

# Circuit Breakers

## Duplex, Triplex and Quadplex Plug-In Breakers

### Duplex Circuit Breakers

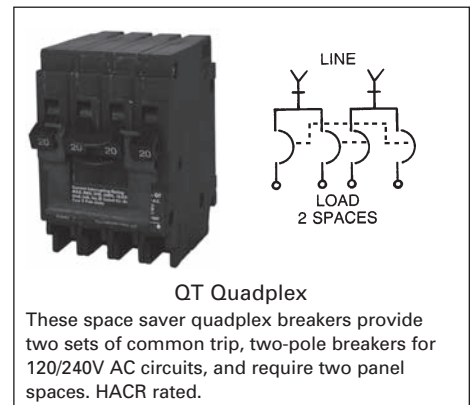
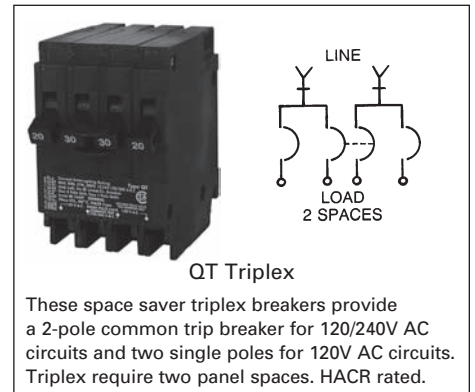
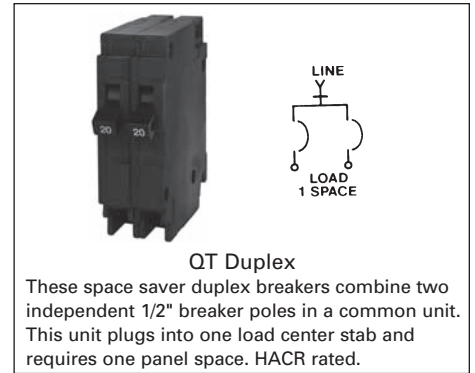
Breaker Type	Ampere Rating	Catalog Number	Catalog Number
<b>QT</b> 1-Pole 10K AIC 120V AC	15-15	<b>Q1515</b>	<b>Q1515NC</b> <sup>①</sup>
	15-20	<b>Q1520</b>	<b>Q1520NC</b> <sup>①</sup>
	20-20	<b>Q2020</b>	<b>Q2020NC</b> <sup>①</sup>
	20-30	<b>Q2030</b>	—
	30-15■	<b>Q3015</b>	—
	30-20	<b>Q3020</b>	—
	30-30	<b>Q3030</b>	<b>Q3030NC</b> <sup>①</sup>
SHIPPING: 12 per carton, (Wt. 4.8 lbs.)			

### Triplex Circuit Breakers

Breaker Type	Ampere Rating		Catalog Number
	Single Pole	Common-Trip 2-Pole	
<b>QT</b> 2-Pole 10K AIC 120/240V AC Inner Poles Common Trip	15	15	<b>Q21515CT</b>
	15	20	<b>Q21520CT</b>
	15	25	<b>Q21525CT</b> ■
	15	30	<b>Q21530CT</b>
	15	35	<b>Q21535CT</b> ■
	15	40	<b>Q21540CT</b>
	15	45	<b>Q21545CT</b> ■
	15	50	<b>Q21550CT</b>
	20	20	<b>Q22020CT</b>
	20	25	<b>Q22025CT</b> ■
	20	30	<b>Q22030CT</b>
	20	35	<b>Q22035CT</b> ■
	20	40	<b>Q22040CT</b>
	20	45	<b>Q22045CT</b> ■
	20	50	<b>Q22050CT</b>
	30	30	<b>Q23030CT</b>
	SHIPPING: 6 per carton, (Wt. 4.9 lbs.)		

### Quadplex Circuit Breakers

Breaker Type	Ampere Rating		Catalog Number
	Common-Trip 2-Pole Inside	Common-Trip 2-Pole Outside	
<b>QT</b> 2-Pole 10K AIC 120/240V AC Inner and Outer 2 Poles Common Trip	15	15	<b>Q21515CT2</b>
	20	20	<b>Q22020CT2</b>
	20	30	<b>Q23020CT2</b>
	20	40	<b>Q24020CT2</b>
	30	30	<b>Q23030CT2</b>
	30	40	<b>Q24030CT2</b>
	40	40	<b>Q24040CT2</b>
	50	30	<b>Q23050CT2</b>
SHIPPING: 6 per carton, (Wt. 4.8 lbs.)			



For external accessories please refer to page 1-42.

For inches / millimeters conversion, see Application Data section.

■ Built to order. Allow 2-3 weeks for delivery.

① Non-CTL. For replacement use only in panels manufactured before 1968

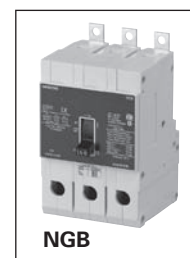
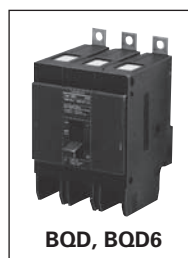
# Molded Case Circuit Breakers

## Reference Guide

## Selection/Application

### Thermal-Magnetic Trip Breakers

Page		Plug-In Breakers							Panelboard Breakers									
		QT	QP, QPP <sup>2</sup>	QPH, QPPH <sup>2</sup>	HQP, HQPP <sup>2</sup>	HQPPH <sup>2</sup>	QPJ <sup>2</sup>	BL	BLH	HBL	BOD, BOD6	NGB	NEB	HEB				
Ratings	Poles	1, 2	1, 2, 3	1, 2, 3	1, 2, 3 <sup>2</sup>	2	2, 3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3			
	Amperes	15-50	10-125 <sup>3</sup>	10-125 <sup>3</sup>	10-125 <sup>3</sup>	100-225	150-200	10-125	15-125	15-100	15-100	15-125	15-125	15-125				
	Volts (50/60 Hz)	1 Pole	120/240	120/240	120/240	120/240	120/240	120/240	120/240	120/240	120/240	277	347	347	347			
		2 Pole	—	—	—	—	—	—	—	—	—	480/277	600/347	600/347	600/347			
		3 Pole	—	240	240	240	240	240	240	240	240	480/277	600/347	600/347	600/347			
	Interrupt Ratings	UL	120V	10,000	10,000	22,000	65,000	—	—	10000	22000	65000	65000	—	—	—		
			240V	10,000	10,000	22,000	65,000	100,000	10,000	10000	22000	65000	65000	100000	85000	100000		
			277V	—	—	—	—	—	—	—	—	—	—	14000	—	—		
			347V	—	—	—	—	—	—	—	—	—	—	10000	—	—		
			480/277V	—	—	—	—	—	—	—	—	—	—	14000	25000	—		
			480V	—	—	—	—	—	—	—	—	—	—	—	—	35000	65000	
		IEC 947-2 50/60 Hz	600/347V	—	—	—	—	—	—	—	—	—	10000	14000	—	—		
			600V	—	—	—	—	—	—	—	—	—	—	—	—	22000	25000	
			220/240V	I <sub>cu</sub>	—	—	—	—	—	—	—	—	—	—	—	65000	85000	100000
				I <sub>cs</sub>	—	—	—	—	—	—	—	—	—	—	—	32000	42000	50000
380/415V			I <sub>cu</sub>	—	—	—	—	—	—	—	—	—	—	—	25000	40000	70000	
			I <sub>cs</sub>	—	—	—	—	—	—	—	—	—	—	—	12000	20000	35000	
500V	I <sub>cu</sub>	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
	I <sub>cs</sub>	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
DC	125/250 V DC Interrupting Rating	2-Pole	—	—	—	—	—	—	—	—	14000	14000	35000	42000				
		3-Pole	—	—	—	—	—	—	—	—	—	—	35000	42000				
Dimensions in Inches	Height	10-50A	—	2.87	2.87	—	—	—	3.56	3.56	3.75	4.50	5.00	5.50	5.50			
		10-60A	3.12	—	—	—	—	—	—	—	—	—	—	—	—			
		55-125A	—	3.12	3.12	3.12	3.12	3 <sup>2</sup>	3.75	3.75	3.75	4.50	5.00	5.50	5.50			
	Width	1-Pole	1.00	1.00	1.00	1.00	—	—	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
		2-Pole	2.00 <sup>1</sup>	2.00 <sup>2</sup>	2.00 <sup>2</sup>	2.00	4.00 <sup>2</sup>	2 <sup>1</sup>	2.00	2.00	2.00	2.00	2.00	2.00	2.00			
3-Pole		2.00 <sup>3</sup>	3.00	3.00	3.00	—	3.00 <sup>3</sup>	3.00	3.00	3.00	3.00	3.00	3.00	3.00				
Depth	—	2.06	2.37	2.37	2.37	2.37	2.34	2.37	2.37	2.37	2.69	2.71	3.00	3.00				
Overcurrent Devices	Thermal and Fixed magnetic Trip	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Thermal and Adjustable Magnetic trip	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
	Adjustable Magnetic trip only	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
	Motor Circuit Protector	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
	Molded Case Switch	—	✓ <sup>4</sup>	—	—	—	—	—	—	—	—	—	—	✓	✓			
Accessories & Modifications	Undervoltage Trip	—	—	—	—	—	—	—	—	—	—	—	—	✓	✓			
	Shunt Trip	—	✓ <sup>5</sup>	✓ <sup>6</sup>	✓ <sup>6</sup>	✓ <sup>6</sup>	✓ <sup>6</sup>	—	✓	✓	✓	✓	✓	✓	✓			
	Auxiliary Switch	—	—	—	—	—	✓ <sup>6</sup>	—	✓	✓	✓	✓	✓	✓	✓			
	Alarm Switch	—	—	—	—	—	—	—	—	—	—	—	—	✓	✓			
	Mechanical Interlock	—	—	—	—	—	—	—	—	—	—	—	—	✓	✓			
Fungus Proofing (ref. page 7-91)	—	—	—	—	—	—	—	✓	✓	✓	✓	✓	✓	✓				
Individual Enclosures	Type 1 - Indoor Surface	✓	✓	✓	✓	✓	—	—	—	—	—	—	—	—	—			
	Type 1 - Indoor, Flush	—	✓	✓	✓	✓	—	—	—	—	—	—	—	—	—			
	Type 3R - Outdoor-Rainproof	—	✓	✓	✓	✓	—	—	—	—	—	—	—	—	—			



For inches / millimeters conversion, see Application Data section.  
For Plug-in Breakers, see Load Centers & Circuit Breakers section.

① BOD6 CSA certified 10,000A @ 600Y/347V 15-70A only.  
② Types QPP, QPPH, HQPP and HQPPH are special 2-pole configurations for metering equipment. Amperage range = 125-225A, width = 4 in.

③ Single pole breakers available in ratings 10-70A only.  
④ 125A, 2-pole 120/240V AC only.  
⑤ Not applicable to types QPP and QPPH.  
⑥ Single pole circuit breakers available in ratings 15-70A only.

125A available as a 2-pole only.  
⑦ Not applicable to type HQPP and HQPPH.  
⑧ Fits only Siemens EQIII load centers. Breaker is 2 or 3 poles wide.

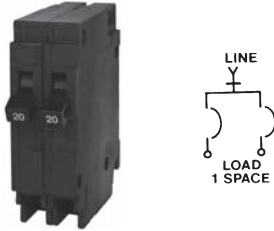
# Circuit Breakers

## Duplex, Triplex and Quadplex Plug-In Breakers

*Selection*

### Duplex Circuit Breakers

Breaker Type	Ampere Rating	Catalog Number	Catalog Number
<b>QT</b> 1-Pole 10K AIC 120V AC	15-15	<b>Q1515</b>	<b>Q1515NC</b> <sup>①</sup>
	15-20	<b>Q1520</b>	<b>Q1520NC</b> <sup>①</sup>
	20-20	<b>Q2020</b>	<b>Q2020NC</b> <sup>①</sup>
	20-30	<b>Q2030</b>	—
	30-15■	<b>Q3015</b>	—
	30-20	<b>Q3020</b>	—
	30-30	<b>Q3030</b>	<b>Q3030NC</b> <sup>①</sup>
SHIPPING: 12 per carton, (Wt. 4.8 lbs.)			

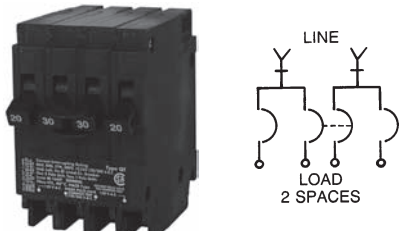


**QT Duplex**

These space saver duplex breakers combine two independent 1/2" breaker poles in a common unit. This unit plugs into one load center stab and requires one panel space. HACR rated.

### Triplex Circuit Breakers

Breaker Type	Ampere Rating		Catalog Number
	Single Pole	Common-Trip 2-Pole	
<b>QT</b> 2-Pole 10K AIC 120/240V AC Inner Poles Common Trip	15	15	<b>Q21515CT</b>
	15	20	<b>Q21520CT</b>
	15	25	<b>Q21525CT</b> ■
	15	30	<b>Q21530CT</b>
	15	35	<b>Q21535CT</b> ■
	15	40	<b>Q21540CT</b>
	15	45	<b>Q21545CT</b> ■
	15	50	<b>Q21550CT</b>
	20	20	<b>Q22020CT</b>
	20	25	<b>Q22025CT</b> ■
	20	30	<b>Q22030CT</b>
	20	35	<b>Q22035CT</b> ■
	20	40	<b>Q22040CT</b>
	20	45	<b>Q22045CT</b> ■
	20	50	<b>Q22050CT</b>
	30	30	<b>Q23030CT</b>
	SHIPPING: 6 per carton, (Wt. 4.9 lbs.)		

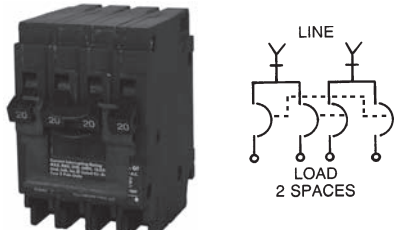


**QT Triplex**

These space saver triplex breakers provide a 2-pole common trip breaker for 120/240V AC circuits and two single poles for 120V AC circuits. Triplex require two panel spaces. HACR rated.

### Quadplex Circuit Breakers

Breaker Type	Ampere Rating		Catalog Number
	Common-Trip 2-Pole Inside	Common-Trip 2-Pole Outside	
<b>QT</b> 2-Pole 10K AIC 120/240V AC Inner and Outer 2 Poles Common Trip	15	15	<b>Q21515CT2</b>
	20	20	<b>Q22020CT2</b>
	20	30	<b>Q23020CT2</b>
	20	40	<b>Q24020CT2</b>
	30	30	<b>Q23030CT2</b>
	30	40	<b>Q24030CT2</b>
	40	40	<b>Q24040CT2</b>
50	30	<b>Q23050CT2</b>	
SHIPPING: 6 per carton, (Wt. 4.8 lbs.)			



**QT Quadplex**

These space saver quadplex breakers provide two sets of common trip, two-pole breakers for 120/240V AC circuits, and require two panel spaces. HACR rated.

For external accessories,  
please refer to page 7-93

For inches / millimeters conversion, see Application Data section.

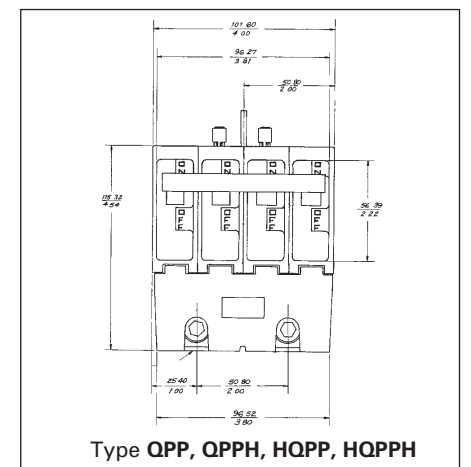
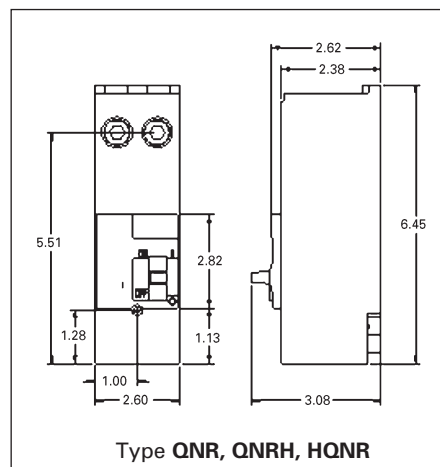
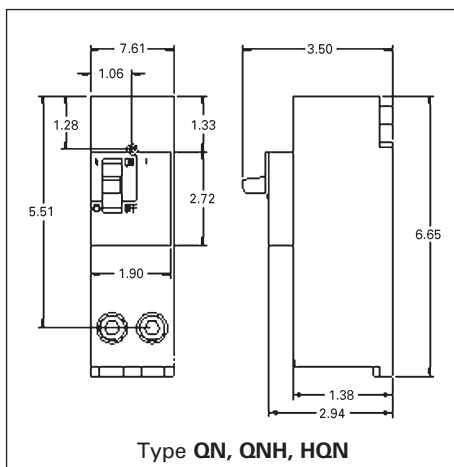
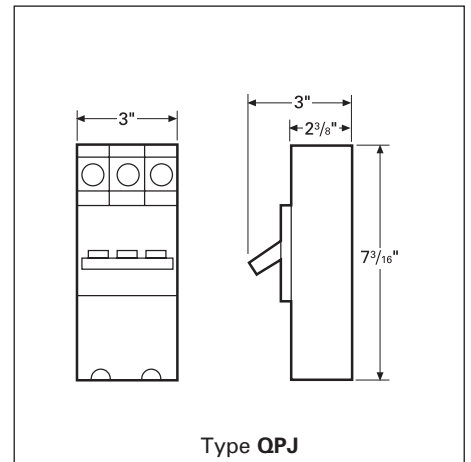
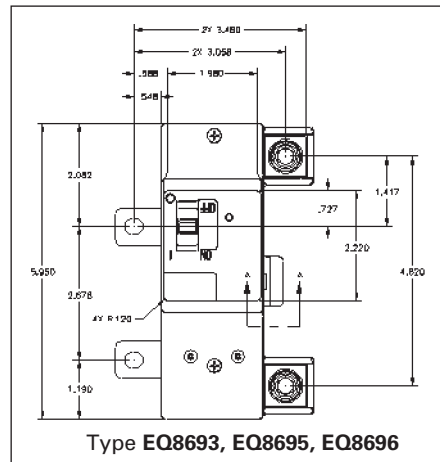
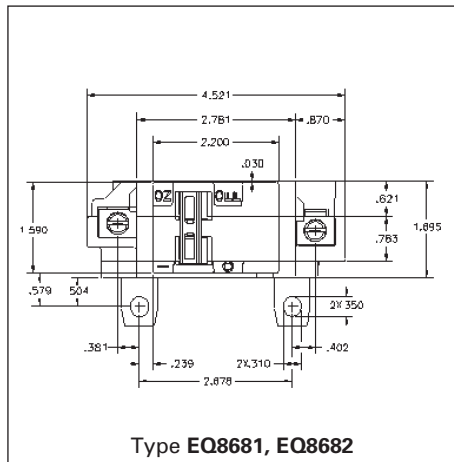
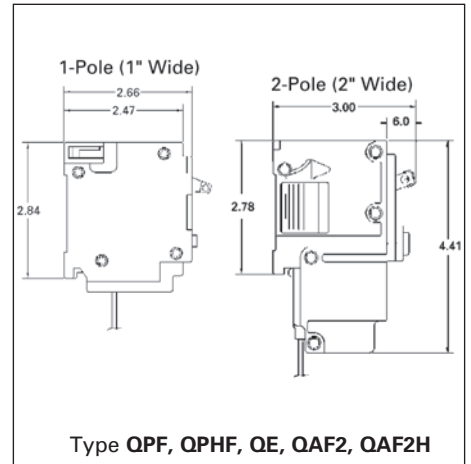
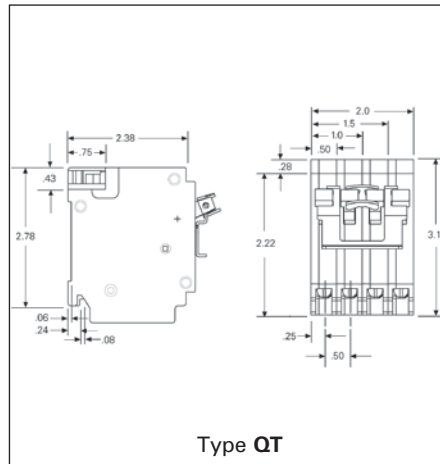
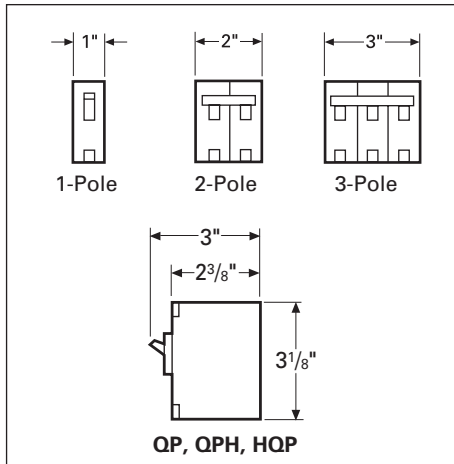
■ Built to order. Allow 2-3 weeks for delivery.

① Non-CTL. For replacement use only in panels manufactured before 1968

# Circuit Breakers

## Line Diagrams

## Dimension Drawings



Ⓞ All standard circuit breakers are calibrated to 40°C maximum ambient application.

# Circuit Breakers

• Revised •  
06/13/14

## Lug Data

*Reference*

Circuit Breaker Type	Circuit Breaker Ampere Rating	Cables Per Connector	Connector Wire Range
	LOAD SIDE		
QP, QPH, HQP, Plug-in	10	2	#14-#16 AWG Cu
	15-35	1	#14-#6 AWG Cu
		1	#14-#6 AWG Al
	40-50	1	#8-#6 AWG Cu
1		#8-#4 AWG Al	
55-125	1	#8-#2/0 AWG Cu	
	1	#8-#2/0 AWG Al	
QT	15-35	1	#14-#6 AWG Cu
		1	#14-#6 AWG Al
	40	1	#8 AWG CU-AL
40-50	1	#8-#6 AWG Cu	
	1	#8-#4 AWG Al	
QPF, QPHF	15-30	1	#14-#10 AWG Cu
		1	#12-#8 AWG Al
40-60	1	#8-#6 AWG Cu	
	1	#8-#4 AWG Al	
QAF2, QAFH2, QFGA2, QFGAH2	15-20	1	#14-#12 AWG Cu
		1	#12-#10 AWG Al
QD	15-20	2	#14-#8 AWG Cu Only
	15-20	1	#14-#12 AWG Cu
		1	#12-#10 AWG Al
	25-35	1	#10-#8 AWG Cu
1		#10-#6 AWG Al	
40-60	1	#8-#6 AWG Cu	
	1	#8-#4 AWG Al	
QN, QNH, HQN	150-200	1	#1-300kcmil Cu-Al
QS, QSH, QSHH, HQS, HQSH	100-225	1	#3-300kcmil Cu-Al
EQ8681-Ultimate	100	1	#4-3/0 AWG Cu-Al
EQ8682-Ultimate	125	1	#4-3/0 AWG Cu-Al
EQ8693-Ultimate	150	1	#1-300kcmil Cu-Al
EQ8695-Ultimate	200	1	#1-300kcmil Cu-Al
EQ8696-Ultimate	225	1	#1-300kcmil Cu-Al
QPP, QPPH, HQPP, HQPPH	125	1	#1 AWG Cu
		1	#2/0 AWG Al
	150	1	#1/0 AWG Cu
		1	#3/0 AWG Al
	175	1	#2/0 AWG Cu
1		#4/0 AWG Al	
200	1	#3/0 AWG Cu	
	1	250kcmil AWG Al	
225	1	#4/0 AWG Cu	
	1	300kcmil AWG Al	
EQ9675-EQIII	100	1	#8-#2/0 AWG Cu
		1	#8-#2/0 AWG Al
EQ9677-EQIII	125	1	#8-#2/0 AWG Cu
		1	#8-#2/0 AWG Al
EQ9683-EQIII	150	1	#1/0 AWG Cu
		1	#3/0 AWG Al
EQ9684	175	1	#3/0 AWG Cu
		1	250kcmil AWG AL
EQ9685-EQIII	200	1	#3/0 AWG Cu
		1	250kcmil AWG Al
EQ9686-EQIII	225	1	#4/0 AWG Cu
		1	300kcmil AWG Al
QPJ	125-200	1	#2-300kcmil Cu-Al

7  
MOLDED CASE  
CIRCUIT BREAKERS