

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.

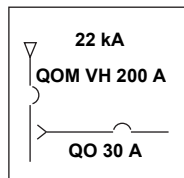
The combination of overcurrent protective devices may be enclosed in a single piece of equipment such as a load center. Three-tier series rated systems are most commonly designed with the supply side device in a separate enclosure, such as metering equipment, that feeds a load center.

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.

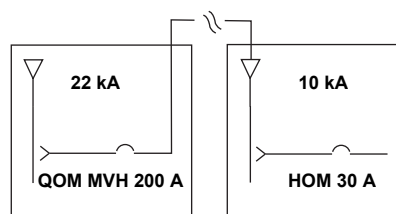
Two-Tier Series Rating

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



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.

Figure 1: Two-Tier Series Ratings Label Application

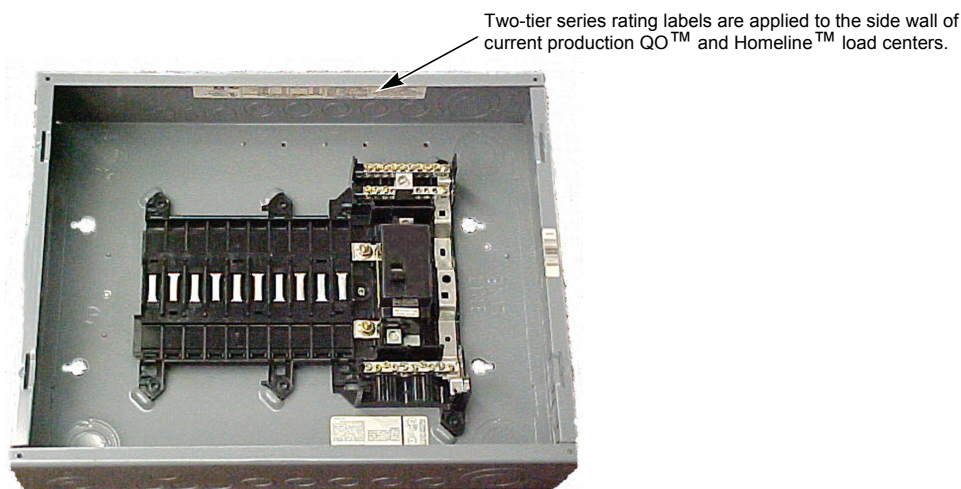


Figure 2: QO Two-Tier Series Ratings Labels for Convertible Main Load Centers



QO™ LOAD CENTER

See Panelboard interior for Catalog No. **QOC24US** or **QOC24UF**

Cover / Cubierta:
QOC24US or / o QOC24UF

Mains max. / Max. Line principal:
125A

See main or service disconnect rating if installed.
240 V~. Max. 365 50 / 60 Hz (UL) circuit max. **max.** circuits:

Ue 415V/240 V~. 3Ø - 4 wire/hielos (IEC) U1 2000 volts (UL) 60 Hz (IEC)

Type 1 (IP20) Enclosure / Gabinete Type 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~.

LUG TORQUE DATA

SEE CIRCUIT BREAKERS AND FIELD INSTALLED UNITS FOR WIRE RANGE AND TORQUE

Lug type	Wire Range (AWG/kcmil)	Torque lb-in
Line Neutral	4 - 2/0 CU/AL	50
Main Lugs	6 - 2/0 CU/AL	50
Alternate Main Breaker	See Main Breaker	See Main Breaker

BRANCH NEUTRAL AND EQUIPMENT GROUND BAR TORQUE Lb-IN

WIRE RANGE (AWG)	BAR WITH 7 SCREW SIZES	BAR WITH 1 SCREW SIZE
	LARGE	SMALL
1/0 - 3 CU / AL	50	---
4 CU / AL	45	35
6 CU / AL	40	30
8 CU / AL	40	30
10-14 CU, 10-12 AL	35	20

EQUIPMENT GROUND COMBINATIONS

(2) 14 CU	35	10	25
(2) 12 CU / AL	35	10	25
(2) 10 CU / AL	35	10	25

SHORT CIRCUIT CURRENT RATING

RMS Symmetrical Amperes x 1000 @ V~ Max	Main / Catalog Designation or Fuse Class (Max. A)	Branch Circuit Breaker
		Catalog Designation (Max. A)
15 @ 240	QO - H	QO - H
10 @ 240	QO - 125	QO - 125 / QO - H
22 @ 240	QO - VH (100)	QO - VH (125)†
65 @ 240		QO (100)*
100 @ 240	†3 (125), T6 (125), J (125)	QH
25 @ 240	QD (125)	1 pole QO*
65 @ 240	QG (125)	2 pole QO (125)*
100 @ 208Y/120	QJ (125)	3 pole QO (130)*
3 (4.5 peak) @ 415V/240		3 pole QO-VH (100)†
10 (17 peak) @ 415V/240		QOXX (100)
		QO - VS (63)

† 240 V~, 3 Ph 3 W. Grounded "B" phase.
 * QO includes suffixes: GFI, EPF, EPD, PL, and AFI.
 † QO-VH includes suffixes GFI and AFI.

IEC 60439-1



ELECTRIC CABINET BOX V-2813



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.

For installation, repairs or alterations, Call an electrical contractor or electrician. Maximum continuous loads not to exceed 80% of the ampere rating of any overcurrent device installed, / Las cargas máximas continuas no deben exceder el 80% de la capacidad en A de cualquier equipo de sobrecorriente instalado.

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Three-Phase QO Load Centers 125 A Max.

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 (UL) 2 or 3 wire/lines (IEC). UI 2,000 volts (IEC) 24 circuits / 24 circuitos max. Type 1 (IP20) Enclosure / Gabinete Tipo 1		LUG TORQUE DATA See circuit breakers and field installed units for wire binding screw torque.		SHORT CIRCUIT CURRENT RATING RMS Symmetrical Amperes X 1000 @ V- Max. 5 @ 240 10 @ 240 22 @ 240 25 @ 240 42 @ 240 65 @ 240 100 @ 240 3 @ 45 (peak) @ 240 1 240 V - 3 Ph 3 W. Grounded "B" phase. * QO includes suffices: I, GF, EPD, PL, AS, and AF. I, QO-VH includes suffices: GF, I and AF.		* 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.		IEC 60439-1  LISTED ELECTRIC CABINET BOX V2B13	
		Wire Range (AWG/kcmil) Line Neutral Lug Main Lug Alternate Main Breaker Branch Neutral and Equipment Ground Bar Wire Range (AWG) 1/0-3 /AL 4-CU /AL 6-CU /AL 8-CU /AL 10-14 CU, 10-12 AL Equipment Ground Combinations Two 14 or 12 CU, Two 12 AL Two 10 AL		Torque (in.-lbs) Bar with 2 screw sizes Large 50 Small — Large 45 Small — Large 45 Small 25 Large 40 Small 10 Large 35 Small 10 35 35 25 20 35 35 25 25		Catalog Designation (Max. A.) QO - H QO - VH (100), QO (100) & QOT QO (100) & QOT QO (100) & QOT QO (100) QO (100) & QOT QH QO (100) & QOT QO (125) / 3 (125) OOXD (63)		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.	

Single-Phase QO Load Centers 125 A Max.

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- máx.	Line Side SQUARE D Circuit Breaker Catalog Designation or Fuse Class / Clase de fusible o designación de catalgo 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	
					SQUARE D Circuit Breaker Catalog Designation / Designación de Catalogo de Interruptor Automático de SQUARE D			SQUARE D			
					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							
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	100 100	HOM § HOMT	50 30 100 50	
100,000 at 240	MHF, Class R, J, T6, T3, L (1200)	2, 3									
42,000 at 240	LA, MA	2, 3			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							
100,000 at 240, 2 pole	MJ, MHF, PJ, PH (1600), RJ (2000)	2, 3				QO ¥ QO-VH QO-H	70 100	125 100			
65,000 at 240, 3 pole				3							
100,000 at 208Y/120, 3 pole	Class R, J, T3, T6, L (1200)										


by Schneider Electric

HRB84262

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- (a) máx.	Line Side SQUARE D Circuit Breaker Catalog Designation or Fuse Class / Remoto only / Clase de fusible o designación de catalgo 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 (Remoto only) / Interruptor Automático del Usuario de SQUARE D (Remoto solamente)	Current Rating Amperes Max. Corriente Nominal Máxima	Catalog Designation (Max. A rating) / Designación de Catalogo (A Máx.)	Current Rating Amperes Max. Corriente Nominal Máxima	1 Pole / 1 Polo	2 Poles / 2 Polos	3 Poles / 3 Polos
42,000	QO-VH (125)	2			HOM ¥	50			
65,000	QOH	2			HOMT	30			
100,000	QOH	2			HOMT	30			
42,000	LH, MG, MJ, MH, PG, PJ, PA (1600), RG (2000), RJ (2000)	2, 3	QO-VH	2	125	50			
65,000	MHF, Class R, J, T6, T3, L (1200)	2, 3			HOM ¥	50			
100,000	LA, MA	2, 3	QD	2	225	50			
42,000	QD (225)	2			HOM ¥	50			
65,000	LH, MG, MH, PG, PA (1600), RG (2000)	2, 3	QD	2	225	50			
100,000	MJ, MHF, PJ, PH (1600), RJ (2000), Class R, J, T3, T6, L (1200)	2, 3	QD	2	225	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- (a) máx.	Line Side Fuse or SQUARE D Circuit Breaker Catalog Designation or Fuse Class / Remoto only / Clase de fusible o designación de catalgo de los interruptores automáticos SQUARE D del lado de línea (Remoto solamente)	Poles / Polos	Tenant SQUARE D Circuit Breaker (Remoto only) / Interruptor Automático del Usuario de SQUARE D (Remoto solamente)	Current Rating Amperes Max. Corriente Nominal Máxima	Catalog Designation (Max. A rating) / Designación de Catalogo (A Máx.)	Current Rating Amperes Max. Corriente Nominal Máxima	1 Pole / 1 Polo	2 Poles / 2 Polos	3 Poles / 3 Polos
42,000	QO-VH (125)	2			HOM ¥	50			
65,000	QOH	2			HOMT	30			
100,000	QOH	2			HOMT	30			
42,000	LH, MG, MJ, MH, PG, PJ, PA (1600), RG (2000), RJ (2000)	2, 3	QO-VH	2	125	50			
65,000	MHF, Class R, J, T6, T3, L (1200)	2, 3			HOM ¥	50			
100,000	LA, MA	2, 3	QD	2	225	50			
42,000	QD (225)	2			HOM ¥	50			
65,000	LH, MG, MH, PG, PA (1600), RG (2000)	2, 3	QD	2	225	50			
100,000	MJ, MHF, PJ, PH (1600), RJ (2000), Class R, J, T3, T6, L (1200)	2, 3	QD	2	225	50			

How to Read the Three-Tier Series Rating Label

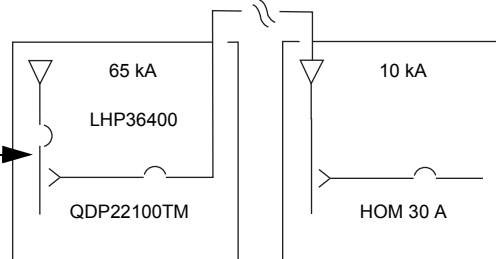
Read the label from left to right. Select the appropriate short circuit current rating and then read across the row to select main disconnect, tenant circuit breaker and load center circuit breakers. See example below in Figure 6.

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-máx.	Line Side SQUARE D Circuit Breaker Catalog Designation or Fuse Class / Clase de fusible o designación de catalgo de los interruptores automáticos SQUARE D del lado de líneas (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.
					SQUARE D Circuit Breaker Catalog Designation / Designación de Catalogo de Interruptor Automático de SQUARE D			SQUARE D			
					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		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.
42,000 at 240	LA, MA	2, 3	QO-VH (125)	2							
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	100 100	HOM § HOMT	50 30	100 50
100,000 at 240	MHF, Class R, J, T6, T3, L (1200)	2, 3									
42,000 at 240	LA, MA	2, 3									
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	MJ, MHF, PJ, PH (1600), RJ (2000)	2, 3				QO ¥ QO-VH QO-H	70 100	125 100			
100,000 at 208Y/120, 3 pole	Class R, J, T3, T6, L (1200)							100			
 by Schneider Electric											HRB84252

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 a V_{Max} / 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 Remote) 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		• See circuit breaker for voltage and interrupting rating. / Consulte los datos del interruptor automático para obtener los valores nominales de tensión e interrupción.	
			Catalog Designation (Max. A rating) / Designación de Catálogo (A Máx.)	Poles / Polos		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				Branch Breaker / Interruptor Automático Derivado
42,000 at 240	LA, MA	2, 3	QO-VH (125)	2	QOM1-VH or NONE	QO ¥	70	100	HOM §	50	100	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.
65,000 at 240	LH, MG, MJ, MH, PG, PJ, PA (1600), RG (2000), RJ (2000)	2, 3	QO-VH (125) or QOH	2		QOT	20	100	HOMT	30	50	
100,000 at 240	MHF, Class R, J, T6, T3, L (1200)	2, 3										
42,000 at 240	LA, MA	2, 3		2	QOM2-VH or NONE	QO ¥	70	200 ‡	HOM §	50	200 ‡	‡ 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
65,000 at 240	LH, MG, MH, PG, PA (1600), RG (2000)	2, 3	QD (225) or QG (225)	2	QOT	20	200 ‡	HOMT	30	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		3		QO ¥ QO-VH QO-H	70 125 100	30 100				


by Schneider Electric

HRB94/252



HRB64252

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- 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 Remote) / 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		* See circuit breaker for voltage and interrupting rating. / Consulte los datos del interruptor automático para obtener los valores nominales de tensión e interrupción.	
			Catalog Designation (Max. A rating) / Designación de Catálogo (A Máx.)	Poles / Polos		SQUARE D Circuit Breaker Catalog Designation / Designación de Catálogo de Interruptor Automático de SQUARE D			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				
42,000 at 240	LA, MA	2, 3	QO-VH (125)	2							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.	
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										
42,000 at 240	LA, MA	2, 3		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)				70 20	125 30	100			
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		3		QO ¥ QO-VH QO-H	70 125 100	30 100				



by Schneider Electric

HR 884622



HRB64252

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 _____ A 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 Remote) / 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		* See circuit breaker for voltage and interrupting rating. / Consulte los datos del interruptor automático para obtener los valores nominales de tensión e interrupción.		
			Catalog Designation (Max. A rating) / Designación de Catálogo (A Máx.)	Poles / Polos		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.		Branch Breaker / Interruptor Automático Derivado	Max. A Rating / Nominal A Máx.
						1 Pole / 1 Polo	2 Poles / 2 Polos	3 Poles / 3 Polos					
42,000 at 240	LA, MA	2, 3	QO-VH (125)	2							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.		
65,000 at 240	LH, MG, MJ, MH, PG, PJ, PA (1600), RG (2000), RJ (2000)	2, 3	QO-VH (125) or QOH		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											
42,000 at 240	LA, MA	2, 3		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)				70 20				‡ QO includes suffixes AFI, EPD, EPE, GFI & PL / QO incluye los sufijos AFI, EPD, EPE, GFI y PL		
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		3		QO ¥ QO-VH QO-H	70 125 100	30 100			§ HOMC includes suffixes AFI, BB, EPD & GFI / HOMC incluye los sufijos AFI, BB, EPD y GFI		
											by Schneider Electric		



HRB64252

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 a V_{Max} / 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 Remote) / 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		* See circuit breaker for voltage and interrupting rating. / Consulte los datos del interruptor automático para obtener los valores nominales de tensión e interrupción.		
			Catalog Designation (Max. A rating) / Designación de Catálogo (A Máx.)	Poles / Polos		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.		Branch Breaker / Interruptor Automático Derivado	Max. A Rating / Nominal A Máx.
						1 Pole / 1 Polo	2 Poles / 2 Polos	3 Poles / 3 Polos					
42,000 at 240	LA, MA	2, 3	QO-VH (125)	2									
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											
42,000 at 240	LA, MA	2, 3		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	QO (225) or QG (225)			QO ¥ QOT	70 20	125 30					
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		3		QO ¥ QO-VH QO-H	70 125 100	30 100					


by Schneider Electric

† 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

HRB4-52



HRB64252

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.	* 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)	Poles	Main Breaker / Interruptor Automático Principal	SQUARE D Branch Circuit Breaker Interruptor Automático Derivado de SQUARE D	Current Rating Ampere Max. Corriente Nominal A Máx.		
Valor nominal de interrupción A simétricos rcm a 240V~ máx.			• Catalog Designation (Ampere Max.) Designación de Catálogo (A Máx.)			• Catalog Designation Designación de Catálogo	1 Pole 1 Polo	2 Pole 2 Polo	
42,000	LA, MA	2, 3	QO-VH (125)	2	QOM1-VH or None	HOM (\$) HOMT	50	100	
65,000	LH, MG, MH, MJ, PG, PJ, PA(1600) RG(2000), RJ(2000)	2, 3	QO-VH (125) or QOH	2			30	50	
100,000	MHF, Class J, R, T6, T3, L (1200)	2, 3							
42,000	LA, MA	2, 3	QD (225)	2	QOM2-VH or None	HOM (\$) HOMT	50	200±	
65,000	LH, MG, MH, PG, PA (1600), RG (2000)	2, 3	QD (225) or QG (225)	2			30	50	
100,000	MJ, MHF, PJ, RJ (2000), Class R, J, T6, T3, L (1200)	2, 3							

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

SQUARE D

by Schneider Electric

HRB84254

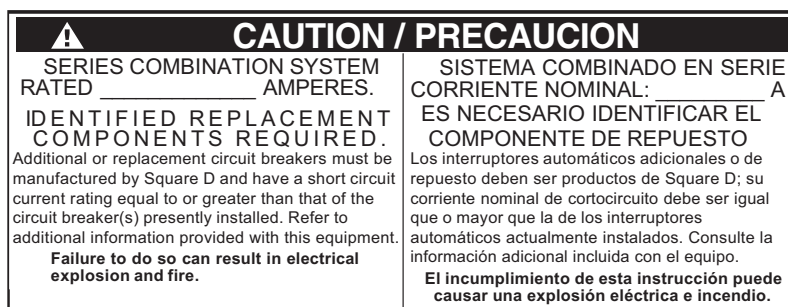
NEC Requirements

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.

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