See panelboard interior for circuit breaker types.</p> <p>IEC 60439-1 </p> <p> LISTED ELECTRIC CABINET BOX V-2813</p> <p>For installation, repairs or alterations, Call an electrical contractor or electrician. Maximum continuous loads not to exceed 80% of the ampere rating of any over current device installed. Las cargas máximas continuas no deben exceder el 80% de la capacidad en A de cualquier equipo de sobrecorriente instalado.</p> <p>SQUARE D  Date Code 40272-350-01</p>
	Wire Range (AWG/ kcmil)	Torque (lb / in.)																																															
Main & Neutral Lugs 4 - 300 CU / AL	250																																																
Service Ground 6 - 2/0 CU / AL	50																																																
Alternate Main Breaker	See Main Breaker																																																
RMS Symmetrical Amperes X 1000 @ V~ Max.	Integral or Remote Main / Catalog Designation or Fuse Class (Max. A)	Branch Circuit Breaker Catalog Designation (Max. A)																																															
11 @ 240	-----	QO - H																																															
10 @ 240	-----	¥ QO & QOT																																															
22 @ 240	-----	£ QO - VH ,																																															
	QO - VH , QOM - VH	¥ QO & QOT																																															
25 @ 240	QD (225)	¥ QO & QOT																																															
42 @ 240	-----	¥ QO (125) & QOT																																															
	QOH	QOH																																															
65 @ 240	-----	QH																																															
	QG (225)	¥ QO & QOT																																															
100 @ 240	QJ (225); T3 (200)	¥ QO & QOT																																															
3 (4.5 peak) @ 240	-----	QOXD (63)																																															
<p>Branch Neutral and Equipment Ground Bar</p> <table border="1"> <tr> <th>Wire Range (AWG)</th> <th>Torque (in - lbs)</th> <th>Bar with 2 screw sizes</th> <th>Bar with 1 screw size</th> </tr> <tr> <td>1/8-3 CU / AL</td> <td>Large 50 Small ---</td> <td>---</td> <td>---</td> </tr> <tr> <td>4 CU / AL</td> <td>Large 45 Small ---</td> <td>---</td> <td>---</td> </tr> <tr> <td>6 CU / AL</td> <td>Large 45 Small 25</td> <td>---</td> <td>---</td> </tr> <tr> <td>8 CU / AL</td> <td>Large 40 Small 10</td> <td>---</td> <td>---</td> </tr> <tr> <td>10-14 CU, 10-12 AL</td> <td>Large 35 Small 10</td> <td>---</td> <td>---</td> </tr> </table> <p>Equipment Ground Combinations</p> <table border="1"> <tr> <td>Two 14 or 12 CU, Two 12 AL</td> <td>35</td> <td>10</td> <td>25</td> </tr> <tr> <td>Two 10 AL</td> <td>35</td> <td>---</td> <td>25</td> </tr> </table>		Wire Range (AWG)	Torque (in - lbs)	Bar with 2 screw sizes	Bar with 1 screw size	1/8-3 CU / AL	Large 50 Small ---	---	---	4 CU / AL	Large 45 Small ---	---	---	6 CU / AL	Large 45 Small 25	---	---	8 CU / AL	Large 40 Small 10	---	---	10-14 CU, 10-12 AL	Large 35 Small 10	---	---	Two 14 or 12 CU, Two 12 AL	35	10	25	Two 10 AL	35	---	25																
Wire Range (AWG)	Torque (in - lbs)	Bar with 2 screw sizes	Bar with 1 screw size																																														
1/8-3 CU / AL	Large 50 Small ---	---	---																																														
4 CU / AL	Large 45 Small ---	---	---																																														
6 CU / AL	Large 45 Small 25	---	---																																														
8 CU / AL	Large 40 Small 10	---	---																																														
10-14 CU, 10-12 AL	Large 35 Small 10	---	---																																														
Two 14 or 12 CU, Two 12 AL	35	10	25																																														
Two 10 AL	35	---	25																																														

Single-Phase QO Load Centers 150 A—225 A

Three-Tier Series Rating

A three-tier series rating consists of three levels of overcurrent protection devices (the furthest load side device being a circuit breaker). Per NEC® 240.86, this three-tier combination of overcurrent protection must be marked on the end use electrical equipment (load center). See Example 3.

Example 3: EZM™ Fusible Main Device feeding EZM Branch Device feeding Homeline Main Lug Load Center (100 kA Three-Tier Series Rating)

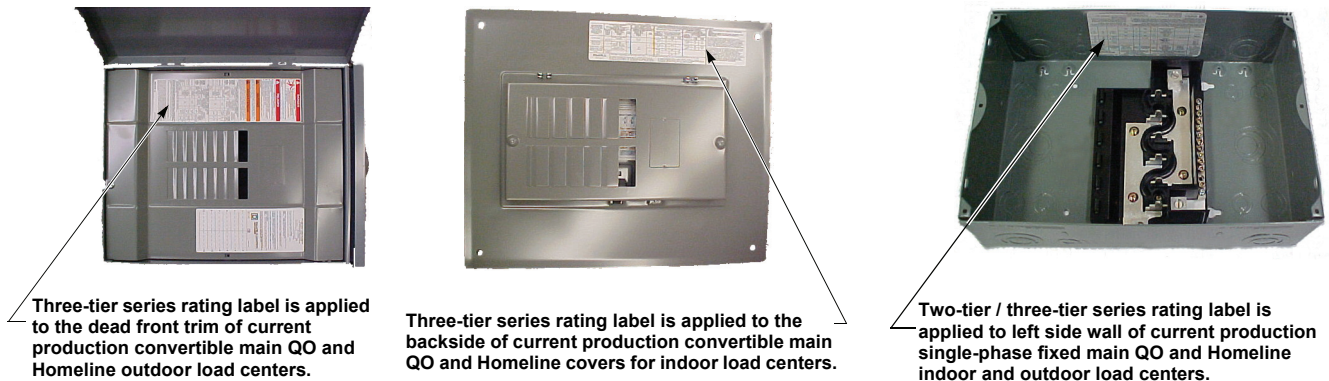


Location of Three-Tier Series Ratings in Square D Equipment

For convertible main load centers, three-tier series ratings labels are applied on the back side of indoor load center covers and on outdoor load center deadfronts (See Figure 3). The information contained on this three-tier series rating label is shown in Figure 4.

For single-phase fixed main indoor and outdoor load centers, two-tier and three-tier ratings are printed on the same label. This label is located on the left side wall (See Figure 3). The information contained on the series rating label for single-phase fixed main load centers is depicted in Figure 5.

Figure 3: Convertible Main Load Centers Label Locations



Three-tier series rating label is applied to the dead front trim of current production convertible main QO and Homeline outdoor load centers.

Three-tier series rating label is applied to the backside of current production convertible main QO and Homeline covers for indoor load centers.

Two-tier / three-tier series rating label is applied to left side wall of current production single-phase fixed main QO and Homeline indoor and outdoor load centers.

Figure 4: Three-Tier Series Ratings Label Applied to Convertible Main QO and Homeline Load Centers

SERIES COMBINATION SHORT CIRCUIT CURRENT RATING / VALORES NOMINALES DE LA CORRIENTE DE CORTOCIRCUITO EN SERIE											
Interrupting Rating RMS Symmetrical Amperes at V _{max} / Valor nominal de interrupción A simétricos rcm a V _{max}	Line Side SQUARE D Circuit Breaker Catalog Designation or Fuse Class / Clase de fusible o designación de catálogo de los interruptores automáticos SQUARE D del lado de línea (Max. A rating / Valor nominal máx. en A)	Poles / Polos	SQUARE D Tenant Circuit Breaker (Integral or Remoto) / Interruptor Automático del Usuario de SQUARE D (Integral o Remoto)		Integral Main Breaker / Interruptor Automático Principal	QO Load Center / Centro de Carga QO			HOMELINE Load Center / Centro de Carga HOMELINE		
			Catalog Designation (Max. A rating) / Designación de Catálogo (A Máx.)	Poles / Polos		Branch Breaker / Interruptor Automático Derivado	SQUARE D Circuit Breaker Catalog Designation / Designación de Catálogo de Interruptor Automático de SQUARE D		Branch Breaker / Interruptor Automático Derivado	Max. A Rating / Nominal A Máx.	
							1 Pole / 1 Polo	2 Poles / 2 Polos		3 Poles / 3 Polos	1 Pole / 1 Polo
42,000 at 240	LA, MA	2, 3	QO-VH (125)	2	QOM1-VH or NONE	QO ¥	70	100	HOM §	50	100
65,000 at 240	LH, MG, MJ, MH, PG, PJ, PA (1600), RG (2000), RJ (2000)	2, 3	QO-VH (125) or QOH	2		QO ¥	70	100	HOM §	50	100
100,000 at 240	MHF, Class R, J, T6, T3, L (1200)	2, 3			QOM2-VH or NONE	QO ¥	70	200 ‡	HOM §	50	200 ‡
42,000 at 240	LA, MA	2, 3	QD (225) or QG (225)	2		QO ¥	70	20	HOM §	30	50
65,000 at 240	LH, MG, MH, PG, PA (1600), RG (2000)	2, 3			QOM2-VH or NONE	QO ¥	70	200 ‡	HOM §	50	200 ‡
100,000 at 240, 2 pole	MJ, MHF, PJ, PH (1600), RJ (2000)	2, 3				QO ¥	70	125	30		
65,000 at 240, 3 pole						QO-VH					
100,000 at 208Y/120, 3 pole	Class R, J, T3, T6, L (1200)					QO-H		100			

Figure 5: Two- and Three-Tier Series Rating Label Applied to Fixed Main Homeline Load Centers

SHORT CIRCUIT CURRENT RATING / VALORES NOMINALES DE LA CORRIENTE DE CORTOCIRCUITO													
Interrupting Rating RMS Symmetrical Amperes at 120/240 Vac Max / Valor nominal de interrupción A simétricos rcm, 120/240 V (e) máx.	Line Side SQUARE D Circuit Breaker Catalog Designation or Fuse Class / Clase de fusible o designación de catálogo de los interruptores automáticos SQUARE D del lado de línea (Remoto solamente) (Max. A rating / Valor nominal máx. en A)	Poles / Polos	Tenant SQUARE D Circuit Breaker (Remote only) / Interruptor Automático del Usuario de SQUARE D (Remoto solamente)		Current Rating Amperes Max. / Corriente Nominal A Máx.	Catalog Designation (Max. A rating) / Designación de Catálogo (A Máx.)	Poles / Polos	Current Rating Amperes Max. / Corriente Nominal A Máx.	Catalog Designation (Max. A rating) / Designación de Catálogo (A Máx.)	Poles / Polos			
			Catalog Designation (Max. A rating) / Designación de Catálogo (A Máx.)	Poles / Polos							Current Rating Amperes Max. / Corriente Nominal A Máx.	Catalog Designation (Max. A rating) / Designación de Catálogo (A Máx.)	Poles / Polos
42,000	QO-VH (125)	2			HOM ¥	50	125 ¶						
65,000	QD (225)	2			HOMT	30	50						
42,000	QOH	2			HOMT	30	50						
42,000	LA, MA	2, 3			HOM ¥	50	100 ¶						
65,000	LH, MG, MJ, MH, PG, PJ, PA (1600), RG (2000), RJ (2000)	2, 3	QO-VH	2	125	HOMT	30	50					
100,000	MHF, Class R, J, T6, T3, L (1200)	2, 3											
42,000	LA, MA	2, 3	QD	2	225								
65,000	LH, MG, MJ, MH, PG, PA (1600), RG (2000)	2, 3	QD	2	225	HOMT	30	125 ¶					
100,000	MJ, MHF, PJ, PH (1600), RJ (2000), Class R, J, T3, T6, L (1200)	2, 3	QD	2	225	HOMT	30	50					

SHORT CIRCUIT CURRENT RATING / VALORES NOMINALES DE LA CORRIENTE DE CORTOCIRCUITO													
Interrupting Rating RMS Symmetrical Amperes at 120/240 Vac Max / Valor nominal de interrupción A simétricos rcm, 120/240 V (e) máx.	Line Side Fuse or SQUARE D Circuit Breaker Catalog Designation / Clase de Fusible o Designación de Catálogo (A Máx.)	Poles / Polos	Tenant SQUARE D Circuit Breaker (Remote only) / Interruptor Automático del Usuario de SQUARE D (Remoto solamente)		Current Rating Amperes Max. / Corriente Nominal A Máx.	Catalog Designation (Max. A rating) / Designación de Catálogo (A Máx.)	Poles / Polos	Current Rating Amperes Max. / Corriente Nominal A Máx.	Catalog Designation (Max. A rating) / Designación de Catálogo (A Máx.)	Poles / Polos			
			Catalog Designation (Max. A rating) / Designación de Catálogo (A Máx.)	Poles / Polos							Current Rating Amperes Max. / Corriente Nominal A Máx.	Catalog Designation (Max. A rating) / Designación de Catálogo (A Máx.)	Poles / Polos
42,000	QO-VH (125)	2			HOM ¥	50	125 ¶						
65,000	QD (225)	2			HOMT	30	50						
42,000	QOH	2			HOMT	30	50						
42,000	LA, MA	2, 3			HOM ¥	50	100 ¶						
65,000	LH, MG, MJ, MH, PG, PJ, PA (1600), RG (2000), RJ (2000)	2, 3	QO-VH or QOH	2	125	HOMT	30	50					
100,000	MHF	2, 3											
42,000	QD (225)	2			225								
65,000	LH, MG, MJ, MH, PG, PA (1600), RG (2000)	2, 3	QD	2	225	HOMT	30	125 ¶					
100,000	MJ, MHF, PJ, PH (1600), RJ (2000), Class R, J, T6, T3, L (1200)	2, 3	QD or QG	2	225	HOMT	30	50					

Applied to Fixed Main Homeline Load Centers

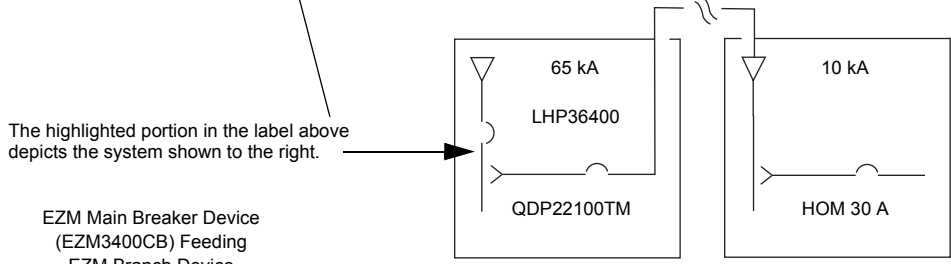
Applied to Single-Phase Fixed Main QO Load Centers

How to Read the Three-Tier Series Rating Label

Read the label from left to right. Select the appropriate short circuit current rating and then read across the row to select main disconnect, tenant circuit breaker and load center circuit breakers. See example below in Figure 6.

Figure 6: Selecting Short Circuit Current Rating

SERIES COMBINATION SHORT CIRCUIT CURRENT RATING / VALORES NOMINALES DE LA CORRIENTE DE CORTOCIRCUITO EN SERIE											
Interrupting Rating RMS Symmetrical Amperes at V _{max} / Valor nominal de interrupción A simétricos rcm a V _{max}	Line Side SQUARE D Circuit Breaker Catalog Designation or Fuse Class / Clase de fusible o designación de catálogo de los interruptores automáticos SQUARE D del lado de línea (Max. A rating / Valor nominal máx. en A)	Poles / Polos	SQUARE D Tenant Circuit Breaker (Integral or Remoto) / Interruptor Automático del Usuario de SQUARE D (Integral o Remoto)		Integral Main Breaker / Interruptor Automático Principal	QO Load Center / Centro de Carga QO			HOMELINE Load Center / Centro de Carga HOMELINE		
			Catalog Designation (Max. A rating) / Designación de Catálogo (A Máx.)	Poles / Polos		Branch Breaker / Interruptor Automático Derivado	SQUARE D Circuit Breaker Catalog Designation / Designación de Catálogo de Interruptor Automático de SQUARE D		Branch Breaker / Interruptor Automático Derivado	Max. A Rating / Nominal A Máx.	
							1 Pole / 1 Polo	2 Poles / 2 Polos		3 Poles / 3 Polos	1 Pole / 1 Polo
42,000 at 240	LA, MA	2, 3	QO-VH (125)	2	QOM1-VH or NONE	QO ¥	70	100	HOM §	50	100
65,000 at 240	LH, MG, MJ, MH, PG, PJ, PA (1600), RG (2000), RJ (2000)	2, 3	QO-VH (125) or QOH	2		QO ¥	70	100	HOMT	30	50
100,000 at 240	MHF, Class R, J, T6, T3, L (1200)	2, 3			QOM2-VH or NONE	QO ¥	70	200 ‡	HOM §	50	200 ‡
42,000 at 240	LA, MA	2, 3	QD (225) or QG (225)	2		QO ¥	70	20	HOMT	30	50
65,000 at 240	LH, MG, MJ, MH, PG, PA (1600), RG (2000)	2, 3			QOM2-VH or NONE	QO ¥	70	200 ‡	HOM §	50	200 ‡
100,000 at 240, 2 pole	MJ, MHF, PJ, PH (1600), RJ (2000)	2, 3				QO ¥	70	125	30		
65,000 at 240, 3 pole						QO-VH					
100,000 at 208Y/120, 3 pole	Class R, J, T3, T6, L (1200)					QO-H		100			



The highlighted portion in the label above depicts the system shown to the right.

EZM Main Breaker Device (EZM3400CB) Feeding EZM Branch Device (EZM312225)

The same series rating information is supplied on all convertible main QO™ and Homeline™ load centers covers. The figures below explain which portions of the label apply to the different types of end use equipment.

SERIES COMBINATION SHORT CIRCUIT CURRENT RATING / VALORES NOMINALES DE LA CORRIENTE DE CORTOCIRCUITO EN SERIE													
Interrupting Rating RMS Symmetrical Amperes at V_{-} Max. / Valor nominal de interrupción simétricos rcm a V_{-} máx.	Line Side SQUARE D Circuit Breaker Catalog Designation or Fuse Class / Clase de fusible o designación de catálogo de los interruptores automáticos SQUARE D del lado de línea (Max. A rating / Valor nominal máx. en A)	Poles / Polos	SQUARE D Tenant Circuit Breaker (Integral or Remoto) / Interruptor Automático del Usuario de SQUARE D (Integral o Remoto)		Integral Main Breaker / Interruptor Automático Principal Integral	QO Load Center / Centro de Carga QO			HOMELINE Load Center / Centro de Carga HOMELINE		* See circuit breaker for voltage and interrupting rating. / Consulte los datos del interruptor automático para obtener los valores nominales de tensión e interrupción. See box label for additional short circuit current ratings and restrictions. / Consulte la etiqueta de la caja para obtener información adicional sobre la corriente nominal de cortocircuito y restricciones. ‡ 100 A Max. in load centers with 125 A Max. mains rating. / 100 A máx. para centros de carga con valor nominal en la línea principal de 125 A máx. ¥ QO includes suffixes AFI, EPD, EPE, GFI & PL / QO incluye los sufijos AFI, EPD, EPE, GFI y PL § HOM includes suffixes AFI, BB, EPD & GFI / HOM incluye los sufijos AFI, BB, EPD y GFI		
			Catalog Designation (Max. A Rating) / Designación de Catálogo (A Máx.)	Poles / Polos		Branch Breaker / Interruptor Automático Derivado	Max. A Rating / Nominal A Máx.			Branch Breaker / Interruptor Automático Derivado		Max. A Rating / Nominal A Máx.	
							1 Pole / 1 Polo	2 Poles / 2 Polos	3 Poles / 3 Polos			1 Pole / 1 Polo	2 Poles / 2 Polos
42,000 at 240	LA, MA	2, 3	QO-VH (125)	2	QOM1-VH or NONE	QO ¥ QOT	70 20	100		HOM § HOMT	50 30	100 50	
65,000 at 240	LH, MG, MJ, MH, PG, PJ, PA (1600), RG (2000), RJ (2000)	2, 3	QO-VH (125) or QOH	2	QOM1-VH or NONE	QO ¥ QOT	70 20	100		HOM § HOMT	50 30	100 50	
100,000 at 240	MHF, Class R, J, T6, T3, L (1200)	2, 3	QO-VH (125) or QOH	2	QOM1-VH or NONE	QO ¥ QOT	70 20	100		HOM § HOMT	50 30	100 50	
42,000 at 240	LA, MA	2, 3	QD (225) or QG (225)	2	QOM2-VH or NONE	QO ¥ QOT	70 20	200 ‡		HOM § HOMT	50 30	200 ‡ 50	
65,000 at 240	LH, MG, MH, PG, PA (1600), RG (2000)	2, 3	QD (225) or QG (225)	2	QOM2-VH or NONE	QO ¥ QOT	70 20	200 ‡		HOM § HOMT	50 30	200 ‡ 50	
100,000 at 240, 2 pole 65,000 at 240, 3 pole 100,000 at 208Y/120, 3 pole	MJ, MHF, PJ, PH (1600), RJ (2000), Class R, J, T3, T6, L (1200)	2, 3	QD (225) or QG (225)	3	QOM2-VH or NONE	QO ¥ QO-VH QO-H	70 20 100	125 30 100		HOM § HOMT	50 30	200 ‡ 50	

For Three-Phase QO Load Centers

SERIES COMBINATION SHORT CIRCUIT CURRENT RATING / VALORES NOMINALES DE LA CORRIENTE DE CORTOCIRCUITO EN SERIE													
Interrupting Rating RMS Symmetrical Amperes at V_{-} Max. / Valor nominal de interrupción simétricos rcm a V_{-} máx.	Line Side SQUARE D Circuit Breaker Catalog Designation or Fuse Class / Clase de fusible o designación de catálogo de los interruptores automáticos SQUARE D del lado de línea (Max. A rating / Valor nominal máx. en A)	Poles / Polos	SQUARE D Tenant Circuit Breaker (Integral or Remoto) / Interruptor Automático del Usuario de SQUARE D (Integral o Remoto)		Integral Main Breaker / Interruptor Automático Principal Integral	QO Load Center / Centro de Carga QO			HOMELINE Load Center / Centro de Carga HOMELINE		* See circuit breaker for voltage and interrupting rating. / Consulte los datos del interruptor automático para obtener los valores nominales de tensión e interrupción. See box label for additional short circuit current ratings and restrictions. / Consulte la etiqueta de la caja para obtener información adicional sobre la corriente nominal de cortocircuito y restricciones. ‡ 100 A Max. in load centers with 125 A Max. mains rating. / 100 A máx. para centros de carga con valor nominal en la línea principal de 125 A máx. ¥ QO includes suffixes AFI, EPD, EPE, GFI & PL / QO incluye los sufijos AFI, EPD, EPE, GFI y PL § HOM includes suffixes AFI, BB, EPD & GFI / HOM incluye los sufijos AFI, BB, EPD y GFI		
			Catalog Designation (Max. A Rating) / Designación de Catálogo (A Máx.)	Poles / Polos		Branch Breaker / Interruptor Automático Derivado	Max. A Rating / Nominal A Máx.			Branch Breaker / Interruptor Automático Derivado		Max. A Rating / Nominal A Máx.	
							1 Pole / 1 Polo	2 Poles / 2 Polos	3 Poles / 3 Polos			1 Pole / 1 Polo	2 Poles / 2 Polos
42,000 at 240	LA, MA	2, 3	QO-VH (125)	2	QOM1-VH or NONE	QO ¥ QOT	70 20	100		HOM § HOMT	50 30	100 50	
65,000 at 240	LH, MG, MJ, MH, PG, PJ, PA (1600), RG (2000), RJ (2000)	2, 3	QO-VH (125) or QOH	2	QOM1-VH or NONE	QO ¥ QOT	70 20	100		HOM § HOMT	50 30	100 50	
100,000 at 240	MHF, Class R, J, T6, T3, L (1200)	2, 3	QO-VH (125) or QOH	2	QOM1-VH or NONE	QO ¥ QOT	70 20	100		HOM § HOMT	50 30	100 50	
42,000 at 240	LA, MA	2, 3	QD (225) or QG (225)	2	QOM2-VH or NONE	QO ¥ QOT	70 20	200 ‡		HOM § HOMT	50 30	200 ‡ 50	
65,000 at 240	LH, MG, MH, PG, PA (1600), RG (2000)	2, 3	QD (225) or QG (225)	2	QOM2-VH or NONE	QO ¥ QOT	70 20	200 ‡		HOM § HOMT	50 30	200 ‡ 50	
100,000 at 240, 2 pole 65,000 at 240, 3 pole 100,000 at 208Y/120, 3 pole	MJ, MHF, PJ, PH (1600), RJ (2000), Class R, J, T3, T6, L (1200)	2, 3	QD (225) or QG (225)	3	QOM2-VH or NONE	QO ¥ QO-VH QO-H	70 20 100	125 30 100		HOM § HOMT	50 30	200 ‡ 50	

For Single-Phase Convertible Main QO Load Centers Protected with QD or QG Tenant Circuit Breakers

SERIES COMBINATION SHORT CIRCUIT CURRENT RATING / VALORES NOMINALES DE LA CORRIENTE DE CORTOCIRCUITO EN SERIE													
Interrupting Rating RMS Symmetrical Amperes at V_{-} Max. / Valor nominal de interrupción simétricos rcm a V_{-} máx.	Line Side SQUARE D Circuit Breaker Catalog Designation or Fuse Class / Clase de fusible o designación de catálogo de los interruptores automáticos SQUARE D del lado de línea (Max. A rating / Valor nominal máx. en A)	Poles / Polos	SQUARE D Tenant Circuit Breaker (Integral or Remoto) / Interruptor Automático del Usuario de SQUARE D (Integral o Remoto)		Integral Main Breaker / Interruptor Automático Principal Integral	QO Load Center / Centro de Carga QO			HOMELINE Load Center / Centro de Carga HOMELINE		* See circuit breaker for voltage and interrupting rating. / Consulte los datos del interruptor automático para obtener los valores nominales de tensión e interrupción. See box label for additional short circuit current ratings and restrictions. / Consulte la etiqueta de la caja para obtener información adicional sobre la corriente nominal de cortocircuito y restricciones. ‡ 100 A Max. in load centers with 125 A Max. mains rating. / 100 A máx. para centros de carga con valor nominal en la línea principal de 125 A máx. ¥ QO includes suffixes AFI, EPD, EPE, GFI & PL / QO incluye los sufijos AFI, EPD, EPE, GFI y PL § HOM includes suffixes AFI, BB, EPD & GFI / HOM incluye los sufijos AFI, BB, EPD y GFI		
			Catalog Designation (Max. A Rating) / Designación de Catálogo (A Máx.)	Poles / Polos		Branch Breaker / Interruptor Automático Derivado	Max. A Rating / Nominal A Máx.			Branch Breaker / Interruptor Automático Derivado		Max. A Rating / Nominal A Máx.	
							1 Pole / 1 Polo	2 Poles / 2 Polos	3 Poles / 3 Polos			1 Pole / 1 Polo	2 Poles / 2 Polos
42,000 at 240	LA, MA	2, 3	QO-VH (125)	2	QOM1-VH or NONE	QO ¥ QOT	70 20	100		HOM § HOMT	50 30	100 50	
65,000 at 240	LH, MG, MJ, MH, PG, PJ, PA (1600), RG (2000), RJ (2000)	2, 3	QO-VH (125) or QOH	2	QOM1-VH or NONE	QO ¥ QOT	70 20	100		HOM § HOMT	50 30	100 50	
100,000 at 240	MHF, Class R, J, T6, T3, L (1200)	2, 3	QO-VH (125) or QOH	2	QOM1-VH or NONE	QO ¥ QOT	70 20	100		HOM § HOMT	50 30	100 50	
42,000 at 240	LA, MA	2, 3	QD (225) or QG (225)	2	QOM2-VH or NONE	QO ¥ QOT	70 20	200 ‡		HOM § HOMT	50 30	200 ‡ 50	
65,000 at 240	LH, MG, MH, PG, PA (1600), RG (2000)	2, 3	QD (225) or QG (225)	2	QOM2-VH or NONE	QO ¥ QOT	70 20	200 ‡		HOM § HOMT	50 30	200 ‡ 50	
100,000 at 240, 2 pole 65,000 at 240, 3 pole 100,000 at 208Y/120, 3 pole	MJ, MHF, PJ, PH (1600), RJ (2000), Class R, J, T3, T6, L (1200)	2, 3	QD (225) or QG (225)	3	QOM2-VH or NONE	QO ¥ QO-VH QO-H	70 20 100	125 30 100		HOM § HOMT	50 30	200 ‡ 50	

For Homeline Convertible Main Load Centers Protected with QO-VH Tenant Circuit Breaker

SERIES COMBINATION SHORT CIRCUIT CURRENT RATING / VALORES NOMINALES DE LA CORRIENTE DE CORTOCIRCUITO EN SERIE													
Interrupting Rating RMS Symmetrical Amperes at V_{-} Max. / Valor nominal de interrupción simétricos rcm a V_{-} máx.	Line Side SQUARE D Circuit Breaker Catalog Designation or Fuse Class / Clase de fusible o designación de catálogo de los interruptores automáticos SQUARE D del lado de línea (Max. A rating / Valor nominal máx. en A)	Poles / Polos	SQUARE D Tenant Circuit Breaker (Integral or Remoto) / Interruptor Automático del Usuario de SQUARE D (Integral o Remoto)		Integral Main Breaker / Interruptor Automático Principal Integral	QO Load Center / Centro de Carga QO			HOMELINE Load Center / Centro de Carga HOMELINE		* See circuit breaker for voltage and interrupting rating. / Consulte los datos del interruptor automático para obtener los valores nominales de tensión e interrupción. See box label for additional short circuit current ratings and restrictions. / Consulte la etiqueta de la caja para obtener información adicional sobre la corriente nominal de cortocircuito y restricciones. ‡ 100 A Max. in load centers with 125 A Max. mains rating. / 100 A máx. para centros de carga con valor nominal en la línea principal de 125 A máx. ¥ QO includes suffixes AFI, EPD, EPE, GFI & PL / QO incluye los sufijos AFI, EPD, EPE, GFI y PL § HOM includes suffixes AFI, BB, EPD & GFI / HOM incluye los sufijos AFI, BB, EPD y GFI		
			Catalog Designation (Max. A Rating) / Designación de Catálogo (A Máx.)	Poles / Polos		Branch Breaker / Interruptor Automático Derivado	Max. A Rating / Nominal A Máx.			Branch Breaker / Interruptor Automático Derivado		Max. A Rating / Nominal A Máx.	
							1 Pole / 1 Polo	2 Poles / 2 Polos	3 Poles / 3 Polos			1 Pole / 1 Polo	2 Poles / 2 Polos
42,000 at 240	LA, MA	2, 3	QO-VH (125)	2	QOM1-VH or NONE	QO ¥ QOT	70 20	100		HOM § HOMT	50 30	100 50	
65,000 at 240	LH, MG, MJ, MH, PG, PJ, PA (1600), RG (2000), RJ (2000)	2, 3	QO-VH (125) or QOH	2	QOM1-VH or NONE	QO ¥ QOT	70 20	100		HOM § HOMT	50 30	100 50	
100,000 at 240	MHF, Class R, J, T6, T3, L (1200)	2, 3	QO-VH (125) or QOH	2	QOM1-VH or NONE	QO ¥ QOT	70 20	100		HOM § HOMT	50 30	100 50	
42,000 at 240	LA, MA	2, 3	QD (225) or QG (225)	2	QOM2-VH or NONE	QO ¥ QOT	70 20	200 ‡		HOM § HOMT	50 30	200 ‡ 50	
65,000 at 240	LH, MG, MH, PG, PA (1600), RG (2000)	2, 3	QD (225) or QG (225)	2	QOM2-VH or NONE	QO ¥ QOT	70 20	200 ‡		HOM § HOMT	50 30	200 ‡ 50	
100,000 at 240, 2 pole 65,000 at 240, 3 pole 100,000 at 208Y/120, 3 pole	MJ, MHF, PJ, PH (1600), RJ (2000), Class R, J, T3, T6, L (1200)	2, 3	QD (225) or QG (225)	3	QOM2-VH or NONE	QO ¥ QO-VH QO-H	70 20 100	125 30 100		HOM § HOMT	50 30	200 ‡ 50	

For Homeline Convertible Main Load Centers Protected with Two-Pole QD or QG Tenant Circuit Breakers

How to Read the Series Rating Label for RB devices

⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E.
- 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

PELIGRO DE DESCARGA ELÉCTRICA, EXPLOSIÓN O DESTELLO POR ARQUEO

- Utilice equipo de protección personal (EPP) apropiado y siga las prácticas de seguridad eléctrica establecidas por su Compañía (consulte la norma NFPA 70E).
- 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 las cubiertas antes de volver a energizar el equipo.

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

⚠ WARNING

This equipment is designed and tested by Square D to performance levels which exceed Underwriters Laboratories Standards. Use of Other than Square D Circuit Breakers May Adversely Affect User Safety and Impair Reliability. Square D disclaims all liability for damage, injury or non-performance caused by use or failure of non-Square D circuit breakers.

⚠ ADVERTENCIA

Este equipo ha sido diseñado y probado por Square D y supera las normas de nivel de rendimiento establecidas por Underwriters Laboratories (UL). El uso de interruptores automáticos que no sean de Square D pueden afectar negativamente la seguridad del usuario y deteriorar la confiabilidad del equipo. Square D no asume responsabilidad alguna por daños, lesiones o funcionamiento inadecuado del equipo causado por el uso o desperfectos de interruptores automáticos que no sean de Square D.

**HOMELINE-SHORT CIRCUIT CURRENT RATING /
Corriente nominal de cortocircuito- HOMELINE**

Interrupting Rating RMS Symmetrical Amperes at 240Vac Max. Valor nominal de interrupción A simétricos rcm a 240V- máx.	* Line Side SQUARE D Circuit Breaker Catalog Designation or Fuse Class Clase de fusible o designación de catálogo de los interruptores automáticos SQUARE D del lado de línea (Max. A rating/ Valor nominal máx. en A)	Poles	Tenant SQUARE D Circuit Breaker (Integral or Remote) Interruptor Automático del Usuario de SQUARE D (Integral o Remoto)	Main Breaker / Interruptor Automático Principal	SQUARE D Branch Circuit Breaker Interruptor Automático Derivado de SQUARE D	Current Rating Ampere Max. Corriente Nominal A Máx.			
			• Catalog Designation (Ampere Max.) Designación de Catálogo (A Máx.)			Poles	• Catalog Designation de Catálogo	1 Pole	2 Pole
42,000	LA, MA	2, 3	QO-VH (125)	2	QOM1-VH or None	HOM (§)	50	100	
65,000	LH, MG, MH, MJ, PG, PJ, PA(1600), RG(2000), RJ(2000)	2, 3	QO-VH (125) or QOH	2			HOMT	30	50
100,000	MHF, Class J, R, T6, T3, L (1200)	2, 3	QD (225) or QG (225)	2	QOM2-VH or None	HOM (§)	50	200±	
42,000	LA, MA	2, 3	QD (225)	2			HOMT	30	50
65,000	LH, MG, MH, PG, PA (1600), RG (2000)	2, 3	QD (225) or QG (225)	2					
100,000	MJ, MHF, PJ, RJ (2000), Class R, J, T6, T3, L (1200)	2, 3	QD (225) or QG (225)	2					

**QO-SHORT CIRCUIT CURRENT RATING /
Corriente nominal de cortocircuito- QO**

Interrupting Rating RMS Symmetrical Amperes at 240Vac Max. Valor nominal de interrupción A simétricos rcm a 240V- máx.	* Line Side SQUARE D Circuit Breaker Catalog Designation or Fuse Class Clase de fusible o designación de catálogo de los interruptores automáticos SQUARE D del lado de línea (Max. A rating/ Valor nominal máx. en A)	Poles	Tenant SQUARE D Circuit Breaker (Integral or Remote) Interruptor Automático del Usuario de SQUARE D (Integral o Remoto)	Main Breaker / Interruptor Automático Principal	SQUARE D Branch Circuit Breaker Interruptor Automático Derivado de SQUARE D	Current Rating Ampere Max. Corriente Nominal A Máx.			
			• Catalog Designation (Ampere Max.) Designación de Catálogo (A Máx.)			Poles	• Catalog Designation de Catálogo	1 Pole	2 Pole
42,000	LA, MA	2, 3	QO-VH(125)	2	QOM1-VH or None	QO (¥)	70	100	
65,000	LH, MG, MJ, MH, PG, PJ, PA(1600), RG(2000), RJ(2000)	2, 3	QO-VH(125) or QOH	2			QOT	20	
100,000	MHF, Class R, J, T6, T3, L (1200)	2, 3	QD (225) or QG (225)	2	QOM2-VH or None	QO (¥)	70	200±	
42,000	LA, MA	2, 3	QD (225)	2			QOT	20	
65,000	LH, MG, MH, PG, PA (1600), RG (2000)	2, 3	QD (225) or QG (225)	2					
100,000	MJ, MHF, PJ, RJ (2000), Class R, J, T6, T3, L (1200)	2, 3	QD (225) or QG (225)	3					
100,000 at 208Y/120		3		3		QO (¥)	70	125	30
						QO-VH	100		

- See circuit breaker for voltage and interrupting rating. / Consulte los datos del interruptor automático para obtener los valores nominales de tensión e interrupción.

See box label for additional short circuit current ratings and restrictions. / Consulte la etiqueta de la caja para obtener información adicional sobre la corriente nominal de cortocircuito y restricciones.

§ HOM includes suffixes AFI, BB, EPD & GFI / HOM incluye los sufijos AFI, BB, EPD y GFI.

¥ QO includes suffixes AFI, EPD, EPE, GFI & PL / QO incluye los sufijos AFI, EPD, EPE, GFI Y PL.

‡ 100 A Max. in load centers with 125 A Max. mains rating / 100 A máx. para centros de carga con valor nominal en la línea principal de 125 A máx.

by Schneider Electric HRB84254

6

© 2003–2014 Schneider Electric All Rights Reserved

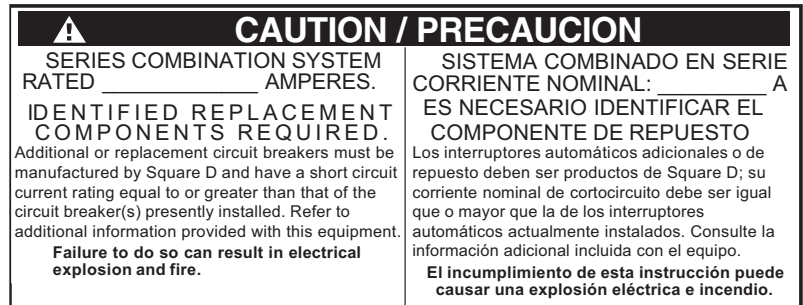
NEC Requirements

Two sections of the NEC address markings of series ratings: Section 110.22 and Section 240.86(b).

Per Section 110.22, the equipment must be legibly marked in the field to indicate the equipment has been applied with a series combination rating. The intent of this section is to alert the installer that the circuit breakers were installed based on a series rating, and to mark the equipment with the short circuit current rating being applied in the series combination.

Schneider Electric provides a label for this purpose with all MP Meter-Pak™ Meter Centers and EZ Meter-Pak™ Meter Center Branch Devices. The label is not applied by Schneider Electric, but is provided loose in these devices for application when series ratings are applied by the installer.

Figure 7: Example of Label Provided



Section 240.86(b) requires that the series combination of overcurrent protective devices be tested and marked on the end use equipment. This marking is applied by the manufacturers of switchboards, panelboards, load centers, etc. Schneider Electric marks load center enclosures and covers with series ratings per Figures 1 and 3.

A series rated system is an affordable, viable alternative to a fully rated system. Series ratings can be two-tiered or multi-tiered, depending on the levels of overcurrent protection, tested and certified. Series ratings include circuit breaker/circuit breaker combinations and also fuse/circuit breaker combinations, but the furthest load side overcurrent protective device is always a circuit breaker. Overcurrent protective device combinations used in series rated systems should be marked on the end use equipment by the electrical distribution product manufacturer. Equipment installed as part of a series rated system must be marked in the field to indicate the short circuit current rating being applied in the series combination.

Schneider Electric USA, Inc.
1415 S. Roselle Road
Palatine, IL 60067 USA
1-888-778-2733
www.schneider-electric.us

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

Square D™ and Schneider Electric™ are trademarks or registered trademarks of Schneider Electric. Other trademarks used herein are the property of their respective owners.