# Modifications, Additions Replacements for Circuit Breakers

### **Replacement Connecting Strap Guide**

The following table may be used to obtain the proper connector kit by measuring the exterior dimensions of the panel. Every attempt has been made to make this table complete and accurate. The table is based on panels produced by ITE, Bulldog and Siemens from 1958 to present. Should any questions arise please contact your Siemens sales office for replacements.

Panelboard				
Tub Width	Depth	Panel Type	Replacement Max Amps	Note
30" - 36" - 42"	9″	OLD CDP	400	MCCB only. Use 5939 series connectors
	9.75″	OLD CDP	600	MCCB only use 5939 series connectors Refer for 800/1200A MCCB's
32″ - 38″	13.75″	CDP/VB6	1200A	MCCB series 6 connectors
			600A	"VB" style units only (*)
38″	12.75″	SPP/FPP6	1200A	MCCB series 6 connectors
			600A	"VK" or "VB" style (*)

\* If switch unit width is 17" it is a vacubreak. If switch unit width is 23" or 28" it is a "VK" switch.

### Connecting Strap For Use With SPP/FPP, S5, F2<sup>®</sup>

Breakers	Height inches (mm)	Series 6 Number
ВО, ВОН, НВ	3.75 (95)	6EQ6 <sup>10</sup>
BL, BLH, HBL, BQD, BQD6	3.75 (95)	6BL2C <sup>26</sup>
ED2, ED4, ED6, HED4	3.75 (95)	6E62 <sup>(1)2)</sup>
CED6	3.75 (95)	6CLE2 <sup>①</sup>
QJ2, QJH2, QJ2H	5 (127)	<b>6QJ2</b> <sup>①</sup>
FXD6, FD6, HFD6	5 (127)	6F62 <sup>①</sup>
CFD6	5 (127)	6CLF1C <sup>®</sup>
JXD2, JXD6, JD2, JD6, HJD6 SJD6, SHJD6	8.75 (222)	6JJ62 <sup>①</sup>
CJD6, SCJD6	8.75 (222)	6CLJ1C <sup>®</sup>
LXD6, LD6, HLD6, SLD6, SHLD6	8.75 (222)	6LL61C <sup>®</sup>
CLD6	8.75 (222)	6CLL1C <sup>®</sup>
SCLD6	8.75 (222)	6SCL61C <sup>®</sup>
MD6, HMD6, CMD6, SCMD6	10 (254)	6M61C <sup>®</sup>
ND6, HND6, CND6 SND6, SHND6, SCND	10 (254)	6N61C <sup>©</sup>

# PANELBOARDS

©These are aluminum connectors. If copper required is please add suffix C.

@3.75'' (95) plate accommodates six 1-pole breakers. @10'' (254) plate accommodates eighteen 1-pole breakers.

- Series 6 connector kits also accommodates FCI and FCII distribution interiors. CDP6 or SPP6 Series Panels.
- © These connectors are available in copper only.
  - In the connector of a connector o
  - VB Switches.

### **Blank Plates**

For use with	Series 6 CDP Panelboards, S5, F	2,
FCI and FCII	Switchboards.	

Height	SPP/FPP/CDP/VB 6
1.25″	6FPB01
2.50″	6FPB02
3.75″	6FPB03
5.00″	6FPB05
10.00″	6FPB10
15.00″	6FPB15

# Connecting Strap Kits and Front-Filler $Plates^{\mbox{\tiny O}}$

For use with NDP-CDP-7, S3

Breakers	Catalog Number
BQD6 (S3 only)	7 BQD6-2
BL, BLH, HBL,	7 BL-2
QJ2, QJH2, 2 Pole	7 QJ2-1
QJ2, QJH2 3 Pole Single unit, Panel Mount	7 QJ3-1
QJ2, QJH2 3 Pole Double unit, Panel Mount	7 QJ3-2
EC4, ED2, ED4, ED6, HED4, HED6	7 E6-2
Filler 1 Pole	QF3-UL

### Connecting Strap Kits<sup>®</sup> For OLD CDP and NDP\* Panels

Breakers	Catalog Number
QJ2, QJH2, QJ2H	5939-2C
ED2, ED4, HED4	5939-7C
FXD6, FD6, HED6	5939-8C
JXD2, JXD6, JD6, HJD6(A) LXD6, LD6, HLD6	5939-9C
JXD2, JXD6, JD6, HJD6(B)	5939-11C
*FB, FD (C)	5939-14C
CED6	5939-15C
CFD6	5939-16C
CJD6	5939-17C
CLD6	5939-18C
MD6, HMD6, CMD6	5939-19C

(A) Single Branch

(B) Dual Branch

(C) Use a replacement for EE through HE frames on NDP Panel

SELECTION

# Fusible / Power and Distribution

## Type F2 (FPP6)

600 Volts AC, 250 Volts DC Maximum 600 Ampere Main Switch, 1200 Ampere Main Lugs Only 600 Ampere Maximum Branch UL & CSA Short Circuit Rating — 200,000A IR Maximum

Meets 1996 NEC wire bending requirement, section 373-6. CSA - C22.2 No. 0.12

### Panelboards

Listed by Underwriters' Laboratories, Inc., under "Panelboards" File #E2269 fo interiors and #E4016 for boxes and fronts & CSA File #LR93833.

### Service

600 Volts AC, 250 Volts DC, Maximum. 1 Phase, 3 Wire; 3 Phase, 3 Wire; or 3 Phase, 4 Wire.

### Boxes

38" wide, 12.75" deep, Type 1

### **Panelboard Fronts and Doors**

Standard panelboards are furnished with 4 piece trim. Fronts are fabricated from code gauge steel and finished ASA61.

### Fuses

The Proper Fuse Type for the Application is Selected Using the Following Parameters:

- Voltage Requirements
- Conductor Ampacity
- Horsepower Requirements
- Maximum Available RMS Fault Current
- UL & CSA Fuse Class

### **UL & CSA Fuse Classes**

### Interrupting Ratings Class Volts l<sup>2</sup>t, lp Circuits Amperes 250 and 600V Less than Н 1-600A 10,000A 10.000A available or less AC 250 and 600V K<sup>②</sup> Feeder circuits 1-600A 100.000A or less AC l<sup>2</sup>t-Low Feeder circuits 600V or less To 200.000A J 1-600A (motor load small %) lp-Low $I^2$ t-Slightly > J 600V or less Feeder circuits RK1 1/10-600A To 200.000A (motor load small %) 250V or less Ip-Slightly > J $l^{2}t - > RK - 1$ 600V or less Motor starting RK5 1/10-600A To 200,000A 250V or less Ip- > RK-1 currents a factor 300 and 600V l<sup>2</sup>t-Low Non-motor loads Т 1-600A To 200,000A or less AC Ip-Low I<sup>2</sup>t-Low Feeder circuits 600V or less L 601-5000A To 200.000A motor loads Ip-Low

 $\ensuremath{\mathbb O}\xspace$ Lug is single barrel construction, rated for 2-250 kcmil or 1-500 kcmil cables.

Main Switch Panel Connectors

Ampere Rating	Connectors Suitable for Cu or Al	
400	(1)—#3/0 AWG–500 mcm (2)—#3/0 AWG–250 mcm	
600	(2)—#3/0 AWG–500 mcm	
800	(3)—#3/0 AWG–500 mcm	
1200	(4)—#3/0 AWG–500 mcm	

### **Branch Switch Connectors**

Switch Ampere Rating	Wire and Cable Range
30	(1)—#14-#4 AWG (Cu or Al)
60	(1)—#14-#4 AWG (Cu or Al)
100	(1)—#10-#1/0 AWG (Cu or Al)
200	(1)—#6 AWG-350 kcmil (Cu or Al)
400	(2)—#4/0 AWG-500 kcmil (Cu or Al)
600	(2)—#4/0 AWG-500 kcmil

### Maximu

Amp Rating

30

	(2)—#4/0	AWG-500	kcmil		
um	VB HP	Ratings			
	3 Phase Single Phase DC				
	Volts			Volts	Volts
	240	480	600	240	250
	7.5 15 20		3	5	

60	15	30	50	10
100	30	50	50	15
200	50	-	-	-
400	-	-	-	-

### Maximum VK HP Ratings

		3 Phase		Single Phase	DC
Amp		Volts		Volts	Volts
Rating	240	480	600	240	250
30	7.5	15	20	3	5
60	1.5	30	50	10	10
100	30.0	50	75	15	20
200	60.0	125	150	15	40

### <sup>(2)</sup>Fuses do not prohibit the use of Class H type fuse

in switch.

**Main Lug Panels** 

Ampere Rating	Connectors Suitable for Cu or Al
400 <sup>1</sup>	(1)—#3/0 AWG–500 mcm (2)—#3/0 AWG–250 mcm
600	(2)—#3/0 AWG-500 mcm
800	(3)—#3/0 AWG–500 mcm
1200	(4)—#3/0 AWG–500 mcm

### Gutters

10

20

40 50

Ampere Rating	End Gutters (Minimum inches)	Side Gutters (Minimum inches)
400	12	7.9
600	12	7.9
800	12	7.9
1200	12	7.9

PANELBOARDS