

SIEMENS



Super Blue Pennant™ Switchboard

Selection and Application Guide

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Super Blue Pennant switchboard

The Siemens switchboard engineered for reliability and durability.
Distributor stocked for convenience.

Ampere ratings:

400-600-800 Ampere circuit breaker main

400-600 Ampere fusible Vacu-Break® main

Voltage ratings:

240/120 Volts 1 Phase, 3 Wire

240/120 Volts 3 Phase, 4 Wire Delta

240 Volts 3 Phase, 3 Wire

208Y/120 Volts 3 Phase, 4 Wire

480Y/277 Volts 3 Phase, 4 Wire

480 Volts 3 Phase, 3 Wire

Short circuit ratings:

The short circuit rating is limited to the lowest current interrupting rating, at the supply voltage, of any device installed.

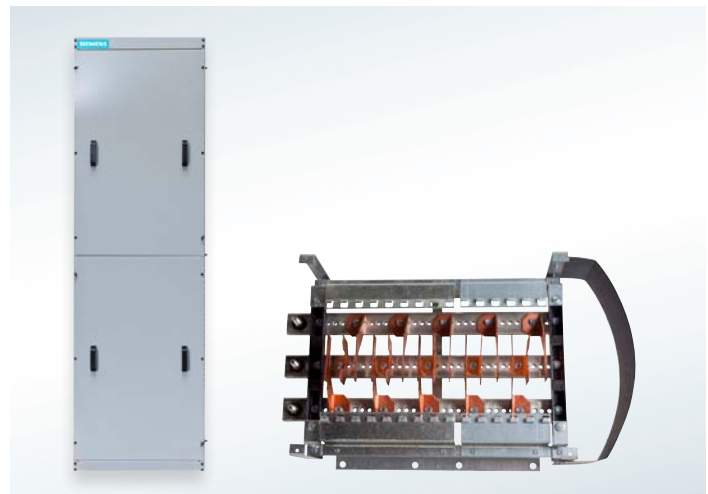
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Features



The Blue Pennant Service Entrance Switchboard is a single unit system designed to meet the needs of mainovercurrent protection with distribution devices for medium duty service applications. Main service disconnects can be either a Siemens Vacu-Break® fusible switch or Siemens circuit breaker. Each provides dependable performance with series rated combinations available. All switchboards meet EUSERC utility requirements, and are suitable for use only as service equipment. Warehouse stock for fast delivery.

- A. NEMA Type 1 indoor or Type 3R outdoor self-contained enclosures are constructed of code gauge steel and painted ANSI-61 light gray.
- B. Rating label information is clearly visible on the equipment front panel. Danger, short circuit rating labels and UL listing label present necessary information to conform with NEMA Standard PB-2.
- C. Metering and test block provisions meet EUSERC utility specifications.
- D. Incoming main lugs are mechanical screw-type mounted on studs accepting a wide range of cable sizes. These can be removed and replaced with compression lugs supplied by the utility, if required.
- E. Barriercd hot sequence utility metering and fully bussed power company current transformer compartment meet EUSERC utility standards.
- F. Service disconnect can be fusible Vacu-Break switch through 200,000 AIC or circuit breaker with maximum rating of 65,000 AIC at 240 volts and 35,000 AIC at 480 volts.
- G. Distribution panel kits are optional and field addable with ratings of 400-800 amperes. Up to 40 branch circuit provisions available, 18 branch circuit minimum.
 - High interrupting capacity subfeed kits with molded case circuit breaker ratings of 225 or 400 amperes.
 - Series rated combinations are available. Consult sales office.



Circuit breaker service section

Indoor circuit breaker main



Section width: all models — 32"
 Section depth: all models — 14^{1/2}"
 ① Does not include load side lugs, distribution panel or subfeed kits.

Main device ampere rating	Service voltage	Catalog number ①		Meter socket clips	Distribution kits available	Approximate weight	
		Indoor	Outdoor			Indoor	Outdoor
400 Ampere Line Lugs (2) — 3/0-500 kcmil (Copper or Aluminum) Breaker Rated 65,000A IR Symmetrical at 240 Volts 35,000A IR Symmetrical at 480 Volts Type JD6	120/240; 1 Phase, 3 Wire	PB224	WPB224	5	PQ2630 PQ2612	320	1050
	240/120; 3 Phase, 4 Wire delta 240; 3 Phase, 3 Wire 208Y/120; 3 Phase, 4 Wire	PB424	WPB424	15	PQ4630 PQ4612	335	1060
	480Y/277; 3 Phase, 4 Wire 480; 3 Phase, 3 Wire	PB444	WPB444	15	PE4630 PF4606	335	1060
600 Ampere Line Lugs (2) — 3/0-500 kcmil (Copper or Aluminum) Breaker Rated 65,000A IR Symmetrical at 240 Volts 35,000A IR Symmetrical at 480 Volts Type LD6	120/240; 1 Phase, 3 Wire	PB226	WPB226	5	PQ2630 PQ2612	320	1050
	240/120; 3 Phase, 4 Wire delta 240; 3 Phase, 3 Wire 208Y/120; 3 Phase, 4 Wire	PB426	WPB426	15	PQ4630 PQ4612	335	1060
	480Y/277; 3 Phase, 4 Wire 480; 3 Phase, 3 Wire	PB446	WPB446	15	PE4630 PF4606	335	1060
800 Ampere Line Lugs (3) — 3/0-500 kcmil (Copper or Aluminum) Breaker Rated 65,000A IR Symmetrical at 240 Volts 50,000A IR Symmetrical at 480 Volts Type MD6	120/240; 1 Phase, 3 Wire	PB228	WPB228	5	PQ2840 PQ2816	460	1090
	240/120; 3 Phase, 4 Wire delta 240; 3 Phase, 3 Wire 208Y/120; 3 Phase, 4 Wire	PB428	WPB428	15	PQ4840 PQ4818	475	1090
	480Y/277; 3 Phase, 4 Wire 480; 3 Phase, 3 Wire	PB448	WPB448	15	PE4840 PF4809	475	1090



Vacu-break service section

Indoor fusible main switch



Main device ampere rating	Service voltage	Catalog number ①		Meter socket clips	Distribution kits available	Approximate weight	
		Indoor	Outdoor			Indoor	Outdoor
400 Ampere Line Lugs (2) — 3/0-500 kcmil (Copper or Aluminum) Breaker Rated 65,000A IR Symmetrical at 240 Volts 35,000A IR Symmetrical at 480 Volts Type JD6	120/240; 1 Phase, 3 Wire	PF224	WPF224	5	PQ2630 PQ2612	365	1094
	240/120; 3 Phase, 4 Wire delta 240; 3 Phase, 3 Wire 208Y/120; 3 Phase, 4 Wire	PF424	WPF424	15	PQ4630 PQ4612	375	1110
	480Y/277; 3 Phase, 4 Wire 480; 3 Phase, 3 Wire	PF444	WPF444	15	PE4630 PF4606	375	1110
600 Ampere Line Lugs (2) — 3/0-500 kcmil (Copper or Aluminum) Breaker Rated 65,000A IR Symmetrical at 240 Volts 35,000A IR Symmetrical at 480 Volts Type LD6	120/240; 1 Phase, 3 Wire	PF226	WPF226	5	PQ2630 PQ2612	370	1100
	240/120; 3 Phase, 4 Wire delta 240; 3 Phase, 3 Wire 208Y/120; 3 Phase, 4 Wire	PF426	WPF426	15	PQ4630 PQ4612	390	1110
	480Y/277; 3 Phase, 4 Wire 480; 3 Phase, 3 Wire	PF446	WPF446	15	PQ4630 PF4606	390	1120

Section width: all models — 32"

Fuses not included.

① Does not include load side lugs, distribution panel or subfeed kits.

Components

Main device load side lugs

Main device load side lugs are adaptable to either circuit breaker or fusible switch construction. Ampere ratings for fusible switches are 400 or 600 amperes and 400, 600 or 800 amperes for circuit breakers.

Discription	Ampere rating	Catalog number	Wire range
For fusible switch	400	LKF4	(1) — 3/0-750 kcmil (Cu or Al)
	600	LKF6	(2) — 3/0-500 kcmil (Cu or Al)
For circuit breaker	400	LKB4	(1) — 600-750 kcmil (Cu or Al)
	600	LKB6	(2) — 3/0-350 kcmil (Cu or Al)
	800	LKB8	(2) — 600-750 kcmil (Cu or Al)

NOTE: Includes phase and neutral load lugs and neutral link assembly.

Distribution panelboard kits

Super Blue Pennant switchboards can accommodate one distribution panelboard assembly per unit. With ratings of 400, 600 or 800 amperes, the distribution panels will allow mounting of up to 40 single pole branch breakers in systems through 480 volts.



Ampere rating	Service voltage	Number and type of circuit breaker poles				Catalog number	Weight (pounds)	Wiring diagrams (page 9)
		QP or HQ	ED4	QJ2 or QJH2	FXD6 ^③			
400 and 600	120/240; 1 Phase, 3 Wire	30	—	—	—	PQ2630	39	1
		12	—	12	—	PQ2612		2
	240/120; 3 Phase, 4 Wire delta ^① 240; 3 Phase, 3 Wire ^② 208Y/120; 3 Phase, 4 Wire	30	—	—	—	PQ4630	42	3
		12	—	12	—	PQ4612		4
	480Y/277; 3 Phase, 4 Wire 480; 3 Phase, 3 Wire	—	30	—	—	PE4630	42	3
		—	12	—	6	PF4606	65	9
800	120/240; 1 Phase, 3 Wire	40	—	—	—	PQ2840	65	5
		12	—	16	—	PQ2816		6
	240/120; 3 Phase, 4 Wire delta ^① 240; 3 Phase, 3 Wire 208Y/120; 3 Phase, 4 Wire	40	—	—	—	PQ4840	70	7
		12	—	18	—	PQ4818		8
	480Y/277; 3 Phase, 4 Wire 480; 3 Phase, 3 Wire	—	40	—	—	PE4840	65	7
		—	12	—	9	PF4809	70	10

① 1-pole breakers must not be connected to "B" phase.

② 2-pole breakers must be rated 240V.

③ 2-pole FJ6 breaker requires 3-pole space.

Circuit breakers

Circuit breakers for use with distribution panelboard kits

Breaker type QP

Ampere rating	Catalog number		
	1-Pole	2-Pole	3-Pole
10	Q110	Q210	Q315
15	Q115	Q215	Q320
20	Q120	Q220	Q325
25	Q125	Q225	Q330
30	Q130	Q230	Q335
35	Q135	Q235	Q340
40	Q140	Q240	Q345
45	Q145	Q245	Q350
50	Q150	Q250	Q360
60	Q160	Q260	Q370
70	Q170	Q270	Q380
80	-	Q280	Q390
90	-	Q290	Q3100
100	-	Q2100	-
110	-	Q2110	-
125	-	Q2125	-

Breaker type HQP

Ampere rating	Catalog number		
	1-Pole	2-Pole	3-Pole
15	Q115HH	Q215HH	Q315HH
20	Q120HH	Q220HH	Q320HH
25	Q125HH	Q225HH	Q325HH
30	Q130HH	Q230HH	Q330HH
35	Q135HH	Q235HH	Q335HH
40	Q140HH	Q240HH	Q340HH
45	Q145HH	Q245HH	Q345HH
50	Q150HH	Q250HH	Q350HH
60	Q160HH	Q260HH	Q360HH
70	Q170HH	Q270HH	Q370HH
80	-	Q280HH	Q380HH
90	-	Q290HH	Q390HH
100	-	Q2100HH	Q3100HH
110	-	Q2110HH	-
125	-	Q2125HH	-

Breaker type ED4

Ampere rating	Catalog number		
	1-Pole	2-Pole	3-Pole
60	-	QJ22B060	QJ23B060
70	-	QJ22B070	QJ23B070
80	-	QJ22B080	QJ23B080
90	-	QJ22B090	QJ23B090
100	-	QJ22B100	QJ23B100
110	-	QJ22B110	QJ23B110
125	-	QJ22B125	QJ23B125
150	-	QJ22B150	QJ23B150
175	-	QJ22B175	QJ23B175
200	-	QJ22B200	QJ23B200
225	-	QJ22B225	QJ23B225

Breaker type QPH

Ampere rating	Catalog number		
	1-Pole	2-Pole	3-Pole
15	Q115H	Q215H	Q315H
20	Q120H	Q220H	Q320H
25	Q125H	Q225H	Q330H
30	Q130H	Q230H	Q340H
35	Q135H	Q235H	Q350H
40	Q140H	Q240H	Q360H
45	Q145H	Q245H	Q370H
50	Q150H	Q250H	Q390H
60	Q160H	Q260H	Q3100H
70	Q170H	Q270H	-
80	-	Q280H	-
90	-	Q290H	-
100	-	Q2100H	-
110	-	Q2110H	-
125	-	Q125H	-

Breaker type ED4

Ampere rating	Catalog number		
	1-Pole	2-Pole	3-Pole
15	ED41B015	ED42B015	ED43B015
20	ED41B020	ED42B020	ED43B020
25	ED41B025	ED42B025	ED43B025
30	ED41B030	ED42B030	ED43B030
35	ED41B035	ED42B035	ED43B035
40	ED41B040	ED42B040	ED43B040
45	ED41B045	ED42B045	ED43B045
50	ED41B050	ED42B050	ED43B050
60	ED41B060	ED42B060	ED43B060
70	ED41B070	ED42B070	ED43B070
80	ED41B080	ED42B080	ED43B080
90	ED41B090	ED42B090	ED43B090
100	ED41B100	ED42B100	ED43B100

Breaker type QJH2

Ampere rating	Catalog number		
	1-Pole	2-Pole	3-Pole
60	-	QJH22B060	QJH23B060
70	-	QJH22B070	QJH23B070
80	-	QJH22B080	QJH23B080
90	-	QJH22B090	QJH23B090
100	-	QJH22B100	QJH23B100
110	-	QJH22B110	QJH23B110
125	-	QJH22B125	QJH23B125
150	-	QJH22B150	QJH23B150
175	-	QJH22B175	QJH23B175
200	-	QJH22B200	QJH23B200
225	-	QJH22B225	QJH23B225

Breaker type QJ2H

Ampere rating	Catalog number		
	1-Pole	2-Pole	3-Pole
60	-	QJ22B060H	QJ23B060H
70	-	QJ22B070H	QJ23B070H
80	-	QJ22B080H	QJ23B080H
90	-	QJ22B090H	QJ23B090H
100	-	QJ22B100H	QJ23B100H
110	-	QJ22B110H	QJ23B110H
125	-	QJ22B125H	QJ23B125H
150	-	QJ22B150H	QJ23B150H
175	-	QJ22B175H	QJ23B175H
200	-	QJ22B200H	QJ23B200H
225	-	QJ22B225H	QJ23B225H

Circuit breakers cont.

Circuit breakers for use with subfeed kits

Breaker type FXD6

Ampere rating	Catalog number		
	1-Pole	2-Pole	3-Pole
70	-	FXD62B070	FXD63B070
80	-	FXD62B080	FXD63B080
90	-	FXD62B090	FXD63B090
100	-	FXD62B100	FXD63B100
110	-	FXD62B110	FXD63B110
125	-	FXD62B125	FXD63B125
150	-	FXD62B150	FXD63B150
175	-	FXD62B175	FXD63B175
200	-	FXD62B200	FXD63B200
225	-	FXD62B225	FXD63B225
250	-	FXD62B250	FXD63B250

Breaker type HFXD6

Ampere rating	Catalog number		
	1-Pole	2-Pole	3-Pole
70	-	HFXD62B070	HFXD63B070
80	-	HFXD62B080	HFXD63B080
90	-	HFXD62B090	HFXD63B090
100	-	HFXD62B100	HFXD63B100
110	-	HFXD62B110	HFXD63B110
125	-	HFXD62B125	HFXD63B125
150	-	HFXD62B150	HFXD63B150
175	-	HFXD62B175	HFXD63B175
200	-	HFXD62B200	HFXD63B200
225	-	HFXD62B225	HFXD63B225
250	-	HFXD62B250	HFXD63B250

Breaker type FD6

Ampere rating	Catalog number		
	1-Pole	2-Pole	3-Pole
70	-	FD62B070	FD63B070
80	-	FD62B080	FD63B080
90	-	FD62B090	FD63B090
100	-	FD62B100	FD63B100
110	-	FD62B110	FD63B110
125	-	FD62B125	FD63B125
150	-	FD62B150	FD63B150
175	-	FD62B175	FD63B175
200	-	FD62B200	FD63B200
225	-	FD62B225	FD63B225
250	-	FD62B250	FD63B250

Breaker type HFD6

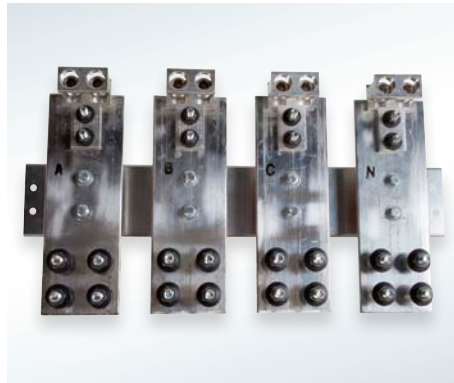
Ampere rating	Catalog number		
	1-Pole	2-Pole	3-Pole
70	-	HFD62B070	HFD63B070
80	-	HFD62B080	HFD63B080
90	-	HFD62B090	HFD63B090
100	-	HFD62B100	HFD63B100
110	-	HFD62B110	HFD63B110
125	-	HFD62B125	HFD63B125
150	-	HFD62B150	HFD63B150
175	-	HFD62B175	HFD63B175
200	-	HFD62B200	HFD63B200
225	-	HFD62B225	HFD63B225
250	-	HFD62B250	HFD63B250

Kits & accessories



Lug landing kits

Available in 400, 600 or 800 amperes, lug landing kits used in the underground pull section are available for single phase three wire, three phase three wire or three phase four wire systems to meet application requirements.



Amprere rating	Description	Catalog number
400	1 Phase, 3 Wire or 3 Phase, 3 Wire 3 Phase, 4 Wire	PLL44 ①
600	1 Phase, 3 Wire or 3 Phase, 3 Wire 3 Phase, 4 Wire	PLL46 ①
800	1 Phase, 3 Wire or 3 Phase, 3 Wire 3 Phase, 4 Wire	PLL48 ①

① A PUG26 or WPUG26 Underground pull section is required when using these lug landing kits.

Meter sockets

Meter sockets are offered with five, six, eight, 13 or 15 jaw capabilities mounted on the meter door. Socket jaws are tin-plated copper with spring-steel reinforced clips for reliable contact pressure. Five jaw sockets are designed to accommodate field additions of a sixth jaw. All sockets have latch type sealing rings.

Description	Catalog number
5 clip meter socket with ring	PMS5
6 clip meter socket with ring	PMS6
8 clip meter socket with ring	PMS8
13 clip meter socket with ring	PMS13
15 clip meter socket with ring	PMS15

Underground pull sections and wireway

Underground pull sections may be used for bottom entry of line side cable; a loadside wireway is available for top exit of load cables. On type 3R outdoor units, the underground pull section may be used either as a pull section or a loadside wireway. Units may be located on either side of the service section.

Description	Catalog number
14.5" deep, 90" high 14" wide (12" opening) Indoor	PUG14
15" wide (12" opening) Outdoor	WPUG14
26" wide (24" opening) Indoor	PUG26
27" wide (24" opening) Outdoor	WPUG26
10" wide (load wiring)	PLW10

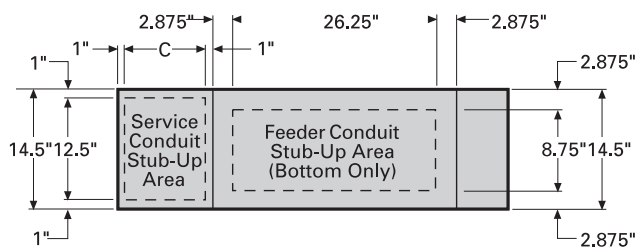
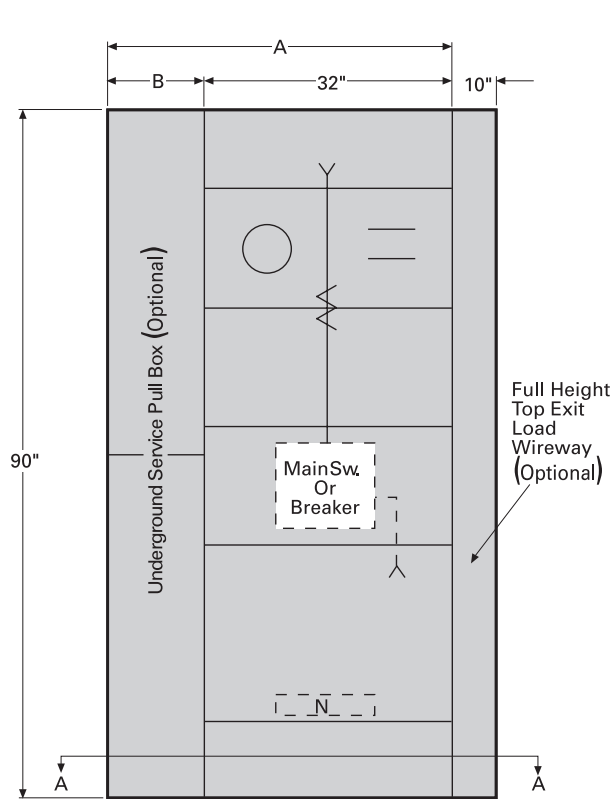
Meter compartment doors

Super Blue Pennant Switchboards have two 15-inch high meter compartment doors, one with meter socket and provision for a test switch, one blank. For requirement flexibility, optional meter doors allow conversions to all common EUSERC utility metering configurations as well as blank doors for remote metering applications.

Description	Catalog number
Meter compartment door (32" wide x 15" high) for "S" base socket with test block cutout (order necessary meter base separately)	PSP32
Meter compartment door (32" wide x 30" high) for 2 "S" base meters with mounting provisions for test block and printing demand meter (order meter base separately) Left hand hinge or right hand hinge	PSDP32
Blank meter compartment door (32" wide x 15" high)	PBP32

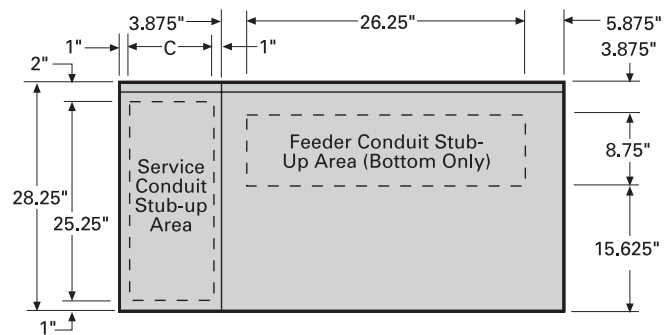
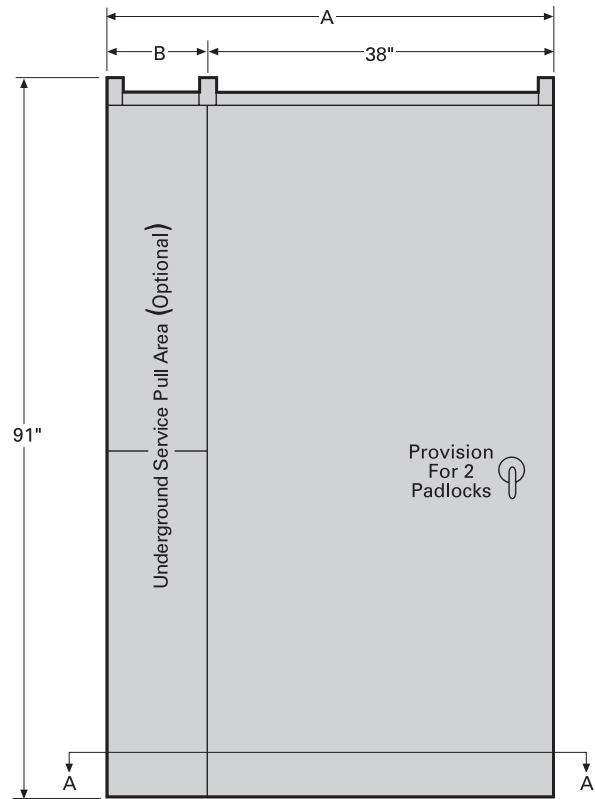
Dimensions and conduit entry

Type 1-Indoor



Description	Dimensions (inches)		
	A	B	C
Without Lug Landing	46	14	12
With Lug Landing	58	26	24

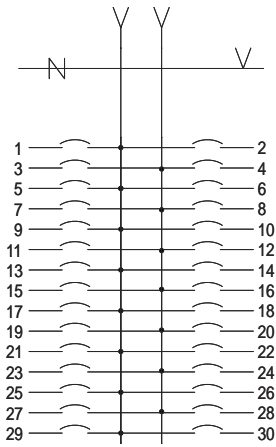
Type 3R-Outdoor



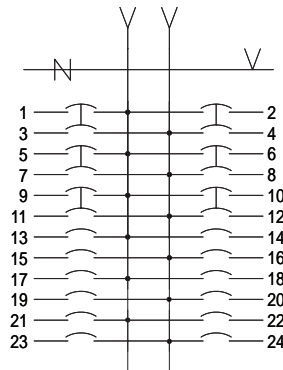
Description	Dimensions (inches)		
	A	B	C
Without Lug Landing	53	15	13
With Lug Landing	65	27	25

Wiring diagrams

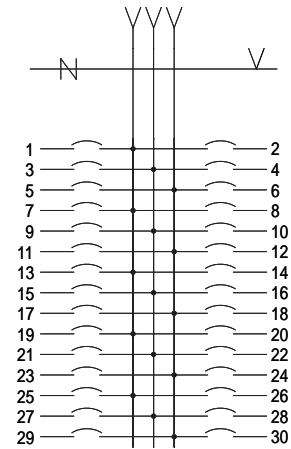
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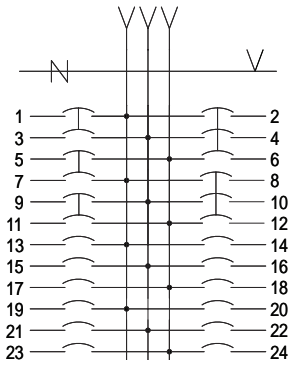
2. PQ2612



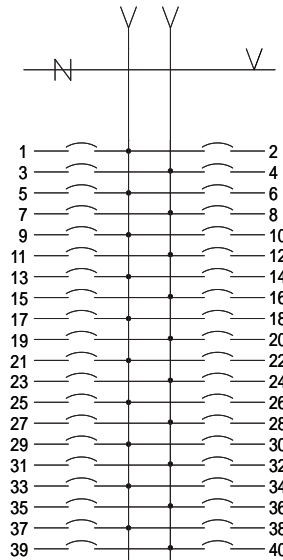
3. PQ4630, PE4630



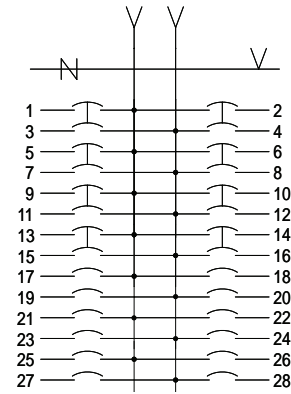
4. PQ4612



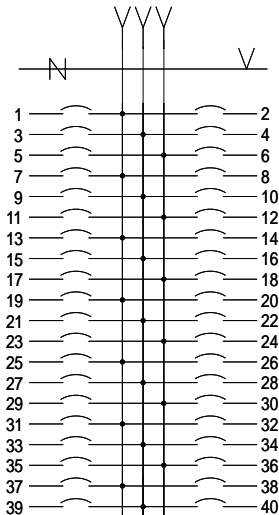
5. PQ2840



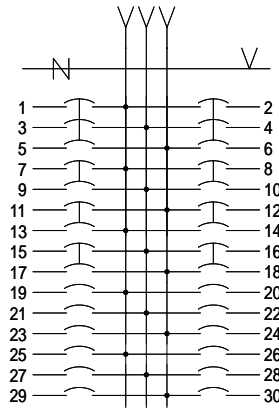
6. PQ2816



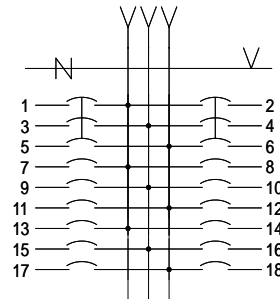
7. PQ4840, PE4840



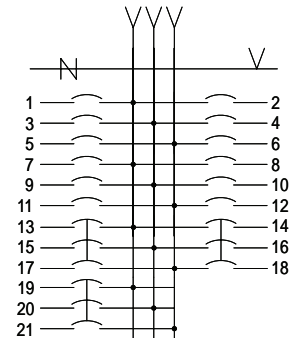
8. PQ4818



9. PF4606



10. PF4809



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