

### GE Fastrac Program Service Switchboards

GE Fastrac Program includes the full range of Switchboards in a variety of ratings and configurations.  
Product is available from six regional manufacturing locations!  
Lead times of 2 weeks to 4 weeks available!  
Contact your local GE sales office for more details.

### New from GE!

—New Record Plus Breakers available in Switchboards!  
—30 Cycle 65kAIC ratings available - contact your local GE sales office for details!

**For more information on these products, order publications from Sections 22 and 23.**

### Application Data

Merchandised and Metering Switchboards—	
Jiffy II-Spectra® .....	10-2
Canadian Jiffy III Switchboards .....	10-7
Commercial Metering Switchboards .....	10-9
Spectra® Integrated Switchboard Solutions.....	10-12
Spectra® Series and Class 5 Utility.....	10-18
Metering Compartments .....	10-18
Application Data .....	10-24
Interrupting Ratings.....	10-26
MicroVersaTrip® Trip Units .....	10-32

### Dimensions Spectra® Series

Dimensions.....	10-34
Section Sizing—Individually Mounted Mains.....	10-36
Section Sizing—Instruments and Meters .....	10-37
Section Sizing—Utility Metering Compartments .....	10-38
Low Voltage Transition Sections and	
Dual Voltage Switchboards.....	10-39
Busway and Conduit Entrance Space.....	10-40
Section Sizing—NEMA 3R.....	10-42
Section Sizing—Group Mounted Mains (Plug-In Style).....	10-43
Section Sizing—Feeder Sections (Plug-In Style) .....	10-44
Section Sizing—Main (Plug-In and Bolt-On Style).....	10-46
Section Sizing—Group Mounted Mains (Bolt-On Style).....	10-47
Section Sizing—Feeder Sections (Bolt-On Style) .....	10-48
Section Sizing—Automatic Throwover Equipment.....	10-49

### Pricing

Ship Cycle.....	10-50
Spectra® Series Pricing .....	10-51
Options and Accessories .....	10-71

### Ordering Directions .....10-72

Ordering—Information Sheet .....	10-72
Ordering—Switchboard Schedule .....	10-73
Ordering—Switchboard Layout .....	10-74



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

# Switchboards

## Group Mounted Switchboards

### Merchandised and Metering

#### Jiffy II-Spectra®

EUSERC West Coast Utility Applications

The GE Jiffy II® Service Entrance Switchboard is designed especially to address the requirements of your small project needs. The compact unit combines the electrical distribution panel, the main service disconnect and the utility metering compartment into one space-saving unit, delivering maximum installation opportunities.

The switchboard is floor mounted and rated up to a maximum 1000A, 100kAIC @ 480V. At 25" deep, the electrical distribution board easily fits into the tightest areas. A full line of field installable digital solid state electronic trip molded-case breakers is also available. With a combination of superior features and options, the GE Jiffy II® not only meets your space saving needs, but also offers total flexibility in design to meet the requirements of the project.

#### Primary Features

- Switchboard Styled NEMA Type 1 Indoor or NEMA 3R Enclosure
- 1000A – Heat Rated Bus Max. 100kAIC @ 480V Max.
- Ground Fault Protection Optional
- Left or Right Hand Pull Sections
- Top or Bottom Feed
- UL, EUSERC Approved
- 14X, 18X, 23X of Device Space for Feeder Breakers, Bolt-on Construction
- Seismic IBC Zone 4, CBC Zone 4, UBC Zone 4
- Heat Rated Aluminum or Heat Rated Copper Bus
- Accepts Aluminum or Copper Incoming Cable
- 35"W Bolt-on (45"W Plug-in) x 90"H x 25"D (Main Only)
- 35"W x 90"H x 25"D (Bussed Pull Section)
- Add 11" Depth for NEMA 3R



# Switchboards

## Group Mounted Switchboards

### Merchandised and Metering

#### Jiffy II-Spectra®

EUSERC West Coast Utility Applications

## Section 10

#### Instructions

- Drawings Included (Feed to Right STD)
- Be sure Utility Kit Size matches Distribution Section
- Fused Switch Distribution Section 45"W
- Fused Distribution Service Disconnect only
- No Fusible Main Device available

- 23X Spectra® Interior available for Distribution
- For Meter Main applications use suffix MM; includes Add On Lug Kit

**Example:** JF63BAW-MM Jiffy Switchboard 600A Bottom Feed, Aluminum Bus, NEMA 3R, 600A Fused Switch Only, No Distribution

#### Fused Switch MLO Service Disconnect (6 Handle Rule) 45"W

Enclosure	Incoming	Max. Amp	Service	Bus Material	Product Number	List Price GO-108Q
NEMA Type 1	Top Feed	400 A	3PH, 4W	Cu	JF43TC	\$5986.82
NEMA Type 1	Top Feed	400 A	3PH, 4W	Al	JF43TA	\$4789.45
NEMA Type 1	Top Feed	400 A	1PH, 3W	Al	JF41TA	\$3414.22
NEMA Type 1	Top Feed	600 A	3PH, 4W	Cu	JF63TC	\$6238.18
NEMA Type 1	Top Feed	600 A	3PH, 4W	Al	JF63TA	\$4989.78
NEMA Type 1	Top Feed	600 A	1PH, 3W	Al	JF61TA	\$3641.58
NEMA Type 1	Top Feed	800 A	3PH, 4W	Cu	JF83TC	\$7058.18
NEMA Type 1	Top Feed	800 A	3PH, 4W	Al	JF83TA	\$5646.54
NEMA Type 1	Top Feed	800 A	1PH, 3W	Al	JF81TA	\$4274.96
NEMA Type 1	Bottom Feed Pull Section Included	400 A	3PH, 4W	Cu	JF43BC	\$7876.19
NEMA Type 1	Bottom Feed Pull Section Included	400 A	3PH, 4W	Al	JF43BA	\$6300.96
NEMA Type 1	Bottom Feed Pull Section Included	400 A	1PH, 3W	Al	JF41BA	\$4774.57
NEMA Type 1	Bottom Feed Pull Section Included	600 A	3PH, 4W	Cu	JF63BC	\$8549.31
NEMA Type 1	Bottom Feed Pull Section Included	600 A	3PH, 4W	Al	JF63BA	\$6501.27
NEMA Type 1	Bottom Feed Pull Section Included	600 A	1PH, 3W	Al	JF61BA	\$5260.74
NEMA Type 1	Bottom Feed Pull Section Included	800 A	3PH, 4W	Cu	JF83BC	\$8947.56
NEMA Type 1	Bottom Feed Pull Section Included	800 A	3PH, 4W	Al	JF83BA	\$7158.03
NEMA Type 1	Bottom Feed Pull Section Included	800 A	1PH, 3W	Al	JF81BA	\$5575.00
NEMA Type 1	Bottom Feed Pull Section Included	1000 A	3PH, 4W	Cu	JF103BC	\$9941.00
NEMA Type 1	Bottom Feed Pull Section Included	1000 A	3PH, 4W	Al	JF103BA	\$7953.39
NEMA Type 3R	Bottom Feed Pull Section Included	400 A	3PH, 4W	Cu	JF43BCW	\$12448.85
NEMA Type 3R	Bottom Feed Pull Section Included	400 A	3PH, 4W	Al	JF43BAW	\$9959.07
NEMA Type 3R	Bottom Feed Pull Section Included	400 A	1PH, 3W	Al	JF41BAW	\$7998.20
NEMA Type 3R	Bottom Feed Pull Section Included	600 A	3PH, 4W	Cu	JF63BCW	\$12603.88
NEMA Type 3R	Bottom Feed Pull Section Included	600 A	3PH, 4W	Al	JF63BAW	\$10083.15
NEMA Type 3R	Bottom Feed Pull Section Included	600 A	1PH, 3W	Al	JF61BAW	\$8297.31
NEMA Type 3R	Bottom Feed Pull Section Included	800 A	3PH, 4W	Cu	JF83BCW	\$13427.68
NEMA Type 3R	Bottom Feed Pull Section Included	800 A	3PH, 4W	Al	JF83BAW	\$10741.65
NEMA Type 3R	Bottom Feed Pull Section Included	800 A	1PH, 3W	Al	JF81BAW	\$9219.25
NEMA Type 3R	Bottom Feed Pull Section Included	1000 A	3PH, 4W	Cu	JF103BCW	\$13261.86
NEMA Type 3R	Bottom Feed Pull Section Included	1000 A	3PH, 4W	Al	JF103BAW	\$12558.90
NEMA Type 3R	Top Feed N3R Includes Separate Utility Landing Section	400 A	3PH, 4W	Cu	JF43TCW	\$8366.92
NEMA Type 3R	Top Feed N3R Includes Separate Utility Landing Section	400 A	3PH, 4W	Al	JF43TAW	\$6755.95
NEMA Type 3R	Top Feed N3R Includes Separate Utility Landing Section	400 A	1PH, 3W	Al	JF41TAW	\$5184.08
NEMA Type 3R	Top Feed N3R Includes Separate Utility Landing Section	600 A	3PH, 4W	Cu	JF63TCW	\$8203.73
NEMA Type 3R	Top Feed N3R Includes Separate Utility Landing Section	600 A	3PH, 4W	Al	JF63TAW	\$6956.28
NEMA Type 3R	Top Feed N3R Includes Separate Utility Landing Section	600 A	1PH, 3W	Al	JF61TAW	\$5691.74
NEMA Type 3R	Top Feed N3R Includes Separate Utility Landing Section	800 A	3PH, 4W	Cu	JF83TCW	\$9024.68
NEMA Type 3R	Top Feed N3R Includes Separate Utility Landing Section	800 A	3PH, 4W	Al	JF83TAW	\$7613.03
NEMA Type 3R	Top Feed N3R Includes Separate Utility Landing Section	800 A	1PH, 3W	Al	JF81TAW	\$5835.33
NEMA Type 3R	Top Feed N3R Includes Separate Utility Landing Section	1000 A	3PH, 4W	Cu	N/A	N/A
NEMA Type 3R	Top Feed N3R Includes Separate Utility Landing Section	1000 A	3PH, 4W	Al	N/A	N/A



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

**Instructions**

- Drawings Included (Feed to Right STD)
- Be sure Utility Kit Size matches Distribution Section
- Breaker Distribution Section 35"W
- Breaker Distribution Service Disconnect only
- Main Device available on next page
- 18X Spectra® Interior available for Distribution

**Breaker MLO Service Disconnect (6 Handle Rule) 35"W**

Enclosure	Incoming	Max. Amp	Service	Bus Material	Product Number	List Price GO-108Q
NEMA Type 1	Top Feed	400 A	3PH, 4W	Cu	JB43TC	\$5986.82
NEMA Type 1	Top Feed	400 A	3PH, 4W	Al	JB43TA	\$4789.45
NEMA Type 1	Top Feed	400 A	1PH, 3W	Al	JB41TA	\$3414.22
NEMA Type 1	Top Feed	600 A	3PH, 4W	Cu	JB63TC	\$6238.18
NEMA Type 1	Top Feed	600 A	3PH, 4W	Al	JB63TA	\$4989.78
NEMA Type 1	Top Feed	600 A	1PH, 3W	Al	JB61TA	\$3641.58
NEMA Type 1	Top Feed	800 A	3PH, 4W	Cu	JB83TC	\$7058.18
NEMA Type 1	Top Feed	800 A	3PH, 4W	Al	JB83TA	\$5646.54
NEMA Type 1	Top Feed	800 A	1PH, 3W	Al	JB81TA	\$4274.96
NEMA Type 1	Bottom Feed Pull Section Included	400 A	3PH, 4W	Cu	JB43BC	\$7876.19
NEMA Type 1	Bottom Feed Pull Section Included	400 A	3PH, 4W	Al	JB43BA	\$6300.96
NEMA Type 1	Bottom Feed Pull Section Included	400 A	1PH, 3W	Al	JB41BA	\$4774.57
NEMA Type 1	Bottom Feed Pull Section Included	600 A	3PH, 4W	Cu	JB63BC	\$8549.31
NEMA Type 1	Bottom Feed Pull Section Included	600 A	3PH, 4W	Al	JB63BA	\$6501.27
NEMA Type 1	Bottom Feed Pull Section Included	600 A	1PH, 3W	Al	JB61BA	\$5260.74
NEMA Type 1	Bottom Feed Pull Section Included	800 A	3PH, 4W	Cu	JB83BC	\$8947.56
NEMA Type 1	Bottom Feed Pull Section Included	800 A	3PH, 4W	Al	JB83BA	\$7158.03
NEMA Type 1	Bottom Feed Pull Section Included	800 A	1PH, 3W	Al	JB81BA	\$5575.00
NEMA Type 1	Bottom Feed Pull Section Included	1000 A	3PH, 4W	Cu	JB103BC	\$9941.00
NEMA Type 1	Bottom Feed Pull Section Included	1000 A	3PH, 4W	Al	JB103BA	\$7953.39
NEMA Type 3R	Bottom Feed Pull Section Included	400 A	3PH, 4W	Cu	JB43BCW	\$12448.85
NEMA Type 3R	Bottom Feed Pull Section Included	400 A	3PH, 4W	Al	JB43BAW	\$9959.07
NEMA Type 3R	Bottom Feed Pull Section Included	400 A	1PH, 3W	Al	JB41BAW	\$7998.20
NEMA Type 3R	Bottom Feed Pull Section Included	600 A	3PH, 4W	Cu	JB63BCW	\$12603.88
NEMA Type 3R	Bottom Feed Pull Section Included	600 A	3PH, 4W	Al	JB63BAW	\$10083.15
NEMA Type 3R	Bottom Feed Pull Section Included	600 A	1PH, 3W	Al	JB61BAW	\$8297.31
NEMA Type 3R	Bottom Feed Pull Section Included	800 A	3PH, 4W	Cu	JB83BCW	\$13427.68
NEMA Type 3R	Bottom Feed Pull Section Included	800 A	3PH, 4W	Al	JB83BAW	\$10741.65
NEMA Type 3R	Bottom Feed Pull Section Included	800 A	1PH, 3W	Al	JB81BAW	\$9219.25
NEMA Type 3R	Bottom Feed Pull Section Included	1000 A	3PH, 4W	Cu	JB103BCW	\$13261.86
NEMA Type 3R	Bottom Feed Pull Section Included	1000 A	3PH, 4W	Al	JB103BAW	\$12558.90
NEMA Type 3R	Top Feed NEMA 3R Includes Separate Utility Landing Section	400 A	3PH, 4W	Cu	JB43TCW	\$8366.92
NEMA Type 3R	Top Feed NEMA 3R Includes Separate Utility Landing Section	400 A	3PH, 4W	Al	JB43TAW	\$6755.95
NEMA Type 3R	Top Feed NEMA 3R Includes Separate Utility Landing Section	400 A	1PH, 3W	Al	JB41TAW	\$5184.08
NEMA Type 3R	Top Feed NEMA 3R Includes Separate Utility Landing Section	600 A	3PH, 4W	Cu	JB63TCW	\$8203.73
NEMA Type 3R	Top Feed NEMA 3R Includes Separate Utility Landing Section	600 A	3PH, 4W	Al	JB63TAW	\$6956.28
NEMA Type 3R	Top Feed NEMA 3R Includes Separate Utility Landing Section	600 A	1PH, 3W	Al	JB61TAW	\$5691.74
NEMA Type 3R	Top Feed NEMA 3R Includes Separate Utility Landing Section	800 A	3PH, 4W	Cu	JB83TCW	\$9024.68
NEMA Type 3R	Top Feed NEMA 3R Includes Separate Utility Landing Section	800 A	3PH, 4W	Al	JB83TAW	\$7613.03
NEMA Type 3R	Top Feed NEMA 3R Includes Separate Utility Landing Section	800 A	1PH, 3W	Al	JB81TAW	\$5835.33
NEMA Type 3R	Top Feed NEMA 3R Includes Separate Utility Landing Section	1000 A	3PH, 4W	Cu	N/A	N/A
NEMA Type 3R	Top Feed NEMA 3R Includes Separate Utility Landing Section	1000 A	3PH, 4W	Al	N/A	N/A



# Switchboards

## Group Mounted Switchboards

### Merchandised and Metering

#### Jiffy II-Spectra®

EUSERC West Coast Utility Applications

## Section 10

#### Instructions

- Drawings Included (Feed to Right STD)
- Be sure Utility Kit Size matches Distribution Section
- K Frame MCB included
- Breaker Distribution Section 35"W
- Main Device included in Section

- 13X Spectra® Interior available for Distribution below Main
- For Meter Main applications use suffix MM; includes Add On Lug Kit

**Example:** JMB63BAW-MM Jiffy Switchboard 600A Bottom Feed, Aluminum Bus, NEMA 3R, 600A MCB Only, No Distribution

#### Main Circuit Breaker with Breaker Distribution 35"W

Enclosure	Incoming	Max. Amp	Service	Bus Material	Product Number	List Price GO-108Q
NEMA Type 1	Top Feed	400 A	3PH, 4W	Cu	JMB43TC	\$8846.40
NEMA Type 1	Top Feed	400 A	3PH, 4W	Al	JMB43TA	\$7517.00
NEMA Type 1	Top Feed	400 A	1PH, 3W	Al	JMB41TA	\$5587.20
NEMA Type 1	Top Feed	600 A	3PH, 4W	Cu	JMB63TC	\$9467.20
NEMA Type 1	Top Feed	600 A	3PH, 4W	Al	JMB63TA	\$7837.60
NEMA Type 1	Top Feed	600 A	1PH, 3W	Al	JMB61TA	\$5975.20
NEMA Type 1	Top Feed	800 A	3PH, 4W	Cu	JMB83TC	\$12396.60
NEMA Type 1	Top Feed	800 A	3PH, 4W	Al	JMB83TA	\$10214.10
NEMA Type 1	Top Feed	800 A	1PH, 3W	Al	JMB81TA	\$7857.00
NEMA Type 1	Bottom Feed Pull Section Included	400 A	3PH, 4W	Cu	JMB43BC	\$10243.20
NEMA Type 1	Bottom Feed Pull Section Included	400 A	3PH, 4W	Al	JMB43BA	\$8691.20
NEMA Type 1	Bottom Feed Pull Section Included	400 A	1PH, 3W	Al	JMB41BA	\$6984.00
NEMA Type 1	Bottom Feed Pull Section Included	600 A	3PH, 4W	Cu	JMB63BC	\$10864.00
NEMA Type 1	Bottom Feed Pull Section Included	600 A	3PH, 4W	Al	JMB63BA	\$9239.25
NEMA Type 1	Bottom Feed Pull Section Included	600 A	1PH, 3W	Al	JMB61BA	\$7372.00
NEMA Type 1	Bottom Feed Pull Section Included	800 A	3PH, 4W	Cu	JMB83BC	\$12416.00
NEMA Type 1	Bottom Feed Pull Section Included	800 A	3PH, 4W	Al	JMB83BA	\$10797.00
NEMA Type 1	Bottom Feed Pull Section Included	800 A	1PH, 3W	Al	JMB81PBA	\$8380.80
NEMA Type 1	Bottom Feed Pull Section Included	1000 A	3PH, 4W	Cu	JMB103BC	\$15830.40
NEMA Type 1	Bottom Feed Pull Section Included	1000 A	3PH, 4W	Al	JMB103BA	\$13424.80
NEMA Type 3R	Bottom Feed Pull Section Included	400 A	3PH, 4W	Cu	JMB43BCW	\$14666.40
NEMA Type 3R	Bottom Feed Pull Section Included	400 A	3PH, 4W	Al	JMB43BAW	\$12416.00
NEMA Type 3R	Bottom Feed Pull Section Included	400 A	1PH, 3W	Al	JMB41BAW	\$9932.80
NEMA Type 3R	Bottom Feed Pull Section Included	600 A	3PH, 4W	Cu	JMB63BCW	\$15132.00
NEMA Type 3R	Bottom Feed Pull Section Included	600 A	3PH, 4W	Al	JMB63BAW	\$12804.00
NEMA Type 3R	Bottom Feed Pull Section Included	600 A	1PH, 3W	Al	JMB61BAW	\$10243.20
NEMA Type 3R	Bottom Feed Pull Section Included	800 A	3PH, 4W	Cu	JMB83BCW	\$16761.60
NEMA Type 3R	Bottom Feed Pull Section Included	800 A	3PH, 4W	Al	JMB83BAW	\$14200.80
NEMA Type 3R	Bottom Feed Pull Section Included	800 A	1PH, 3W	Al	JMB81BAW	\$11329.69
NEMA Type 3R	Bottom Feed Pull Section Included	1000 A	3PH, 4W	Cu	JMB103BCW	\$22659.20
NEMA Type 3R	Bottom Feed Pull Section Included	1000 A	3PH, 4W	Al	JMB103BAW	\$19167.20
NEMA Type 3R	Top Feed NEMA 3R Includes Separate Utility Landing Section	400 A	3PH, 4W	Cu	JMB43TCW	\$11849.52
NEMA Type 3R	Top Feed NEMA 3R Includes Separate Utility Landing Section	400 A	3PH, 4W	Al	JMB43TAW	\$10297.52
NEMA Type 3R	Top Feed NEMA 3R Includes Separate Utility Landing Section	400 A	1PH, 3W	Al	JMB41TAW	\$8590.32
NEMA Type 3R	Top Feed NEMA 3R Includes Separate Utility Landing Section	600 A	3PH, 4W	Cu	JMB63TCW	\$12470.32
NEMA Type 3R	Top Feed NEMA 3R Includes Separate Utility Landing Section	600 A	3PH, 4W	Al	JMB63TAW	\$10840.72
NEMA Type 3R	Top Feed NEMA 3R Includes Separate Utility Landing Section	600 A	1PH, 3W	Al	JMB61TAW	\$8978.32
NEMA Type 3R	Top Feed NEMA 3R Includes Separate Utility Landing Section	800 A	3PH, 4W	Cu	JMB83TCW	\$14022.32
NEMA Type 3R	Top Feed NEMA 3R Includes Separate Utility Landing Section	800 A	3PH, 4W	Al	JMB83TAW	\$12082.32
NEMA Type 3R	Top Feed NEMA 3R Includes Separate Utility Landing Section	800 A	1PH, 3W	Al	JMB81TAW	\$9987.12
NEMA Type 3R	Top Feed NEMA 3R Includes Separate Utility Landing Section	1000 A	3PH, 4W	Cu	N/A	N/A
NEMA Type 3R	Top Feed NEMA 3R Includes Separate Utility Landing Section	1000 A	3PH, 4W	Al	N/A	N/A



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

# Switchboards

## Group Mounted Switchboards

### Merchandised and Metering

#### Jiffy II-Spectra®

EUSERC West Coast Utility Applications  
Utility Kits

## Section 10

Utility kits include meter door, socket and lugs.

### Three-Phase Breaker Width

Utility	Voltage	Phase	Door Width	Product Number	List Price GO-108Q
ARIZONA PUBLIC SERVICE	120/208V OR 277/480V	3P4W	35	J335APS	\$985.95
LADWP	120/208V OR 277/480V	3P4W	35	J335LADWP	\$1060.95
NEVADA POWER	120/208V OR 277/480V	3P4W	35	J335NP	\$1126.80
PACIFIC GAS & ELECTRIC	120/208V OR 277/480V	3P4W	35	J335PG&E	\$1197.23
PORTLAND GEN ELECTRIC	120/208V OR 277/480V	3P4W	35	J335POGE	\$1197.23
PUGET SOUND ENERGY	120/208V OR 277/480V	3P4W	35	J335PSE	\$985.95
SACRAMENTO MUNICIPAL	120/208V OR 277/480V	3P4W	35	J335SME	\$1197.23
SALT RIVER PROJECT	120/208V OR 277/480V	3P4W	35	J335SRP	\$1455.46
SAN DIEGO GAS & ELECTRIC	120/208V OR 277/480V	3P4W	35	J335SDG&E	\$1060.95
SEATTLE CITY LIGHT	120/208V OR 277/480V	3P4W	35	J335SCL	\$1126.80
SOUTHERN CAL EDISON	120/208V OR 277/480V	3P4W	35	J335SCE	\$1126.80
TUCSON ELECT POWER	120/208V OR 277/480V	3P4W	35	J335STEP	\$1060.95

### Three-Phase Fusible Width

Utility	Voltage	Phase	Door Width	Product Number	List Price GO-108Q
ARIZONA PUBLIC SERVICE	120/208V OR 277/480V	3P4W	45	J345APS	\$1150.28
LADWP	120/208V OR 277/480V	3P4W	45	J345LADWP	\$1225.26
NEVADA POWER	120/208V OR 277/480V	3P4W	45	J345NP	\$1314.60
PACIFIC GAS & ELECTRIC	120/208V OR 277/480V	3P4W	45	J345PG&E	\$1385.03
PORTLAND GEN ELECTRIC	120/208V OR 277/480V	3P4W	45	J345POGE	\$1385.03
PUGET SOUND ENERGY	120/208V OR 277/480V	3P4W	45	J345PSE	\$1150.28
SACRAMENTO MUNICIPAL	120/208V OR 277/480V	3P4W	45	J345SM	\$1385.03
SALT RIVER PROJECT	120/208V OR 277/480V	3P4W	45	J345SRP	\$1338.09
SAN DIEGO GAS & ELECTRIC	120/208V OR 277/480V	3P4W	45	J345SDG&E	\$1225.26
SEATTLE CITY LIGHT	120/208V OR 277/480V	3P4W	45	J345SCL	\$1314.60
SOUTHERN CAL EDISON	120/208V OR 277/480V	3P4W	45	J345SCE	\$1314.60
TUCSON ELECT POWER	120/208V OR 277/480V	3P4W	45	J345STEP	\$1225.26

### Single-Phase Breaker Width

Utility	Voltage	Phase	Door Width	Product Number	List Price GO-108Q
ARIZONA PUBLIC SERVICE	120/240V	1P3W	35	J135APS	\$516.45
LADWP	120/240V	1P3W	35	J135LADWP	\$591.45
NEVADA POWER	120/240V	1P3W	35	J135NP	\$985.95
PACIFIC GAS & ELECTRIC	120/240V	1P3W	35	J135PG&E	\$1173.75
PORTLAND GEN ELECTRIC	120/240V	1P3W	35	J135POGE	\$1173.75
PUGET SOUND ENERGY	120/240V	1P3W	35	J135PSE	\$516.45
SACRAMENTO MUNICIPAL	120/240V	1P3W	35	J135SM	\$1173.75
SALT RIVER PROJECT	120/240V	1P3W	35	J135SRP	\$657.30
SAN DIEGO GAS & ELECTRIC	120/240V	1P3W	35	J135SDG&E	\$591.45
SEATTLE CITY LIGHT	120/240V	1P3W	35	J135SCL	\$985.95
SOUTHERN CAL EDISON	120/240V	1P3W	35	J135SCE	\$985.95
TUCSON ELECT POWER	120/240V	1P3W	35	J135STEP	\$591.45

### Single-Phase Fusible Width

Utility	Voltage	Phase	Door Width	Product Number	List Price GO-108Q
ARIZONA PUBLIC SERVICE	120/240V	1P3W	45	J145APS	\$680.78
LADWP	120/240V	1P3W	45	J145LADWP	\$755.78
NEVADA POWER	120/240V	1P3W	45	J145NP	\$1150.28
PACIFIC GAS & ELECTRIC	120/240V	1P3W	45	J145PG&E	\$1338.08
PORTLAND GEN ELECTRIC	120/240V	1P3W	45	J145POGE	\$1338.08
PUGET SOUND ENERGY	120/240V	1P3W	45	J145PSE	\$680.78
SACRAMENTO MUNICIPAL	120/240V	1P3W	45	J145SM	\$1338.08
SALT RIVER PROJECT	120/240V	1P3W	45	J145SRP	\$1173.76
SAN DIEGO GAS & ELECTRIC	120/240V	1P3W	45	J145SDG&E	\$755.78
SEATTLE CITY LIGHT	120/240V	1P3W	45	J145SCL	\$1173.75
SOUTHERN CAL EDISON	120/240V	1P3W	45	J145SCE	\$1150.28
TUCSON ELECT POWER	120/240V	1P3W	45	J145STEP	\$755.78



# Switchboards

## Group Mounted Switchboards

### Jiffy III Switchboards

## Section 10

#### Product Introduction

The GE Jiffy III Utility Service Entrance Switchboard is designed especially to address the Canadian market. The compact unit combines the electrical distribution panel, the main service disconnect and the utility metering compartment into one space-saving unit, delivering maximum installation opportunities.

The switchboard is floor mounted and rated up to a maximum 1200A, 42 kAIC @600V. At 15" (381 mm) deep, the electrical distribution board easily fits into the tightest areas where space is typically limited. The Jiffy III is UL and cUL<sup>1</sup> approved and meets the seismic requirements of IBC Zone 4 and CBC Zone 4.

Designed and approved specifically for the Canadian Utility Market<sup>2</sup>, the Jiffy III is available with mains rated at 800A, 1000A and 1200A; 80% and 100% rated (with the exception of 1200A, which is 80% rated only); and with or without Ground Fault protection. A full line of field installable Digital Solid State Electronic Trip Molded-Case Breakers is also available. With a combination of superior features and options, the GE Jiffy III Utility Service Entrance Switchboard not only meets your space-saving needs, but also offers total flexibility in design to meet the requirements of the project.



#### Features

- Switchboard Styled, Type 1 Indoor Enclosure with Driphood (NEMA 1)
- 1200A-Heat Rated Bus max., 65kAIC @ 600V max.
- 80% and 100% Rated Main (1200A rated at 80% only)
- Ground Fault Protection optional
- Left or Right Hand Pull Sections—dependent on region
- Top or Bottom Feed Main—dependent on region
- UL, cUL approved
- 23X of Device Space for Feeder Breakers, Bolt-on Construction
- Seismic IBC Zone 4, CBC Zone 4, UBC Zone 4
- Heat Rated Aluminum Bus Bar standard with Copper Main Device Straps
- Accepts Aluminum or Copper Incoming Cable
- 40" W (1016 mm) x 90" H (2286 mm) x 15" D (381 mm) (Main Only)
- 25" W (635 mm) x 90" H (2286 mm) x 15" D (381 mm) (Bussed Pull Section)
- 15" W (381 mm) x 90" H (2286 mm) x 15" D (381 mm) (Blank Pull Section)
- Branch Feed-MCCB 15-1200A

<sup>1</sup>cUL certified to meet CSA 22.2 No. 31.

<sup>2</sup>Non-BC Hydro Utilities. Contact your local GE Sales Engineer for your utility requirements.



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications



# Switchboards

## Group Mounted Switchboards

### Jiffy III Switchboards

## Section 10

#### Switchboard with Bussed Section<sup>1</sup>–Left to Right Feed

Max. Amp	Main Breaker Rating	Ground Fault Protection	Product Number	List Price GO-108CJ
800	80%	No	ACJ208080LR	<b>\$17410.00</b>
800	80%	Yes	ACJ208080GLR	<b>\$19260.00</b>
800	100%	No	ACJ208100LR	<b>\$24450.00</b>
800	100%	Yes	ACJ208100GLR	<b>\$26300.00</b>
1000	100%	No	ACJ210100LR	<b>\$25560.00</b>
1000	100%	Yes	ACJ210100GLR	<b>\$27410.00</b>
1200	80%	No	ACJ212080LR	<b>\$18150.00</b>
1200	80%	Yes	ACJ212080GLR	<b>\$20005.00</b>

#### Switchboard with Bussed Section<sup>1</sup>–Right to Left Feed

Max. Amp	Main Breaker Rating	Ground Fault Protection	Product Number	List Price GO-108CJ
800	80%	No	ACJ208080RL	<b>\$17410.00</b>
800	80%	Yes	ACJ208080GRL	<b>\$19260.00</b>
800	100%	No	ACJ208100RL	<b>\$24450.00</b>
800	100%	Yes	ACJ208100GRL	<b>\$26300.00</b>
1000	100%	No	ACJ210100RL	<b>\$25560.00</b>
1000	100%	Yes	ACJ210100GRL	<b>\$27410.00</b>
1200	80%	No	ACJ212080RL	<b>\$18150.00</b>
1200	80%	Yes	ACJ212080GRL	<b>\$20005.00</b>

#### Switchboard w/out Bussed Pull Section<sup>1</sup>–Top Feed

Max. Amp	Main Breaker Rating	Ground Fault Protection	Product Number	List Price GO-108CJ
800	80%	No	ACJ108080T	<b>\$11855.00</b>
800	80%	Yes	ACJ108080GT	<b>\$12965.00</b>
800	100%	No	ACJ108100T	<b>\$17410.00</b>
800	100%	Yes	ACJ108100GT	<b>\$18520.00</b>
1000	100%	No	ACJ110100T	<b>\$18520.00</b>
1000	100%	Yes	ACJ110100GT	<b>\$19630.00</b>
1200	80%	No	ACJ112080T	<b>\$12595.00</b>
1200	80%	Yes	ACJ112080GT	<b>\$13705.00</b>

#### Switchboard w/out Bussed Pull Section<sup>1</sup>–Bottom Feed

Max. Amp	Main Breaker Rating	Ground Fault Protection	Product Number	List Price GO-108CJ
800	80%	No	ACJ108080B	<b>\$11855.00</b>
800	80%	Yes	ACJ108080GB	<b>\$12965.00</b>
800	100%	No	ACJ108100B	<b>\$17410.00</b>
800	100%	Yes	ACJ108100GB	<b>\$18520.00</b>
1000	100%	No	ACJ110100B	<b>\$18520.00</b>
1000	100%	Yes	ACJ110100GB	<b>\$19630.00</b>
1200	80%	No	ACJ112080B	<b>\$12595.00</b>
1200	80%	Yes	ACJ112080GB	<b>\$13705.00</b>

<sup>1</sup>Bus material–aluminum with copper main device straps. Bussed pull sections are not convertible from left to right or right to left. Main breaker included in section.

### Specifications

Product Capability/Specification	Jiffy III Switchboard	Additional Information
Enclosure Type	NEMA 1	NEMA 1 with Driphood
Section Dimensions	40" W x 90" H x 15" D (1016 mm x 2286 mm x 381 mm) (Main Only) 25" W x 90" H x 15" D (635 mm x 2286 mm x 381 mm) (Bussed Pull Section) 15" W x 90" H x 15" D (381 mm x 2286 mm x 381 mm) (Blank Pull Section)	
Voltage	600V Max.	
Amperage	1200A - Heat Rated	
Bus Bar	Aluminum with Copper Main Device Straps	
80% Rating	800A to 1200A	
100% Rating	800A to 1000A	
Standards	cUL, NEMA, NEC, PB II	
Seismic Rating	IBC Zone 4, CBC Zone 4, UBC Zone 4	
Entry	Cable or Bussed Pull Section	
Top or Bottom Feed	Top and Bottom Feed	
Lug Type	Mechanical Aluminum	
Incoming Cable	Copper or Aluminum	
Max. Bus kA Rating	65kAIC	
Neutral Rating	100% - Heat Rated	
Main Devices	1200A Manually Operated Stationary	
Main Device Accessories	UV <sup>2</sup> , ST <sup>2</sup> , Aux Contact, Bell Alarm	Field Installed
Utility CT Provision	Bar Type CT	
Utility PT Provision	Yes	
Branch/Feeder Switches	MCCB 15 - 1200A	TEY, TED, TED6CL, THED, TEDL, SFHA SGLA, SFDA, SFHA, SKHA, SKLA Field Installed
Branch Accessories	UV <sup>2</sup> , ST <sup>2</sup> , Aux Contact, Bell Alarm	Field Installed
Branch Mounting	23x Bolt-on Construction	
Delivery Time	2 Weeks to Ship - 3 Weeks On-site	
Accessories Available	Jiffy and Spectra® Bolt-on Device Mounting Hardware Full Filler Plates for Jiffy and Spectra® Jiffy and Spectra® Bolt-on Device Filler Plate Kit Padlocking Devices for Jiffy and Spectra® Load Lugs	

<sup>2</sup>Shunt Trip or UV cannot be installed in same breakers.





# Switchboards

## Group Mounted Switchboards

### Commercial Metering Switchboard

EUSERC West Coast Utility Applications

NON-EUSERC Utility Applications

Lever Bypass

GE Commercial Metering Switchboards are designed specifically to serve the EUSERC market in the western United States. In addition, they serve the NON-EUSERC markets with a Lever By-Pass arrangement. They are UL listed and labeled and offer a wide range of installation and performance features that simplify any project.

Metering sections are assembled with two sockets pre-wired on the line and load sides. All sockets are 200A continuous duty. A full selection of tenant mains are available including circuit breakers, fusible switches and T-Fuse pullouts.

#### Standards

##### Switchboard

- UL 891
- NEMA PB-2

##### Meter Sockets

- UL 414
- ANSI C12.7

##### Circuit Breakers

- UL 489

##### Fused Switches

- UL 98

#### Other Key Features

- 4000 main service, 480V maximum
- Aluminum or copper bus
- 65,000A symmetrical bracing; standard 100K available
- 200A continuous duty sockets
- Hot and cold sequencing is available
- Type 3R construction available

#### Available Sections

- Underground Pull Sections
- Underground Pull Section with Main Switch
- Underground Pull Section with Main Breaker
- Overhead Sections with Main Switch or Breaker
- CT Meter Sections with Main Switch
- CT Meter Sections with Main Switch and Distribution
- CT Meter Sections with Main Breaker
- CT Main Sections with Main Breaker and Distribution
- CT Meter Sections with Main Lugs
- Auxiliary Sections (Wireways, Corner Sections)
- Multi Meter Sections with Fusible Pullout Mains
- Multi Meter Sections with Circuit Breaker Mains
- Distribution Sections



For application and size information, refer to publication DEA-340, internet address [www.geelectrical.com](http://www.geelectrical.com), or contact your local Sales Office. For pricing support contact your local GE Consumer and Industrial Sales Office.



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

# Switchboards

## Group Mounted Switchboards

### Commercial Metering Switchboard

EUSERC West Coast Utility Applications

NON-EUSERC Utility Applications

Lever Bypass

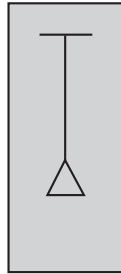
Section Types

- UL Listed, EUSERC, XCEL ENERGY Approved
- 208Y/120V or 480Y/277V; 100 kAIC
- 600, 800, 1000, 1200, 2000, 3000, 4000A

- NEMA 1 or 3R enclosure
- Bottom feed
- Cu or Al bus

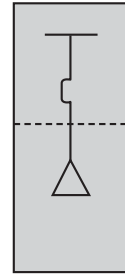
#### Underground Pull Sections

- 25" minimum depth
- 100 kAIC
- Bottom feed
- Cu or Al bus
- NEMA 1 or 3R



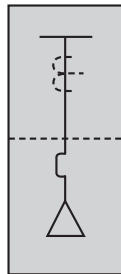
#### Underground Pull Sections with Single Main Breaker

- 400A-2000A
- G, K and PBII circuit breakers
- HPC and THFP fused switches
- 25" minimum depth
- Device padlocking
- SE barriers
- Equipment ground fault protection on 1200A-2000A (optional on 400A-1000A)
- Front access



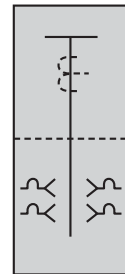
#### Large Tenant Mains

- Hot Sequence Metering
- SG, SK, PBII, THFP, HPC
- 25" minimum depth
- Minimum widths:
  - 400A and 600A G Frame, 800A K Frame: 35"
  - 1000A and 1200A K Frame: 40"
  - 1600 and 2000A PBII: 40"
  - 400A and 600A THFP, 800A HPC: 35"
  - 1000A and 1200A HPC: 40"
- Bottom or top exit
- Device padlocking
- Equipment ground fault protection on 1200A and 2000A (optional on lower amperages)
- Mounting provisions for CTs
- Isolating barriers
- Hinged sealable cover
- Transformer rated meter socket
- Front access
- Middle or bottom mounted neutral
- Lever bypass meter sockets available



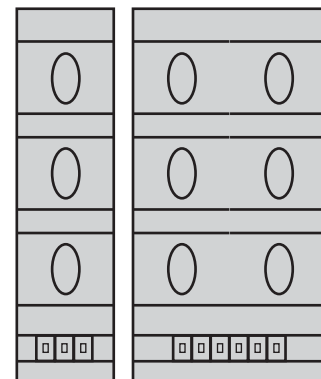
#### Distribution Panel

- Interior 2000A, Cu bus, 100 kAIC
- 13, 18, 23X distribution space
- Bolt-on and Plug-in
- 3Ph 4W
- Spectra® main breaker or main lug only interior
- CT compartment up to 2000A
- Front neutral access



#### Tenant Metering

- Cold and hot sequences
- Tenant mains SF, T-fuse pullout and FD1 with J fuse constructions:
  - a) SF (100A, 200A)
  - b) T-fuse pull out (100A, 200A)
  - c) FD1 (100A, 200A) with J fuse
- 3 Ph 4 W Service
- 3 Pole, 2 Pole disconnects
- 600A-4000A horizontal bus
- 3-pack 20" width, 6-pack 35" width
- 25" minimum depth for top or bottom exit—to 60"
- Provisions for field installable socket and breaker additions
- Front access
- 100% rated neutral; standard ground rating
- Middle or bottom mounted neutral
- Ringless style meter sockets
- Lever bypass meter sockets available
- Service entrance barriers
- 4000A maximum horizontal bus
- 100 kAIC
- Top and bottom feed exit
- Test bypass block meter socket available
- Ringless cover - NO hinge (ST only)
- 5, 7, 13 jaw sockets
- Locking jaws
- Flash shields
- Line lugs at top, load at bottom
- Small tenant meters: 3- or 6-pack
- Main disconnects lockable in OFF position



# Switchboards

## Group Mounted Switchboards

### Commercial Metering Switchboard

EUSERC West Coast Utility Applications

NON-EUSERC Utility Applications

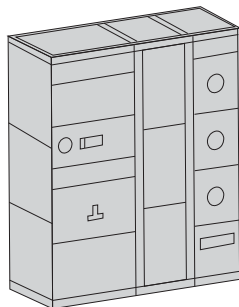
Lever Bypass

## Section 10

### Options

#### Side Load Wireway

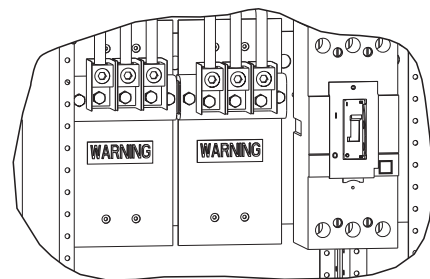
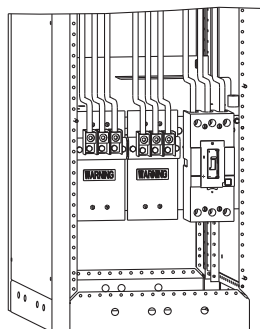
—15" minimum width, copper or aluminum bus



Side Load Wireway

#### UL Approved Field-Installable Small Tenant Kits

—Prewired sections meet UL



#### Meter Socket Field Kits

Disconnect	Rating	Product Number	List Price
35 kAIC Breaker	277/480V, 200A	CM 203M SB600V	<b>\$939.00</b>
35 kAIC Breaker	277/480V, 100A	CM 103M SB600V	<b>\$939.00</b>
65 kAIC Breaker	277/480V, 200A	CM 203M SB600VH	<b>\$939.00</b>
65 kAIC Breaker	277/480V, 100A	CM 103M SB600VH	<b>\$939.00</b>
65 kAIC Breaker	120/208V, 200A	CM 203M SB240V	<b>\$939.00</b>
65 kAIC Breaker	120/208V, 100A	CM 103M SB240V	<b>\$939.00</b>
65 kAIC Breaker	120/240V, 200A	CM 203M SSB240V	<b>\$939.00</b>
65 kAIC Breaker	120/240V, 100A	CM 103M SSB240V	<b>\$939.00</b>
65 kAIC Breaker	120/240V, 200A	CM 201M SSB240V	<b>\$1149.00</b>
65 kAIC Breaker	120/240V, 100A	CM 101M SSB240V	<b>\$1149.00</b>
T-Fuse Pullout	277/480V, 200A	CM 203M STF600V	<b>\$247.00</b>
T-Fuse Pullout	120/208V, 200A	CM 203M STF240V	<b>\$231.00</b>
T-Fuse Pullout	120/240V, 200A	CM 201M STF240V	<b>\$231.00</b>
T-Fuse Pullout	277/480V, 100A	CM 103M STF600V	<b>\$216.00</b>
T-Fuse Pullout	120/208V, 100A	CM 103M STF240V	<b>\$204.00</b>
T-Fuse Pullout	120/240V, 100A	CM 101M STF240V	<b>\$204.00</b>
FD1 Switch	277/480V, 200A	CM 200M SJF600V	<b>\$963.00</b>
FD1 Switch	120/208V, 200A	CM 200M SJF240V	<b>\$963.00</b>



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

# Switchboards

## Spectra® Series Switchboards

### Spectra® Integrated Switchboard Solutions

## Section 10

#### Product Introduction

Spectra® Integrated Switchboard solutions save time, money and space, yet sacrifice nothing in terms of safety, performance or flexibility. You get flexibility in design and consistency in execution. Units expand or contract to accommodate your specific needs. And not only do they reflect GE's rigorous Six Sigma quality standards, they are also built and tested in accordance with NEMA PB-2, UL 891 and the NEC. All sections and devices are UL listed and UL labeled.



#### Features

Spectra® Integrated Switchboard solutions are custom designed and built to your specifications. You choose all the elements you need. Featured elements include:

- Power distribution
- Energy management systems
- Building automation systems
- Automatic transfer switches
- Surge suppression
- Dry type transformers
- Lighting controls

#### Typical Installation Steps for Spectra® Integrated Switchboard Solution

1. Bring conduits through floor
2. Receive single switchboard unit
3. Set switchboard in place (whether the room is complete or not)
4. Run conduits and wire branches

**For pricing support contact your local GE Consumer and Industrial Sales Office.**

#### Benefits

- Save Space**—Conventional electrical installations waste space. Lighting and power panels take up long stretches of wall. Transformers eat up floor space. Lighting controls and building automation have to go somewhere. Spectra® Integrated Switchboard solutions integrate all these elements into a fraction of the area.
- Reduce Total Installed Costs**—The Spectra® Integrated Switchboard solution packs virtually all your power requirements into one single integrated distribution and control system—a compact, plug-and-play line-up. This reduces installation costs while turning otherwise non-productive mechanical space into revenue-generating sales or storage space.
- Cut Installation Time**—Construction schedules have never been tighter. When you're ready to install electrical equipment, you want it done now, so that you can move on to the next step. Spectra® Integrated Switchboard solutions arrive with everything you need, and when you need it, fully pre-wired to your specifications. All you have to do is set it in place, run the incoming power and wire out the branches. Installation takes less than half the time.



# Switchboards

## Spectra® Series Switchboards

### Spectra® Integrated Switchboard Solutions

Lighting Panels

A-Series Panel type AQ, AL, AE, AD

## Section 10

### A-Series Panel Type AQ, AL, AE, AD

A-Series Panel Height	Switchboard Cover Height
19	32
25	32
31	36
37	40
43	48
49	60
58	64
70	76

To determine A-Series Panel height (AQ, AL and AE only), refer to EQIP Sizing 2001.

### A-Series Panel Specifications

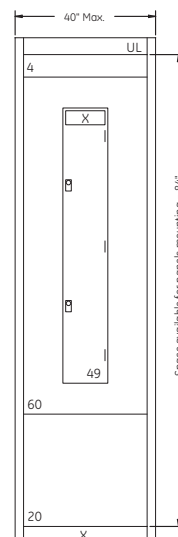
<b>Amperage</b>	400 Amp maximum, MCB or MLO.
<b>Voltage</b>	600 Vac maximum
<b>Int. Rating</b>	65 kA max., fully or series rating.
<b>Circuits</b>	42 circuits maximum in each panel.
<b>Section Depth</b>	15" to 30"
<b>Section Width</b>	20" to 40"

Maximum panels heights in stack are 36"H and 48"H.

If 400 A panel serves as an incoming component then a 4" cover is necessary between the panel and either top (for top feed) or bottom (bottom feed)

If 600 A panel serves as an incoming component, then an 8" cover is necessary between the panel and either top (for top feed) or bottom (bottom feed)

The A-Series panels above 125A must be type M (equipment panel)

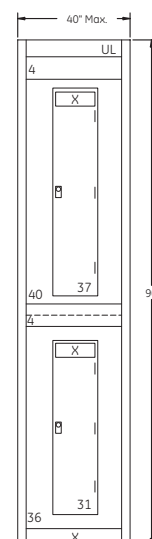


Single A-Series Panel

### A-Series Panel Selection Guide

Amps. Max.	Service Information	Switchboard Location	Section Width Min.
<b>AQ panel</b>			
125 A	240 Vac max.	Top, Bottom	20W
225 A	1 Ph, 3W.	Top, Bottom	20W
400 A	3 Ph, 3W.	Top, Bottom	20W
<b>AL panel</b>			
125 A	240 Vac max.	Top, Bottom	20W
225 A	1 Ph, 3W.	Top, Bottom	20W
400 A	3 Ph, 3W.	Top, Bottom	20W
<b>AE Panel</b>			
125 A	480Y/227 Vac	Top, Bottom	20W
225 A	3 Ph, 4W.	Top, Bottom	20W
400 A	125/250 Vdc	Top, Bottom	20W
<b>AD Panel<sup>1</sup></b>			
125 A	120/208 Vac, 3 Ph, 4W.	Full Height	25W
225 A	480 Vac, 3 Ph, 3W.	Full Height	25W
400 A	480Y/277 Vac, 3 Ph, 4W.	Full Height	25W

<sup>1</sup>Availability limited—ask local GE Sales Engineer



Dual A-Series Panel



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

# Switchboards

## Spectra® Series Switchboards

### Spectra® Integrated Switchboard Solutions

#### Transformers

## Section 10

### Transformer Specifications

Type	3 Phase, 15-150 kVA High-Efficiency
Windings	Copper or Aluminum
Temp. Rise	80°C, 115°C, 150°C
Category	Standard
Shield	No shield or Electrostatic-Shield <sup>1</sup>
Enclosure Type	NEMA 1

No transformer can be placed in a section adjacent to a 150kVA.

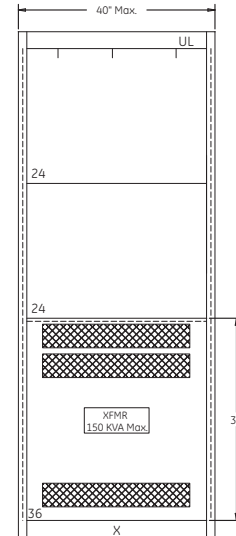
Individual transformers can be placed at the bottom of the section only.

<sup>1</sup>Ask local GE Sales Engineer about K-rated transformer availability.

### Individual Mounting Logic

kVA	Temperature Rise	Minimum Size
15	All	30W25D
30	All	30W25D
45	All	30W25D <sup>2</sup>
75	All	35W30D
112.5	150°C, 80°C (TransforMore®)	35W30D
112.5	115°C	40W30D
150	150°C	40W30D
150	150°C, 80°C (TransforMore®)	35W30D

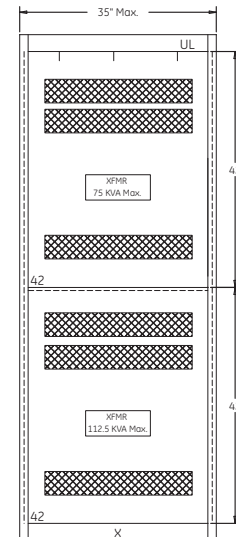
<sup>2</sup>45kVA, 80°C is 35W30D



Individual Transformer

### Dual Mounting Logic

XFMR Cover	Lower XFMR	Upper XFMR	Temp Rise	Min. Sect. Width	Min. Sect. Depth
42	15	15	All	30	25
	30	15	All	30	25
	30	30	All	30	25
	45	15	150°C	30	25
	45	30	150°C	30	25
	45	45	150°C	30	25
	45	15	115°C	35	30
	45	30	115°C	35	30
	45	45	80°C	35	30
	75	15	All	35	30
	75	30	All	35	30
	75	45	All	35	30
	75	75	All	35	30
	112.5 (150°C)	15	All	35	30
	112.5 (150°C)	30	All	35	30
	112.5 (150°C)	45	All	35	30
	112.5 (150°C)	75	All	35	30
	112.5 (150°C)	15	All	40	30
	112.5 (150°C)	30	All	40	30
	112.5 (150°C)	45	All	40	30
	112.5 (150°C)	75	All	40	30
	112.5 (80°C)	15	All	35	30
	112.5 (80°C)	30	All	35	30
	112.5 (80°C)	45	All	35	30
	112.5 (80°C)	75	All	35	30



Dual Transformer



# Switchboards

## Spectra® Series Switchboards

### Spectra® Integrated Switchboard Solutions

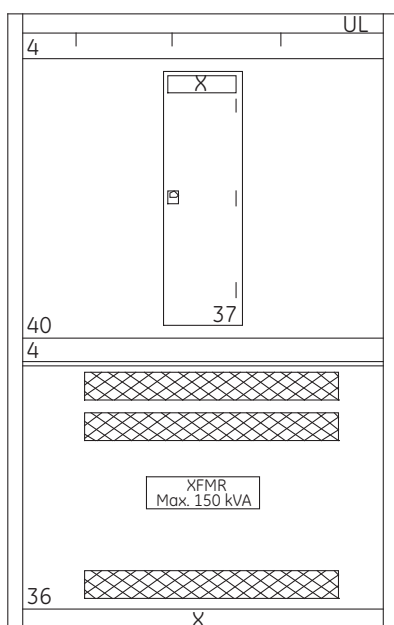
Stacking Lighting Panels with Transformer

## Section 10

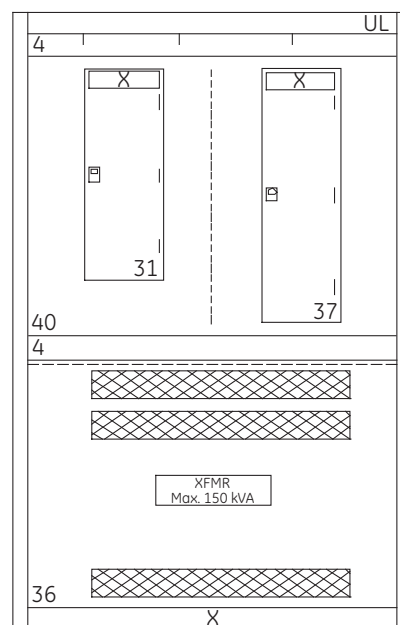
### Product Description

Panel type	AQ, AL, AE
Panel height	37"H with MCB
Transformer type	High-Efficiency, 3 Phase, 15 - 150 kVA
Section size	In individual mounting, section depth and width depend on the transformer. In double mounting, minimum section width is 40W. Section depth depends on the transformer.

Transformers can be placed at the bottom of the section only.  
Contact local GE Sales Engineer for Dual Mounted panels with different voltages.



A-Series Single Mounting and Transformer



A-Series Double Mounting and Transformer



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications



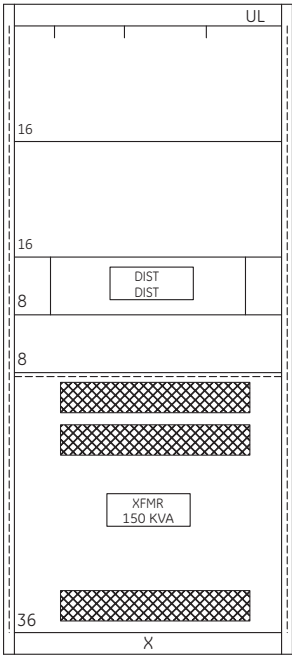
Breaker Specifications

Type	Spectra® RMS SE Spectra® RMS SF
Ampere Rating	SE 15-150 SF 70-250
System	3Ph, 3W 3Ph, 4W
Voltage	600 V max.
Section depth	15" min.
Stack with	Transformers Lighting panels

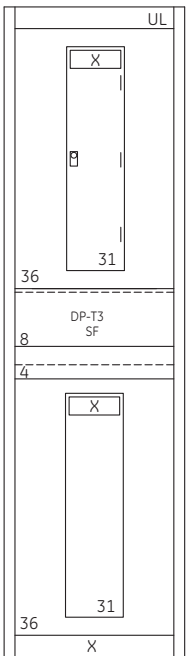
When SE/SF are mounting in stack with transformers, the section size depend on the transformers.

Breaker Dimensions

Type	Ampere Rating	Minimum size into the section	
		Height	Width
SE	15-70	8H	20W
SE	70-150	8H	20W
SF	70-150	8H	20W
SF	150-250	8H	25W



SE or SF with Transformer



SE or SF with Lighting Panels



# Switchboards

## Spectra® Series Switchboards

### Spectra® Integrated Switchboard Solutions

Lighting Contactors and Relays

## Section 10

The minimum section depth required to mount a 463, 260L, or 360ML2 is 15"D.  
All other contactors require 20"D section.  
Total Box size includes the size of the contactor and necessary wire bending space required. Contactors are placed at the bottom of the section.

#### Lighting Contactors

Type: Contactor	Amps- Contactor	Valid Combinations	Section Width	Section Depth	Contactor Module Width	Contactor Module Height
CR360L3	30	CR360L3, L4	20-40	15 - 30	5.00	8.58
CR360L4	60	CR360L3, L4	20-40	20 - 30	5.00	10.70
CR463ML	30	CR463ML	20-40	15 - 30	6.66	10.70
CR360L5	100	CR360L5	20-40	20 - 30	7.50	17.45
CR360L6	200	CR360ML400, CR36L6, L7	20-40	25 - 30	11.65	25.74
CR360L7	300	CR360ML400, CR36L6, L7	20-40	25 - 30	12.50	34.90
CR360ML400	400	CR360ML400, CR36L6, L7	20-40	25- 30	12.25	26.90
CR160MC30	30	CR160MC30, MC60-75, MC100, MC150, MC200, MC225	20-40	20 - 30	10.00	14.30
CR160MC60-75	60-75		20-40	20 - 30	10.00	17.45
CR160MC100	100		20-40	20 - 30	10.00	19.31
CR160MC150	150		20-40	20 - 30	10.00	24.50
CR160MC200	200		20-40	20 - 30	10.00	25.70
CR160MC225	225		20-40	20 - 30	10.00	26.90
External ROCB Controller	N/A	External ROCB Controller	20-40	20 - 30	10	28

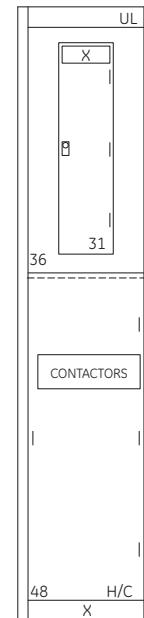
#### Size of standard plates to mount Lighting Contactor and Relays

Height	Width
8	20
12	20
16	20
20	25
24	25
28	30
32	30
36	35
40	35
42	40
48	40

#### Spectra® Power Panelboard—Individual Section

Type	Spectra® Panel Bolt-on
Amperage	1200A max.
Voltage	600 Vac max.
Main	MLO or MCB

Contact local GE Sales Engineer for customer metering or individually mounted TVSS.



Section with Lighting Contactors and A-S Panel

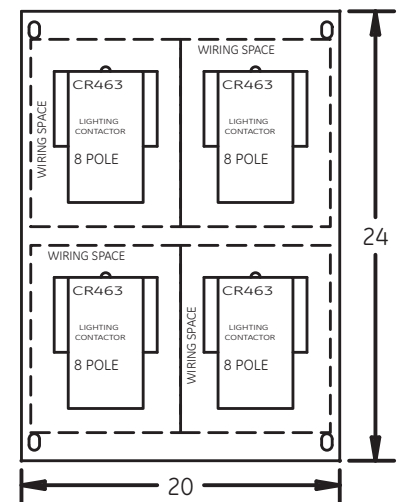


Plate with Lighting Contactors



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

The following utilities have approved the type of metering compartment shown. Compartments are available with the following features:

- CT busbars mounted on high impact glass fiber polyester insulation and arranged in an edgewise plane.
- Door with concealed hinges, 3-point catch and lock, handle seal over CT compartment: barriers rear and bottom (top).  
Note: The bottom barrier is furnished at top if main device is over CT compartment.
- 9" or 11" centerline standard. For other centerlines refer to factory.
- CT bus bars drilled for transformers with NEMA terminations.
- #10-32 and 1/4-20 screws for potential taps.
- Removable links provided if part of utility requirements.
- Type 1 — Compartments have 9" centerlines
- Type 2 — Compartments meet EUSERC standards
- Type 3 — Compartments have 11" centerlines, potential transformer space and mounting bracket if required.
- Cold sequence metering has CT compartment on load side of main device. Hot sequence CT Compartment is on line side.

See next two pages for utility company information matrix.

### Approved Utilities

Utility Company	Utility Compartment Type Number
Anderson Municipal (IN)	1
Anoka Electric	1
Appalachian Power Company	3 <sup>3,5</sup>
Atlantic City Electric Company	3 <sup>3</sup>
Austin Municipal Utility	1
Bangor Hydro Electric Company	1
Belmont Municipal Light Dept. (MA)	1
Blackstone Valley Gas and Electric Company	1
Boston Edison	3 <sup>1,3</sup>
Braintree Electric Light Company (MA)	1
Brockton Edison Company (MA)	1
Burlington Electric Light Dept (VT)	1
Cambridge Electric Company (MA)	1
Cape and Vineyard Electric Company (MA)	1
Central Hudson Gas and Electric Corp	1
Central Illinois Power and Light	1
Central Vermont Pub. Serv. Corp	1
Chicopee Light and Power (MA)	1
City of Columbus Municipal Power Co.	1
City of Dover	1
City of Vineland	1
Cleveland Electric Illuminating Company	1
Cleveland Public Power (OH)	1
Columbus and Southern Ohio	3
Concord Electric Company (NH)	1
Connecticut Light and Power	3 <sup>3,5</sup>
Danvers Lighting Company (MA)	1
Dayton Power and Light	3 <sup>2</sup>
Delaware Power and Light Company	1
Delmarva Power and Light	3 <sup>3</sup>
Duquesne Light Company	3 <sup>3,5</sup>
East Central Electric (MN)	1
Eugene Water & Electric (OR)	1
Exeter and Hampton of New Hampshire	3 <sup>3,5</sup>
Fall River Electric Light Company	1
First Energy	1
Freeport Electric Company	1
Georgia Power Company	1
Granite State (NH)	1
Green Mountain Power Company	1
Gulf States Utilities	1
Hancock County Rural Electric Co-op (IA)	1
Hartford Electric Light Company	3 <sup>3,5</sup>
Illinois Gas and Electric	1
Indianapolis Power and Light	3 <sup>3,5</sup>
Interstate Power	1
Iowa Electric Light and Power Company	1
Iowa Illinois Gas and Electric	1
Iowa Public Service	1
Jacksonville Electric	1
Jersey Central Power and Light	3 <sup>2</sup>
Kansas City Power and Light	1
Kansas Gas and Electric Company	1



### Approved Utilities (Continued)

Utility Company	Utility Compartment Type Number
Kansas Power and Light	1
Kentucky Utility	1
Kentucky Power	1
Lake Superior District Power Company	3
Long Island Lighting	1 <sup>4</sup>
Lubec Light and Power Company (ME)	1
Lynn Gas and Electric (MA)	1
Madison Gas and Electric	1
Maine Public Service	1
Massachusetts Electric Company	3 <sup>3,5</sup>
Metropolitan Edison Company	3 <sup>3,5</sup>
Mid-America Energy	1
Milbank Municipal	1
Minnesota Power and Light Company	3
Monongahela Power Company	3 <sup>3,5</sup>
Montana Dakota Utilities	1
Mississippi Power and Light	1
Municipal Power Company of Ohio	1
Muscatine Power and Water	1
Mystic Power Company (CT)	1
Narragansett Electric	3 <sup>3</sup>
New Bedford Gas and Edison Company	1
New Jersey Power and Light	3 <sup>2</sup>
New York State Electric and Gas	3 <sup>3,5</sup>
Newport Electric (RI)	1
Niagara Mohawk	3 <sup>3</sup>
Northern States Power	3
Northwest Public Service	1
Norwich Department of Public Utilities	1
Norwood Municipal Light Company	1
Ohio Edison	1
Ohio Electric Company	1
Ohio Power Company	3
Omaha Public Power District	1
Orange and Rockland Utilities	3 <sup>3</sup>
Otter Tail Power Company	3
Patchogue Electric	1 <sup>4</sup>
Penn Electric Company	1
Philadelphia Electric	3 <sup>3</sup>
Potomac Edison Company	1
Public Service Gas and Electric of NJ	3
Public Service of Colorado	1
Public Service of Indiana	1
Public Service of New Hampshire	1
Rochester Gas and Electric	1
Rockville Light and Power	1
South Central	1
South Hadley Electric Light Company	1
South Norwalk Electric (CT)	1
Southern Indiana Gas and Electric	1
Southern Maryland Corp	1
St. Charles	1
Superior Water, Light and Power	3

Utility Company	Utility Compartment Type Number
Toledo Edison	1
Union Electric of St. Louis	3
United Illuminating	3 <sup>3,5</sup>
Vermont Public Service	1
Village of Hamilton	1
Wakefield Municipal (MA)	1
Watertown Municipal (NY)	1
West Penn Power	3 <sup>3,5</sup>
Western Mass. Electric	1
Xcel Colorado	1
Xcel Minnesota	1
Xcel Wisconsin	1

#### Canadian Utility Companies

ATCO	NA
BC Hydro	NA
Hydro Quebec	NA
Manitoba Hydro	NA
Ottawa Hydro	NA
SASK Power	NA
Saskatoon	NA
Transalta	NA
West Kootenay	NA
Winnipeg	NA

Except for:

New Orleans Public Service,  
utilities in the states of Florida, Georgia,  
South Carolina, North Carolina,  
Tennessee, Alabama, Mississippi,  
Louisiana, Arkansas, Oklahoma, and Texas

1

<sup>1</sup>Use Type 1 through 1600 amp, 240 volt max.

<sup>2</sup>Use Type 1 through 800 amp.

<sup>3</sup>For 480 volt service, add for potential transformer space and mounting bracket.

See page 10-51 under Metering Compartment.

<sup>4</sup>Through 1200 amp only, 240 volt max.

<sup>5</sup>Use Type 1 for 240 volt max.



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

### E.U.S.E.R.C. Member Utilities

Alameda, City of	P.U.D. No. 1 of Douglas County
Anaheim, City of	Pacific Gas and Electric
Anchorage Municipal Light and Power	Pacificorp
Arizona Public Service	Palo Alto, City of
Avista Utilities	Pasadena, City of
Azusa, City of—Light	Peninsula Light Co.
Banning, City of	Plumas-Sierra Rural Electric Coop
Benton Public Utility Dist. #1	Port Angeles City Light
Benton Rural Electric Association	Portland General Electric
Burbank Water and Power	Puget Sound Energy
Chelan Count P.U.D. #1	Richland, City of
Citizens Energy Services	Redding, City of—Electrical
Citizens Utilities Co.	Riverside Public Utilities
Clark County Public Utility	Riverside, City of
Colorado Springs Utility	Roseville, City of
Colton, City of	Salem Electric
Coos-Curry Electric Coop, Inc.	Salt River Project—PHX
Ellensburg, City of—Energy Services	San Carlos Irrigation Project
Franklin PUD	San Diego Gas and Electric
Glendale Water and Power	Seattle City Light
Grant County PUD #2	Sierra Pacific Power Company
Gray's Harbor P.U.Dist. #1	Silicon Valley Power
Gridley, City of	S.M.U.D.
Hawaii Electric Light Co., Inc.	Snohomish County—PUD #1
Hawaiian Electric Co.	Southern California Edison
Healdsburg, City of	Southern California Water Co.
Idaho Power Company	Springfield Utility Board
Imperial Irrigation District	Sulpher Springs Electric
Intermountain Rural Electric Association	Tacoma Public Utilities
Lassen Municipal Utility District	Trico Electric Coop, Inc.
Lodi, City of	Truckee-Donner P.U.D.
Lompoc, City of—Electric Dept.	Tucson Electric Power Co.
Los Angeles, City of—DWP	Turlock Irrigation District
Mason County PUD #3	Ukiah, City of
Maui Electric Co.	Umatilla Electric Coop
McMinnville Water and Light	Valley Electric Assn.
Mesa, City of—Electric Utility	Vernon, City of
Modesto Irrigation District	Western Area Power and Administration
Montana Power Co.	
Navajo Tribal Utility Authority	
Navapache Electric Coop Inc.	
Needles, City of	
Nevada Power Company	
Oregon Trail Electric	

**For utility companies not listed above, prior approval by the utility must be obtained before an order can be accepted.**



# Switchboards

## Spectra® Series Switchboards

### Utility Metering Compartments

## Section 10

Utility compartments are available with the following features:

- CT busbars mounted on high impact glass fiber polyester insulation and arranged in an edgewise plane.
- Door with concealed hinges, 3-point catch and lock, handle seal over CT compartment: barriers rear and bottom (top).  
Note: The bottom barrier is furnished at top if main device is over CT compartment.

- 9" or 11" centerline standard. For other centerlines refer to factory.
- CT bus bars drilled for transformers with NEMA terminations.
- #10-32 and 1/4-20 screws for potential taps.
- Removable links provided if part of utility requirements.
- Cold sequence metering has CT compartment on load side of main device. Hot sequence CT Compartment is on line side.

Electric Utility Company	ED&C Utility Code	Known Sequence		Check Marks (✓) indicate utility details which are required on each order		
		Hot	Cold	Sequence (Hot or Cold) <sup>2</sup>	CT Info <sup>1</sup>	P.T. Info 480V & above <sup>1</sup>
Anderson Municipal, IN	AM	—	—	✓	✓	—
Anoka Electric Co., MN	AN	—	—	✓	✓	—
Appalachian Power Co., VA	AP	X	—	—	✓	✓
Atlantic Electric, NJ	AE	X	—	—	—	✓
Austin Electric Dept., TX	AU	—	—	✓	✓	—
— Baltimore Gas & Electric, MD	BG	X	—	—	—	—
Bangor Hydro-Electric Co., ME	BH	—	X	—	✓	—
Belmont Municipal, MA	BM	—	X	—	✓	—
— Blackstone Valley Elect. Co., RI	BV	X	—	—	—	—
— Boston Edison Co., MA	BE	—	X	—	—	—
Braintree Elect. Light Co., MA	BL	—	X	—	✓	—
Burlington Elect. Lighting Dept., VT	BD	—	—	✓	✓	—
— Cambridge Electric Co., MA	CA	—	X	—	—	✓
Central Colorado Pwr/Centel Corp., CO	CX	X	—	—	✓	—
Central Hudson Gas & Electric, NY	CH	—	—	✓	✓	—
Central Illinois Light Co., IL	CT	—	—	✓	✓	—
Central Illinois Public Service, IL	CV	X	—	—	✓	—
— Central Maine Power Co., ME	CM	—	—	✓	—	✓
Central Vermont Public Service Corp., VT	CR	X	—	—	✓	—
Chicopee Light & Power, MA	CL	—	X	—	✓	—
— Cincinnati Gas & Electric, OH	CG	X	—	—	✓	✓
City of Dover, DE	CD	—	—	✓	✓	—
City of Vineland, NJ	CI	—	X	—	✓	—
Cleveland Electric Illuminating Co., OH	CC	—	X	—	✓	—
Cleveland Public Power, OH	—	—	X	—	✓	—
Colorado Springs Dept. of Utilities, CO	ZS	X	—	—	✓	—
Columbus Div. of Electric, OH	CY	—	X	—	✓	—
— Columbus Southern Power, OH	CU	—	—	✓	✓	—
— Commonwealth Edison Co., IL	CE	X	—	—	—	—
Commonwealth Electric, MA	CW	—	X	—	—	✓
Concord Electric Co., NH	CO	—	X	—	✓	—
Connecticut Light & Power Co., CT	CN	—	X	—	✓	✓
— Consolidated Edison Co., NY Spec. 377	C3	X	—	—	✓	—
Consolidated Edison Co., NY Spec. 298	CS	X	—	—	—	—
Consumers Power of Michigan, MI	CP	—	X	—	—	✓
Cornbelt Electric Co-Op., IL	CB	—	—	✓	✓	—
Danvers Elec. Div., MA	DC	—	X	—	✓	—
Dayton Power & Light Co., OH	DP	X	—	—	✓	—
Delaware Power & Light Co., DE	DL	—	—	✓	✓	—
Delmarva Power & Light, DE	DM	—	—	✓	✓	✓
— Detroit Edison Co., MI	DE	X	—	—	✓	—
Duquesne Light Co, PA	DU	X	—	—	✓	✓
East Central Electric, MN	EC	—	—	✓	✓	—
— Eastern Edison Co, MA	EE	X	—	—	—	✓
Eugene Water & Electric, OR	EW	—	X	—	✓	—
Exeter & Hampton Electric Co., NH	EH	—	X	—	✓	✓
First Energy	FF	X	—	—	✓	—
— Freeport Electric Dept., NY	FE	X	—	—	—	—
Georgia Power Co., GA	GP	—	—	✓	✓	✓
Granite State, NH	GS	—	X	—	✓	—
Green Mountain Power Co., VT	GM	X	—	—	✓	—
— Greenport Electric Dept., NY	GL	X	—	—	—	—
Gulf State Utilities Co., TX	GE	X	—	—	✓	—
Hancock Co. Rural Electric Corp., IA	HC	—	—	✓	✓	—

<sup>1</sup>When CT and or PT information is required, provide manufacturer's name, product number and rating.

<sup>2</sup>When sequence information is required, advise whether hot or cold sequence is to be provided.

— Not included in PDQ™—Electrical Equipment Design and Ordering System.



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

Electric Utility Company	ED&C Utility Code	Known Sequence		Check Marks (✓) indicate utility details which are required on each order		
		Hot	Cold	Sequence (Hot or Cold) <sup>2</sup>	CT Info <sup>1</sup>	P.T. Info 480V & above <sup>1</sup>
Illinois Power Co., IL	IC	X	—	—	✓	—
— Indiana & Michigan Electric Co., IN	IM	X	—	—	✓	—
Indianapolis Power & Light, IN	IP	—	—	✓	✓	✓
Interstate Power Co., IA	IN	—	—	✓	✓	—
Iowa Electric Light & Power Co., IA	IE	—	—	✓	✓	—
Iowa Illinois Gas & Electric, IA	II	—	X	—	✓	—
Iowa Power & Light Co., IA	IO	—	—	✓	✓	—
Iowa Public Service, IA	IS	—	X	—	✓	—
Iowa Southern Utilities Co., IA	IU	—	—	✓	✓	—
Jacksonville Electric Authority, FL	JE	—	—	✓	✓	—
— Jersey Central Power & Light, NJ	JC	X	—	—	—	✓
Kansas City Power & Light Co., MO	KC	X	—	—	—	—
Kansas Gas & Electric Co., KS	KG	—	—	✓	✓	—
Kansas Power & Light, KS	KL	—	—	✓	✓	—
Kentucky Power, KY	KP	X	—	—	✓	—
Kentucky Utilities, KY	KU	X	—	—	✓	—
Lake Superior District Power Co., MN	LS	X	—	—	✓	—
Laverne Municipal Electric Plant, OK	LM	X	—	—	✓	—
Lincoln Electric System, NE	LC	—	—	✓	✓	—
— Long Island Lighting Co., NY	LI	X	—	—	—	—
— Louisville Gas & Electric Co., KY	LG	X	—	—	✓	—
Lubec Water & Electric District, ME	LL	—	X	—	✓	—
Madison Gas & Electric Co., WI	MG	—	—	✓	—	—
Maine Public Service Co., ME	MP	—	X	—	✓	—
— Massachusetts Electric Co., MA	MC	X	—	—	—	✓
Metropolitan Edison Co., PA	ME	X	—	—	✓	✓
Mid-America Energy	MZ	X	X	✓	✓	✓
Midwest Power Co., IA	MX	X	—	—	✓	—
Minnesota Power & Light Co., MN	ML	—	—	✓	✓	—
Mississippi Power & Light, MS	MS	X	—	—	✓	—
Monongahela Power Co., WV	MO	—	—	✓	✓	✓
Montana Dakota Utilities, MT/ND/SD	MD	X	—	—	—	—
Muscatine Power & Water, IA	MW	—	—	✓	✓	—
— Narragansett Electric Co., RI	NE	X	—	—	—	✓
— New Orleans Public Service, LA	NO	X	—	—	✓	—
Newport Electric, RI	NC	—	X	—	✓	—
New York State Electric & Gas Corp., NY	NY	—	X	—	✓	✓
— Niagara Mohawk Corp., NY	NM	—	X	—	—	—
— Northern Indiana Public Service, IN	NI	X	—	—	✓	—
Northern States Power Co., MN/WI/ND/SD	NS	X	—	—	✓	—
Northwestern Public Service, SD	NP	—	—	✓	—	—
Norwich Dept. of Public Utilities, CT	ND	—	X	—	✓	—
Norwood Municipal Light Co., MA	NL	—	X	—	✓	—

<sup>1</sup>When CT and or PT information is required, provide manufacturer's name, product number and rating.

<sup>2</sup>When sequence information is required, advise whether hot or cold sequence is to be provided.

— Not included in PDQ™—Electrical Equipment Design and Ordering System.





# Switchboards

## Spectra® Series Switchboards

### Utility Metering Compartments

## Section 10

Electric Utility Company	ED&C Utility Code	Known Sequence		Check Marks (✓) indicate utility details which are required on each order		
		Hot	Cold	Sequence (Hot or Cold) <sup>2</sup>	CT Info <sup>1</sup>	P.T. Info 480V & above <sup>1</sup>
Ohio Edison Co., OH	OE	X	—	—	✓	—
Ohio Power Co., OH	OP	X	—	—	✓	✓
Omaha Public Power District, NE	OM	X	—	—	—	✓
Orange & Rockland Utilities, NY	OR	X	—	—	—	—
Otter Tail Power Co., MN	OT	X	—	—	—	—
Parker Municipal Light Dept., SD	PM	—	—	✓	✓	—
Pennsylvania Electric Co., PA	PE	X	—	—	—	✓
Pennsylvania Power Co., PA	PY	—	—	✓	✓	—
Pennsylvania Power & Light Co., PA	PL	X	—	—	—	—
Philadelphia Electric Co., PA	PH	X	—	—	—	✓
Potomac Edison Co., MD	PT	X	—	—	✓	—
Potomac Electric Power Co., DC	PP	X	—	—	—	—
Public Service Electric & Gas Co., NJ	PS	—	—	✓	—	—
Public Service of Colorado, CO	PC	X	—	—	—	—
Public Service of Indiana, IN	PI	X	—	—	✓	—
Public Service of New Hampshire, NH	PU	—	—	✓	✓	—
Rochester Gas & Electric Co., NY	RG	X	—	—	✓	—
Rockville Centre Electric Dept., NY	RE	X	—	—	—	—
South Central Elec. Association, MN	SC	—	—	✓	✓	—
South Hadley Electric Light Dept., MA	SH	—	—	✓	✓	—
South Norwalk Electric, CT	SN	—	X	—	✓	—
Southern Indiana Gas & Electric, IN	SI	—	X	—	✓	—
Southern Maryland Co-Op., MD	SM	X	—	—	✓	—
St. Charles	—	X	—	—	✓	—
St. Louis Municipal Electric, MI	SL	—	—	✓	✓	—
Superior Water Light & Power, MN	SW	X	—	—	✓	—
Toledo Edison, OH	TE	—	X	—	✓	—
Union Electric of St. Louis, MO	UE	X	—	—	—	—
Union Light Heat & Power Co., KY	UL	X	—	—	✓	✓
United Illuminating Co., CT	UI	—	X	—	—	—
Vermont Public Service, VT	VP	—	—	✓	✓	—
Village of Hamilton, NY	VH	—	—	✓	✓	—
Virginia Electric Power Co., VA	VE	X	—	—	—	—
Wakefield Municipal, MA	WM	—	X	—	✓	—
Watertown Municipal, NY	WA	—	X	—	✓	—
Watertown Municipal Utilities, SD	WU	X	—	—	—	—
Wellesley Dept. of Public Works, MA	WY	—	X	—	✓	—
West Penn Power Co., PA	WP	X	—	—	✓	✓
Western Massachusetts Electric Co., MA	WT	—	X	—	✓	—
Westerville Electric Co., OH	WR	—	—	✓	—	—
Wheatland Electric Co-Op., KS	WC	—	—	✓	✓	—
Wisconsin Electric Power Co., WI	WE	X	—	—	—	—
Wisconsin Power & Light Co., WI	WL	X	—	—	—	—
Wisconsin Public Service, WI	WS	X	—	—	—	—
Xcel Colorado	XC	X	—	—	✓	—
Xcel Minnesota	XM	X	—	—	✓	—
Xcel Wisconsin	XW	X	—	—	✓	—
<b>Canadian Utility Companies</b>						
ATCO	—	—	X	✓	✓	✓
BC Hydro	BR	—	X	✓	✓	✓
Hydro Quebec	HQ	—	X	✓	✓	✓
Manitoba Hydro	MH	—	X	✓	✓	✓
Ottawa Hydro	OW	—	X	✓	✓	✓
SASK Power	SK	—	X	✓	✓	✓
Saskatoon	SZ	—	X	✓	✓	✓
Transalta	TR	—	X	✓	✓	✓
West Kootenay	WK	—	X	✓	✓	✓
Winnipeg	WG	—	X	✓	✓	✓

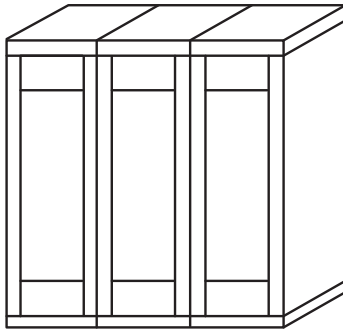
<sup>1</sup>When CT and or PT information is required, provide manufacturer's name, product number and rating.

<sup>2</sup>When sequence information is required, advise whether hot or cold sequence is to be provided.

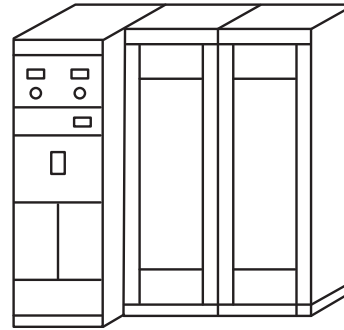
— Not included in PDQ™—Electrical Equipment Design and Ordering System.



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications



Class I



Class II

### Group-Mounted Main and Feeders Front-Accessible

- 1200A Mains maximum
- 1200A Feeders maximum
- Rear alignment standard
- Minimum depth 25"
- Main lugs to 2000A
- May be mounted against wall.

### Main and Feeder Devices Group-Mounted

- Molded case circuit breakers
- Fusible switches type ADS available in (Spectra® only)
- Spectra® RMS<sup>1</sup> Molded case circuit breakers
- Spectra® RMS<sup>1</sup>
- Molded case circuit breakers with MicroVersaTrip® Plus or MicroVersaTrip® PM trip units
- Current-limiting circuit breakers
- Integral ground fault
- Integral protective relay functions
- Energy Management Connectivity

For pricing and application assistance,  
contact your local GE Sales Office

### Individually-Mounted Main, Group-Mounted Feeders Front-Accessible

- 5000A Mains maximum
- 6000A main lug
- 1200A feeders maximum
- Rear alignment standard
- Utility CT Compartments
- Depths:
  - Mains 25"-60"
  - Feeders 25" minimum

### Mains Individually-Mounted

- Power Break® and Power Break® II Insulated case circuit breakers 800-4000A with MicroVersaTrip® Plus or MicroVersaTrip® PM trip units
- High pressure contact switches 800-4000A
- WavePro low voltage power circuit breakers
- Integral ground fault
- Integral protective relay functions
- Energy Management Connectivity

### Feeder Devices, Group-Mounted

- Molded case circuit breakers
- Fusible switches type ADS
- Spectra® RMS<sup>1</sup> Molded case circuit breakers
- Spectra® RMS<sup>1</sup> Molded case circuit breakers with MicroVersaTrip® Plus or MicroVersaTrip® PM trip units
- Current-limiting circuit breakers
- Integral ground fault
- Integral protective relay functions
- Integral POWER LEADER® network communications

<sup>1</sup>Available as 100% equipment rated for group mounted construction.

<sup>2</sup>For WavePro options, contact factory.



### GE Spectra® Switchboards

#### Class 1

Description	Available Devices		
	Function	Type	Rating (Amps)
Group mounted—mains and feeders	Main	MCCB	1200
Rear alignment standard		QMR	1200
Front accessible	Feeders	MCCB	1200
Max. 1200-amp mains—1200-amp feeders		QMR	1200

#### Spectra® Class 2

Description	Available Devices		
	Function	Type	Rating (Amps)
Individually mounted mains	Main	MCCB	1200
Group mounted feeders		QMR	1200
Rear alignment standard		HPC	4000
Main section side or rear accessible standard		PB/PB II	4000
Feeder sections-front access		WavePro	5000
Max. 4000-amp mains—1200-amp feeders	Feeders	BPS	4000/5000 <sup>1</sup>
Utility metering compartment		MCCB	1200
		QMR	1200

<sup>1</sup> Not UL labeled.

### Standards

GE switchboards are manufactured to meet specific quality standards using standardized components. They meet the following standard:

(a) Underwriters Laboratories No. UL891.

**Note:** GE switchboards are constructed to this standard as to enclosure, busing, wiring and clearances. Only switchboards or switchboard sections containing all UL Listed devices can be UL labeled.

(b) NEMA Standard PB2-latest issue.

(c) CSA (Spectra® Class 1 only)

### Short-circuit Rating

The standard main or vertical bus in each switchboard is aluminum (copper optional) braced for an integrated equipment rating of 65,000 rms symmetrical amperes. When required, bus bars can be furnished braced for higher short-circuit currents (at additional price).

### Ground Bus

Ground bus is furnished as standard.

### Space and Busing for Future

When space only is required for future addition of any specified feeder device in a GE switchboard, corresponding vertical bus and blank filler plate will be furnished. (Device mounting hardware may be included.)

### Blank Space Only

When blank space is specified for any class of GE switchboard, corresponding vertical bus, device mounting, and connecting straps will not be furnished.

**For pricing and application assistance, contact your local GE Sales Office**



### Molded Case Circuit Breakers

Construction	Circuit Breakers					Federal Specs C/B Class W-C375B	UL Listed Interrupting Ratings (Amps in thousands)										
	Frame	Trip Range (Amps)	Poles <sup>3</sup>	Rated Voltage			RMS Symmetrical ac Volts								dc Volts		
				ac	dc		120	120/240	240	277	480Y/277	480	347	600Y/347	600	125	250
HQ	THQB	15-70	1	120/240	—	12a	10	10	—	—	—	—	—	—	—	—	—
	THQB	15-100	2	120/240	—	12a	—	10	—	—	—	—	—	—	—	—	—
	THQB	15-100	2, 3	240	—	12b	—	—	10	—	—	—	—	—	—	—	—
HHQ	THHQB	15-60	1	120/240	—	14a	22	22	—	—	—	—	—	—	—	—	—
	THHQB	15-100	2	120/240	—	14a	—	22	—	—	—	—	—	—	—	—	—
	THHQB	15-100	2, 3	240	—	14b	—	—	22	—	—	—	—	—	—	—	—
Standard Frame	TEY	15-100	1	277	—	—	—	—	14	14	—	—	—	—	—	—	—
	TEY	15-100	2, 3	480Y/277	—	—	—	—	65	—	14	—	—	—	—	—	—
Standard Frames	TEB	15-100	1	120	125	12a	10	—	—	—	—	—	—	—	—	5	—
	TEB	15-100	2	240	250	12b	—	—	10	—	—	—	—	—	—	—	5
	TEB	15-100	3	240	—	12b	—	—	10	—	—	—	—	—	—	—	—
	TED	15-100	1	277	125	13a	—	—	—	14	—	10	—	—	—	10	—
	TED4	15-50 <sup>1</sup>	1	480	—	13b	—	—	18	—	—	14	—	—	—	—	10
	TED4	15-100	2	480	250	13b	—	—	18	—	—	14	—	—	—	—	10
	TED4	15-150	3	480	—	13b	—	—	18	—	—	14	—	—	—	—	—
	TED6	15-100	3	600	—	18b	—	—	18	—	—	14	—	—	14	—	—
	TED6	15-150	3	600	—	N/A	—	—	18	—	—	14	—	—	14	—	—
	SEDA <sup>4</sup>	15-100	2, 3	600	—	18b	—	—	18	—	—	14	—	—	14	—	—
	SEDA <sup>4</sup>	110-150	2, 3	600	—	N/A	—	—	18	—	—	14	—	—	14	—	—
	TQD	125-225	2, 3	120/240	—	12b	—	10	—	—	—	—	—	—	—	—	—
	TQD	125-225	3	240	—	12b	—	—	10	—	—	—	—	—	—	—	—
	SFHA	70-250	2	480	—	13b, 15b	—	—	—	65	—	35	—	—	—	—	—
	SFHA	70-250	3	600	—	20a, 22a	—	—	—	65	—	25	—	—	18	—	—
	TJD	250-400	2	120/240	250	14b	—	22	—	—	—	—	—	—	—	—	10
	TJD	250-400	3	240	—	14b	—	—	22	—	—	—	—	—	—	—	—
	SGDA	250-400	2	120/240	—	14b	—	65	—	—	—	—	—	—	—	—	—
	SGDA	250-400	3	240	—	14b	—	—	65	—	—	—	—	—	—	—	—
	SGHA4	125-400	2, 3	600	—	21a, 23a	—	—	65	—	—	35	—	—	25	—	—
	SGHA6	250-600	2, 3	600	—	21a, 23a	—	—	65	—	—	35	—	—	25	—	—
	SKHA8	300-800	2, 3	600	—	21a, 23a	—	—	65	—	—	50	—	—	25	—	—
	SKHA12	600-1200	2, 3	600	—	21a, 23a	—	—	65	—	—	50	—	—	25	—	—
Hi-Break Frames	THED	15-30	1	277	125	13a	—	—	—	65	—	—	—	—	—	20 <sup>2</sup>	—
	THED4	15-100	2	480	250	22a	—	—	65	—	—	25	—	—	—	—	20 <sup>2</sup>
	THED4	15-100	2	480	—	—	—	—	65	—	—	25	—	—	—	—	—
	THED4	110-150	2	480	—	—	—	—	42	—	—	25	—	—	—	—	—
	THED6	15-100	3	600	—	22a	—	—	65	—	—	25	—	—	18	—	—
	THED6	110-150	3	600	—	—	—	—	42	—	—	25	—	—	18	—	—
	SEHA <sup>4</sup>	15-100	2, 3	600	—	22a	—	—	65	—	—	25	—	—	18	—	—
	SEHA <sup>4</sup>	110-150	2, 3	600	—	—	—	—	65	—	—	25	—	—	18	—	—
	THQD	125-225	2	120/240	—	—	—	22	—	—	—	—	—	—	—	—	—
	THQD	125-225	3	240	—	—	—	—	22	—	—	—	—	—	—	—	—
	THJK4	125-400	2, 3	600	250 <sup>3</sup>	23a	—	—	65	—	—	35	—	—	25	—	20 <sup>2</sup>
	THJK6	250-600	2, 3	600	250 <sup>3</sup>	21a	—	—	65	—	—	35	—	—	25	—	20 <sup>2</sup>
High Interruption Frames	SKLA	300-1200	2, 3	600	—	24a	—	—	100	—	—	65	—	—	42	—	—
	SKPA	300-1200	2, 3	600	—	25a	—	—	200	—	—	100	—	—	65	—	—

<sup>1</sup>Not UL Listed.

<sup>2</sup>DC ratings above 10,000 AIC are not UL Listed.

<sup>3</sup>Three-pole devices are not dc rated.

<sup>4</sup>Two-pole devices rated 480v max.

<sup>5</sup>Utilizing 2 poles in series on one leg.



### Molded Case Circuit Breakers (Continued)

Construction	Circuit Breakers					Federal Specs C/B Class W-C375B	UL Listed Interrupting Ratings (Amps in thousands)										
	Frame	Trip Range (Amps)	Poles <sup>3</sup>	Rated Voltage			RMS Symmetrical ac Volts								dc Volts		
				ac	dc		120	120/240	240	277	480Y/277	480	347	600Y/347	600	125	250
Fuseless Current Limiting Frames	FBV6	15-100	1	347	—	13a,13b, 14a	35	—	—	35	—	—	22	—	—	—	—
	FBN6	15-100	1	347	—	13a,13b, 14a	65	—	—	65	—	—	25	—	—	—	—
	FBH6	15-100	1	347	—	13a,13b, 14a	100	—	—	100	—	—	35	—	—	—	—
	FBL6	15-100	1	347	—	13a,13b, 14a	100	—	—	100	—	—	42	—	—	—	—
	FBV6	15-100	2, 3	600	250	21a, 22a	—	—	65	—	—	35	—	22	—	—	25 <sup>5</sup>
	FBN6	15-100	2, 3	600	250	21a, 22a, 23a	—	—	150	—	—	65	—	25	—	—	30 <sup>5</sup>
	FBH6	15-100	2, 3	600	250	21a, 22a, 23a	—	—	200	—	—	100	—	35	—	—	42 <sup>5</sup>
	FBL6	15-100	2, 3	600	250	21a, 22a, 23a	—	—	200	—	—	150	—	42	—	—	65 <sup>5</sup>
	FCS6	15-100	2, 3	600	250	20a	—	—	42	—	—	25	—	18	—	—	22 <sup>5</sup>
	FCV6	15-100	2, 3	600	250	21a, 22a	—	—	65	—	—	35	—	22	—	—	25 <sup>5</sup>
	FCN6	15-100	2, 3	600	250	21a, 22a, 23a	—	—	150	—	—	65	—	25	—	—	30 <sup>5</sup>
	FCH6	15-100	2, 3	600	250	21a, 22a, 23a	—	—	200	—	—	100	—	35	—	—	42 <sup>5</sup>
	FCL6	15-100	2, 3	600	250	21a, 22a, 23a	—	—	200	—	—	150	—	—	42	—	65 <sup>5</sup>
	SELA	15-150	2	480	—	13b	—	—	100	—	—	65	—	—	—	—	—
	SELA	15-150	3	600	—	21a, 22a, 23a	—	—	100	—	—	65	—	—	25	—	—
	SEPA	15-150	2	480	—	16a	—	—	200	—	—	100	—	—	—	—	—
	SEPA	15-150	3	600	—	16a	—	—	200	—	—	100	—	—	25	—	—
	FES1T	20-150	2, 3	600	250	20a	—	—	42	—	—	25	—	—	18	—	10 <sup>5</sup>
	FEV1T	20-150	2, 3	600	250	21a, 22a	—	—	65	—	—	35	—	—	22	—	25 <sup>5</sup>
	FEN1T	20-150	2, 3	600	250	21a, 22a, 23a	—	—	150	—	—	65	—	—	25	—	50 <sup>5</sup>
	FEH1T	20-150	2, 3	600	250	21a, 22a, 23a	—	—	200	—	—	100	—	—	35	—	85 <sup>5</sup>
	FEL1T	20-150	2, 3	600	250	21a, 22a, 23a	—	—	200	—	—	150	—	—	42	—	100 <sup>5</sup>
	FES1E	20-150	2, 3	600	250	20a	—	—	42	—	—	25	—	—	18	—	—
	FEV1E	20-150	2, 3	600	250	21a, 22a	—	—	65	—	—	35	—	—	22	—	—
	FEN1E	20-150	2, 3	600	250	21a, 22a, 23a	—	—	150	—	—	65	—	—	25	—	—
	FEH1E	20-150	2, 3	600	250	21a, 22a, 23a	—	—	200	—	—	100	—	—	35	—	—
	FEL1E	20-150	2, 3	600	250	21a, 22a, 23a	—	—	200	—	—	150	—	—	42	—	—
	SFLA	70-250	2	480	—	13b	—	—	100	—	—	65	—	—	—	—	—
	SFLA	70-250	3	600	—	21a, 23a	—	—	100	—	—	65	—	—	25	—	—
	SFPA	70-250	2	480	—	16a	—	—	200	—	—	100	—	—	—	—	—
	SFPA	70-250	3	600	—	16a	—	—	200	—	—	100	—	—	25	—	—
	FES2T	70-250	2, 3	600	250	20a	—	—	42	—	—	25	—	—	18	—	10 <sup>5</sup>
	FEV2T	70-250	2, 3	600	250	21a, 22a	—	—	65	—	—	35	—	—	22	—	25 <sup>5</sup>
	FEN2T	70-250	2, 3	600	250	21a, 22a, 23a	—	—	150	—	—	65	—	—	25	—	50 <sup>5</sup>
	FEH2T	70-250	2, 3	600	250	21a, 22a, 23a	—	—	200	—	—	100	—	—	35	—	85 <sup>5</sup>
	FEL2T	70-250	2, 3	600	250	21a, 22a, 23a	—	—	200	—	—	150	—	—	42	—	100 <sup>5</sup>
	FES2E	70-250	2, 3	600	250	20a	—	—	42	—	—	25	—	—	18	—	—
	FEV2E	70-250	2, 3	600	250	21a, 22a	—	—	65	—	—	35	—	—	22	—	—
	FEN2E	70-250	2, 3	600	250	21a, 22a, 23a	—	—	150	—	—	65	—	—	25	—	—
	FEH2E	70-250	2, 3	600	250	21a, 22a, 23a	—	—	200	—	—	100	—	—	35	—	—
	FEL2E	70-250	2, 3	600	250	21a, 22a, 23a	—	—	200	—	—	150	—	—	42	—	—
	SGLA4 <sup>4</sup>	125-400	2, 3	600	—	23a	—	—	100	—	—	65	—	—	65	—	—
	SGPA4 <sup>4</sup>	125-400	2, 3	600	—	23a	—	—	200	—	—	100	—	—	65	—	—
	SGLA6 <sup>4</sup>	250-600	2, 3	600	—	24a	—	—	100	—	—	65	—	—	65	—	—
	SGPA6 <sup>4</sup>	250-600	2, 3	600	—	25a	—	—	200	—	—	100	—	—	65	—	—

<sup>1</sup>Not UL Listed.

<sup>2</sup>DC ratings above 10,000 AIC are not UL Listed.

<sup>3</sup>Three-pole devices are not dc rated.

<sup>4</sup>Two-pole devices rated 480v max.

<sup>5</sup>Utilizing 2 poles in series on one leg.



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

### Molded Case Circuit Breakers (Continued)

Construction	Circuit Breakers					Federal Specs C/B Class W-C375B	UL Listed Interrupting Ratings (Amps in thousands)										
	Frame	Trip Range (Amps)	Poles <sup>3</sup>	Rated Voltage			RMS Symmetrical ac Volts								dc Volts		
				ac	dc		120	120/240	240	277	480Y/277	480	347	600Y/347	600	125	250
Fuseless Current Limiting Frames	FGV2	125-250	2, 3	600	250	21a, 22a	—	65	65	—	—	35	—	—	22	—	—
	FGN2	125-250	2, 3	600	250	23a	—	150	150	—	—	65	—	—	35	—	—
	FGH2	125-250	2, 3	600	250	24a	—	—	200	—	—	100	—	—	42	—	—
	FGL2	125-250	2, 3	600	250	25a	—	—	200	—	—	150	—	—	65	—	—
	FGP2	125-250	2, 3	600	250	25a	—	—	200	—	—	200	—	—	65	—	—
	FGV4	250-400	2, 3	600	250	21a, 22a	—	65	65	—	—	35	—	—	22	—	—
	FGN4	250-400	2, 3	600	250	23a	—	150	150	—	—	65	—	—	35	—	—
	FGH4	250-400	2, 3	600	250	24a	—	—	200	—	—	100	—	—	42	—	—
	FGL4	250-400	2, 3	600	250	25a	—	—	200	—	—	150	—	—	65	—	—
	FGP4	250-400	2, 3	600	250	25a	—	—	200	—	—	200	—	—	65	—	—
	FGV6	375-600	2, 3	600	250	21a, 22a	—	65	65	—	—	35	—	—	22	—	—
	FGN6	375-600	2, 3	600	250	23a	—	150	150	—	—	65	—	—	35	—	—
	FGH6	375-600	2, 3	600	250	24a	—	—	200	—	—	100	—	—	42	—	—
	FGL6	375-600	2, 3	600	250	25a	—	—	200	—	—	150	—	—	65	—	—
	FGP6	375-600	2, 3	600	250	25a	—	—	200	—	—	200	—	—	65	—	—
SPECTRA® RMS Molded Case Circuit Breakers with MicroVersaTrip® Plus Trip Units	SGHB4	60-400	3	600	—	21a, 23a	—	—	65	—	—	35	—	—	25	—	—
	SGLB4	60-400	3	600	—	23a	—	—	100	—	—	65	—	—	65	—	—
	SGPB4	60-400	3	600	—	23a	—	—	200	—	—	100	—	—	65	—	—
	SGHB6	300-600	3	600	—	21a, 23a	—	—	65	—	—	35	—	—	25	—	—
	SGLB6	300-600	3	600	—	24a	—	—	100	—	—	65	—	—	65	—	—
	SGPB6	300-600	3	600	—	25a	—	—	200	—	—	100	—	—	65	—	—
	SKHB	300-1200	3	600	—	21a, 23a	—	—	65	—	—	50	—	—	25	—	—
SKLB	300-1200	3	600	—	24a	—	—	100	—	—	65	—	—	42	—	—	
SKPB	300-1200	3	600	—	25a	—	—	200	—	—	100	—	—	65	—	—	

<sup>1</sup>Not UL Listed.

<sup>2</sup>DC ratings above 10,000 AIC are not UL Listed.

<sup>3</sup>Three-pole devices are not dc rated.

<sup>4</sup>Two-pole devices rated 480v max.

<sup>5</sup>Utilizing 2 poles in series on one leg.



### Molded-Case Circuit Breakers Spectra® RMS Breakers with MicroVersaTrip® Plus or PM Trip Units

Construction	Circuit Breakers					Federal Specs C/B Class W-C375B	UL Listed Interrupting Ratings (Amps in thousands)								
	Frame	Trip Range (Amps)	Poles	Rated Voltage			rms Symmetrical ac Volts					dc Volts			
				ac	dc		120	120/240	240	277	480Y/277	480	600	125	250
SPECTRA® RMS Molded Case Circuit Breakers with MicroVersaTrip® PM Trip Units¹	SGHB4	60-400	3	600	—	21a, 23a	—	—	65	—	—	35	25	—	—
	SGLB4	60-400	3	600	—	23a	—	—	100	—	—	65	65	—	—
	SGPB4	60-400	3	600	—	23a	—	—	200	—	—	100	65	—	—
	SGHB6	300-600	3	600	—	21a, 23a	—	—	65	—	—	35	25	—	—
	SGLB6	300-600	3	600	—	24a	—	—	100	—	—	65	65	—	—
	SGPB6	300-600	3	600	—	25a	—	—	200	—	—	100	65	—	—
	SKHB	300-1200	3	600	—	21a, 23a	—	—	65	—	—	50	25	—	—
	SKLB	300-1200	3	600	—	24a	—	—	100	—	—	65	42	—	—
	SKPB	300-1200	3	600	—	25a	—	—	200	—	—	100	65	—	—

### Molded-Case Circuit Breakers 100% Equipment Rated for Group Mounted Construction

Construction	Circuit Breakers					Federal Specs C/B Class W-C375B	UL Listed Interrupting Ratings (Amps in thousands)								
	Frame	Trip Range (Amps)	Poles	Rated Voltage			rms Symmetrical ac Volts					dc Volts			
				ac	dc		120	120/240	240	277	480Y/277	480	600	125	250
SPECTRA® RMS Molded Case Circuit Breakers	SGHHA	125-400	2, 3	600	—	21a, 23a	—	—	65	—	—	35	25	—	—
	SGLLA	125-400	2, 3	600	—	21a, 23a	—	—	100	—	—	65	65	—	—
	SGPPA	125-400	2, 3	600	—	21a, 23a	—	—	200	—	—	100	65	—	—
	SKHHA <sup>2</sup>	300-1200	2, 3	600	—	21a, 23a	—	—	65	—	—	50	24	—	—
	SKLLA <sup>2</sup>	300-1200	2, 3	600	—	24a	—	—	100	—	—	65	42	—	—
	SKPPA <sup>2</sup>	300-1200	2, 3	600	—	25a	—	—	200	—	—	100	65	—	—
SPECTRA® RMS Molded Case Circuit Breakers with MicroVersaTrip® Plus Trip Units	SGHHB	60-400	3	600	—	21a, 23a	—	—	65	—	—	35	25	—	—
	SGLLB	60-400	3	600	—	23a	—	—	100	—	—	65	65	—	—
	SGPPB	60-400	3	600	—	23a	—	—	200	—	—	100	65	—	—
	SKHHB <sup>2</sup>	300-1200	3	600	—	21a, 23a	—	—	65	—	—	50	25	—	—
	SKLLB <sup>2</sup>	300-1200	3	600	—	24a	—	—	100	—	—	65	42	—	—
	SKPPB <sup>2</sup>	300-1200	3	600	—	25a	—	—	200	—	—	100	65	—	—
SPECTRA® RMS Molded Case Circuit Breakers with MicroVersaTrip® PM Trip Units <sup>1</sup>	SGHHB	60-400	3	600	—	21a, 23a	—	—	65	—	—	35	25	—	—
	SGLLB	60-400	3	600	—	23a	—	—	100	—	—	65	65	—	—
	SGPPB	60-400	3	600	—	23a	—	—	200	—	—	100	65	—	—
	SKHHB <sup>2</sup>	300-1200	3	600	—	21a, 23a	—	—	65	—	—	50	25	—	—
	SKLLB <sup>2</sup>	300-1200	3	600	—	24a	—	—	100	—	—	65	42	—	—
	SKPPB <sup>2</sup>	300-1200	3	600	—	25a	—	—	200	—	—	100	65	—	—

<sup>1</sup>SPECTRA® RMS breakers with MicroVersaTrip® PM trip units are available with protective relay functions (voltage unbalance, current unbalance, undervoltage, overvoltage and power reversal) and POWER LEADER® network communications.

<sup>2</sup>1200A must have fully rated bus. Copper lugs must be used on line or load side of breaker.





### Bolted Pressure Switches

Type	Available Ratings		Contact Interrupting Rating Based on Ability to Operate on Overload Unassisted by the Fuse	Switch-fuse Combination at Switch-rated ac Volts With Class "L" Fuses
	Continuous Amperes	ac Volts		
Bolted Pressure Switches	800, 1200 1600, 2000 2500, 3000 4000 5000 <sup>1</sup>	240 and 480	"Open" — 12 X amp rating "Close-Open" — 6 X amp rating	200,000

<sup>1</sup> Bolted pressure switch only; not UL labeled.

### Type ADS Fusible Switches<sup>2</sup>

Amp Rating	Fuse		Interrupting Rating rms Symmetrical amps <sup>3</sup>
	UL Class	Description	
(30-1200)	H	One-time	10,000
	K5	Time-delay or Current-Limiting Non-Rejection	100,000
	J	Current-Limiting Rejection	200,000
	R	Current-Limiting Rejection	200,000
	L	Current-Limiting	200,000
	T	Current-Limiting	200,000

<sup>2</sup> Available in Spectra® Series only.

<sup>3</sup> The interrupting rating of the fuse must equal or exceed the short-circuit rating of the switch. If it is lower, then the short circuit rating is the same as the fuse. Fusible switches have no short-circuit rating if renewable fuses are used.

### Estimated 400 Hz Interrupting Ratings for Power Break® II Breakers rms Symmetrical Amperes—Not UL Listed

Standard Break				
Frame Size (Amps)	Max. Rating Plug Ampacity <sup>4</sup>	120/240	277/480	346/600
800	600	6500	5000	4200
1600	1000	8500	6500	5000
2000	1200	8500	6500	5000
2500	1600	10000	10000	8500
Hi-Break®				
Frame Size (Amps)	Max. Rating Plug Ampacity <sup>4</sup>	120/240	277/480	346/600
800	600	10000	10000	6500
1600	1000	12500	10000	6500
2000	1200	12500	10000	6500
2500	1600	20000	15000	10000

<sup>4</sup> No additional thermal derating is required for above-maximum rating plug ratings for frame sizes noted. Note: 400-Hz interrupting ratings are based on engineering judgement, taking into consideration the operating characteristics of insulated case circuit breakers and the worldwide lack of test facilities to verify performance. Power+™ trip units and the energy management functions in MicroVersaTrip PM™ trip units are suitable for 50/60 Hz applications only.

### Power Break® II Interrupting Capacity and Short-time Ratings—rms Symmetrical kA

Frame	800A	1600 to 2000A	2500-3000A <sup>5</sup>	4000A <sup>5</sup>
UL 489 Ratings, 50/60 Hz Standard				
240V	65	85	100	100
480V	65	65	100	100
600V	50	50	85	85
Hi-Break®				
240V	100	125	200	200
480V	100	100	150	150
600V	65	65	100	100
Short Time <sup>5</sup>				
(0.5) sec	25	40	42	42
IEC 947-2 Ratings 415, 50/60 Hz				
I <sub>CU</sub>	—	75	75 <sup>6</sup>	85
I <sub>CS</sub>	—	56	45 <sup>6</sup>	25
I <sub>CW</sub> (1 sec)	—	40	50 <sup>6</sup>	50

<sup>5</sup> Applies to high range instantaneous or "H" option.

<sup>6</sup> Must use 4000A construction.



### Bolted Pressure Switches

Type	Available Ratings		Contact Interrupting Rating Based on Ability to Operate on Overload Unassisted by the Fuse	Switch-fuse Combination at Switch-rated ac Volts With Class "L" Fuses
	Continuous Amperes	ac Volts		
Bolted Pressure Switches	800, 1200 1600, 2000 2500, 3000 4000	240 and 480	"Open" — 12 X amp rating "Close-Open" — 6 X amp rating	200,000

## WavePro Low Voltage Power Circuit Breakers

### Basic Selection Information

#### WavePro Interrupting Ratings (50/60 Hz ac)

Rated AC Voltage Nominal (max)	Breaker Type	Frame Size (amps)	Short-Circuit RMS Symmetrical kA		
			Short-Time Withstand	With Instantaneous Trip	Without Instantaneous Trip
600 (635)	WPS-08	800	30	30	30
	WPH-08	800	42	42	42
	WPX-08	800	50	50	50
	WPS-16	1600	42	42	42
	WPH-16	1600	65	65	65
	WPS-20	2000	65	65	65
	WPS-32	3200	65	65	65
	WPH-32	3200	85	85	85
	WPS-40	4000	85	85	85
	WPS-50	5000	85	85	85
	WPS-08	800	30	30	30
	WPH-08	800	42	42	42
	WPX-08	800	65	65	65
	WPS-16	1600	50	50	50
480 (508)	WPH-16	1600	65	65	65
	WPS-20	2000	65	65	65
	WPS-32	3200	65	65	65
	WPH-32	3200	85	85	85
	WPS-40	4000	85	85	85
	WPS-50	5000	85	85	85
	WPS-08	800	30	42	30
	WPH-08	800	42	50	42
	WPX-08	800	65	65	65
	WPS-16	1600	50	65	50
	WPH-16	1600	65	65	65
	WPS-20	2000	65	65	65
	WPS-32	3200	65	85	65
	WPH32	3200	85	130	85
240 (254)	WPS-40	4000	85	130	85
	WPS-50	5000	85	130	85
	WPS-08	800	30	42	30
	WPH-08	800	42	50	42
	WPX-08	800	65	65	65
	WPS-16	1600	50	65	50
	WPH-16	1600	65	65	65
	WPS-20	2000	65	65	65
	WPS-32	3200	65	85	65
	WPH32	3200	85	130	85

### Fused Breaker Ratings. Max. 600 Vac 5-/60 Hz

Frame Size (Amps)	Fuse Rating (Amps) <sup>1</sup>		Interrupting Rating ms Symmetrical kA	Breaker Type
	Min	Max		
800	300	1500	200	WPF-08
1600	450	2500	200	WPF-16
2000	2000	2500	200	WPS-20 <sup>2</sup>
3200	2000	4000	200	WPS32 <sup>2</sup>
4000	2000	5000	200	WPS-40 <sup>2</sup>
5000	2000	5000	200	WPS50 <sup>2</sup>

<sup>1</sup>The maximum fuse rating is the largest fuse that tests show will result in proper performance of the breaker and fuse in combination under short circuit conditions.

<sup>2</sup>Fuses are mounted on separate fuse roll-out element and are ordered and shipped separately.



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

Switchboards

Spectra® Series Switchboards

MicroVersaTrip® Trip Units

Power Break® I or II Rating Plug Selection

Frame Size (Amps)	Sensor Rating (Amps)	Current Rating (Amps)	Rating Plug Product Number	Frame Size (Amps)	Sensor Rating (Amps)	Current Rating (Amps)	Rating Plug Product Number		
800	200	100	TR2B100	2500	1000	400	TR10B400		
		150	TR2B150			600	TR10B600		
		200	TR2B200			800	TR10B800		
	400	150	TR4B150			1000	TR10B1000		
		200	TR4B200		2000	750	TR20B750		
		225	TR4B225			800	TR20B800		
		250	TR4B250			1000	TR20B1000		
		300	TR4B300			1200	TR20B1200		
		400	TR4B400			1500	TR10B1500		
	800	300	TR8B300			1600	TR20B1600		
		400	TR8B400			2000	TR20B2000		
		450	TR8B450		2500	1600	TR25B1600		
		500	TR8B500			2000	TR25B2000		
		600	TR8B600			2500	TR25B2500		
		700	TR8B700		3000	2000	TR30B2000		
		800	TR8B800			2500	TR30B2500		
	1600	1000	400			TR10B400	4000	4000	3000
600			TR10B600	1600	TR40B1600				
800			TR10B800	2000	TR40B2000				
1000			TR10B1000	2500	TR40B2500				
1600		600	TR16B600	3000	TR40B3000				
		800	TR16B800	3600	TR40B3600				
		1000	TR16B1000	4000	TR40B4000				
		1100	TR16B1100						
		1200	TR16B1200						
		1600	TR16B1600						
		2000	2000	750	TR20B750				
				800	TR20B800				
1000				TR20B1000					
1200				TR20B1200					
1500				TR20B1500					
1600				TR20B1600					
2000		TR20B2000							

#### Power Break® I or II Trip Unit

Trip Unit Suffix	Long-time (L)	Short-time (S)	Inst. (I)	High Inst. (H)	Ground Fault (G) <sup>1</sup>	OL/SC Targets (T1)	OL/SC/GF Targets (T2)	GF Zone Interlock (Z1)	GF/ST Zone Interlock (Z2)
<b>Adjustable Instantaneous</b>									
LI	•		•						
LIT1	•		•			•			
LIG	•		•		•				
LIGT2	•		•		•		•		
LIGT2Z2	•		•		•		•	•	
LS I	•	•	•						
LSIT1	•	•	•			•			
LSIG	•	•	•		•				
LSIGT2	•	•	•		•		•		
LSIGT2Z1	•	•	•		•		•	•	
LSIGT2Z2	•	•	•		•		•		•
<b>Adjustable High Range Instantaneous</b>									
LSHT1	•	•		•		•			
LSHGT2	•	•		•	•		•		
LSHGT2Z1	•	•		•	•		•	•	
LSHGT2Z12	•	•		•	•		•		•

<sup>1</sup>For single-phase 3-wire or 3-phase, 4-wire applications, order appropriate neutral current sensor.



# Switchboards

## Spectra® Series Switchboards

## Section 10

### Switchboard Sizing Considerations

Listed below are rules and arrangements that must be considered when sizing and dimensioning Spectra® switchboards.

Switchboard depth is the most variable of section dimensions as depth varies depending upon type and size of feed required; type, size, feed and combination of devices required; and the circuitry involved.

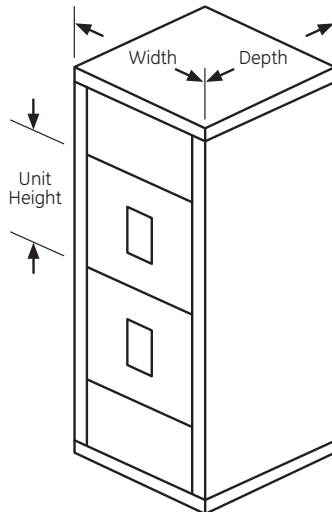


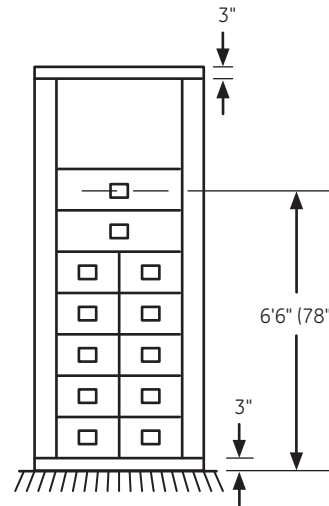
Fig. 1

The dimensions shown in this publication are based on the following considerations:

- Typical circuit and device arrangements as shown in Figure.
- Lug or busway feed not exceeding the ampacity of the largest rated devices. For oversize lugs, a lug section may be required. See table 1 on page 10-35.
- When two or more devices are involved in the same section, the section width and depth is to be determined by the largest of the devices.
- Where bottom feed is involved, use reverse mounted or reverse fed devices, if possible. If not, a pull section may be required to prevent looping of bus bars, and to facilitate barrier replacement. See Figure 1 on page 10-35.
- Where main lugs are involved spaces must be allowed for bending cable. Allow space at top (or bottom) of section per table 2 on page 10-35.
- In combining lug space and devices there will be cases where it will not be possible to fit more than one device per section. When such space becomes critical refer to factory for alternate arrangements.
- For connection to substation transformers see page 10-39 for further sizing requirements.
- Use of busway may dictate section dimensions. For busway locations and dimensions see page 10-40.
- Dimensions for front accessible sections may be reduced if rear access is available.

### 6'-7" Handle Rule

The National Electrical Code (Article 380-8) requires that switches or circuit breakers shall be installed so that the center of the grip of the operating handle of the switch or circuit breaker when in its highest position is not more than 6'-6" above the floor or working platform.



Feeder Section  
Fig. 2

### Wiring Bending Space

The National Electrical Code latest issue (Tables 373-6 (a and b) specify minimum wire bending space. A 14" unit height allowance as shown in Figure 3 will meet NEC requirements and provide wire bending space for front and rear accessibility. The 14" allowance for wire bending space may be utilized for metering (page 10-37), but not for devices. If there is rear access than it may be possible to reduce or eliminate the 14" allowance. Refer to factory.

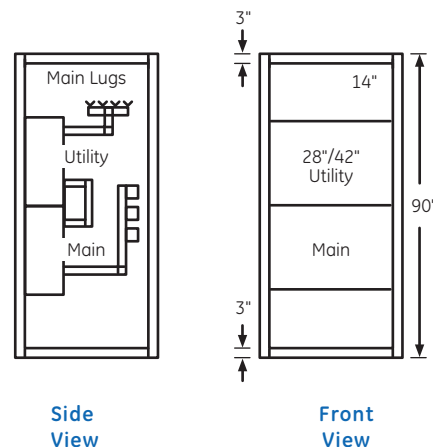


Fig. 3

### Wiring Terminals (Lugs)

Pressure type lugs suitable for 250-600 kcmil aluminum or copper wire, are provided for short circuit ratings to 100,000A. Above 100,000A compression type lugs are provided.

When oversize lugs are required, a lug section with minimum width shown in Table 1 on page 10-35 may be furnished.



# Switchboards

## Spectra® Series Switchboards

## Section 10

### Bussed Pull Sections

Section has cross bus that connects to adjacent main section bus. Section width and number of lugs are shown in table below.

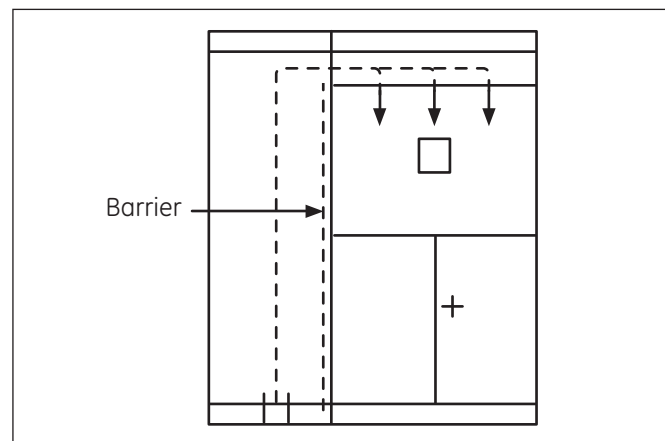
**Table 1 Pull Section Dimensions**

Amperes	Number of Lugs per Ø and N <sup>1</sup>	Section Width Minimum	Section Depth Minimum
800	3	25	25
1000	4		
1200	4		
1600	5	30	25
2000	6		
2500	8		
3000	9	35	30
4000	12		

<sup>1</sup> 50% Neutral will have one-half the lugs shown, 250-600 kcmil. Al or Cu wire.

### Pull Sections

Pull section are available in widths and depths from fifteen inches (15") to sixty inches (60") in five inch (5") increments. Twenty inch (20") width is standard. Depth is same as main section. The pull section provides space for pulling and installing cables. It is also used with bottom feed where reverse feed or reverse mounted devices cannot be used. A barrier is provided for service entrance to meet NEC requirements. Busing and lugs are not provided.



**Fig. 1**

**Table 2 Cable Bending Space Reference**

**Tabulation (75°C Cable Ampacity Rating Applies)**

Amperes	Lug Qty	Conductor		kcmil Size		Lug Space (Inches)	
		AL	CU	250-600	350-800	Top	Bottom
800	3		X	X		16	20
					X	20	24
	3	X		X		18	22
1000					X	22	26
	3		X	X		18	22
		X			X	22	26
				X		18	22
1200	3		X	X		18	22
					X	22	26
	4	X		X		19	23
1600					X	24	28
	4		X	X		19	23
		X			X	24	28
	5	X		X		19	23
2000					X	24	28
	5		X	X		19	23
	6	X		X		19	23
2500					X	24	28
	6		X	X		19	23
	7	X			X	24	28
	8	X		X		22	26
3000			X		X	24	28
	7		X	X		22	26
	8	X			X	24	28
	9	X		X		22	26
4000			X		X	26	30
	9		X	X		26	30
	10	X			X	30	34
	11	X			X	30	34

**Compression Lugs Are Provided For The Following Ampere Ratings At 100kA**

Amperes	Short Circuit Bracing	Anderson VCEL CU-AL Compression Lugs Per Phase And Neutral
800A	100kA	3 - 4/0-500kcmil
1000A	100kA	4 - 4/0-500kcmil
1200A	100kA	4 - 4/0-500kcmil



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

Individually Mounted Mains and Feeders

Section widths and depths shown below are minimum for main lugs equal to the main device rating. For other arrangements refer to company.

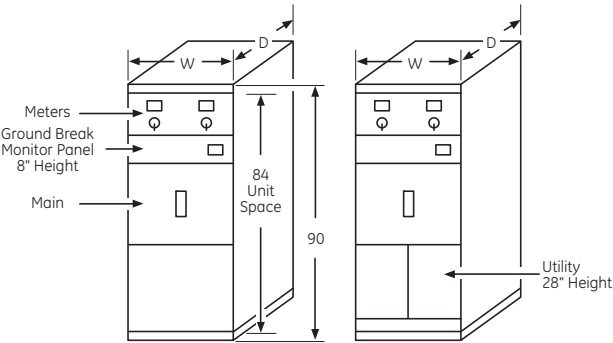


Fig. 1

Power Break® II Dimensions (Inches) Includes Incoming Lugs and Customer Meter CT's

Amp Rating		Stationary <sup>1</sup>						Draw Out <sup>1,2,3</sup>					
		Manual			Electrical			Manual			Electrical		
		Unit Height	Section		Unit Height	Section		Unit Height	Section		Unit Height	Section	
Frame	Sensor		Width	Depth		Width	Depth		Width	Depth		Width	Depth
800 <sup>2</sup>	200, 400, 800	20	25 <sup>1</sup>	30	20	25	30	20 <sup>1</sup>	30	40	20 <sup>1</sup>	30	40
1600	800, 1000, 1600	20	30	35	20	30	35	20	30	40	20	30	40
2000 <sup>2</sup>	2000	20	30	35	20	30	35	20	30	40	20	30	40
2500	1000, 2000, 2500	40	40	40	40	40	40	32	30	45	32	30	45
3000	3000	40	40	40	40	40	40	32	40	45	32	40	45
4000	4000	40	40	45	40	40	45	32	40	50	44	40	50

<sup>1</sup>Width and depth will vary depending on lug arrangement and number of devices included in the section.

<sup>2</sup>Max. of 72 secondary contacts.

<sup>3</sup>Rear access may be required for 2500A through 4000A drawout.

Class II and Class V Devices

Power Break® II Dimensions (Inches)

Amp Rating		Stationary <sup>1</sup>						Draw Out <sup>1,2,3</sup>					
		Manual			Electrical			Manual			Electrical		
		Unit Height	Section		Unit Height	Section		Unit Height	Section		Unit Height	Section	
Frame	Sensor		Width	Depth		Width	Depth		Width	Depth		Width	Depth
800 <sup>2</sup>	200, 400, 800	20	25 <sup>1</sup>	30	20	25	30	20 <sup>1</sup>	30	45	20 <sup>3</sup>	30	45
1600	800, 1000, 1600	20	30	35	20	30	35	20	30	45	20	30	45
2000 <sup>2</sup>	2000	20	30	35	20	30	35	20	30	45	20	30	45
2500	1000, 2000, 2500	40	40	40	40	40	40	32	30	45	32	30	45
3000	3000	40	40	40	40	40	40	32	40	45	32	40	45
4000	4000	40	40	40	40	40	40	44	40	45	44	40	45

<sup>1</sup>Width and depth will vary depending on lug arrangement and number of devices included in the section.

<sup>2</sup>Max. of 72 secondary contacts.

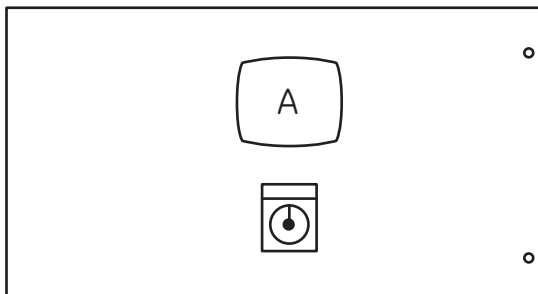
<sup>3</sup>Rear access may be required for 2500A through 4000A drawout.



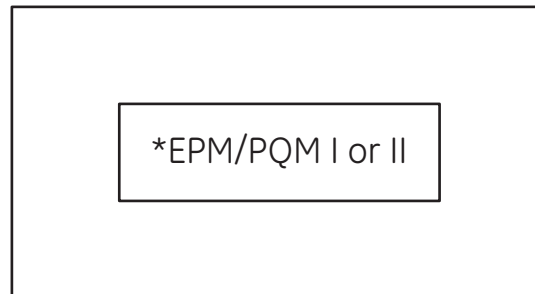


### Instruments and Meters<sup>1</sup>

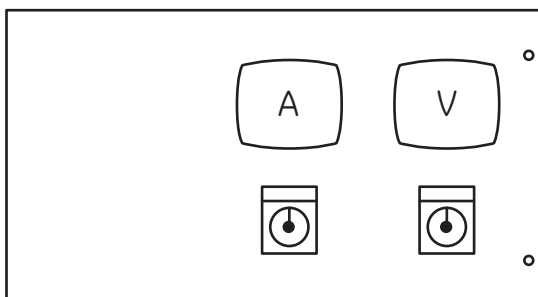
Listed below are the instrument and metering combinations with the compartment door configurations. Hinged door is standard on all meter doors.



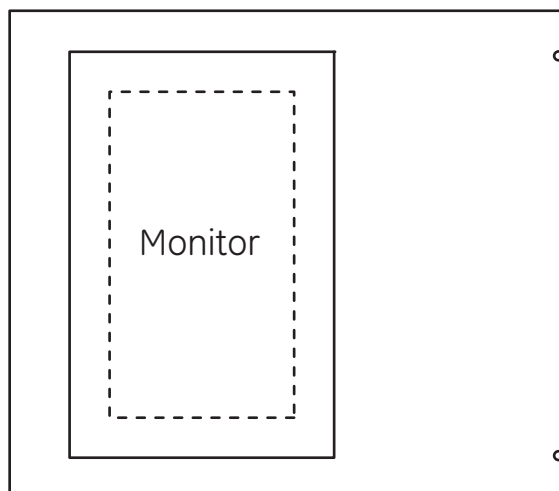
Ammeter and Selector Switch<sup>2</sup>



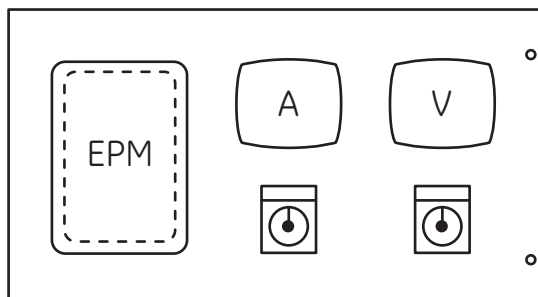
EPM/PQM Meters<sup>2</sup>



Ammeter, Voltmeter and Selector Switches<sup>2</sup>



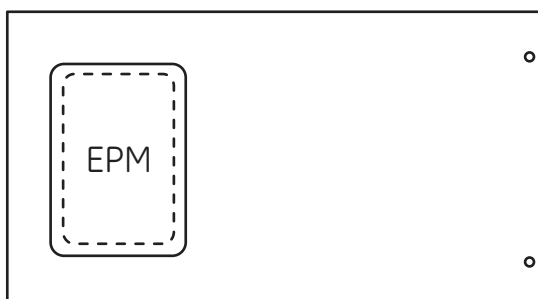
POWER LEADER® Monitor<sup>3</sup>



Ammeter, Voltmeter, with Selector Switches and Watt Hour Meter<sup>2</sup>



Ground Break® Monitor Panel<sup>4</sup>



EPM Multi-function meter<sup>2</sup>

<sup>1</sup>For layouts/options other than those shown, contact factory.

<sup>2</sup>Compartment door is 12 inches high and requires 25 inch minimum width.

<sup>3</sup>Compartment door is 21 inches high and requires 25 inch minimum width.

Repeater (if required) will be mounted in the same compartment. No additional space required.

<sup>4</sup>Compartment door is 8 inches high and requires 25 inch minimum width.



Standard Utility Compartments

NOTE: Dimensions shown are minimum widths and depths of switchboard sections containing CT compartments only. If there are other devices located in the section, actual width will be based on the largest device required. And, the entire switchboard lineup depth will be based on the largest device depth required.

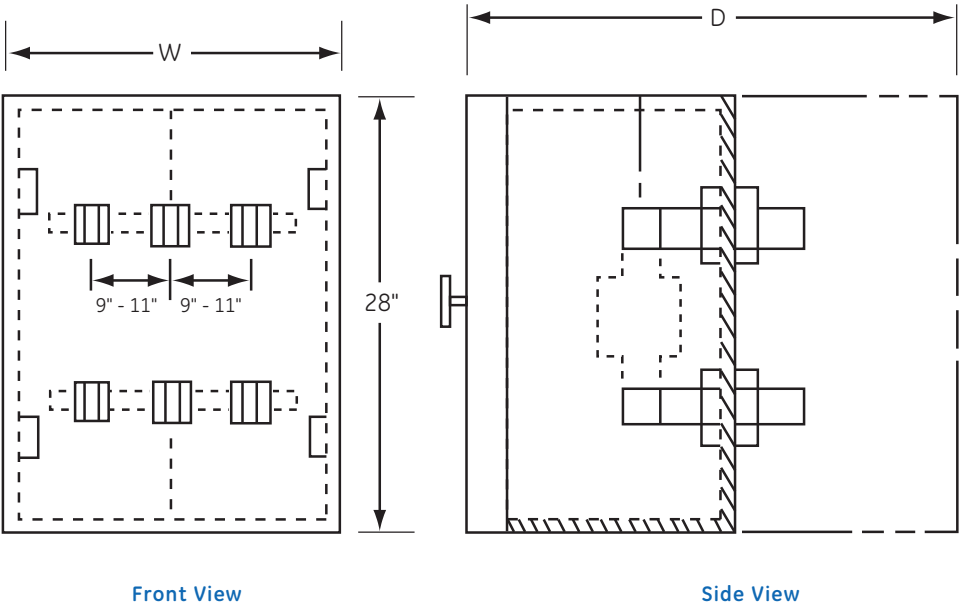


Fig. 1

CT Compartment Dimensions (Inches)

C/T Center Line	Max. Ampere Ratings	Minimum Section Width (Inches)	Minimum Section Depth (Inches)
9"	600	35	30
	800	35	30
	3000	35	30
	4000	40	35
11"	600	35	30
	800	40	30
	3000	40	30
	4000	40	35



### Low Voltage Transition Sections

Transition sections are required for connection of low-voltage Spectra® Series switchboards to all liquid-filled transformers, and not required for GE or SEPS open dry-type transformers 750 to 2000 kVA. They are also required for connection of switchboards to motor control centers. Transformer and transition sections are always aligned on center of depth of both sections.

Transition section depth is determined by device and circuitry of service entrance section. Transformer depth can be either deeper, the same, or shallower than the transition section depth.

Note that the minimum allowable switchboard depth is 40".

For the 1500 and 2000 kVA, 95 BIL transformers, a 100-inch high transition section is required. The switchboard remains 90" high.

Transition sections are 15" wide except for 2000-3000 kVA which require 20" wide transition section.

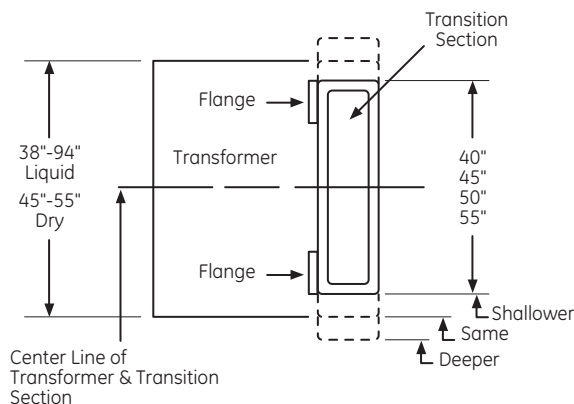


Fig. 1

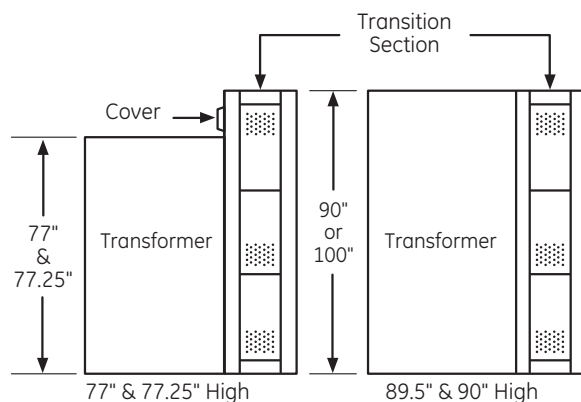


Fig. 2

### Dual Voltage Switchboards

#### Dry Type Transformer Sections—480 Volt Primary

kVA	Self-Cooled	
	Width	Depth
30	30"	35"
45	30"	35"
75	35"	35"
112.5	40"	35"
150	45"	40"

Core & coil type QLC transformers provided in switchboard enclosures are set up for cable connection to primary and secondary. Fig. 3 applies.

750 and 1000KVA transformers are provided in NEMA 1 transformer enclosures. Primary and secondary flanges to switchboard sections do not require transition sections.

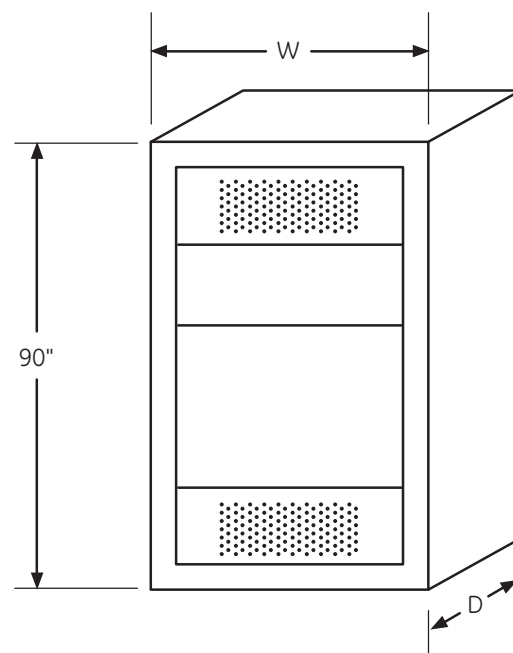


Fig. 3



# Switchboards

## Spectra® Series Switchboards

### Spectra® Series Busway Entrance

The Spectra® Busway switchboard stub may connect to the switchboard top main bus or the line or load terminals of a device in the switchboard section into which it enters. All dimensions shown are to centerline of busway. When two busway runs enter a switchboard section, refer to factor. For busway entrance locations other than Spectra® Busway refer to factory.

#### Switchboard Stubs

Both top and bottom entrance is available, however, TFR is the recommended standard entrance position. Dimensions for bottom entrance are the same as top entrance. Note that TEL and TER entrance positions require a separate 15-inch wide switchboard adjacent to the switchboard main device for entrance.

#### Spectra® Busway Rating by Stack

No. of Stacks	Aluminum Bus Ampere Rating	Copper Bus Ampere Rating
1	225-2000	225-2000
2	2500	3000
	3000	4000
	4000	5000

#### Spectra® Busway Switchboard Equivalent Stacks

Stacks	Aluminum Bus Amps	Copper Bus Amps
1	800	800
	1000	1000
	1200	1200
		1600
		2000
2	1600	2500
	2000	3000
	2500	4000
	3000	
3	4000	5000

#### Dimensions (inches)

Stub Type	"W" Dim. Busway Stacks			"D" Dim. Busway Stacks		
	1	2	3	1	2	3
TFR	25	30	40	-	-	-
TFF	25	35	45	-	-	-
TEL, TER	-	-	-	1	1	1

<sup>1</sup>Refer to factory  
 Notes: TFR requires rear access or must be preassembled into switchboard before it is set into place  
 Any feeder busway must be on extreme ends of switchboard with path ground, or consult factory.

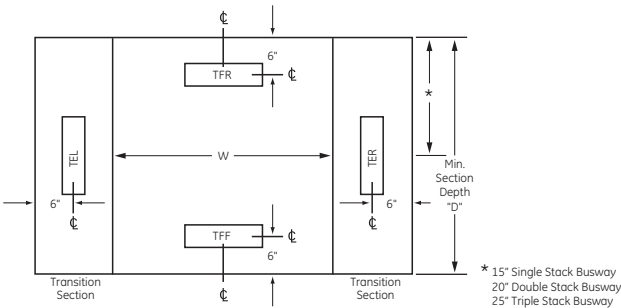


Fig. 1

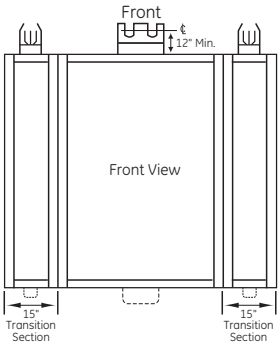


Fig. 2



# Switchboards

## Spectra® Series Switchboards

## Spectra® Series Conduit Entrance Space

## Section 10

### Group-Mounted Distribution Sections

To find "A" dimension subtract 5" from width of switchboard section. To find "B" dimension subtract 9" from depth of switchboard section.

### Incoming Line Sections

To find "A" dimension subtract 5" from width of switchboard section. See table for "B" dimension. "B" dimension is conduit entrance space available with neutral bus and device at extreme top or bottom.

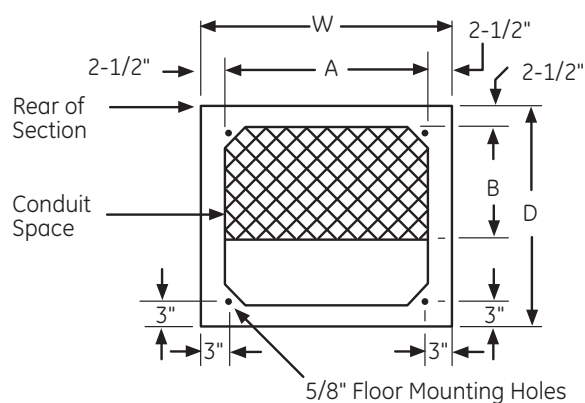


Fig. 1

### Floor Mounting Method

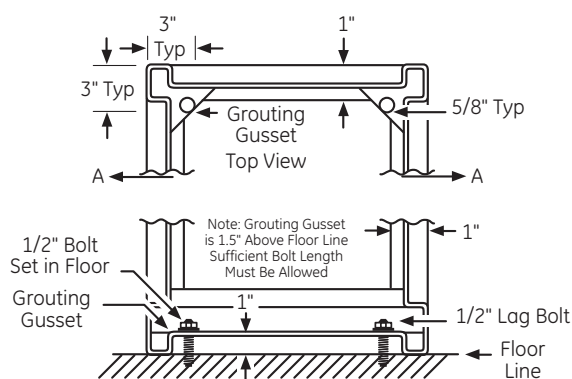


Fig. 2

### Incoming Line Section "B" Dimensions<sup>1</sup> (Inches)

Device	Section Depth							
	25"	30"	35"	40"	45"	50"	55"	60"
TJ	5	10	15	20	25	30	35	40
TK	5	10	15	20	25	30	35	40
TLB, THLC	5	10	15	20	25	30	35	40
JJ-JK 600A	5	10	15	20	25	30	35	40
KM1 200A	5	10	15	20	25	30	35	40
TB 600A	5	10	15	20	25	30	35	40
TB 800A	5	10	15	20	25	30	35	40
QMR 4-600A	5	10	15	20	25	30	35	40
QMR 8-1200A	5	10	15	20	25	30	35	40
HPC 800A	5	10	15	20	25	30	35	40
HPC 1600A	5	10	15	20	25	30	35	40
HPC 2000A	5	10	15	20	25	30	35	40
HPC 2500A	—	5	10	15	20	25	30	35
HPC 3000A	—	5	10	15	20	25	30	35
HPC 4000A	—	—	5	10	15	20	25	30
CBC 800A	—	5	10	15	20	25	30	35
CBC 12-2000A	—	5	10	15	20	25	30	35
CBC 2500A	—	—	5	10	15	20	25	30
CBC 3000A	—	—	5	10	15	20	25	30
CBC 4000A	—	—	5	10	15	20	25	30
PBI/PBII 800A <sup>2</sup>	5	10	15	20	25	30	35	40
PBI/PBII 1600A <sup>2</sup>	5	10	15	20	25	30	35	40
PBI/PBII 2000A <sup>2</sup>	5	10	15	20	25	30	35	40
PBI/PBII 2500A <sup>2</sup>	—	5	10	15	20	25	30	35
PBI/PBII 3000A <sup>2</sup>	—	—	5	10	15	20	25	30
PBI/PBII 4000A <sup>2</sup>	—	—	5	10	15	20	25	30
PBI/PBII 800A D/O <sup>2</sup>	—	—	5	10	15	20	25	30
PBI/PBII 1600A D/O <sup>2</sup>	—	—	5	10	15	20	25	30
PBI/PBII 2000A D/O <sup>2</sup>	—	—	5	10	15	20	25	30
PBI/PBII 2500A D/O <sup>2</sup>	—	—	5	10	15	20	25	30
PBI/PBII 3000A D/O	—	—	5	10	15	20	25	30
PBI/PBII 4000A D/O	—	—	—	—	5	10	15	20
AKR30 800A	—	—	—	5	10	15	20	25
WPS/WPH/WPX 800A	—	—	—	5	10	15	20	25
AKR50 1600A	—	—	—	5	10	15	20	25
WPS/WPH 1600A	—	—	—	5	10	15	20	25
AKRT50H 2000A	—	—	—	5	10	15	20	25
WPS 2000A	—	—	—	5	10	15	20	25
AKR75 3200A	—	—	—	—	5	10	15	20
WPS/WPH 3200A	—	—	—	—	5	10	15	20
AKR100 4000A	—	—	—	—	5	10	15	20
WPS 4000A	—	—	—	—	5	10	15	20
AKR30S 800A D/O	—	—	—	—	5	10	15	20
WPS/WPH/WPX 800A D/O	—	—	—	—	5	10	15	20
AKR50H 1600A D/O	—	—	—	—	5	10	15	20
WPS/WPH 1600A D/O	—	—	—	—	5	10	15	20
AKRT50 2000A D/O	—	—	—	—	5	10	15	20
WPS 2000A D/O	—	—	—	—	5	10	15	20
AKR75 3200A D/O	—	—	—	—	—	5	10	15
WPS/WPH 3200A D/O	—	—	—	—	—	5	10	15
AKR100 4000A D/O	—	—	—	—	—	—	5	10
WPS 4000A D/O	—	—	—	—	—	—	5	10
AKR125 5000A D/O <sup>3</sup>	—	—	—	—	—	—	—	—
WPS 5000A D/O <sup>3</sup>	—	—	—	—	—	—	—	—
Utility C/T (13" deep)	—	5	10	15	20	25	30	35
Utility C/T (18" deep)	—	—	5	10	15	20	25	30
Utility C/T (23" deep)	—	—	—	5	10	15	20	25

<sup>1</sup> Refer to factory for conduit area when channel-sills are used.

<sup>2</sup> Subtract 5" from "B" dimension for electrically-operated devices.

<sup>3</sup> Bussed cable pull section required.



NEMA 3R Outdoor Enclosure Non Walk-In

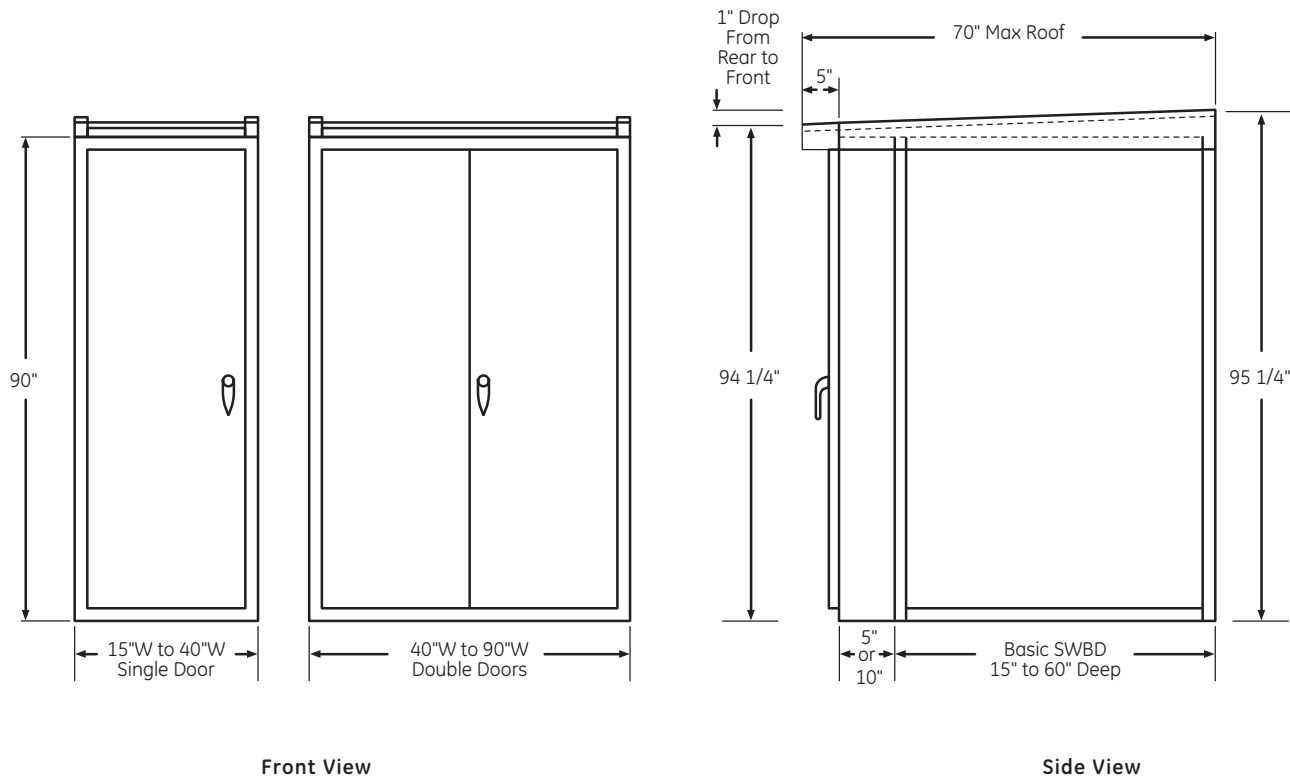


Fig. 1 Non-walk-in

NEMA 3R outdoor enclosures consist of standard indoor cubicles and components enclosed with a front frame and roof assembly to provide a weather resistant structure. Any number of sections may be bolted together. However, all sections must be of the same depth.

Standard outdoor construction consists of:

- 90" high sections
- Filtered front roof vents
- Flat, front area floor
- Single doors 15"-40" width; double doors 40"-90" width
- Wind stop on each door
- 3-point catch with provision for padlock
- Front to rear full depth lifting beams

Options available are:

- 1 5/8" high floor sills with rodent guards
- Fluorescent light with receptacle

# Switchboards

## Spectra® Series Switchboards

Section Sizing—Group Mounted Mains (Plug-in Style)

## Section 10

### Main Lugs Only

Amp Rating	Top or Bottom Cable Entry Maximum Feeder X-Height Available <sup>1</sup>	Depth (inches)	Width (inches) <sup>2</sup>
400	38	25	35
600			
800			
1000			
1200			
1600			
2000			

<sup>1</sup>43X Interior available, rear access required

<sup>2</sup>Minimum section width shown. Wider section may be required. Refer to branch sizing table.

### Bussed Cable Pull Section

Amperes	Section Width (inches)	Section Depth (inches)
800	35	25
1200		
1600		
2000		
2500		
3000		
4000		

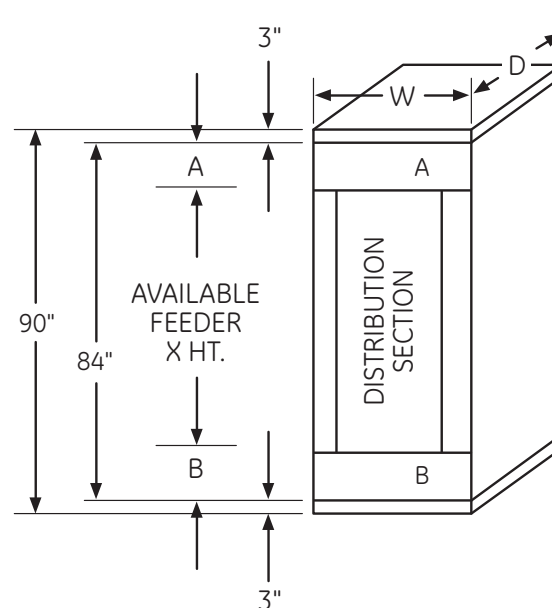


Fig. 1

### Main Device—Group Mounted<sup>3</sup>

Type	Device	Amp Range	Main X-Height	Available Feeder X-Height	Depth (inches)
Circuit Breaker	FGV, FGN, FGH, FGL, FGP	400-600	4	34	25
	SGDA, SGHA, SGLA, SGPA	400-600	4	34	25
	SKHA, SKLA, SKPA	800-1200	6	32	25
Spectra® RMS Breaker with MicroVersaTrip® Plus Trip Unit <sup>4</sup>	SGHB, SGLB, SGPB	400-600	4	34	25
	SKHB, SKLB, SKPB	800-1200	6	32	25
Fusible Switch	ADS	400, 600	10	28	25
		800, 1200	19	19	

### Main Device—Group Mounted—MicroVersaTrip® PM Trip Unit<sup>3</sup>

Type	Device	Amp Range	Main X-Height	Available Feeder X-Height	Depth (inches)
Spectra® RMS Breaker with MicroVersaTrip® PM Trip Unit <sup>5</sup>	SGHB, SGLB, SGPB	400-600	5 <sup>6</sup>	33	25
	SKHB, SKLB, SKPB	800-1200	7 <sup>6</sup>	31	25

### Main Device—Group Mounted—100% Equipment Rated<sup>3</sup>

Type	Device	Amp Range	Main X-Height	Available Feeder X-Height	Depth (inches)
Spectra® RMS Breaker	SGHHA, SGLLA, SGPPA	400	4	34	25
	SKHHA, SKLLA, SKPPA	400-1200	6	32	25
Spectra® RMS Breaker with MicroVersaTrip® Plus Trip Unit <sup>4</sup>	SGHBB, SGLLB, SGPPB	400	4	34	25
	SKHBB, SKLLB, SKPPB	400-1200	6	32	25
Spectra® RMS Breaker with MicroVersaTrip® PM Trip Unit <sup>5</sup>	SGHBB, SGLLB, SGPPB	400	4 <sup>6</sup>	34	25
	SKHBB, SKLLB, SKPPB	400-1200	7 <sup>6</sup>	31	25

<sup>3</sup>Section width is determined by widest main or feeder used; refer to dimension tables on pages 10-45 and 10-46

<sup>4</sup>Breakers with MicroVersaTrip® Plus trip units with optional control power require a Voltage Module.

<sup>5</sup>Breakers with MicroVersaTrip® PM trip units must use a Voltage Module.

<sup>6</sup>Breakers with MicroVersaTrip® PM trip units must have installed auxiliary switch; 1X breaker side control wiring space is included.



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

# Switchboards

## Spectra® Series Switchboards

Section Sizing—Feeder Section (Plug-in Style)

## Section 10

### Feeder Section Dimensions

Service:

- 3Ø3W, 240V, 480V, 600V
- 3Ø4W, 208Y/120V
- 480Y/277V

—Main: None

—Bus bar connected to adjacent section

—Devices are standard (80%) rated unless noted as 100% rated.

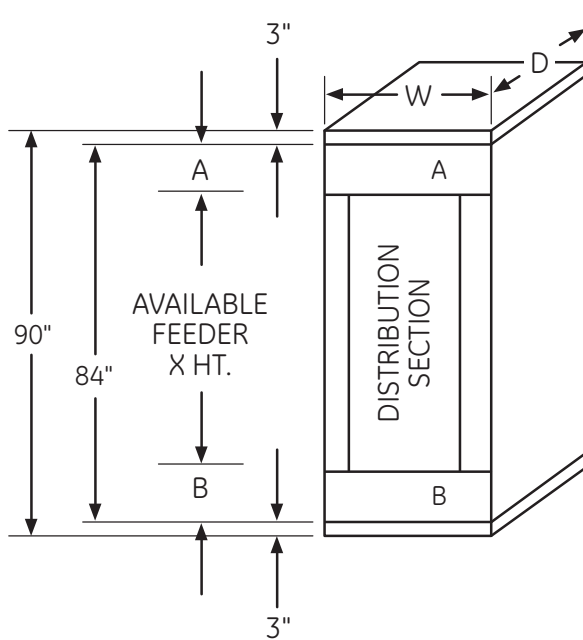


Fig. 1

### Section Dimensions (Inches)

Distribution Section Rating Amperes	A	B	Available Feeder X Ht.	Width	Depth
800	14 <sup>1</sup>	7 <sup>1</sup>	43 <sup>2</sup>	See Device Tables	
1000					
1200					
1600					
2000					
2500					
3000, 4000					

<sup>1</sup> Neutral located at top. For neutral at bottom reverse dimensions.

<sup>2</sup> 53X Interior Available—Rear access required. Dimensions are A-7", B-0".

### Branch Devices—Group Mounted—ADS Fusible Switches (Plug-in only)

Amperes	Poles	Voltage	Fuse Type							Mounting			
			H	J	K	L	R	T	Module Config.	Blank Option	X Height	Minimum width (inches)	Minimum Depth (inches)
30	2/3	240	•	—	•	—	•	—	Double	Yes	4	40	25
	2/3	600	•	•	•	—	•	—	Double	Yes	4	40	
60	2/3	240	•	—	•	—	•	—	Double	Yes	4	40	
	2/3	600	•	•	•	—	•	—	Double	Yes	5	40	
100	2/3	240	•	—	•	—	•	—	Double	Yes	5	40	
	2/3	600	•	•	•	—	•	—	Double	Yes	5	40	
	2/3	240/600	—	—	—	—	—	•	Double	Yes	7	40	
	2/3	240/600	•	—	•	—	•	—	Double	No	7	45	
200	2/3	240/600	•	—	•	—	•	—	Single	No	7	40	
	2/3	240	—	—	—	—	—	•	Double	Yes	7	40	
	2/3	600	—	•	—	—	—	•	Double	Yes	7	40	
	2/3	240/600	•	—	•	—	•	—	Single	No	10	45	
400/600	2/3	240	—	—	—	—	—	•	Single	No	10	40	
	2/3	600	—	•	—	—	—	•	Single	No	10	40	
800/1200	2/3	600	—	—	—	•	—	—	Single	No	19	45	





# Switchboards

## Spectra® Series Switchboards

Section Sizing—Feeder Section (Plug-in Style)

## Section 10

### Branch Devices—Group Mounted—Molded Case Circuit Breakers

Mounting	Max. Breaker Amps	Breaker Frames	3-Pole Module X-height <sup>1</sup>	2-Pole Module X-height <sup>1</sup>	Minimum Width (inches)	Minimum Depth (inches)
Double	100	THQB, THHQB, TEY	3	—	35	25
		SE, SF, FC	3	3	35	25
	150	TEB, TED, TQD, THQD	3	2	35	25
		THED, FE	3	3	35	25
	225	TQD, THQD	3	2	35	25
		FG	4	4	40	25
	250	SF	3	3	35	25
		FG	4	4	40	25
	400	SG, FG	4	4	40	25
		SG, FG	4	4	40	25
Double Adjacent to Fusible Switch	150	SEDA, SEHA, SELA, SEPA, FC, FE	4	4	40	25
		SFHA, SFLA, SFPA, FE	4	4	40	25
	250	SF, FE	3	3	35	25
		SG, FG	4	4	35	25
	600	SG, FG	4	4	35	25
		MicroVersaTrip® Plus SGHB, SGLB, SGPB	4	—	35	25
	1200	SKHA, SKLA	6	6	40	25
		SKPA	6	6	45	25
		MicroVersaTrip® Plus SKHB, SKLB	6	—	40	25
		MicroVersaTrip® Plus SKPB	6	—	45	25
Single Adjacent to Fusible Switch	250	SF, FE	4	4	40	25

### Branch Devices—Group Mounted—Breakers with MicroVersaTrip® PM<sup>2</sup> Trip Unit

Mounting	Max. Breaker Amps	Breaker Frames	3-Pole Module X-height <sup>3</sup>	2-Pole Module X-height	Minimum Width (inches)	Minimum Depth (inches)
Twin	600	MicroVersaTrip® PM SGHB, SGLB, SGPB	6 or 5 <sup>4</sup>	—	40	25
Single	600	MicroVersaTrip® PM SGHB, SGLB, SGPB	5 <sup>3</sup>	—	35	25
	1200	MicroVersaTrip® PM SKHB, SKLB	8 <sup>5</sup>	—	40	25
		MicroVersaTrip® PM SKPB	8 <sup>5</sup>	—	45	25

<sup>1</sup>Add 1X per double or single branch for internal accessories die control wiring space. (Shunt trip, auxiliary switch, bell alarm undervoltage release).

<sup>2</sup>Breakers with MicroVersaTrip® PM trip units must use a Voltage Module.

<sup>3</sup>Add 1X per double or single branch for internal accessories side control wiring space. (Shunt trip, bell alarm, undervoltage release).

<sup>4</sup>Breakers with MicroVersaTrip® PM trip units must have installed auxiliary switch; 1X breaker side control wiring space is included.

<sup>5</sup>Breakers with MicroVersaTrip® PM trip units must have installed auxiliary switch; 1X breaker no side control wiring space is included.



# Switchboards

## Spectra® Series Switchboards

Section Sizing—Main (Plug-in and Bolt-on Styles)

## Section 10

### 14.1 Main Devices (Inches)

Device			Stationary						Draw Out										
Type	Designation	Ampere Rating	Manual			Electrical			Manual			Electrical							
			Unit Height	Section		Unit Height	Section		Unit Height	Section		Unit Height	Section						
				Width	Depth <sup>1,2</sup>		Width	Depth <sup>1,2</sup>		Width	Depth <sup>1,2</sup>		Width	Depth <sup>1,2</sup>					
Bolted Pressure Switch	CBC	800	32	30	30	same as manual			not available										
		1200																	
		1600																	
		2000	36	35	40														
		2500																	
		3000																	
4000	48	45	40																
MCCB Standard and Hi-Break	TKM, THKM SKH	1200	24			same as manual						not available							
Fusible Switch	QMR	400	28	25	20	not available					not available								
		600																	
		800																	
		1200		35															
Metering			see page 10-38	25	25	same as manual		25				not applicable							
Ground Fault-Ground Break	8	25	25		25														
Utility Metering			Type 1			Type 2			Type 3			not applicable							
			Ht	Width Min	Depth Min	Ht	Width	Depth	Ht	Width Min	Depth Min								
800	28	35	35	44	40	30	28	40	25										
1000																			
1200																			
1600																			
2000																			
2500																			
3000																			
4000	28	40	35	44	40	30	28	40	30										
Automatic Throwover	800	28H x 35W x 35 deep									not applicable								
4000																			

<sup>1</sup>If metering CT's are required add 5" to depth. For devices at extreme top or bottom depth shown may not provide sufficient conduit entrance space. See page 10-41 for conduit space available.

<sup>2</sup>If vertical neutral bar is required, add 5" to depth.



# Switchboards

## Spectra® Series Switchboards

Section Sizing—Group Mounted Mains (Bolt-on Style)

## Section 10

### Main Lugs Only

Amp Rating	Top or Bottom Cable Entry Maximum Feeder X-Height Available <sup>1</sup>	Depth (inches)	Width <sup>2</sup> (inches)
400	38	25	35
600			
800			
1000			
1200			
1600			
2000			

<sup>1</sup>43X Interior available, rear access required

<sup>2</sup>Minimum section width shown. Wider section may be required. Refer to branch sizing table.

### Bussed Cable Pull Section

Ampere	Section Width (inches)	Section Depth (inches)
800	35	25
1200		
1600		
2000		
2500		
3000		
4000		

### Main Device—Group Mounted<sup>3</sup>

Type	Device	Amp Range	Main X-Height	Available Feeder X-Height	Depth (inches)
Circuit Breaker	FGV, FGN, FGH, FGL, FGP	400-600	4	34	25
	SGDA, SGHA, SGLA, SGPA	400-600	4	34	25
	SKHA, SKLA, SKPA	800-1200	6	32	25
Spectra® RMS Breaker with MicroVersaTrip® Plus Trip Unit	SGHB, SGLB, SGPB	400-600	4	34	25
	SKHB, SKLB, SKPB	800-1200	6	32	25

<sup>3</sup>Section width is determined by widest main or feeder used; refer to Dimension tables on page 10-48.

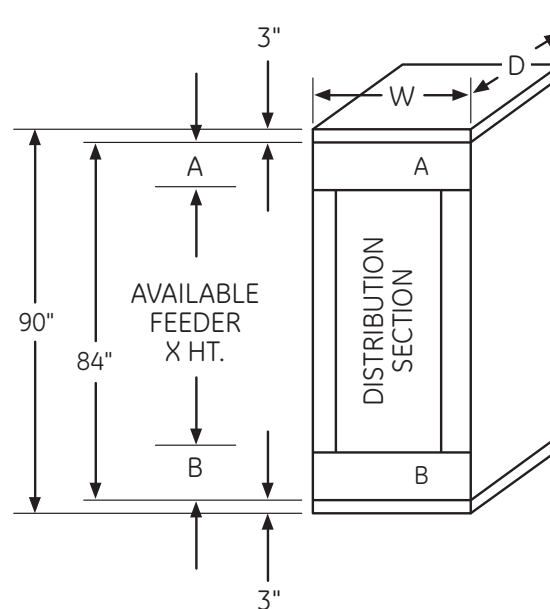


Fig. 1

### Spectra® Distribution Bolt-on Switchboards

Distribution Bolt-on switchboard sections may be furnished in 20-inch depths when the following conditions are met:

1. Incoming feed enters switchboard section at opposite end from load cables—1200A max and no metering or ground fault.
2. Device "X" Height for incoming sections and feeder sections should be limited to 33X to provide adequate front access for line and load cable terminations.
3. Branch devices are limited to circuit breakers shown on pages 10-47 and 10-48.

### Class-1, Class-2 Feeder Section Dimensions

Service:

- 3Ø3W, 240, 480V
- 3Ø4W, 208Y/120V, 480Y/277V
- Main: None
- Bus Bar Connected to
- Adjacent Section
- All Devices Standard (80%)
- Rated



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

# Switchboards

## Spectra® Series Switchboards

Section Sizing—Feeder Section (Bolt-on Style)

## Section 10

### Feeder Section Dimensions

Service:

- 3Ø3W, 240V, 480V, 600V
- 3Ø4W, 208Y/120V  
480Y/277V

- Main: None
- Bus bar connected to adjacent section
- Devices are standard (80%) rated unless noted as 100% rated.

### Section Dimensions (Inches)

Distribution Section Rating Amperes	A	B	Available Feeder X Ht.	Width	Depth
800	14 <sup>1</sup>	7 <sup>1</sup>	43 <sup>2</sup>	See Device Tables	
1000					
1200					
1600					
2000					
2500					
3000, 4000					

<sup>1</sup> Neutral located at top. For neutral at bottom reverse dimensions.

<sup>2</sup> 53X Interior Available—Rear access required. Dimensions are A-7", B-0".

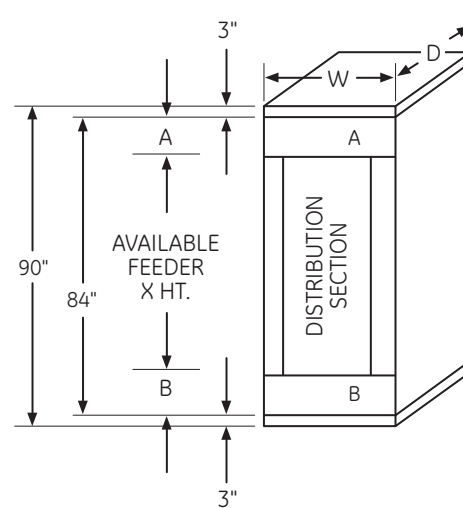


Fig. 1

### Bolt-on Branch Devices—Group Mounted—Molded Case Circuit Breakers

Mounting	Max. Breaker Amps	Breaker Frames	3-Pole Module X Height <sup>3</sup>	2-Pole Module X Height <sup>3</sup>	Minimum Width (inches)	Minimum Depth (inches)
Double	100	TED	3	2	35	25
		TEY	3	—	35	25
		SE, SF, THED, FC, FE	3	3	35	25
		SG	4	4	40	25
	150	TED	3	2	35	25
		SE, FE	3	3	35	25
	250	SF, FE	3	3	35	25
		FG	4	4	40	25
	400	SG, FG	4	4	40	25
		SG, FG	4	4	40	25
	600	MicroVersa Trip Plus™ SGHB, SGLB, SGPB	4	—	40	25
Single	250	SF, FE	3	3	35	25
		FG	4	4	40	25
	400	SG, FG	4	4	35	25
		SG, FG	4	4	35	25
	600	MicroVersa Trip Plus™ SGHB, SGLB, SGPB	4	—	35	25
		SK	6	6	40	25
	1200	MicroVersa Trip Plus™ SGHB, SGLB, SGPB	6	—	45	25

<sup>3</sup> Add 1X per double or single branch for internal accessories side control wiring space. (Shunt trip, auxiliary switch, bell alarm, undervoltage release).

<sup>4</sup> Breakers with MicroVersaTrip Plus™ trip units with optional control power require a Voltage Module.



# Switchboards

## Spectra® Series Switchboards

Automatic Throwover Equipment

## Section 10

GE Zenith ZTS series automatic transfer switches are for use with electrically operated circuit breakers. They include the standard ZTS switch, the ZTSD delayed transition switch, ZTSCT closed transition switch and ZBTS Bypass/Isolation. ZTS are electrically operated, mechanically-held by a simple, over center mechanism. The components of the ATS are accessible for inspection and maintenance without removal of the switch or the power conductors.

Mechanical indicator and contact chamber cover are designed for inspection, safety and position designation. Logic devices including microprocessor control auxiliary time delays and special accessory equipment are assembled on the door for ease of maintenance and separation from the power section. The various functions of the switch are listed in the Standard Features table.

### Zenith ZTS with MX200 (Module 25)

Ampere Rating	ZTS Minimum Section Dimensions		
	Height	Width	Depth
400	90	20	25
600	90	35	30
800	90	35	30
1000	90	35	30
1200	90	35	30
1600	90	45	40
2000	90	45	40
3000	90	45	40
4000	90	45	50

### ZTS Standard Features

Option	Description
A1	AUX-SPDT, Normal Power
A1E	AUX-SPDT, Emergency Power
A3	AUX-SPST, Emergency Position
A4	AUX-SPST, Normal Position
A6	Motor Disconnect During Xfr
C/D <sup>1</sup>	Load/No Load Exerciser—7 day
C/D-14 <sup>1</sup>	Load/No Load Exerciser—14 day
C/D 365 <sup>1</sup>	Load/No Load Exerciser—365 day
E	Engine Start Contact
J2E	O/U Frequency Sensing—Emergency
J2N	O/U Frequency Sensing—Normal
L1	Light—Emergency Position
L2	Light—Normal Position
L3	Light—Normal Available
L4	Light—Emergency Available
P1	TD Engine Start
Q2**	Remote Test/Peak Shave
Q3**	Transfer Inhibit—to Emergency
R1	0 Voltage Sensing—Normal
R8	0 Voltage Sensing—Emergency
R16	Phase Rotation Sensing
R17	3 Phase UV Sensing—Emergency
R50**	Tri-Phase Monitor
T	TD—Retransfer to Normal
U	TD—Engine Cooldown
E	TD—Transfer to Emergency/Warmup
YEN	PB—Bypass T&W Times

S = STANDARD

<sup>1</sup>Please indicate choice when ordering—7 days provided unless otherwise specified.



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

These pricing pages are coded to indicate which shipment cycle the product feature qualifies for. The cycle category can be matched with quoted cycles from Equipment Plant Customer Service updates. The shipment cycle codes for group mounted switchboards are:

Code	Shipment Cycle	Explanation
S	Short	Limited product scope, very quick shipment
M	Mid	Larger product scope than short cycle
N	Normal	Standard delivery covering 80% of all product options
N+	Normal +	Special order items requiring additional lead time

The codes have two uses:  
The **shortest shipment cycle possible** for a given proposition is the longest code associated with any of the options quoted, i.e., if everything falls under the “S” code except for one item which is “N”, then the proposition should be quoted as a Normal Cycle delivery.

To **quote correct shipment cycle time**, match the longest shipment code to the current lead times published by Equipment Plant Customer Service.



# Switchboards

## Spectra® Series Switchboards

Incoming Line—Individual Sections (Plug-in and Bolt-on Styles)

## Section 10

### Service Entrance Equipment (SE Label)

Switchboards used as service entrance equipment (maximum six sub-main devices) include a UL service entrance label, a neutral bonding jumper, neutral disconnect link, ground bus, and grounding electrode. **List price addition \$450, GO-108A.** Ground-fault protection is required by NEC on main service disconnect at 1000 amperes and greater, on 480Y/277 volt solidly grounded systems, and must be priced separately.

### Main Lugs

Use only when no main protective device is required on switchboard. Ship cycle shown applies to standard lug size only (see page 10-35). Otherwise, ship cycle is N+.

Ampere Rating	List Price Each, GO-108A			Ship Cycle
	3-phase, 4-wire	3-phase, 3-wire	1-phase, 3-wire	
1600	\$2563.00	\$2021.00	\$2563.00	S
2000	\$3054.00	\$2413.00	\$3054.00	
2500	\$3708.00	\$2955.00	\$2658.00	
3000	\$4380.00	\$3471.00	\$4380.00	S
4000	\$5724.00	\$4565.00	\$5724.00	
5000-6000	\$23505.00	\$18804.00	—	N+

### Metering Compartment for Electric Utility Equipment, 600 Volts ac Max.

Ship cycle shown applies to power companies listed on pages 10-18 through 10-23. Otherwise, ship cycle is N+.

Description	List Price Each, GO-108A		Ship Cycle
	3-phase, 4-wire	1- or 3-phase, 3-wire	
Utility metering compartment includes front accessible portion of incoming-line section with bus, space and bus for three current transformers, double front door, and isolating barriers and removable links if required.			
800 amps or less	\$2289.00	\$2158.00	S
1000-2000 amps	\$3359.00	\$2886.00	
2500 and 3000 amps	\$4229.00	\$3521.00	
4000 amps	\$5051.00	\$4080.00	S
Meter Socket	\$479.00	\$411.00	S
Space and Mounting Bracket for Potential Transformers	\$498.00	\$498.00	

### GE HPC Switches—Manually Operated (Prices do not include fuses)<sup>2</sup>

Ampere Rating	List Price Each, GO-108A						Ship Cycle
	3-ph, 4w or 3-ph, 3w			1-ph, 3-wire			
	240 Volt ac	600 Volt ac	Space and Busing	240 Volt ac	600 Volt ac	Space and Busing	
800	\$9219.00	\$9219.00	\$3421.00	\$8100.00	\$8100.00	\$2712.00	S
1200	\$12466.00	\$13921.00	\$3969.00	\$11185.00	\$12540.00	\$3284.00	
1600	\$13897.00	\$15315.00	\$4454.00	\$12466.00	\$13734.00	\$3770.00	
2000	\$15414.00	\$16783.00	\$5486.00	\$13548.00	\$14916.00	\$4616.00	
2500	\$17617.00	\$19047.00	\$7240.00	\$15476.00	\$16907.00	\$6120.00	
3000	\$28067.00	\$29484.00	\$8596.00	\$23787.00	\$25517.00	\$7191.00	M
4000	\$39052.00	\$40346.00	\$14866.00	\$33516.00	\$34374.00	\$8571.00	

### NEMA Class L Std Fuses, 600 volts or less

Ampere Rating	List Price, GO-108A Addition Each Fuse, GO-108A	Ship Cycle
800	\$796.00	S
1000	\$796.00	
1200	\$796.00	
1600	\$1062.00	
2000	\$1301.00	
2500	\$1598.00	M
3000	\$2140.00	
4000	\$2612.00	

### Bolted Pressure Switches—Manually Operated (Prices do not include fuses)<sup>2</sup>

Ampere Rating	List Price Each, GO-108A						Ship Cycle
	3-ph, 4w or 3-ph, 3w			1-ph, 3-wire			
	240 Volt ac	600 Volt ac	Space and Busing	240 Volt ac	600 Volt ac	Space and Busing	
800	\$10140.00	\$10140.00	\$3763.00	\$8910.00	\$8910.00	\$2983.00	M
1200	\$13713.00	\$15313.00	\$4366.00	\$12304.00	\$13794.00	\$3612.00	
1600	\$15287.00	\$16847.00	\$4899.00	\$13713.00	\$15107.00	\$4147.00	
2000	\$16955.00	\$18461.00	\$6035.00	\$14903.00	\$16408.00	\$5078.00	
2500	\$19379.00	\$20952.00	\$7964.00	\$17024.00	\$18598.00	\$6732.00	
3000	\$30874.00	\$32482.00	\$9456.00	\$26166.00	\$28069.00	\$7910.00	N+
4000	\$42957.00	\$44383.00	\$16353.00	\$36868.00	\$37811.00	\$9428.00	
5000 <sup>3</sup>	\$62953.00	\$64900.00	\$24530.00	—	—	—	

<sup>2</sup> Arranged for Class L current-limiting fuses. If fuses are required, make additions listed in fuse table.

<sup>3</sup> Not UL rated.



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

# Switchboards

## Spectra® Series Switchboards

(Plug-in and Bolt-on Styles)

Power Break® Insulated Case Circuit Breakers<sup>1</sup>—3-Pole

MicroVersaTrip® Breakers—See Page 10-68 for Trip Options

## Section 10

Circuit Breaker			List Price, GO-108A						Ship Cycle
Type Frame	Frame Rating (Amps)	Trip Range (Amps)	Stationary			Drawout			
			Manual	Elec. Operated	Space & Busing	Manual	Elec. Operated	Space & Busing	
SS	800	200-800	\$15060.00	\$19880.00	\$4106.00	\$22853.00	\$29618.00	\$6159.00	S
	1600	800-1600	\$18947.00	\$23594.00	\$4690.00	\$26623.00	\$32391.00	\$7035.00	
	2000	2000	\$20222.00	\$25374.00	\$6220.00	\$26830.00	\$32654.00	\$9330.00	
SS	2500	2500	\$36234.00	\$41437.00	\$9568.00	\$42569.00	\$48342.00	\$14352.00	N
	3000	3000	\$46612.00	\$53313.00	\$13225.00	\$53890.00	\$61018.00	\$19837.50	
	4000	4000	\$73296.00	\$83398.00	\$22691.00	\$82241.00	\$92889.00	\$34036.50	
SHS	800	200-800	\$16285.00	\$20819.00	\$4106.00	\$24225.00	\$30983.00	\$6159.00	M
	1600	800-1600	\$21047.00	\$25275.00	\$4690.00	\$30350.00	\$36136.00	\$7035.00	
	2000	2000	\$23643.00	\$28558.00	\$6220.00	\$30585.00	\$36415.00	\$9330.00	
SHS	2500	2500	\$45350.00	\$50465.00	\$9568.00	\$52476.00	\$58087.00	\$14352.00	N
	3000	3000	\$58379.00	\$65313.00	\$13225.00	\$62237.00	\$69427.00	\$19837.50	
	4000	4000	\$89294.00	\$99396.00	\$22691.00	\$98933.00	\$104559.00	\$34036.50	

Type	ac Volts	Max. Amps	List Price Each, (3-pole) GO-108A	Ship Cycle
PBII Insulated Case Switch	600	800	\$7955.00	M
		1600	\$10615.00	
		2000	\$11783.00	
		2500	\$17860.00	
		3000	\$31805.00	
		4000	\$49151.00	N

<sup>1</sup>When line and load connections are required in single section designs, and one main lug price of appropriate ampere rating.





# Switchboards

## Spectra® Series Switchboards

Incoming Line—Group Mounted Mains (Plug-in Style)

## Section 10

### Main Lugs

Use only when no main protective device is required on switchboard. Lugs mounted on panel.

Ampere Rating	List Price Each, GO-108A		Ship Cycle
	3-phase, 4-wire	3-phase, 3-wire	
400	\$853.00	\$690.00	S
600	\$1132.00	\$889.00	
800	\$1449.00	\$1100.00	
1000	\$1915.00	\$1524.00	
1200	\$1915.00	\$1524.00	
1600	\$2563.00	\$2021.00	
2000	\$3054.00	\$2413.00	

### Service Entrance Equipment (SE Label)

Switchboards used as service entrance equipment (maximum six sub-main devices) include a UL service entrance label, a neutral bonding jumper, neutral disconnect link, ground bus, and grounding electrode. **List price addition \$450, GO-108A.**

Ground-fault protection is required by NEC on main service disconnect at 1000 amperes and greater, on 480Y/277 volt solidly grounded systems, and must be priced separately.

### Main Circuit Breaker—Group Mounted—80% Rated

Mains	List Price Each, GO-108A									
Maximum Amps	Standard Frames			High Interrupting			Current Limiting			Ship Cycle
	Frame	3-ph, 4-w	3-ph, 3-w	Frame	3-ph, 4-w	3-ph, 3-w	Frame	3-ph, 4-w	3-ph, 3-w	
400	SGDA <sup>1</sup>	\$4264.00	\$4057.00	—	—	—	SGLA4	\$5256.00	\$4760.00	S
	SGHA <sup>4</sup>	\$4584.00	\$4386.00				SGLB4 Plus <sup>2</sup>	\$7169.00	\$6823.00	
	SGHB4 Plus <sup>2</sup>	\$6420.00	\$6191.00				SGPA4	\$6987.00	\$6848.00	
							SGPB4 Plus <sup>2</sup>	\$9477.00	\$8593.00	
							FGV4	\$4584.00	\$4386.00	
							FGN4	\$5256.00	\$4760.00	
							FGH4	\$5266.00	\$4770.00	
							FGL4	\$8035.00	\$7875.00	
							FGP4	\$8734.00	\$8560.00	
							THLC6	\$7468.00	\$7281.00	
600	SGHA6	\$5351.00	\$5139.00	—	—	—	SGLA6	\$6057.00	\$5735.00	
	SGHB6 Plus <sup>2</sup>	\$7202.00	\$6962.00				SGLB6 Plus <sup>2</sup>	\$8218.00	\$7459.00	
							SGPA6	\$8389.00	\$8121.00	
							SGPB6 Plus <sup>2</sup>	\$11368.00	\$10317.00	
							FGV6	\$5351.00	\$5139.00	
							FGN6	\$6057.00	\$5735.00	
							FGH6	\$6067.00	\$5745.00	
							FGL6	\$9647.00	\$9339.00	
							FGP6	\$10486.00	\$10151.00	
	800	SKHA8	\$9005.00				\$8595.00	SKLA8	\$10620.00	
SKHB8 Plus <sup>2</sup>		\$10948.00	\$10610.00	SKLB8 Plus <sup>2</sup>	\$12990.00	\$12571.00				
				SKPA8	\$12669.00	\$12262.00				
				SKPB8 Plus <sup>2</sup>	\$16301.00	\$15979.00				
1000	SKHA12	\$10093.00	\$9620.00	SKLA12	\$10839.00	\$10433.00	—	—	—	
	SKHB12 Plus <sup>2</sup>	\$11068.00	\$10680.00	SKLB12 Plus <sup>2</sup>	\$13059.00	\$12722.00				
				SKPA12	\$13557.00	\$13150.00				
				SKPB12 Plus <sup>2</sup>	\$17444.00	\$14241.00				
1200				SKLA12	\$12421.00	\$12021.00	—	—	—	
	SKHA12	\$11634.00	\$11249.00	SKLB12 Plus <sup>2</sup>	\$13351.00	\$13019.00				
	SKHB12 Plus <sup>2</sup>	\$13020.00	\$12629.00	SKPA12	\$14894.00	\$14381.00				
				SKPB12 Plus	\$20464.00	\$20190.00				

<sup>1</sup>240 volts ac maximum.

<sup>2</sup>MicroVersaTrip® Plus circuit breaker in mid cycle. See pricing page 10-67 for options and page 10-71 for accessories.

### Main Circuit Breaker—Group Mounted—80% Rated—MicroVersaTrip® PM Trip Units<sup>3</sup>

Mains	List Price Each, GO-108A									Ship Cycle
Maximum Amps	Standard Frames			High Interrupting			Current Limiting			
	Frame	3-ph, 4-w	3-ph, 3-w	Frame	3-ph, 4-w	3-ph, 3-w	Frame	3-ph, 4-w	3-ph, 3-w	
400	SGHB4 PM	\$10368.00	\$10186.00	—	—	—	SGLB4 PM	\$12478.00	\$12106.00	N
							SGPB4 PM	\$14827.00	\$13943.00	
600	SGHB6 PM	\$12552.00	\$12312.00	—	—	—	SGLB6 PM	\$13568.00	\$12809.00	
							SGPB6 PM	\$16718.00	\$15667.00	
800	SKHB8 PM	\$15228.00	\$14908.00	SKLB8 PM	\$15986.00	\$15654.00	—	—	—	
				SKPB8 PM	\$21651.00	\$21329.00				
1000	SKHB12 PM	\$15348.00	\$14971.00	SKLB12 PM	\$18195.00	\$17823.00	—	—	—	
				SKPB12 PM	\$22794.00	\$19592.00				
1200	SKHB12 PM	\$17942.00	\$17611.00	SKLB12 PM	\$18701.00	\$18369.00	—	—	—	
				SKPB12 PM	\$25814.00	\$25540.00				

<sup>3</sup> Breakers with MicroVersaTrip® PM trip units must use a Voltage Module. Priced separately. Price includes 1-installed auxiliary switch (1 element), 1-Distribution Cable Junction Box, 1-Distribution Cable Harness and 1X filler plate for side control wiring space. See pricing page 10-67 for options and page 10-71 for accessories.



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

# Switchboards

## Spectra® Series Switchboards

Incoming Line—Group Mounted Mains (Plug-in Style)

## Section 10

### Main Circuit Breaker—Group Mounted—100% Equipment Rated

Mains	List Price Each, GO-108A						Ship Cycle
Maximum Amps	Standard Frames			High Interrupting			
	Frame	3-ph, 4-w	3-ph, 3-w	Frame	3-ph, 4-w	3-ph, 3-w	
800				SKLLA8	\$10668.00	\$10247.00	M
	SKHHA8	\$10934.00	\$10399.00	SKLLB8 Plus <sup>1</sup>	\$13038.00	\$12598.00	
	SKHHB8 Plus <sup>1</sup>	\$11379.00	\$10990.00	SKLLB8 PM <sup>2</sup>	\$17639.00	\$17236.00	
	SKHHB8 PM <sup>2</sup>	\$16729.00	\$16340.00	SKPPA8	\$14569.00	\$14225.00	
				SKPPB8 Plus <sup>1</sup>	\$18202.00	\$17942.00	
				SKPPB8 PM <sup>2</sup>	\$23552.00	\$23292.00	
1000				SKLLA12	\$11980.00	\$11485.00	
	SKHHA10	\$11684.00	\$10592.00	SKLLB12 Plus <sup>1</sup>	\$14772.00	\$14344.00	
	SKHHB10 Plus <sup>1</sup>	\$12580.00	\$12135.00	SKLLB12 PM <sup>2</sup>	\$19499.00	\$19051.00	
	SKHHB10 PM <sup>2</sup>	\$18493.00	\$18063.00	SKPPA12	\$15947.00	\$15352.00	
				SKPPB12 Plus <sup>1</sup>	\$22510.00	\$22209.00	
				SKPPB12 PM <sup>2</sup>	\$26034.00	\$25746.00	

<sup>1</sup>MicroVersaTrip® Plus circuit breaker. Breakers with MicroVersaTrip® Plus trip units with optional control power require a Power Supply. Add \$1000 list for 1-Distribution Cable Junction Box and 1-Distribution Cable Harness for each breaker with this option. See pricing page 10-67 for options and page 10-71 for accessories.

<sup>2</sup>MicroVersaTrip® PM circuit breaker in N cycle. Breakers with MicroVersaTrip® PM trip units must use a Voltage Module. Price includes 1-installed auxiliary switch (1 element), 1-Distribution Cable Junction Box, 1-Distribution Cable Harness and 1X filler plate for side control wiring space. See pricing page 10-67 for options and page 10-71 for accessories.

### Main Fusible Switch—Spectra® Series Only—240 Volts ac ADS Fusible Switch

Standard (Class R) fuse clips are furnished. For optional fuse clips see pricing table for notes. Fuses are not included.

Max. Amp	List Price Each, GO-108A		Ship Cycle	Max. Amp	List Price Each, GO-108A		Ship Cycle
	3-ph, 4-w	3-ph, 3-w			3-ph, 4-w	3-ph, 3-w	
200	\$2048.00	\$1899.00	S	800	\$8350.00	\$8026.00	S
400	\$3766.00	\$3596.00	S	3	—	—	S
600	\$5071.00	\$4815.00	S	1200	\$9779.00	\$9379.00	S
—	—	—	S	3	—	—	S

### Main Fusible Switch—Spectra® Series Only—600 Volts ac ADS Fusible Switch

Standard (Class R) fuse clips are furnished. For optional fuse clips see pricing table for notes. Fuses are not included.

Max. Amp	List Price Each, GO-108A		Ship Cycle	Max. Amp	List Price Each, GO-108A		Ship Cycle
	3-ph, 4-w	3-ph, 3-w			3-ph, 4-w	3-ph, 3-w	
200	\$2350.00	\$2220.00	S	800	\$8361.00	\$8026.00	S
400	\$4298.00	\$4152.00	S	3	—	—	S
600	\$5285.00	\$5030.00	S	1200	\$9779.00	\$9379.00	S
—	—	—	S	3	—	—	S

<sup>3</sup>800 and 1200-amp ratings arranged for Class "L" current limiting fuses only.

### Optional Fuse Clips

Fuse Class	Availability	Ship Cycle
R	Standard 30-200A Switches	S
L	Standard 800, 1200A Switches	S
H, J, K, T	No Charge—Specify on Order	S



## Spectra® Series Switchboards

Group Mounted—Feeder Section Class 1, Class 2 Circuit Breaker Feeders (Plug-in Style)

## Molded Case Circuit Breaker Feeders—80% Rated—Standard Frames

List Price Each, GO-108A Standard Frames									
Branch Mounting	Max Volts	Breaker Frame	Trip Range	Per Circuit			Space Only <sup>2</sup>		Ship Cycle
				*3P	*2P	1P	3P	2P	
Twin	120/240	THQB <sup>1</sup>	15-60	—	\$257.00	\$150.00	—	\$214.00	\$107.00
Twin	120/240	THQB <sup>1</sup>	70	—	\$305.00 <sup>3</sup>	\$187.00	—	\$214.00	\$107.00
Twin	120/240	THQB <sup>1</sup>	80-100	—	\$342.00 <sup>3</sup>	—	—	\$214.00	—
Twin	240	THQB <sup>1</sup>	15-60	\$411.00	\$342.00	—	\$333.00	\$214.00	—
Twin	240	THQB <sup>1</sup>	70	\$459.00	\$407.00	—	\$333.00	\$214.00	—
Twin	240	THQB <sup>1</sup>	80-100	\$550.00	\$460.00	—	\$333.00	\$214.00	—
Twin	240	TEB	15-60	\$599.00	\$406.00	\$200.00	\$333.00	\$214.00	\$107.00
Twin	240	TEB	70-100	\$699.00	\$526.00	\$260.00	\$333.00	\$214.00	\$107.00
Twin	240	TQD <sup>5</sup>	125-225	\$1058.00	\$913.00	—	\$333.00	\$214.00	—
Twin	240	SGDA	250-400	\$2687.00	\$2314.00	—	\$646.00	\$646.00	—
Twin	480Y/277	TEV <sup>4,5</sup>	15-60	\$610.00	\$428.00	\$203.00	\$333.00	\$214.00	\$107.00
Twin	480Y/277	TEV <sup>4,5</sup>	70-100	\$679.00	\$503.00	\$246.00	\$333.00	\$214.00	\$107.00
Twin	480	TED4	15-60	\$790.00	\$594.00	\$205.00	\$333.00	\$214.00	\$107.00
Twin	480	TED4	70-100	\$879.00	\$653.00	—	\$333.00	\$214.00	—
Twin	480	TED4	110-150	\$1639.00	—	—	\$333.00	—	—
Twin	600	TED6	15-60	\$879.00	—	—	\$333.00	—	—
Twin	600	TED6	70-100	\$957.00	—	—	\$333.00	—	—
Twin	600	TED6	110-150	\$1654.00	—	—	\$333.00	—	—
Twin	600	SEDA	15-60	\$1009.00	\$759.00 <sup>8</sup>	—	\$333.00	\$333.00	—
Twin	600	SEDA	70-100	\$1102.00	\$828.00 <sup>8</sup>	—	\$333.00	\$333.00	—
Twin	600	SEDA	110-150	\$1884.00	\$1422.00 <sup>8</sup>	—	\$333.00	\$333.00	—
Single or Twin	600	SFHA	70-225	\$1917.00	\$1471.00	—	\$333.00	\$333.00	—
Single or Twin	600	SFHA	250	\$2183.00	\$1798.00	—	\$333.00	\$333.00	—
Single <sup>7</sup> or Twin	600	SGHA4	125-400	\$2856.00	\$2443.00	—	\$455.00	\$455.00	—
Single <sup>7</sup> or Twin	600	SGHB4 <sup>6</sup>	60-400	\$5432.00	—	—	\$646.00	—	—
Single <sup>7</sup> or Twin	600	SGHA6	250-600	\$4206.00	\$3421.00	—	\$455.00	\$455.00	—
Single <sup>7</sup> or Twin	600	SGHB6 <sup>6</sup>	250-600	\$6176.00	—	—	\$646.00	—	—
Single	600	SKHA8	300-800	\$6017.00	\$5152.00	—	\$1318.00	\$1318.00	—
Single	600	SKHB8 <sup>6</sup>	300-800	\$9126.00	—	—	\$1764.00	—	—
Single	600	SKHA12	1000	\$7242.00	\$6323.00	—	\$1764.00	\$1764.00	—
Single	600	SKHA12	1200	\$9721.00	\$8906.00	—	\$1764.00	\$1764.00	—
Single	600	SKHB12 <sup>6</sup>	1000-12000	\$10047.00	—	—	\$1764.00	—	—

FCV/FCS/FCN/FCL Series 2P breaker supplied in 3P envelope ONLY.

Circuit breaker 1" per pole, but requires switchboard spacing of full "X" height.

Record Plus 15-20 Amp Circuit Breakers come with Load Lugs Factory Installed.

<sup>1</sup>Not available in Bolt-on design.<sup>2</sup>Space unit includes vertical bus and filler plate only. MicroVersaTrip® circuit breaker spaces are 4 pole (includes 1X for side control wiring space.)<sup>3</sup>Use only on 3-ph, 4-wire 208Y/120 volts systems.<sup>4</sup>Use only on 3-ph, 4-wire systems, 480Y/277 volts maximum.<sup>5</sup>Spectra® Series only.<sup>6</sup>MicroVersaTrip® Plus circuit breaker. See pricing table on page 10-67 for options and page 10-71 for accessories. Breakers with MicroVersaTrip® Plus trip units with optional control power require a power supply. Refer to Table for pricing. Add \$1000 list for 1-Distribution Cable Junction Box and

1-Distribution Cable Harness for each breaker with this option.

<sup>7</sup>SG6 and SG4 can be twin mounted in section rated for 2000A or less.<sup>8</sup>2-pole device is rated 480 Vac max.

# Switchboards

## Spectra® Series Switchboards

Group Mounted—Feeder Section Class 1, Class 2 Circuit Breaker Feeders (Plug-in Style)

## Section 10

### Molded Case Circuit Breaker Feeders—80% Rated—High Interrupting and Current Limiting

List Price Each, GO-108A High Interrupting and Current Limiting											
Branch Mounting	Max Volts	Breaker Frame	Trip Range	Per Circuit			Space Only		Hardware Only	Ship Cycle	
				*3P	*2P	1P	3P	2P			1P
Twin	120/240	THHQB <sup>1</sup>	15-60	—	\$294.00	\$171.00	—	\$214.00	\$107.00		
Twin	120/240	THHQB <sup>1</sup>	70	—	\$337.00 <sup>2</sup>	\$209.00	—	\$214.00	\$107.00		
Twin	120/240	THHQB <sup>1</sup>	80-100	—	\$385.00 <sup>2</sup>	—	—	\$214.00	—		
Twin	240	THHQB <sup>1</sup>	15-60	\$471.00	\$385.00	—	\$333.00	\$214.00	—		
Twin	240	THHQB <sup>1</sup>	70	\$535.00	\$449.00	—	\$333.00	\$214.00	—		
Twin	240	THHQB <sup>1</sup>	80-100	\$610.00	\$514.00	—	\$333.00	\$214.00	—		
Twin	240	THQD	125-225	\$1177.00	\$1151.00	—	\$333.00	\$333.00	—		
Twin	240	THED	15-30	—	—	\$493.00	—	—	\$107.00		
Twin	480	THED4	15-60	—	\$878.00 <sup>3</sup>	—	—	\$214.00	—		
Twin	480	THED4	70-100	—	\$926.00	—	—	\$214.00	—		
Twin	600	FCS6	15-60	\$1001.00	\$900.00	—	\$333.00	\$333.00	—		
Twin	600	FCS6	70-100	\$1085.00	\$976.00	—	\$333.00	\$333.00	—		
Twin	600	THED6	15-60	\$1188.00	—	—	\$333.00	—	—		
Twin	600	THED6	70-100	\$1288.00	—	—	\$333.00	—	—		
Twin	600	THED6	110-150	\$2521.00	—	—	\$333.00	—	—		
Twin	600	FBV6	15-60	Breaker not available at time of printing							
Twin	600	FBV6	70-100	Breaker not available at time of printing							
Twin	600	FCV6	15-60	\$1148.00	\$1033.00	—	\$333.00	\$333.00	—		
Twin	600	FCV6	70-100	\$1250.00	\$1125.00	—	\$333.00	\$333.00	—		
Twin	600	SEHA	15-60	\$1091.00	\$1008.00	—	\$333.00	\$333.00	—		
Twin	600	SEHA	70-100	\$1188.00	\$1065.00	—	\$333.00	\$333.00	—		
Twin	600	SEHA	110-150	\$2311.00	\$2087.00	—	\$333.00	\$333.00	—		
Twin	600	FBN6	15-60	Breaker not available at time of printing							
Twin	600	FBN6	70-100	Breaker not available at time of printing							
Twin	600	FCN6	15-60	\$1824.00	\$1641.00	—	\$333.00	\$333.00	—		
Twin	600	FCN6	70-100	\$2031.00	\$1827.00	—	\$333.00	\$333.00	—		
Twin	600	SELA	15-60	\$1733.00	\$1386.00 <sup>4</sup>	—	\$333.00	\$333.00	—		
Twin	600	SELA	70-100	\$1930.00	\$1541.00 <sup>4</sup>	—	\$333.00	\$333.00	—		
Twin	600	SELA	110-150	\$2729.00	\$2290.00 <sup>4</sup>	—	\$333.00	\$333.00	—		
Twin	600	FBH6	15-60	Breaker not available at time of printing							
Twin	600	FBH6	70-100	Breaker not available at time of printing							
Twin	600	FCH6	15-60	\$2213.00	\$1991.00	—	\$333.00	\$333.00	—		
Twin	600	FCH6	70-100	\$2489.00	\$2240.00	—	\$333.00	\$333.00	—		
Twin	600	SEPA	15-60	\$2103.00	\$1880.00 <sup>4</sup>	—	\$333.00	\$333.00	—		
Twin	600	SEPA	70-100	\$2365.00	\$1883.00 <sup>4</sup>	—	\$333.00	\$333.00	—		
Twin	600	SEPA	110-150	\$3467.00	\$2771.00 <sup>4</sup>	—	\$333.00	\$333.00	—		
Twin	600	FBL6	15-60	Breaker not available at time of printing							
Twin	600	FBL6	70-100	Breaker not available at time of printing							
Twin	600	FCL6	15-60	\$2677.00	\$2409.00	—	\$333.00	\$333.00	—		
Twin	600	FCL6	70-100	\$3346.00	\$3011.00	—	\$333.00	\$333.00	—		

FCV/FCS/FCN/FCL Series 2P breaker supplied in 3P envelope ONLY.

Circuit breaker 1" per pole, but requires switchboard spacing of full "X" height.

Record Plus 15-20 Amp Circuit Breakers come with Load Lugs Factory Installed.

<sup>1</sup>Not available in Bolt-on design.

<sup>2</sup>Use only on 3-ph, 4-wire 208Y/120 volts systems.

<sup>3</sup>Breaker frame is THED, ampere rated 14-30A only.

<sup>4</sup>2pole device is rated 480 Vac max.



# Switchboards

## Spectra® Series Switchboards

Group Mounted—Feeder Section Class 1, Class 2 Circuit Breaker Feeders (Plug-in Style)

## Section 10

### Molded Case Circuit Breaker Feeders—80% Rated—High Interrupting and Current Limiting (Continued)

List Price Each, GO-108A											
High Interrupting and Current Limiting											
Branch Mounting	Max Volts	Breaker Frame	Trip Range	Per Circuit			Space Only			Hardware Only	Ship Cycle
				*3P	*2P	1P	3P	2P	1P		
Single or Twin	600	FES1T	20-150								
Single or Twin	600	FEV1T	20-150								
Single or Twin	600	FEN1T	20-150								
Single or Twin	600	FEH1T	20-150								
Single or Twin	600	FEL1T	20-150								
Single or Twin	600	FES1E	20-150								
Single or Twin	600	FEV1E	20-150								
Single or Twin	600	FEN1E	20-150								
Single or Twin	600	FEH1E	20-150								
Single or Twin	600	SFLA	70-225	\$2882.00	\$2422.00	—	\$333.00	\$333.00	—		
Single or Twin	600	SFLA	250	\$3515.00	\$2953.00	—	\$333.00	\$333.00	—		
Twin	600	SFPA	70-225	\$4002.00	\$3199.00	—	\$333.00	\$333.00	—		
Twin	600	SFPA	250	\$4558.00	\$3906.00	—	\$333.00	\$333.00	—		
Single or Twin	600	FES2T	70-250								
Single or Twin	600	FEV2T	70-250								
Single or Twin	600	FEN2T	70-250								
Single or Twin	600	FEH2T	70-250								
Single or Twin	600	FEL2T	70-250								
Single or Twin	600	FES2E	70-250								
Single or Twin	600	FEV2E	70-250								
Single or Twin	600	FEN2E	70-250								
Single or Twin	600	FEH2E	70-250								
Single or Twin	600	FEL2E	70-250								
Single or Twin	600	FGV2	125-250	\$2856.00	\$2443.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGN2	125-250	\$4047.00	\$3238.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGH2	125-250	\$5071.00	\$4210.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGL2	125-250	\$5820.00	\$4830.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGP2	125-250	\$6326.00	\$5250.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	SGLA4	125-400	\$4047.00	\$3238.00	—	\$455.00	\$455.00	—		S
Single or Twin	600	SGLB4 <sup>1</sup>	60-400	\$6765.00	—	—	\$646.00	—	—		
Single or Twin	600	SGPA4	125-400	\$5061.00	\$4200.00	—	\$455.00	\$455.00	—		
Single or Twin	600	SGPB4 <sup>1</sup>	60-400	\$8460.00	—	—	\$646.00	—	—		
Single or Twin	600	FGV4	250-400	\$2856.00	\$2443.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGN4	250-400	\$4047.00	\$3238.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGH4	250-400	\$5071.00	\$4210.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGL4	250-400	\$5820.00	\$4830.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGP4	250-400	\$6326.00	\$5250.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	SGLA6	250-600	\$4951.00	\$4127.00	—	\$455.00	\$455.00	—		
Single or Twin	600	SGLB6 <sup>1</sup>	250-600	\$7147.00	—	—	\$646.00	—	—		
Single or Twin	600	SGPA6	250-600	\$6506.00	\$5211.00	—	\$455.00	\$455.00	—		
Single or Twin	600	SGPB6 <sup>1</sup>	250-600	\$9813.00	—	—	\$646.00	—	—		
Single or Twin	600	FGV6	400-600	\$4206.00	\$3421.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGN6	400-600	\$4951.00	\$4127.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGH6	400-600	\$6516.00	\$5221.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGL6	400-600	\$7482.00	\$5993.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGP6	400-600	\$8133.00	\$6514.00	—	\$455.00	\$455.00	—	\$1481.00	
Single	600	SKLA8	300-800	\$6803.00	\$5897.00	—	\$1318.00	\$1318.00	—		
Single	600	SKLB8 <sup>1</sup>	300-800	\$9992.00	—	—	\$1764.00	—	—		
Single	600	SKPA8	300-800	\$8844.00	\$7517.00	—	\$1318.00	\$1318.00	—		
Single	600	SKPB8 <sup>1</sup>	300-800	\$12989.00	—	—	\$1764.00	—	—		
Single	600	SKLA12	1000	\$8026.00	\$7122.00	—	\$1764.00	\$1764.00	—		
Single	600	SKLA12	1200	\$10464.00	\$9451.00	—	\$1764.00	\$1764.00	—		
Single	600	SKLB12 <sup>1</sup>	1000-1200	\$11216.00	—	—	\$1764.00	—	—		
Single	600	SKPA12	1000	\$9630.00	\$8212.00	—	\$1764.00	\$1764.00	—		
Single	600	SKPA12	1200	\$12573.00	\$10684.00	—	\$1764.00	\$1764.00	—		
Single	600	SKPB12 <sup>1</sup>	1000-1200	\$13477.00	—	—	\$1764.00	—	—		

FCV/FCS/FCN/FCL Series 2P breaker supplied in 3P envelope ONLY.

Circuit breaker 1" per pole, but requires switchboard spacing of full "X" height.

Record Plus 15-20 Amp Circuit Breakers come with Load Lugs Factory Installed.

<sup>1</sup>MicroVersaTrip® Plus circuit breaker. See pricing table on page 10-67 for options and page 10-71 for accessories. Breakers with MicroVersaTrip® Plus trip units with optional control power require a power supply. Refer to Table for pricing. **Add \$1000** list for 1-Distribution Cable Junction Box and 1-Distribution Cable Harness for each breaker with this option.



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

# Switchboards

## Spectra® Series Switchboards

(Plug-in Style)

## Section 10

### Molded Case Circuit Breaker Feeders

#### MicroVersaTrip® PM<sup>1</sup> Trip Units for SG and SK Molded Case Breakers

GO-108A

Circuit Breaker		List Price							Ship Cycle
Max. Volts	Breaker Frame	Standard Frames			High Interrupting and Current Limiting				
		Trip Range	Per Circuit	Space <sup>2</sup>	Breaker Frame	Trip Range	Per Circuit	Space <sup>2</sup>	
			3-Pole	3-Pole			3-Pole	3-Pole	
600	SGHB PM	60-400	\$10782.00	\$862.00	SGLB PM	60-400	\$12115.00	\$862.00	N
	—	—	—	—	SGPB PM	60-400	\$13810.00	\$862.00	
	—	—	—	—	—	500-600	\$15162.00	\$862.00	
	SKHB8 PM	300-800	\$14476.00	\$2353.00	SKLB8 PM	300-800	\$15342.00	\$2353.00	
	—	—	—	—	SKPB8 PM	300-800	\$18339.00	\$2353.00	
	SKHB12 PM	1000	\$15397.00	\$2353.00	SKLB12 PM	1000	\$16566.00	\$2353.00	
		1200	\$15397.00	\$2353.00		1200	\$16566.00	\$2353.00	
	—	—	—	—	SKPB12 PM	1000	\$18827.00	\$2353.00	
					1200	\$18827.00	\$2353.00		

<sup>1</sup>MicroVersaTrip® PM circuit breaker. Price includes 1-installed auxiliary switch (1 element), 1-Distribution Cable Junction Box, 1-Distribution Cable Harness and 1X filler plate for side control wiring space for each breaker. Breakers with MicroVersaTrip® PM trip units must use a Voltage Module. See pricing page 10-67 for options and page 10-71 for accessories.

<sup>2</sup>Space unit includes vertical bus and filler plate only. MicroVersaTrip® PM circuit breaker spaces are 4 pole (includes 1X for side control wiring space). See pricing page 10-67 for options and page 10-71 for accessories.

### Spectra® Series Molded Case Circuit Breaker Feeders

#### 100% Equipment Rated for SG and SK Molded Case Breakers

Circuit Breaker		Standard Frames						High Interrupting and Current Limiting						Ship Cycle
Max. Volts	Breaker Frame	Trip Range	Per Circuit		Space <sup>1,2</sup>		Breaker Frame	Trip Range	Per Circuit		Space <sup>1</sup>			
			List Price	List Price	List Price	List Price			List Price	List Price	List Price	List Price		
			GO-108A 3-Pole	GO-108A 2-Pole	GO-108A 3-Pole	GO-108A 2-Pole			GO-108A 3-Pole	GO-108A 2-Pole	GO-108A 3-Pole	GO-108A 2-Pole		
600	SGHHA4	125-400	\$3427.00	\$2932.00	\$455.00	\$455.00	SGLLA4	125-400	\$4866.00	\$3885.00	\$455.00	\$455.00	M	
	-	-	-	-	-	-	SGPPA4	125-400	\$5972.00	\$5040.00	\$455.00	\$455.00		
	SKHHA8	300-800	\$7220.00	\$6182.00	\$1318.00	\$1318.00	SKLLA8	300-800	\$8164.00	\$7076.00	\$1318.00	\$1318.00		
	-	-	-	-	-	-	SKPPA8	300-800	\$10612.00	\$9020.00	\$1318.00	\$1318.00		
	SKHHA12 <sup>7</sup>	1000	\$8689.00	\$7587.00	\$1764.00	\$1764.00	SKLLA12 <sup>7</sup>	1000	\$9631.00	\$5697.00	\$1764.00	\$1764.00		
	-	-	-	-	-	-	SKPPA12 <sup>7</sup>	1000	\$12038.00	\$9856.00	\$1764.00	\$1764.00		
	SGHHB4 Plus <sup>4</sup>	60-400	\$5771.00	-	\$646.00	-	SGLLB4 Plus <sup>4</sup>	60-400	\$7779.00	-	\$646.00	-		
	-	-	-	-	-	-	SGPPB4 Plus <sup>4</sup>	60-400	\$9730.00	-	\$646.00	-		
	SKHHB8 Plus <sup>4</sup>	300-800	\$10495.00	-	\$1764.00	-	SKLLB8 Plus <sup>4</sup>	300-800	\$11490.00	-	\$1764.00	-		
	-	-	-	-	-	-	SKPPB8 Plus <sup>4</sup>	300-800	\$14937.00	-	\$1764.00	-		
	SKHHB12 Plus <sup>4,7</sup>	1000	\$11509.00	-	\$1764.00	-	SKLLB12 Plus <sup>4,7</sup>	1000	\$12898.00	-	\$1764.00	-		
	-	-	-	-	-	-	SKPPB12 Plus <sup>4,7</sup>	1000	\$15498.00	-	\$1764.00	-		
	SGHHB4 PM <sup>5</sup>	60-400	\$11121.00	-	\$862.00 <sup>6</sup>	-	SGLLB4 PM <sup>5</sup>	60-400	\$13129.00	-	\$862.00 <sup>6</sup>	-		
	-	-	-	-	-	-	SGPPB4 PM <sup>5</sup>	60-400	\$15080.00	-	\$862.00 <sup>6</sup>	-		
	SKHHB8 PM <sup>5</sup>	300-800	\$15485.00	-	\$2353.00 <sup>6</sup>	-	SKLLB8 PM <sup>5</sup>	300-800	\$16840.00	-	\$2353.00 <sup>6</sup>	-		
	-	-	-	-	-	-	SKPPB8 PM <sup>5</sup>	300-800	\$20287.00	-	\$2353.00 <sup>6</sup>	-		
SKHHB12 PM <sup>5,7</sup>	1000	\$16859.00	-	\$2353.00 <sup>6</sup>	-	SKLLB12 PM <sup>5,7</sup>	1000	\$18248.00	-	\$2353.00 <sup>6</sup>	-			
-	-	-	-	-	-	SKPPB12 PM <sup>5,7</sup>	1000	\$20848.00	-	\$2353.00 <sup>6</sup>	-			

<sup>1</sup>Unit space price includes vertical bus and filler space only.

<sup>2</sup>Maximum IC rating cannot exceed 100kA regardless of circuit breaker or voltage.

<sup>3</sup>100% rated for section ratings up to 2000A max. 80% rated for 2500-4000A.

<sup>4</sup>MicroVersaTrip® Plus circuit breaker. Add \$1000.00 list for 1-Distribution Cable Junction Box and 1-Distribution Cable Harness for each breaker.

<sup>5</sup>MicroVersaTrip® PM circuit breaker. Price includes 1-installed auxiliary switch (1 element), 1-Distribution Cable Junction Box, 1-Distribution Cable Harness and 1X filler plate for side control wiring space for each breaker. See pricing page 10-67 for options and page 10-71 for accessories. Breakers with MicroVersaTrip® PM trip units must use a Voltage Module. See 10-70.

<sup>6</sup>MicroVersaTrip® PM circuit breaker spaces are 4 pole (includes 1X for side control wiring space).

<sup>7</sup>1220A must have fully rated bus. Copper lugs must be used on line or load side of breaker.



# Switchboards

## Spectra® Series Switchboards

Group Mounted—Feeder Section Class 1, Class 2 (Plug-in Style)

## Section 10

### Fusible Feeder ADS Type—Spectra® Plug-in Series Only

Standard (Class R) fuse clips are furnished. For optional fuse clips, see table below. Fuses not included.

		List Price Each, GO-108A								
		240 Volts				600 Volts				
Unit Type	Ampere Rating	3-Pole		2-Pole		3-Pole		2-Pole		Ship Cycle
		Complete	Unit Space <sup>3</sup>	Complete	Unit Space <sup>1</sup>	Complete	Unit Space <sup>1</sup>	Complete	Unit Space <sup>1</sup>	
Double Branch <sup>2</sup>	30/30	\$878.00	\$314.00	\$725.00	\$314.00	\$1211.00	\$314.00	\$1058.00	\$314.00	S
	30/Blank	\$672.00	\$314.00	\$579.00	\$314.00	\$951.00	\$314.00	\$878.00	\$314.00	
	60/60	\$878.00	\$314.00	\$725.00	\$314.00	\$1211.00	\$546.00	\$1058.00	\$546.00	
	60/Blank	\$672.00	\$314.00	\$579.00	\$314.00	\$951.00	\$546.00	\$878.00	\$546.00	
	100/100	\$1177.00	\$546.00	\$799.00	\$546.00	\$1457.00	\$546.00	\$1211.00	\$546.00	
	100/Blank	\$878.00	\$546.00	\$579.00	\$546.00	\$951.00	\$546.00	\$878.00	\$546.00	
	200/200	\$2848.00	\$733.00	\$2422.00	\$733.00	\$3488.00	\$733.00	\$3022.00	\$733.00	
	200/Blank	\$1424.00	\$733.00	\$1211.00	\$733.00	\$1744.00	\$733.00	\$1511.00	\$733.00	
Single Branch	200	\$1424.00	\$733.00	\$1211.00	\$733.00	\$1744.00	\$733.00	\$1511.00	\$733.00	
	400	\$2810.00	\$1058.00	\$2263.00	\$1058.00	\$3342.00	\$1058.00	\$2810.00	\$1058.00	
	600	\$3901.00	\$1058.00	\$3214.00	\$1058.00	\$4087.00	\$1058.00	\$3635.00	\$1058.00	
	800 <sup>3</sup>	\$6843.00	\$2237.00	\$5936.00	\$2237.00	\$6843.00	\$2237.00	\$5936.00	\$2237.00	
	1200 <sup>3</sup>	\$7761.00	\$2237.00	\$6589.00	\$2237.00	\$7761.00	\$2237.00	\$6589.00	\$2237.00	

<sup>1</sup> Unit space price includes vertical bus and filler plate only.

<sup>2</sup> List price is per pair of circuits of the same number of poles. When circuits of a double branch unit are of different amp ratings, such as a 100-amp—60 amp or 100 amp—30 amp, price and layout as a 100 amp—100 amp unit. Also, when a two-pole circuit is desired, opposite a three-pole circuit, price as a three-pole double-branch unit.

<sup>3</sup> Arranged for Class L current limiting fuses only.

### Optional Fuse Clips

Fuse Class	Availability	Ship Cycle
R	Standard 30-200A Switches	S
L	Standard 800, 1200A Switches	S
H, J, K, T	No Charge—Specify on Order	S

### Molded Case Switches<sup>4</sup>

Circuit Breaker			List Price Each, GO-108A	Ship Cycle
Type	Rating			
	ac Volts	Max. Amps		
Standard Frames			Price as a Standard Spectra Circuit Breaker	N
SE150	600	150		
SF250	600	225		
SG600	600	600		
SK1200	600	1200		

<sup>4</sup> Equipment may not be UL Listed when molded case switches are furnished.



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

# Switchboards

## Spectra® Series Switchboards

Options and Accessories (Plug-in Style)

## Section 10

### Spectra® Series PCU (Process Control Unit) Selection Guide

(Specify overload FLA included in price)

**Description:** 15hp max, 22A, 600V max

**Configuration:** 3PH, 3W, and ground

Pilot Device	Mount <sup>1</sup>	Product Number <sup>2</sup>	List Price GO-101	Ship Cycle
Yes	Double	APCU151FNDPD**	\$4477.00	M
Yes	Single	APCU151FNDPSX*	\$2239.00	M
No	Double	APCU151FNDND**	\$4218.00	M
No	Single	APCU151FNDNSX*	\$2109.00	M

<sup>1</sup>Add 3 X Height for each unit as part of Switchboard Price.

<sup>2</sup>Replace \* with overload range from PCU Table.

### Spectra® PCU Expansion Kit

(Kit to expand or rebuild PCU units)

Product Number	List Price GO-101	Ship Cycle
APCUEKAF (left side)	\$2007.00	M
APCURKAF (right side)	\$2007.00	M

### Spectra® PCU Empty Units

Product Number	List Price GO-101	Ship Cycle
APCUDCAN 4X	\$600.00	M
APCUDCAN 7X	\$700.00	M

### Spectra® PCU Control Power Transformer Kits

Continuous kVA	Primary Voltage	Capacity	Product Number	List Price GO-101	Ship Cycle
.200	600	Standard	APCUCKA200	\$913.00	M
.300	600	Extra	APCUCKA300	\$1002.00	M
.200	480/240	Standard	APCUCKB200	\$914.00	M
.300	480/240	Extra	APCUCKB300	\$907.00	M
.200	208	Standard	APCUCKC200	\$938.00	M
.300	208	Extra	APCUCKC300	\$938.00	M

### PCU Overload Selection

*	Overload Range
B	0.16-0.26A
C	0.25-0.41A
D	0.40-0.65A
F	0.65-1.1A
G	1.0-1.5A
H	1.3-1.9A
J	1.8-2.7A
K	2.5-4.1A
L	4.0-6.3A
M	5.5-8.5A
N	8.0-12.0A
P	10.0-16.0A
S	14.5-18.0A
T	17.5-22.0A
X	BLANK

### Spectra® PCU Pilot Light Option

Product Number	List Price GO-101	Ship Cycle
APCUKPLT	\$143.00	M

### Spectra® PCU Wiring Kit

(Optional kit for remote wiring)

Product Number	List Price GO-101	Ship Cycle
APCUWK	\$14.00	M





# Switchboards

## Spectra® Series Switchboards

Incoming Line—Group Mounted Mains (Bolt-on Style)

## Section 10

### Main Lugs

Use only when no main protective device is required on switchboard. Lugs mounted on panel.

Ampere Rating	List Price Each, GO-108A		Ship Cycle
	3-phase, 4-wire	3-phase, 3-wire	
400	\$853.00	\$690.00	S
600	\$1132.00	\$889.00	S
800	\$1449.00	\$1100.00	S
1000	\$1915.00	\$1524.00	S
1200	\$1915.00	\$1524.00	S
1600	\$2563.00	\$2021.00	S
2000	\$3054.00	\$2413.00	S

### Service Entrance Equipment (SE Label)

Switchboards used as service entrance equipment (maximum six sub-main devices) include a UL service entrance label, a neutral bonding jumper, neutral disconnect link, ground bus, and ground-fault protection is required by NEC on main service disconnect at 1000 amperes and greater, on 480Y/277 volt solidly grounded systems, and must be priced separately.

### Main Circuit Breaker—Group Mounted—80% Rated

Mains	List Price Each, GO-108A									Ship Cycle
Maximum Amps	Standard Frames			High Interrupting			Current Limiting			
	Frame	3-ph, 4-w	3-ph, 3-w	Frame	3-ph, 4-w	3-ph, 3-w	Frame	3-ph, 4-w	3-ph, 3-w	
400	SGDA <sup>1</sup>	\$3985.00	\$3792.00	—	—	—	SGLA4	\$4912.00	\$4454.00	S
	SGHA4	\$4284.00	\$4099.00				SGLB4 Plus <sup>2</sup>	\$6700.00	\$6377.00	
	SGHB4 Plus <sup>2</sup>	\$6000.00	\$5786.00				SGPA4	\$6530.00	\$6400.00	
							SGPB4 Plus <sup>2</sup>	\$8857.00	\$8031.00	
							FGV4	\$6000.00	\$5786.00	
							FGV6	\$4912.00	\$4454.00	
							FGH4	\$4922.00	\$4464.00	
							FGL4	\$7510.00	\$7360.00	
							FGP4	\$8163.00	\$8000.00	
							600			
SGLB6 Plus <sup>2</sup>	\$7680.00	\$6971.00								
SGPA6	\$7840.00	\$7590.00								
SGPB6 Plus <sup>2</sup>	\$10624.00	\$9642.00								
FGV6	\$5001.00	\$4803.00								
FGN6	\$5661.00	\$5360.00								
FGN6	\$5671.00	\$5370.00								
FGL6	\$9016.00	\$8729.00								
800			FGP6	\$9800.00	\$9488.00					
			SKLA8	\$9925.00	\$9459.00					
			SKHB8 Plus <sup>2</sup>	\$12140.00	\$11749.00					
			SKPA8	\$11840.00	\$11460.00					
1000			SKPB8 Plus <sup>2</sup>	\$15235.00	\$14934.00					
			SKLA12	\$10130.00	\$9750.00					
			SKLB12 Plus <sup>2</sup>	\$12205.00	\$11890.00					
			SKPA12	\$12670.00	\$12290.00					
			SKPB12 Plus <sup>2</sup>	\$16303.00	\$13310.00					
			SKLA12	\$11608.00	\$11235.00					
1200			SKHA12	\$10873.00	\$10513.00					
			SKLB12 Plus <sup>2</sup>	\$12478.00	\$12167.00					
			SKPA12	\$13920.00	\$13440.00					
			SKPB12 Plus <sup>2</sup>	\$19125.00	\$18869.00					

<sup>1</sup>240 volts ac maximum.

<sup>2</sup>MicroVersaTrip® Plus circuit breaker in mid cycle. See page 10-67 for options and page 10-71 for accessories.

### Main Circuit Breaker—Group Mounted—80% Rated—MicroVersaTrip® PM Trip Units<sup>3</sup>

Mains	List Price Each, GO-108A									Ship Cycle
Maximum Amps	Standard Frames			High Interrupting			Current Limiting			
	Frame	3-ph, 4-w	3-ph, 3-w	Frame	3-ph, 4-w	3-ph, 3-w	Frame	3-ph, 4-w	3-ph, 3-w	
400	SGHB4 PM	\$9690.00	\$9520.00	—	—	—	SGLB4 PM	\$11662.00	\$11314.00	N
							SGPB4 PM	\$13857.00	\$13031.00	
600	SGHB6 PM	\$11731.00	\$11507.00	—	—	—	SGLB6 PM	\$12680.00	\$11971.00	
							SGPB6 PM	\$15624.00	\$14642.00	
800	SKHB8 PM	\$14232.00	\$13933.00	SKLB8 PM	\$14940.00	\$14630.00	—	—	—	N
				SKPB8 PM	\$20235.00	\$19934.00				
1000	SKHB12 PM	\$14344.00	\$13992.00	SKLB12 PM	\$17005.00	\$16657.00	—	—	—	N
				SKPB12 PM	\$21303.00	\$18310.00				
1200	SKHB12 PM	\$16768.00	\$16459.00	SKLB12 PM	\$17478.00	\$17167.00	—	—	—	N
				SKPB12 PM	\$24125.00	\$23869.00				

<sup>3</sup>Breakers with MicroVersaTrip® PM trip units must use a Voltage Module. Price includes 1-installed auxiliary switch (1 element), 1-Distribution Cable Junction Box, 1-Distribution Cable Harness and 1X filler plate for side control wiring space.



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

Main Circuit Breaker—Group Mounted—100% Equipment Rated

Mains		List Price Each, GO-108A					
Maximum Amps	Standard Frames			High Interrupting			Ship Cycle
	Frame	3-ph, 4-w	3-ph, 3-w	Frame	3-ph, 4-w	3-ph, 3-w	
800				SKLLA8	\$9976.00	\$9577.00	M
				SKLLB8 Plus <sup>1</sup>	\$12185.00	\$11774.00	M
	SKHHA8	\$10219.00	\$9719.00	SKLLB8 PM <sup>2</sup>	\$16485.00	\$16108.00	M
	SKHHB8 Plus <sup>1</sup>	\$10635.00	\$10271.00	SKPPA8	\$13616.00	\$13294.00	M
	SKHHB8 PM <sup>2</sup>	\$15635.00	\$15271.00	SKPPB8 Plus <sup>1</sup>	\$17011.00	\$16768.00	M
				SKPPB8 PM <sup>2</sup>	\$22011.00	\$21768.00	M
1000				SKLLA12 <sup>1,3</sup>	\$11196.00	\$10734.00	M
				SKLLB12 Plus <sup>1,3</sup>	\$13806.00	\$13406.00	M
	SKHHA12 <sup>3</sup>	\$10359.00	\$9899.00	SKLLB12 PM <sup>2,3</sup>	\$18223.00	\$17805.00	M
	SKHHB12 Plus <sup>1,3</sup>	\$11756.00	\$11341.00	SKPPA12 <sup>3</sup>	\$14904.00	\$14348.00	M
	SKHHB12 PM <sup>2,3</sup>	\$17283.00	\$16881.00	SKPPB12 Plus <sup>1,3</sup>	\$21037.00	\$20756.00	M
				SKPPB12 PM <sup>2,3</sup>	\$24331.00	\$24062.00	M

<sup>1</sup>MicroVersaTrip® Plus circuit breaker. Breakers with MicroVersaTrip® Plus trip units with optional control power require a Power Supply. Add \$1000 list for 1-Distribution Cable Junction Box and 1-Distribution Cable Harness for each breaker with this option. See pricing page 10-67 for options and page 10-71 for accessories.

<sup>2</sup>MicroVersaTrip® PM circuit breaker in N cycle. Breakers with MicroVersaTrip® PM trip units must use a Voltage Module. Price includes 1-installed auxiliary switch (1 element), 1-Distribution Cable Junction Box, 1-Distribution Cable Harness and 1X filler plate for side control wiring space.

<sup>3</sup>1200A must have fully rated bus. Copper lugs must be used on line or load side of breaker. See pricing page 10-67 for options and page 10-71 for accessories.



# Switchboards

## Spectra® Series Switchboards

Group Mounted—Feeder Section Class 1, Class 2  
Circuit Breaker Feeders (Bolt-on Style)

## Section 10

### Molded Case Circuit Breaker Feeders—80% Rated—Standard Frames

List Price Each, GO-108A Standard Frames											
Branch Mounting	Max Volts	Breaker Frame	Trip Range	Per Circuit			Space Only <sup>2</sup>			Hardware Only	Ship Cycle
				*3P	*2P	1P	3P	2P	1P		
Twin	120/240	THQB <sup>1</sup>	15-60	—	\$240.00	\$140.00	—	\$200.00	\$100.00	\$316.00	
Twin	120/240	THQB <sup>1</sup>	70	—	\$285.00 <sup>3</sup>	\$175.00	—	\$200.00	\$100.00	\$316.00	
Twin	120/240	THQB <sup>1</sup>	80-100	—	\$320.00 <sup>3</sup>	—	—	\$200.00	—	\$316.00	
Twin	240	THQB <sup>1</sup>	15-60	\$390.00	\$320.00	—	\$311.00	\$200.00	—	\$316.00	
Twin	240	THQB <sup>1</sup>	70	\$429.00	\$380.00	—	\$311.00	\$200.00	—	\$316.00	
Twin	240	THQB <sup>1</sup>	80-100	\$514.00	\$430.00	—	\$311.00	\$200.00	—	\$316.00	
Twin	240	TEB	15-60	\$560.00	\$379.00	\$187.00	\$311.00	\$200.00	\$100.00	\$316.00	
Twin	240	TEB	70-100	\$653.00	\$492.00	\$243.00	\$311.00	\$200.00	\$100.00	\$316.00	
Twin	240	TQD <sup>5</sup>	125-225	\$989.00	\$853.00	—	\$311.00	\$200.00	—	\$316.00	
Twin	240	SGDA	250-400	\$2511.00	\$2163.00	—	\$425.00	\$425.00	—	\$1481.00	
Twin	480Y/277	TEY <sup>4,5</sup>	15-60	\$570.00	\$400.00	\$190.00	\$311.00	\$200.00	\$100.00	\$316.00	
Twin	480Y/277	TEY <sup>4,5</sup>	70-100	\$635.00	\$470.00	\$230.00	\$311.00	\$200.00	\$100.00	\$316.00	
Twin	480	TED4	15-60	\$739.00	\$555.00	\$192.00	\$311.00	\$200.00	\$100.00	\$316.00	
Twin	480	TED4	70-100	\$821.00	\$610.00	—	\$311.00	\$200.00	—	\$316.00	
Twin	480	TED4	110-150	\$1533.00	—	—	\$311.00	—	—	\$316.00	S
Twin	600	TED6	15-60	\$821.00	—	—	\$311.00	—	—	\$316.00	
Twin	600	TED6	70-100	\$895.00	—	—	\$311.00	—	—	\$316.00	
Twin	600	TED6	110-150	\$1547.00	—	—	\$311.00	—	—	\$316.00	
Twin	600	SEDA	15-60	\$943.00	\$709.00 <sup>8</sup>	—	\$311.00	\$311.00	—	\$316.00	
Twin	600	SEDA	70-100	\$1030.00	\$774.00 <sup>8</sup>	—	\$311.00	\$311.00	—	\$316.00	
Twin	600	SEDA	110-150	\$1760.00	\$1330.00 <sup>8</sup>	—	\$311.00	\$311.00	—	\$316.00	
Single or Twin	600	SFHA	70-225	\$1792.00	\$1375.00	—	\$311.00	\$311.00	—	\$779.00	
Single or Twin	600	SFHA	250	\$2040.00	\$1680.00	—	\$311.00	\$311.00	—	\$779.00	
Single <sup>7</sup> or Twin	600	SGHA4	125-400	\$2669.00	\$2283.00	—	\$425.00	\$425.00	—	\$1481.00	
Single <sup>7</sup> or Twin	600	SGHB4 <sup>6</sup>	60-400	\$5077.00	—	—	\$604.00	—	—	\$1481.00	
Single <sup>7</sup> or Twin	600	SGHA6	250-600	\$3931.00	\$3197.00	—	\$425.00	\$425.00	—	\$1481.00	
Single <sup>7</sup> or Twin	600	SGHB6 <sup>6</sup>	250-600	\$5772.00	—	—	\$604.00	—	—	\$1481.00	
Single	600	SKHA8	300-800	\$5623.00	\$4815.00	—	\$1232.00	\$1232.00	—	\$1854.00	
Single	600	SKHB8 <sup>6</sup>	300-800	\$8529.00	—	—	\$1649.00	—	—	\$1854.00	
Single	600	SKHA12	1000	\$6768.00	\$5909.00	—	\$1649.00	\$1649.00	—	\$1854.00	
Single	600	SKHA12	1200	\$9085.00	\$8323.00	—	\$1649.00	\$1649.00	—	\$1854.00	
Single	600	SKHB12 <sup>6</sup>	1000-12000	\$9390.00	—	—	\$1649.00	—	—	\$1854.00	

FCV/FCS/FCN/FCL Series 2P breaker supplied in 3P envelope ONLY.

Circuit breaker 1" per pole, but requires switchboard spacing of full "X" height.

Record Plus 15-20 Amp Circuit Breakers come with Load Lugs Factory Installed.

<sup>1</sup>Not available in Bolt-on design.

<sup>2</sup>Space unit includes vertical bus and filler plate only. MicroVersaTrip® circuit breaker spaces are 4 pole (includes 1X for side control wiring space.)

<sup>3</sup>Use only on 3-ph, 4-wire 208Y/120 volts systems.

<sup>4</sup>Use only on 3-ph, 4-wire systems, 480Y/277 volts maximum.

<sup>5</sup>Spectra® Series only.

<sup>6</sup>MicroVersaTrip® Plus circuit breaker. See pricing table on page 10-67 for options and page 10-71 for accessories. Breakers with MicroVersaTrip® Plus trip units with optional control power require a power supply. Refer to Table for pricing. **Add \$1000** list for 1-Distribution Cable Junction Box and 1-Distribution Cable Harness for each breaker with this option.

<sup>7</sup>SG6 and SG4 can be twin mounted in section rated for 2000A or less.

<sup>8</sup>2-pole device is rated 480 Vac max.



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

# Switchboards

## Spectra® Series Switchboards

Group Mounted—Feeder Section Class 1, Class 2  
Circuit Breaker Feeders (Bolt-on Style)

## Section 10

### Molded Case Circuit Breaker Feeders—80% Rated—High Interrupting and Current Limiting

List Price Each, GO-108A High Interrupting and Current Limiting										
Branch Mounting	Max Volts	Breaker Frame	Trip Range	Per Circuit			Space Only		Hardware Only	Ship Cycle
				*3P	*2P	1P	3P	2P		
Twin	120Y/240	THHQB <sup>1</sup>	15-60	—	\$275.00	\$160.00	—	\$200.00	\$107.00	\$316.00
Twin	120Y/240	THHQB <sup>1</sup>	70	—	\$315.00	\$195.00	—	\$200.00	\$107.00	\$316.00
Twin	120Y/240	THHQB <sup>1</sup>	80-100	—	\$360.00	—	—	\$200.00	—	\$316.00
Twin	240	THHQB <sup>1</sup>	15-60	\$471.00	\$360.00	—	\$311.00	\$200.00	—	\$316.00
Twin	240	THHQB <sup>1</sup>	70	\$535.00	\$420.00	—	\$311.00	\$200.00	—	\$316.00
Twin	240	THHQB <sup>1</sup>	80-100	\$610.00	\$480.00	—	\$311.00	\$200.00	—	\$316.00
Twin	240	THQD	125-225	\$1177.00	\$1076.00	—	\$311.00	\$311.00	—	\$316.00
Twin	240	THED	15-30	—	—	\$461.00	—	—	\$107.00	\$316.00
Twin	480	THED4	15-60	—	\$821.00	—	—	\$200.00	—	\$316.00
Twin	480	THED4	70-100	—	\$865.00	—	—	\$200.00	—	\$316.00
Twin	600	FCS6	15-60	\$935.00	\$845.00	—	\$311.00	\$311.00	—	\$316.00
Twin	600	FCS6	70-100	\$1014.00	\$912.00	—	\$311.00	\$311.00	—	\$316.00
Twin	600	THED6	15-60	\$889.00	—	—	\$311.00	—	—	\$316.00
Twin	600	THED6	70-100	\$964.00	—	—	\$311.00	—	—	\$316.00
Twin	600	THED6	110-150	\$1885.00	—	—	\$311.00	—	—	\$316.00
Twin	600	FBV6	15-60	Breaker not available at time of printing						
Twin	600	FBV6	70-100	Breaker not available at time of printing						
Twin	600	FCV6	15-60	\$1073.00	\$989.00	—	\$311.00	\$311.00	—	\$316.00
Twin	600	FCV6	70-100	\$1168.00	\$1047.00	—	\$311.00	\$311.00	—	\$316.00
Twin	600	SEHA	15-60	\$1020.00	\$940.00	—	\$311.00	\$311.00	—	\$316.00
Twin	600	SEHA	70-100	\$1110.00	\$995.00	—	\$311.00	\$311.00	—	\$316.00
Twin	600	SEHA	110-150	\$2160.00	\$1950.00	—	\$311.00	\$311.00	—	\$316.00
Twin	600	FBN6	15-60	Breaker not available at time of printing						
Twin	600	FBN6	70-100	Breaker not available at time of printing						
Twin	600	FCN6	15-60	\$1705.00	\$1363.00	—	\$311.00	\$311.00	—	\$316.00
Twin	600	FCN6	70-100	\$1898.00	\$1515.00	—	\$311.00	\$311.00	—	\$316.00
Twin	600	SELA	15-60	\$1620.00	\$1295.00	—	\$311.00	\$311.00	—	\$316.00
Twin	600	SELA	70-100	\$1804.00	\$1440.00	—	\$311.00	\$311.00	—	\$316.00
Twin	600	SELA	110-150	\$2550.00	\$2140.00	—	\$311.00	\$311.00	—	\$316.00
Twin	600	FBH6	15-60	Breaker not available at time of printing						
Twin	600	FBH6	70-100	Breaker not available at time of printing						
Twin	600	FCH6	15-60	\$2068.00	\$1652.00	—	\$311.00	\$311.00	—	\$316.00
Twin	600	FCH6	70-100	\$2326.00	\$1852.00	—	\$311.00	\$311.00	—	\$316.00
Twin	600	SEPA	15-60	\$1965.00	\$1570.00	—	\$311.00	\$311.00	—	\$316.00
Twin	600	SEPA	70-100	\$2210.00	\$1760.00	—	\$311.00	\$311.00	—	\$316.00
Twin	600	SEPA	110-150	\$3240.00	\$2590.00	—	\$311.00	\$311.00	—	\$316.00
Twin	600	FBL6	15-60	Breaker not available at time of printing						
Twin	600	FBL6	70-100	Breaker not available at time of printing						
Twin	600	FCL6	15-60	\$2502.00	\$2251.00	—	\$311.00	\$311.00	—	\$316.00
Twin	600	FCL6	70-100	\$3128.00	\$2815.00	—	\$311.00	\$311.00	—	\$316.00

FCV/FCS/FCN/FCL Series 2P breaker supplied in 3P envelope ONLY.

Circuit breaker 1" per pole, but requires switchboard spacing of full "X" height.

Record Plus 15-20 Amp Circuit Breakers come with Load Lugs Factory Installed.

<sup>1</sup>Not available in Bolt-on design.



# Switchboards

## Spectra® Series Switchboards

Group Mounted—Feeder Section Class 1, Class 2  
Circuit Breaker Feeders (Bolt-on Style)

## Section 10

### Molded Case Circuit Breaker Feeders—80% Rated—High Interrupting and Current Limiting (Continued)

List Price Each, GO-108A											
Branch Mounting	Max Volts	Breaker Frame	Trip Range	High Interrupting and Current Limiting						Hardware Only	Ship Cycle
				Per Circuit			Space Only				
				*3P	*2P	1P	3P	2P	1P		
Single or Twin	600	FES1T	20-150								
Single or Twin	600	FEV1T	20-150								
Single or Twin	600	FEN1T	20-150								
Single or Twin	600	FEH1T	20-150								
Single or Twin	600	FEL1T	20-150								
Single or Twin	600	FES1E	20-150								
Single or Twin	600	FEV1E	20-150								
Single or Twin	600	FEN1E	20-150								
Single or Twin	600	FEH1E	20-150								
Single or Twin	600	FEL1E	20-150								
Single or Twin	600	SFLA	70-225	\$2693.00	\$2264.00	—	\$311.00	\$311.00	—	\$779.00	
Single or Twin	600	SFLA	250	\$3285.00	\$2760.00	—	\$311.00	\$311.00	—	\$779.00	
Single or Twin	600	SFPA	70-225	\$3740.00	\$2990.00	—	\$311.00	\$311.00	—	\$779.00	
Single or Twin	600	SFPA	250	\$4260.00	\$3650.00	—	\$311.00	\$311.00	—	\$779.00	
Single or Twin	600	FES2T	70-250								
Single or Twin	600	FEV2T	70-250								
Single or Twin	600	FEN2T	70-250								
Single or Twin	600	FEH2T	70-250								
Single or Twin	600	FEL2T	70-250								
Single or Twin	600	FES2E	70-250								
Single or Twin	600	FEV2E	70-250								
Single or Twin	600	FEN2E	70-250								
Single or Twin	600	FEH2E	70-250								
Single or Twin	600	FEL2E	70-250								
Single or Twin	600	FGV2	125-250	\$2669.00	\$2283.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGN2	125-250	\$3782.00	\$3026.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGH2	125-250	\$4740.00	\$3935.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGL2	125-250	\$5440.00	\$4514.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGP2	125-250	\$5913.00	\$4906.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	SGLA4	125-400	\$3782.00	\$3026.00	—	\$425.00	\$425.00	—	\$1481.00	
Single or Twin	600	SGLB4 <sup>1</sup>	60-400	\$6322.00	—	—	\$604.00	—	—	\$1481.00	
Single or Twin	600	SGPA4	125-400	\$4730.00	\$3925.00	—	\$425.00	\$425.00	—	\$1481.00	
Single or Twin	600	SGPB4 <sup>1</sup>	60-400	\$7907.00	—	—	\$604.00	—	—	\$1481.00	
Single or Twin	600	FGV4	250-400	\$2669.00	\$2283.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGN4	250-400	\$3782.00	\$3026.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGH4	250-400	\$4740.00	\$3935.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGL4	250-400	\$5440.00	\$4514.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGP4	250-400	\$5913.00	\$4906.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	SGLA6	250-600	\$4627.00	\$3857.00	—	\$425.00	\$425.00	—	\$1481.00	
Single or Twin	600	SGLB6 <sup>1</sup>	250-600	\$6679.00	—	—	\$604.00	—	—	\$1481.00	
Single or Twin	600	SGPA6	250-600	\$6080.00	\$4870.00	—	\$425.00	\$425.00	—	\$1481.00	
Single or Twin	600	SGPB6 <sup>1</sup>	250-600	\$9171.00	—	—	\$604.00	—	—	\$1481.00	
Single or Twin	600	FGV6	400-600	\$3931.00	\$3197.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGN6	400-600	\$4627.00	\$3857.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGH6	400-600	\$6090.00	\$4880.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGL6	400-600	\$6992.00	\$5600.00	—	\$455.00	\$455.00	—	\$1481.00	
Single or Twin	600	FGP6	400-600	\$7600.00	\$6088.00	—	\$455.00	\$455.00	—	\$1481.00	
Single	600	SKLA8	300-800	\$6358.00	\$5511.00	—	\$1232.00	\$1232.00	—	\$1854.00	
Single	600	SKLB8	300-800	\$9338.00	—	—	\$1649.00	—	—	\$1854.00	
Single	600	SKPA8	300-800	\$8265.00	\$7025.00	—	\$1232.00	\$1232.00	—	\$1854.00	
Single	600	SKPB8 <sup>1</sup>	300-800	\$12139.00	—	—	\$1649.00	—	—	\$1854.00	
Single	600	SKLA12	1000	\$7501.00	\$6656.00	—	\$1649.00	\$1649.00	—	\$1854.00	
Single	600	SKLA12	1200	\$9779.00	\$8833.00	—	\$1649.00	\$1649.00	—	\$1854.00	
Single	600	SKLB12 <sup>1</sup>	1000-1200	\$10482.00	—	—	\$1649.00	—	—	\$1854.00	
Single	600	SKPA12	1000	\$9000.00	\$7675.00	—	\$1649.00	\$1649.00	—	\$1854.00	
Single	600	SKPA12	1200	\$11750.00	\$9985.00	—	\$1649.00	\$1649.00	—	\$1854.00	
Single	600	SKPB12 <sup>1</sup>	1000-1200	\$12595.00	—	—	\$1649.00	—	—	\$1854.00	

FCV/FCS/FCN/FCL Series 2P breaker supplied in 3P envelope ONLY.

Circuit breaker 1" per pole, but requires switchboard spacing of full "X" height.

Record Plus 15-20 Amp Circuit Breakers come with Load Lugs Factory Installed.

<sup>1</sup>MicroVersaTrip® Plus circuit breaker. See pricing table on page 10-67 for options and page 10-71 for accessories. Breakers with MicroVersaTrip® Plus trip units with optional control power require a power supply. Refer to Table for pricing. **Add \$1000** list for 1-Distribution Cable Junction Box and 1-Distribution Cable Harness for each breaker with this option.



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

# Switchboards

## Spectra® Series Switchboards

(Bolt-on Style)

## Section 10

### Molded Case Circuit Breaker Feeders

#### MicroVersaTrip® PM<sup>1</sup> Trip Units for SG and SK Molded Case Breakers

Circuit Breaker		List Price Each, GO-108A							Ship Cycle	
Max. Volts	Breaker Frame	Standard Frames				High Interrupting and Current Limiting				
		Trip Range	Per Circuit	Space <sup>2</sup>	Breaker Frame	Trip Range	Per Circuit	Space <sup>2</sup>		
			3-Pole	3-Pole			3-Pole	3-Pole		
600	SGHB PM	60-400	\$10077.00	\$806.00	SGLB PM	60-400	\$11322.00	\$806.00	N	
		500-600	\$10772.00	\$806.00		500-600	\$11979.00	\$806.00		
	—	—	—	—	SGPB PM	60-400	\$12907.00	\$806.00		
	—	—	—	—		500-600	\$14171.00	\$806.00		
	SKHB8 PM	300-800	\$13529.00	\$2199.00	SKLB8 PM	300-800	\$14338.00	\$2199.00		
	—	—	—	—	SKPB8 PM	300-800	\$17139.00	\$2199.00		
	SKHB12 PM	1000	\$14390.00	\$2199.00	SKLB12 PM	1000	\$15482.00	\$2199.00		
		1200	\$14390.00	\$2199.00		1200	\$15482.00	\$2199.00		
	—	—	—	—	SKPB12 PM	1000	\$17595.00	\$2199.00		
	—	—	—	—		1200	\$17595.00	\$2199.00		

<sup>1</sup>MicroVersaTrip® PM circuit breaker. Price includes 1-installed auxiliary switch (1 element), 1-Distribution Cable Junction Box, 1-Distribution Cable Harness and 1X filler plate for side control wiring space for each breaker. Breakers with MicroVersaTrip® PM trip units must use a Voltage Module.

<sup>2</sup>Space unit includes vertical bus and filler plate only. MicroVersaTrip® PM circuit breaker spaces are 4 pole (includes 1X for side control wiring space).

### Spectra® Series Molded Case Circuit Breaker Feeders

#### 100% Equipment Rated for SG and SK Molded Case Breakers

Circuit Breaker		List Price Each, GO-108A											Ship Cycle
Max. Volts	Breaker Frame	Standard Frames				High Interrupting and Current Limiting							
		Trip Range	Per Circuit		Space <sup>1,2</sup>		Breaker Frame	Trip Range	Per Circuit		Space <sup>1</sup>		
			3-Pole	2-Pole	3-Pole	2-Pole			3-Pole	2-Pole	3-Pole	2-Pole	
600	SGHHA4	125-400	\$3203.00	\$2740.00	\$425.00	\$425.00	SGLLA4	125-400	\$4538.00	\$3631.00	\$425.00	\$425.00	M
	-	-	-	-	-	-	SGPPA4	125-400	\$5581.00	\$4710.00	\$425.00	\$425.00	
	SKHHA8	300-800	\$6748.00	\$5778.00	\$1232.00	\$1232.00	SKLLA8	300-800	\$7630.00	\$6613.00	\$1232.00	\$1232.00	
	-	-	-	-	-	-	SKPPA8	300-800	\$9918.00	\$8430.00	\$1232.00	\$1232.00	
	SKHHA10	1000	\$8121.00	\$7091.00	\$1649.00	\$1649.00	SKLLA12 <sup>7</sup>	1000	\$9001.00	\$5324.00	\$1649.00	\$1649.00	
	-	-	-	-	-	-	SKPPA12 <sup>7</sup>	1000	\$11250.00	\$9211.00	\$1649.00	\$1649.00	
	SGHHB4 Plus <sup>4</sup>	60-400	\$5393.00	-	\$604.00	-	SGLLB4 Plus <sup>4</sup>	60-400	\$7270.00	-	\$604.00	-	
	-	-	-	-	-	-	SGPPB4 Plus <sup>4</sup>	60-400	\$9093.00	-	\$604.00	-	
	SKHHB8 Plus <sup>4</sup>	300-800	\$9808.00	-	\$1649.00	-	SKLLB8 Plus <sup>4</sup>	300-800	\$10738.00	-	\$1649.00	-	
	-	-	-	-	-	-	SKPPB8 Plus <sup>4</sup>	300-800	\$13960.00	-	\$1649.00	-	
	SKHHB12 Plus <sup>4,7</sup>	1000	\$10756.00	-	\$1649.00	-	SKLLB12 Plus <sup>4,7</sup>	1000	\$12054.00	-	\$1649.00	-	
	-	-	-	-	-	-	SKPPB12 Plus <sup>4,7</sup>	1000	\$14484.00	-	\$1649.00	-	
	SGHHB4 PM <sup>5</sup>	60-400	\$10393.00	-	\$806.00 <sup>6</sup>	-	SGLLB4 PM <sup>5</sup>	60-400	\$12270.00	-	\$806.00 <sup>6</sup>	-	
	-	-	-	-	-	-	SGPPB4 PM <sup>5</sup>	60-400	\$14093.00	-	\$806.00 <sup>6</sup>	-	
	SKHHB8 PM <sup>5</sup>	300-800	\$14808.00	-	\$2199.00 <sup>6</sup>	-	SKLLB8 PM <sup>5</sup>	300-800	\$15738.00	-	\$2199.00 <sup>6</sup>	-	
	-	-	-	-	-	-	SKPPB8 PM <sup>5</sup>	300-800	\$18960.00	-	\$2199.00 <sup>6</sup>	-	
	SKHHB12 PM <sup>5,7</sup>	1000	\$15756.00	-	\$2199.00 <sup>6</sup>	-	SKLLB12 PM <sup>5,7</sup>	1000	\$17054.00	-	\$2199.00 <sup>6</sup>	-	
	-	-	-	-	-	-	SKPPB12 PM <sup>5,7</sup>	1000	\$19484.00	-	\$2199.00 <sup>6</sup>	-	

<sup>1</sup>Unit space price includes vertical bus and filler space only.

<sup>2</sup>Maximum IC rating cannot exceed 100kA regardless of circuit breaker or voltage.

<sup>3</sup>100% rated for section ratings up to 2000A max. 80% rated for 2500-4000A.

<sup>4</sup>MicroVersaTrip® Plus circuit breaker. Add \$1000.00 list for 1-Distribution Cable Junction Box and 1-Distribution Cable Harness for each breaker.

<sup>5</sup>MicroVersaTrip® PM circuit breaker. Price includes 1-installed auxiliary switch (1 element), 1-Distribution Cable Junction Box, 1-Distribution Cable Harness and 1X filler plate for side control wiring space for each breaker. See pricing page 10-67 for options and page 10-71 for accessories. Breakers with MicroVersaTrip® PM trip units must use a Voltage Module. See page 10-70.

<sup>6</sup>MicroVersaTrip® PM circuit breaker spaces are 4 pole (includes 1X for side control wiring space).

<sup>7</sup>1220A must have fully rated bus. Copper lugs must be used on line or load side of breaker.



# Switchboards

## Spectra® Series Switchboards

Options and Accessories

## Section 10

### MicroVersaTrip® Plus<sup>1</sup> Trip Unit Functions with Ammeter For SG and SK Spectra® RMS Molded-Case Circuit Breakers

Trip Unit Suffix	List Price GO-108A <sup>1</sup>	Long-time (L)	Short-time (S)	Adj. Instantaneous (I)	4-Wire Ground Fault (G) <sup>2</sup>	OL/SC Targets <sup>3</sup>	OL/SC/GF Targets <sup>3</sup>	Ship Cycle
LI	No Price Adder	X		X		X		S
LSI	\$1680.00	X		X	X	X	X	S
LIG	\$3222.00	X	X	X		X		S
LSIG	\$4342.00	X	X	X	X	X	X	S

X = Function included

<sup>1</sup>Basic Trip Unit includes Long Time and Adjustable Instantaneous overcurrent trip functions, three phase Ammeter and OL/SC trip indicators. When optional functions are required, specify suffix and price. MicroVersaTrip® Plus Trip Unit(s) with optional control power require a power supply. Also add \$1000.00 list per breaker for optional prewired 24 Vdc control power to Trip Unit(s).

### MicroVersaTrip® PM<sup>4</sup> Trip Unit Functions For SG and SK Spectra® RMS Molded-Case Circuit Breakers with Full Metering and Communications

Trip Unit Suffix	List Price, GO-108A <sup>4</sup>	Long-time (L)	Short-time (S)	Adj. Instantaneous (I)	4-Wire Ground Fault (G) <sup>2</sup>	OL/SC Targets <sup>3</sup>	OL/SC/GF Targets <sup>3</sup>	Protective Relay Targets <sup>3</sup>	Ship Cycle
LIM	No Price Adder	X		X		X			N
LSIM	\$1680.00	X		X	X		X		N
LIGM	\$3222.00	X	X	X		X			N
LSIGM	\$4342.00	X	X	X	X		X		N

### with Full Metering, Protective Relaying and Communications

Trip Unit Suffix	List Price GO-108A <sup>4</sup>	Long-time (L)	Short-time (S)	Adj. Instantaneous (I)	4-Wire Ground Fault (G) <sup>2</sup>	OL/SC Targets <sup>3</sup>	OL/SC/GF Targets <sup>3</sup>	Protective Relay Targets <sup>3</sup>	Ship Cycle
LIPM	\$3000.00	X		X		X		X	N
LSIPM	\$4680.00	X		X	X		X	X	N
LIGPM	\$6222.00	X	X	X		X		X	N
LSIGPM	\$7342.00	X	X	X	X		X	X	N

X = Function included

<sup>2</sup>Trip Units with suffix "G" include neutral sensor for 3Φ -4W applications. For 3Φ -3W grounded wye applications deduct \$1000.00 list from the trip unit list price.

<sup>3</sup>Trip Indication targets are standard.

<sup>4</sup>Basic Trip Unit includes Long Time and Adjustable Instantaneous overcurrent trip functions, LCD meter and OL/SC trip indicators. When optional functions are required, specify suffix and price. MicroVersaTrip® PM Trip Units must use a Voltage Module for voltage sensing and control power.

### Group Mounted— Feeder Section Class 1, Class 2 Molded Case Switches<sup>5</sup>

Circuit Breaker			List Price Each, GO-108A	Ship Cycle
Type	Rating			
	ac Volts	Max. Amps		
Standard Frames			Price as a Standard Spectra Circuit Breaker	N
SE150	600	150		
SF250	600	225		
SG600	600	600		
SK1200	600	1200		

<sup>5</sup>Equipment may not be UL Listed when molded case switches are furnished.



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

### MicroVersaTrip® Plus<sup>1</sup> Trip Unit Functions For Power Break® I or II

### MicroVersaTrip® Plus<sup>2</sup> with Ammeter Display

Trip Unit Suffix	List Price, GO-108A <sup>1</sup>	Long-time (L)	Short-time (S)	Adj. Inst. (I)	High Inst. (H)	4-Wire Ground Fault (G) <sup>2</sup>	GF Zone Interlock (Z1) <sup>3</sup>	GS/ST Zone Interlock (Z2) <sup>3</sup>	OL/S C Targets <sup>4</sup>	OL/SC/GF Targets <sup>4</sup>	Protective Relay Targets <sup>4</sup>	Ship Cycle
LI	No Price Adder	X		X					X			S
LSI	\$2170.00	X	X	X					X			S
LSH <sup>5</sup>	\$4546.00	X	X		X				X			S
LIG	\$4229.00	X		X		X				X		S
LSIG	\$6399.00	X	X	X		X				X		S
LSHG <sup>5</sup>	\$9262.00	X	X		X	X				X		M
LIGZ1	\$6861.00	X		X		X	X			X		M
LSIGZ1	\$9037.00	X	X	X		X	X			X		M
LSIGZ2	\$9972.00	X	X	X		X		X		X		M
LSHGZ1 <sup>5</sup>	\$10198.00	X	X		X	X	X			X		M
LSHGZ2 <sup>5</sup>	\$111133.00	X	X		X	X		X		X		M

X = Function included.

<sup>1</sup>Basic Trip Unit(s) includes Long Time and Adjustable Instantaneous overcurrent trip functions, three phase Ammeter and OL/SC trip indicators. When optional functions are required, specify suffix and price.

MicroVersaTrip® Plus Trip Unit(s) with optional control power require a power supply. Also add \$1000 list per breaker for optional prewired 24 Vdc control power to Trip Unit(s).

<sup>2</sup>Trip Unit(s) with suffix "G" includes neutral sensor for 3Φ-4W applications. For 3Φ-3W grounded wye applications deduct \$1000 from the trip units List Price.

<sup>3</sup>Zone Selective Interlock function requires separate Z-SEL Interlock Module type T1M1 (120 Vac control voltage required). Add \$1680 List Price per breaker.

<sup>4</sup>Trip Indication targets are standard.

<sup>5</sup>Hi-range instantaneous not available for 4000A TP stationary mount.

### MicroVersaTrip® Plus and PM Trip Unit Function Definitions

Function	Description	Function	Description
Long-Time (L)	Adjustable current setting	Full Metering	Amperes (A/kA) - Phase Selectable
	Adjustable long-time delay		Voltage (V) - L-L or L-N and Phase Selectable
Short-Time (S)	Adjustable short-time pick-up		Energy (kWh/MWh)
	Adjustable short-time delay with I <sup>2</sup> t		Real Power (kW) - L-L or L-N
	Adjustable short-time delay without I <sup>2</sup> t		Apparent Power (kVA) - L-L or L-N
			Frequency (Hz)
Instantaneous (I)	Adjustable pick-up	Protective Relay Functions	Adjustable Undervoltage pickup
High Range Instantaneous (H) <sup>5</sup>	Fixed pick-up (1.0H)		Adjustable Undervoltage delay or OFF
Ground Fault (G)	Adjustable ground fault pick-up		Adjustable Overvoltage pickup
	Adjustable ground fault delay with I <sup>2</sup> t		Adjustable Overvoltage delay or OFF
	Adjustable ground fault delay without I <sup>2</sup> t		Adjustable Voltage Unbalance pickup
Trip Indication Target (OL/SC)	Overload/short circuit targets		Adjustable Voltage Unbalance delay or OFF
(OL/SC/GF)	Overload/short circuit/ground fault targets		Adjustable Current Unbalance pickup
Protective Relays	Undervoltage/Overvoltage/Voltage		Adjustable Current Unbalance delay or OFF
	Unbalance/Current Unbalance/Power Reversal		Adjustable Power Reversal pickup
			Adjustable Power Reversal delay or OFF





### MicroVersaTrip® PM<sup>1</sup> Trip Unit Functions For Power Break® I or II (AKR and WavePro)

#### with Full Metering and Communications

Trip Unit Suffix	List Price, GO-108A <sup>1</sup>	Long-time (L)	Short-time (S)	Adj. Inst. (I)	High Inst. (H)	4-Wire Ground Fault (G) <sup>2</sup>	GF Zone Interlock (Z1) <sup>3</sup>	GF/ST Zone Interlock (Z2) <sup>3</sup>	OL/SC Targets <sup>4</sup>	OL/SC/GF Targets <sup>4</sup>	Protective Relay Targets <sup>4</sup>	Ship Cycle
LIM	\$3360.00	X		X					X			M
LSIM	\$5530.00	X	X	X					X			M
LSHM <sup>5</sup>	\$7906.00	X	X		X				X			M
LIGM	\$7589.00	X		X		X				X		M
LSIGM	\$9759.00	X	X	X		X				X		M
LSHGM <sup>5</sup>	\$12622.00	X	X		X	X				X		M
LIGZ1M	\$10221.00	X		X		X	X			X		N
LSIGZ1M	\$12397.00	X	X	X		X	X			X		N
LSIGZ2M	\$13321.00	X	X	X		X		X		X		N
LSHGZ1M <sup>5</sup>	\$13558.00	X	X		X	X	X			X		N
LSHGZ2M <sup>5</sup>	\$14493.00	X	X		X	X		X		X		N

#### with Protective Relaying and Communications

Trip Unit Suffix	List Price, GO-108A <sup>1</sup>	Long-time (L)	Short-time (S)	Adj. Inst. (I)	High Inst. (H)	4-Wire Ground Fault (G) <sup>2</sup>	GF Zone Interlock (Z1) <sup>3</sup>	GF/ST Zone Interlock (Z2) <sup>3</sup>	OL/SC Targets <sup>4</sup>	OL/SC/GF Targets <sup>4</sup>	Protective Relay Targets <sup>4</sup>	Ship Cycle
LIP	\$2720.00	X		X					X		X	M
LSIP	\$4890.00	X	X	X					X		X	M
LSHP <sup>5</sup>	\$7266.00	X	X		X				X		X	M
LIGP	\$6949.00	X		X		X				X	X	M
LSIGP	\$9119.00	X	X	X		X				X	X	M
LSHGP <sup>5</sup>	\$11982.00	X	X		X	X				X	X	M
LIGZ1P	\$9581.00	X		X		X	X			X	X	N
LSIGZ1P	\$11757.00	X	X	X		X	X			X	X	N
LSIGZ2P	\$12692.00	X	X	X		X		X		X	X	N
LSHGZ1P <sup>5</sup>	\$12918.00	X	X		X	X	X			X	X	N
LSHGZ2P <sup>5</sup>	\$13853.00	X	X		X	X		X		X	X	N

#### with Full Metering, Protective Relaying and Communications

Trip Unit Suffix	List Price, GO-108A <sup>1</sup>	Long-time (L)	Short-time (S)	Adj. Inst. (I)	High Inst. (H)	4-Wire Ground Fault (G) <sup>2</sup>	GF Zone Interlock (Z1) <sup>3</sup>	GF/ST Zone Interlock (Z2) <sup>3</sup>	OL/SC Targets <sup>4</sup>	OL/SC/GF Targets <sup>4</sup>	Protective Relay Targets <sup>4</sup>	Ship Cycle
LIPM	\$5120.00	X		X					X		X	M
LSIPM	\$7290.00	X	X	X					X		X	M
LSHPM <sup>5</sup>	\$9666.00	X	X		X				X		X	M
LIGPM	\$9349.00	X		X		X				X	X	M
LSIGPM	\$11519.00	X	X	X		X				X	X	M
LSHGPM <sup>5</sup>	\$14382.00	X	X		X	X				X	X	M
LIGZ1PM	\$11981.00	X		X		X	X			X	X	N
LSIGZ1PM	\$14157.00	X	X	X		X	X			X	X	N
LSIGZ2PM	\$15092.00	X	X	X		X		X		X	X	N
LSHGZ1PM <sup>5</sup>	\$15318.00	X	X		X	X	X			X	X	N
LSHGZ2PM <sup>5</sup>	\$16253.00	X	X		X	X		X		X	X	N

X = Function included.

<sup>1</sup> Basic Trip Unit includes Long Time and Adjustable Instantaneous overcurrent trip functions, LCD meter and OL/SC trip indicators.

When optional functions are required, specify suffix and price.

MicroVersaTrip® PM Trip Unit must use a Voltage Module for voltage sensing and control power.

<sup>2</sup> Trip Unit with suffix "G" include neutral sensor for 3Φ-4W applications.

For 3Φ-3W grounded wye applications **deduct \$1000** from the trip units **List Price**.

<sup>3</sup> Zone Selective Interlock function requires separate Z-SEL Interlock Module type T1M1 (120 Vac control voltage required).

**Add \$1680 list** per breaker.

<sup>4</sup> Trip Indication targets are standard.

<sup>5</sup> Hi-range instantaneous not available for 4000A TP stationary mount.

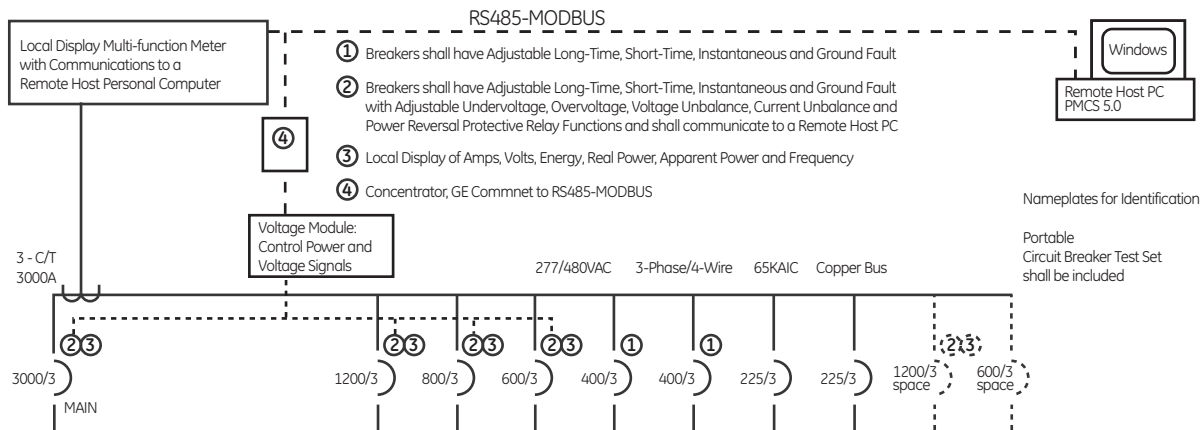


# Switchboards

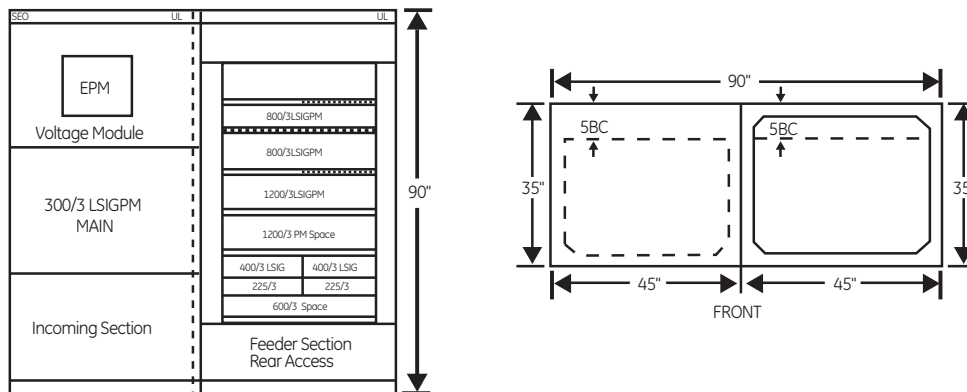
## Spectra® Series Switchboards

Example for MicroVersaTrip® PM and Plus Trip Units and POWER LEADER® EPM

## Section 10



One Line Diagram



Spectra® Series Switchboard Layout/Dimensions

### Spectra® Switchboard Price Make Up for Power Management

Description	List Price GO-108	Totals
Qty 1		
Switchboard 480/277V 3Ph 4W		
Service Entrance Label		
50KAIC		\$450.00
3000A Main type TP Stationary/MO		\$46612.00
Trip LSIGPM		\$11519.00
EPM w/Com.		\$9900.00
3-CTs	\$1953.00	\$5589.00
Qty 2		
2—225/3 SFLA	\$2693.00	\$5386.00
2—400/3 SGLB Plus	\$6322.00	\$12664.00
Trip LSIG	\$4342.00	\$8684.00
Cable and J-Box	\$1000.00	\$2000.00
1—600/3 SGLB PM	\$11979.00	\$11979.00
Trip LSIGPM	\$7342.00	\$7342.00
1—800/3 SKLB8 PM	\$14338.00	\$14338.00
Trip LSIGPM	\$7342.00	\$7342.00
1—1200/3 SKLB12 PM	\$15482.00	\$15482.00
LSIGPM	\$7342.00	\$7342.00
1—Space & Bus for 600 SGLA6	\$425.00	\$425.00
1—Space & Bus for 1200A SKLB12 PM	\$2199.00	\$2199.00
1—Voltage Module		\$7400.00
11—NPs	\$34.00	\$374.00
Copper Bus 2 Sections	\$5536.00	\$11072.00
1—Test Set		\$4156.00
<b>Total List</b>		<b>\$192525.00</b>

### Power Management Devices for Switchboards

Power Management Device	List Price GO-108	Description	Ship Cycle
Voltage Module, Ground Mounted or individually compartment mounted	\$7400.00	24 Vdc Power Supply Conditioner PTs	
Power Supply only for LCD display individually compartment mounted	\$4050.00	For Spectra® Plus Breakers, remember to add cable and J-Box	
POWER LEADER® Repeater for Commnet	\$6000.00	Extends the distance and number of devices for the Commnet network, one per 1000' or >30 devices	N
Modbus Monitor	\$19100.00	Window into PM devices for one location	
RS485 Modbus Concentrator	\$7000.00	Converts GE Commnet to open protocol Modbus communication for GE PMCS or third party use. See GEH-6502 Network Architecture and GEH-6508 Protocol Ref.	
Multinet®	\$8250.00	Modbus to Ethernet Converter	

For PM system and software contact your Power Management factory contact.



### Molded Case Circuit Breaker Accessories

GO-108A

Frame	Bell Alarm	Shunt Trip <sup>1</sup>	Ship Cycle	Under Voltage Release <sup>1,2</sup>	Motor <sup>2</sup> Operating Mechanism 120vac	Kirk Key <sup>2,4</sup>	Auxiliary Contacts 240V only			Slide Plate <sup>2,3</sup>	Pad Lock <sup>2</sup> Device	Lock off <sup>2</sup> Device
							1	2	4			
THQB, THHQB	—	\$98.00 <sup>2</sup>	S	—	—	—	\$89.00 <sup>2</sup>	—	—	\$678.00	\$100.00	\$5.00
TEV	—	\$392.00 <sup>2</sup>	S	—	—	—	\$200.00 <sup>2</sup>	—	—	\$678.00	\$100.00	\$5.00
TEB, TEBA, TED6, THED4, THED6	\$261.00	\$392.00	S	\$392.00	—	—	\$261.00	\$360.00	—	\$678.00	\$100.00	\$5.00
FCS, FCV, FCN, FCH, FCL	\$261.00	\$392.00	S	\$392.00	—	\$821.00	\$261.00	—	—	\$678.00	\$100.00	\$5.00
SEDA, SEHA, SELA, SEPA	\$261.00	\$392.00	S	\$392.00	—	—	\$261.00	\$360.00	\$740.00	\$678.00	\$100.00	\$5.00
FES, FEV, FEN, FEH, FEL	\$261.00	\$392.00	S	\$392.00	—	\$821.00	\$261.00	—	—	\$678.00	\$100.00	\$5.00
SFHA, SFLA, SFPA	\$261.00	\$392.00	S	\$392.00	—	—	\$261.00	\$360.00	\$740.00	\$678.00	\$100.00	\$5.00
SGDA, SGHA, SGLA, SGPA	\$261.00	\$447.00	S	\$447.00	\$2588.00	\$690.00	—	\$360.00	\$740.00	\$890.00	\$115.00	N/A
FGV, FGN, FGH, FGL, FGP	\$261.00	\$392.00	S	\$392.00	—	\$821.00	\$261.00	—	—	\$678.00	\$115.00	N/A
SKHA, SKLA, SKPA, SKHHA, SKLLA, SKPPA	\$261.00	\$447.00	S	\$447.00	—	\$690.00	—	\$360.00	\$740.00	\$890.00	\$125.00	N/A
SGHB, SGLB, SGPB	\$261.00	\$447.00	S	\$447.00	\$2588.00	\$690.00	—	\$360.00	\$740.00	\$890.00	\$115.00	N/A
MicroVersaTrip® Plus SKHB, SKLB, SKPB, SKHHB, SKLLB, SKPPB	\$261.00	\$447.00	M	\$447.00	—	\$690.00	—	\$360.00	\$740.00	\$890.00	\$125.00	—
MicroVersaTrip® PM SKHB, SKLB, SKPB, SKHHB, SKLLB, SKPPB	\$261.00	\$447.00	N	\$447.00	—	\$690.00	—	Included with breaker	\$380.00	\$890.00	\$125.00	—
TP, THP, SS <sup>4</sup>	\$491.00 <sup>2</sup>	\$821.00	S	\$821.00	—	\$821.00 <sup>4</sup>	\$460.00	\$572.00	\$833.00	—	—	—

<sup>1</sup> Requires additional 1 pole space.

<sup>2</sup> Normal ship cycle.

<sup>3</sup> Slide plate interlock applies to panel mounted breaker only.

<sup>4</sup> Provision only is \$411.

<sup>5</sup> Bell alarm has two (2) versions, bell alarm trip and bell alarm mechanism.

### MagneTrip™ Trip

Description	Product Number Suffix	List Price GO-108A	Ship Cycle
Adjustable current plus adjustable short-time and fixed instantaneous	D	\$1213.00	N
Inverted construction (Stationary only)	B	No Adder	

### Automatic Throwover Devices Pricing Guidelines<sup>6</sup>

Note: Automatic throwover using electrically operated fused switches is not available.

—**Molded case breakers**—stationary only and 2 breaker transfer only. Price from page 10-54 (Plug-In) and 10-62 (Bolt-On) and **add \$4267 list per breaker** (includes motor operator and auxiliary switch and bell alarm).

—**Insulated case**—price from page 10-52 and **add \$2121 list per breaker** (includes auxiliary switch, bell alarm and hidden ON button).

—All control functions operate from 115 Vac control power.

### Automatic Throwover<sup>7,8</sup>

Max. 480 Vac, Three-phase, three or four-wire

### Two Breaker Transfer U-U or U-G (Normal and Emergency Source Breakers)

Equipment Required	List Price GO-108A	Ship Cycle
1-GE FANUC 90/30 PLC (STD Programming) Special Programming refer to Factory RTF	\$25400.00	N+
2-Electric Operator Breakers (see type desired) AKR-50, AKR-75 or AKR-100 Power Circuit Breakers Insulated Case Circuit Breakers TP, THP, SS, SH Motor Operator TKM8, TKM12 or THKM12 Molded Case Circuit Breakers	See pricing guidelines above	
Exercise Time Switch	add \$1449.00	
UPS 1kVA	\$5850.00	

### Three Breaker Transfer U-U (Two-normal Source and One-tie Breaker)

Equipment Required	List Price GO-108A	Ship Cycle
1-GE FANUC 90/30 PLC (STD Programming) Special Programming refer to Factory RTF	\$32400.00	N+
3-Electric Operated Breakers (select type desired) AKR-50, AKR-75 or AKR-100 Power Circuit Breakers Insulated Case Circuit Breakers TP, THP, SS, SH Position Switch (electrical interlocking)	See pricing guidelines above \$995.00	
UPS 1kVA	\$5850.00	

<sup>6</sup>If drawout breakers are used, also add position switch (AKR) or bypass switch (TSS) to each breaker.

<sup>7</sup>Price includes three-phase voltage sensing time delay transfer and return control and test switches, control power transfer and control power transformers.

<sup>8</sup>Upgrades available—consult factory.



**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

JOB NAME		REQUISITION NO.		SUBMITTED BY	
SWITCHBOARD ITEM NO.		SWITCHBOARD MARK		OFFICE	
		PROP NO.		DATE	REV. NO.
DRAWINGS FOR:	<input type="checkbox"/> APPROVAL <input type="checkbox"/> RECORD				
VOLTAGE	<input type="checkbox"/> 208/Y120 <input type="checkbox"/> 240/Ø129 <input type="checkbox"/> 240Ø <input type="checkbox"/> 480/Y277 <input type="checkbox"/> 480Ø <input type="checkbox"/> 600Ø <input type="checkbox"/> DC    _____ VOLTS				
PHASE/WIRE	<input type="checkbox"/> 3Ø4w <input type="checkbox"/> 3Ø3w <input type="checkbox"/> 1Ø3w <input type="checkbox"/> 1/2N <input type="checkbox"/> F.N.				
MAIN RATING	_____ AMPERES				
SWITCHBOARD SHORT-CIRCUIT CURRENT RATING	_____ RMS SYM. AMPS				
LINE UP ARRANGEMENT	<input type="checkbox"/> REAR LINE-UP (STD) <input type="checkbox"/> FRONT & REAR LINE-UP <input type="checkbox"/> OUTDOOR				
NO ACCESS TO:	<input type="checkbox"/> REAR NOTE-ABOVE 2000 AMPERE REQUIRES REAR ACCESS <input type="checkbox"/> LEFT HAND SIDE <input type="checkbox"/> RIGHT HAND SIDE				
U/L SERVICE ENTRANCE LABEL	<input type="checkbox"/> YES <input type="checkbox"/> NO				
CIRCUIT IDENTIFICATION	<input type="checkbox"/> CARDHOLDER <input type="checkbox"/> NAMEPLATE    IF NAMEPLATE, ATTACH SCHEDULE				
DEVICES	MAINS <input type="checkbox"/> GROUP MOUNTED <input type="checkbox"/> STATIONARY <input type="checkbox"/> INDIVIDUALLY MOUNTED <input type="checkbox"/> DRAWOUT				
	FEEDERS <input type="checkbox"/> GROUP MOUNTED <input type="checkbox"/> COMBINATION <input type="checkbox"/> DRAWOUT <input type="checkbox"/> INDIVIDUALLY MOUNTED <input type="checkbox"/> STATIONARY				
GROUND FAULT	<input type="checkbox"/> INTEGRAL TO COMPONENT <input type="checkbox"/> GROUND BREAK SYSTEM <input type="checkbox"/> ZERO SEQUENCE <input type="checkbox"/> MONITOR PANEL <input type="checkbox"/> GROUND RETURN				
	<input type="checkbox"/> OTHER (SPECIFY) _____				
BUSING	MATERIAL	<input type="checkbox"/> ALUM. STD (TIN PLATE) <input type="checkbox"/> COPPER (SILVER PLATE) <input type="checkbox"/> OTHER (SPECIFY) _____			
	DENSITY	<input type="checkbox"/> ALUM. STD 750 AMPERES/SQ. INCH <input type="checkbox"/> OTHER (SPECIFY) _____ <input type="checkbox"/> COPPER 1000 AMPERES/SQ. INCH			
	BRACING	<input type="checkbox"/> 50 KAIC (STD) <input type="checkbox"/> OTHER _____			
	PROVISIONS FOR FUTURE EXTENSIONS	<input type="checkbox"/> NO (STD) <input type="checkbox"/> YES <input type="checkbox"/> TAPERED BUS (STD) <input type="checkbox"/> NON-TAPERED BUS			
INCOMING FEED	LOCATION: <input type="checkbox"/> TOP <input type="checkbox"/> BOTTOM		<input type="checkbox"/> L.H. SECTION <input type="checkbox"/> R.H. SECTION <input type="checkbox"/> CENTER SECTION		SECTION NO. _____
	<input type="checkbox"/> LUGS <input type="checkbox"/> STUDS (NO LUGS) <input type="checkbox"/> ALUM      TYPES OF CABLE & SIZE <input type="checkbox"/> MECHANICAL (STD) <input type="checkbox"/> COPPER <input type="checkbox"/> QTY/PHASE _____ MCM <input type="checkbox"/> COMPRESSION <input type="checkbox"/> NEUT QTY/PHASE _____ MCM				
	<input type="checkbox"/> BUSWAY TYPE _____ <input type="checkbox"/> ALUM <input type="checkbox"/> COPPER <input type="checkbox"/> INTERNAL GROUND <input type="checkbox"/> OTHER (SPECIFY) TYPE _____				
REQUIRES TRANSITION SECTION	<input type="checkbox"/> TRANSFORMER KVA _____ <input type="checkbox"/> DRY <input type="checkbox"/> LIQUID <input type="checkbox"/> CORE & COIL <input type="checkbox"/> ROME <input type="checkbox"/> VAPORTRAN* <input type="checkbox"/> OTHER (SPECIFY) _____ <input type="checkbox"/> FORT WAYNE <input type="checkbox"/> OTHER (SPECIFY) _____				
OUTGOING FEEDERS EXIT	<input type="checkbox"/> TOP <input type="checkbox"/> BOTTOM <input type="checkbox"/> MIXED				
POWER CO. METERING COMPARTMENT	REQUIRED:	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> HOT SEQUENCE (BEFORE MAIN) <input type="checkbox"/> COLD SEQUENCE (AFTER MAIN)			
	SPECIFY:	CT	QTY.	SIZE	CAT. NO.
		PT	QTY.	SIZE	CAT. NO.
		POWER CO. NAME: _____			
		CT'S/PT'S TO BE INSTALLED BY _____ FURNISHED BY _____			
DIMENSION RESTRICTIONS	<input type="checkbox"/> NONE <input type="checkbox"/> SPECIFY				
OPTIONS	<input type="checkbox"/> (SPECIFY)				



## Switchboards

# Spectra® Series Switchboards

## Switchboard Schedule

## Section 10

JOB NAME REQUISITION NO.		SWITCHBOARD ITEM NO.	SWITCHBOARD MARK
CONTRACTOR	DISTRIBUTOR	SUBMITTED BY DATE	

[illegible]

**Publications and Reference:** See Section 22 for a complete list of additional product-related publications

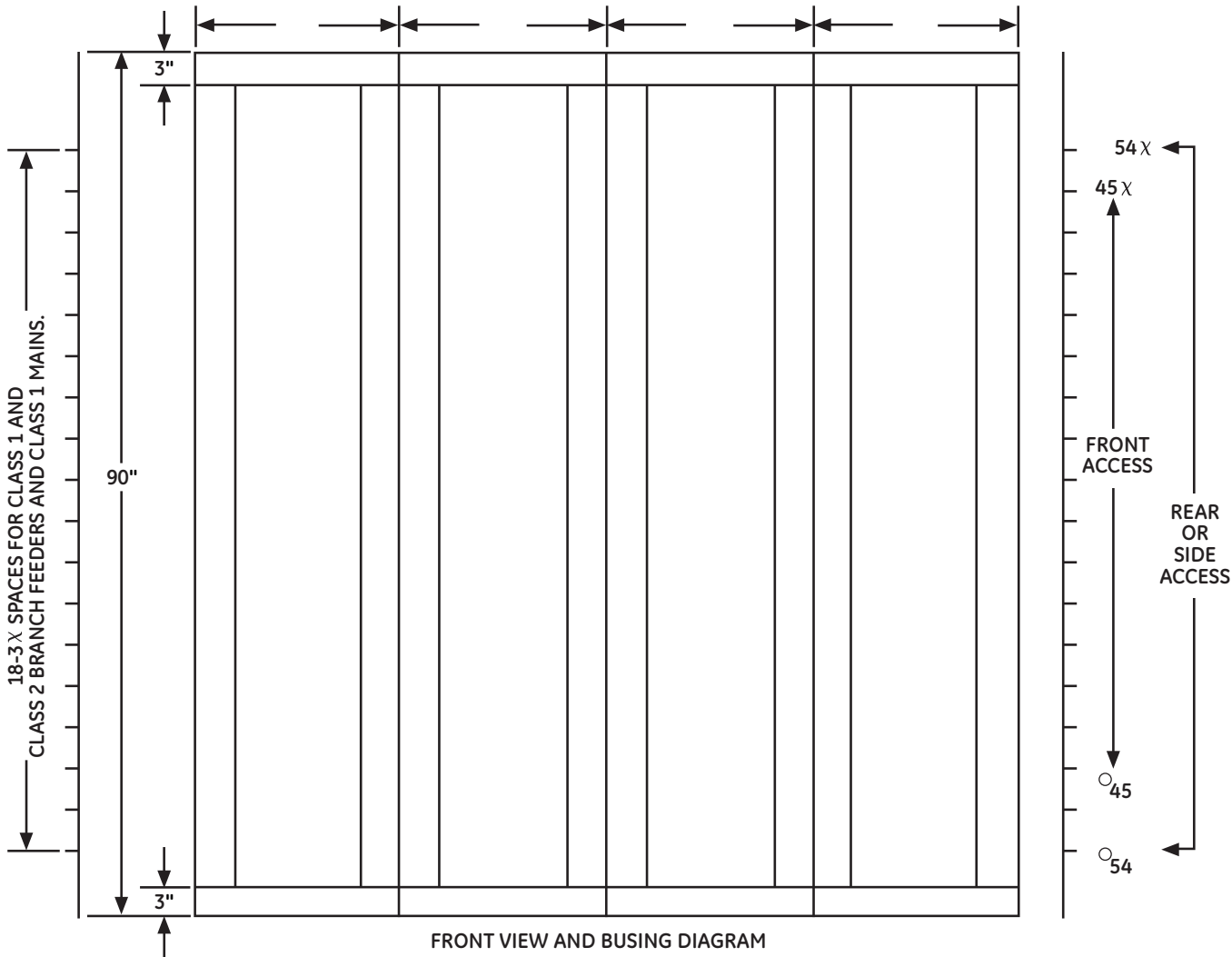
Rev. 1/08  
Prices and data subject  
to change without notice

www.geeelectrical.com

BuyLog® Catalog

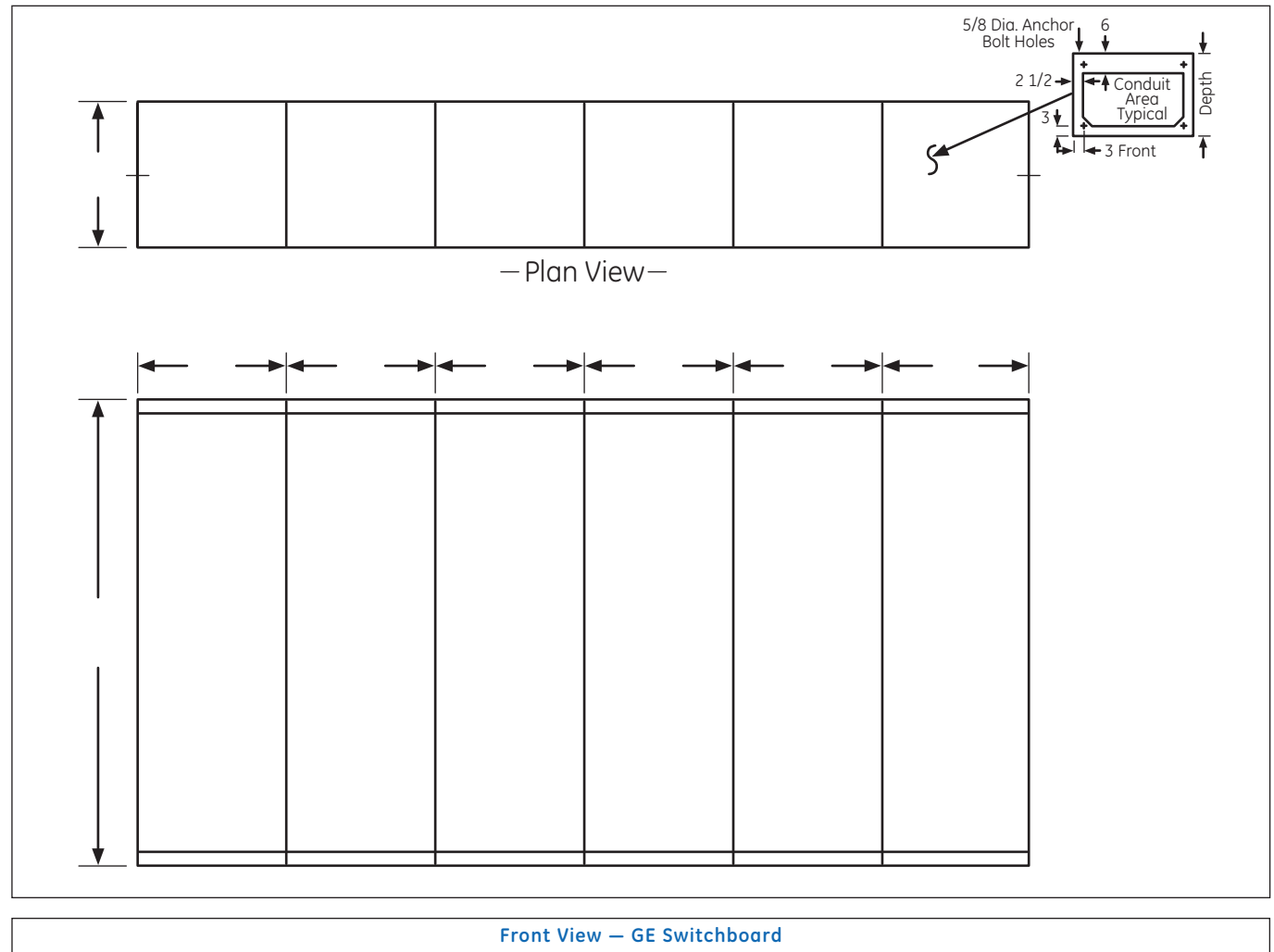
10-73

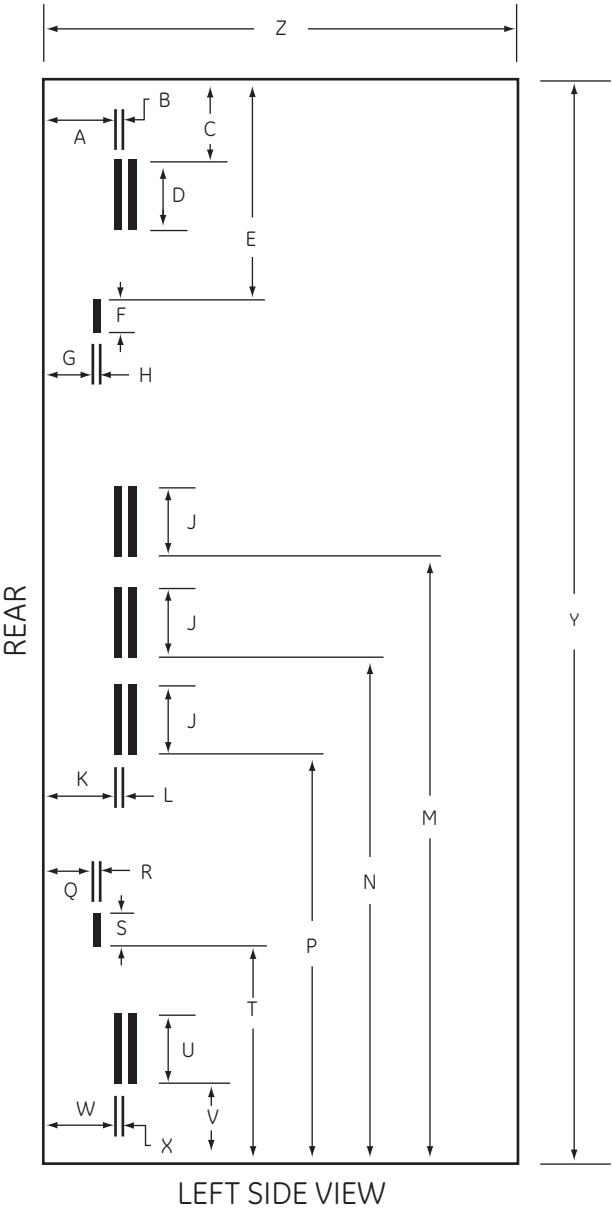
JOB NAME		DISTRIBUTOR	
LOCATION		LOCATION	
CONTRACTOR		DISTR. ORDER NO.	
APPROVED BY		SALES ENGINEER	
DATE		GE REQN. NO.	
UTILITY	#	FACTORY ORDER NO.	
DRAWN BY		DATE	SHEET ____ OF ____
		ITEM NO.	



NOTE: This layout is for estimating purposes only. It is not to be used for construction unless factory verified.



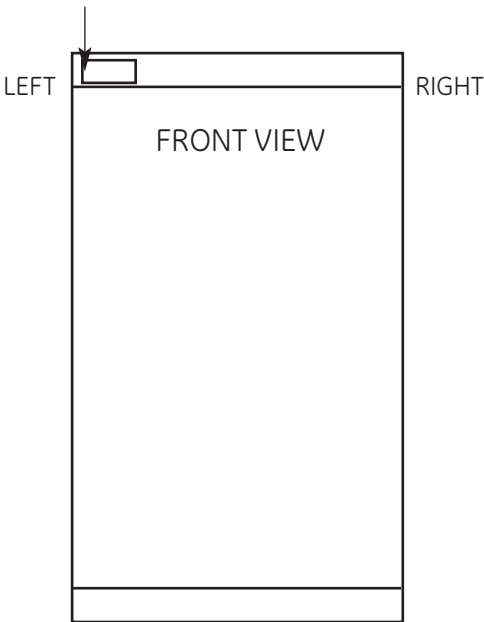




A \_\_\_\_\_ N \_\_\_\_\_  
B \_\_\_\_\_ P \_\_\_\_\_  
C \_\_\_\_\_ Q \_\_\_\_\_  
D \_\_\_\_\_ R \_\_\_\_\_  
E \_\_\_\_\_ S \_\_\_\_\_  
F \_\_\_\_\_ T \_\_\_\_\_  
G \_\_\_\_\_ U \_\_\_\_\_  
H \_\_\_\_\_ V \_\_\_\_\_  
J \_\_\_\_\_ W \_\_\_\_\_  
K \_\_\_\_\_ X \_\_\_\_\_  
L \_\_\_\_\_ Y \_\_\_\_\_  
M \_\_\_\_\_ X \_\_\_\_\_

Qty of bus bars per phase = \_\_\_\_\_  
Qty of bus bars per neutral = \_\_\_\_\_  
Phase and neutral material = \_\_\_\_\_  
Ground material = \_\_\_\_\_

\*Supply complete nameplate information:



Location of neutral and ground (top or bottom) to be determined by locations in existing job.

\*Job # \_\_\_\_\_  
Req. # \_\_\_\_\_  
Section # \_\_\_\_\_  
Supply Amps \_\_\_\_\_  
Section Amps \_\_\_\_\_  
Bracing \_\_\_\_\_  
Wire \_\_\_\_\_ Voltage \_\_\_\_\_