

POWERSTAC™
Modular Power Strips

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How To Create Order-Entry Model Numbers for POWERSTAC™ Modular Power Strips

Step 1:

Determine the number of 15A, 20A, and 30A circuits required. (Minimum 2, maximum 15) See “Junction Box Capacity” page for allowable combinations and box fill limits. (Note: Modules that are rated 15A have 12ga wire and are counted as 20A circuits for junction box fill considerations.)

Step 2:

Determine strip length required (30", 60", or 75") taking into consideration the rack size, number of circuits, and desired location of receptacles inside rack.

Note:

75" strips are designated by a single letter (K, N, P, Q, R, T, or W). See “Worksheet for 75-inch”.

60" strips are designated by the letter **X** followed by a single digit. See “Worksheet for 60-inch”.

30" strips are designated by the letter **Y** followed by two digits. See “Worksheet for 30-inch”.

Select appropriate worksheet and choose chassis / junction box (inside or outside) or conduit whip combination based on the number of circuits required. Write chosen designator in left-hand box(es) as indicated.

Step 3:

Choose a module for the first position (nearest the junction box or conduit). See module detail pages for choices. This module will be identified as “Circuit #1” (unless it is a blank, in which case the first active module nearest the junction box or conduit will be identified as circuit #1).

Write module designator in space(s) next to J-box or conduit designator (after the dash).

IMPORTANT NOTE:

Five-inch modules have a ONE character designator.

Ten-inch modules have a TWO character designator starting with the letter “B” followed by one digit.

Fifteen-inch modules have a THREE character designator starting with the letter “C” followed by two digits.

Place ONLY ONE character in each box.

Choose a module for the next position adjacent the first module. Write module designator in space(s) to the right of the first module. DO NOT skip any spaces or leave any spaces blank. This module will be identified as “Circuit #2”

Repeat these steps until all spaces are full. Each additional module (except for blanks) will be identified sequentially (circuit #3, circuit #4, etc.). The module closest to the junction box or conduit will always be “Circuit #1.”

NOTE:

75" strip model numbers must have 16 characters.

60" strip model numbers must have 14 characters.

30" strip model numbers must have 9 characters.

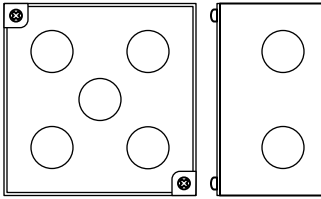
If the model number you have created has more or less characters than indicated above, then start over and try again. Refer to sample worksheets for guidance.

Indicate on worksheet desired location of power strip and orientation of receptacles in rack. See Sample Worksheet. Module orientation is field changeable. See Module Repositioning page. If not specified, default location is left rear corner of rack (as viewed from rear of rack), receptacles facing to inside.



Junction Box Capacity for POWERSTAC™ Modular Power Strips

Used on:
 75" strips: K and T
 60" strips: X1 and X5
 30" strips: Y11 and Y44

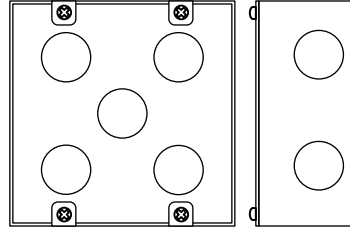


4" Sq. x 2 1/8"

Max # of Circuits
 Allowable Combinations

<u>20A</u>	<u>30A</u>
3	0
2	1
0	2

Used on:
 75" strips: N and W
 60" strips: X2 and X6
 30" strips: Y22 and Y55

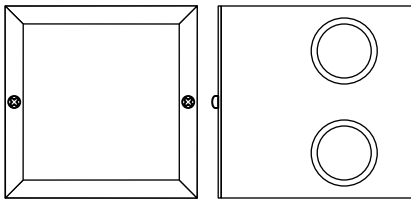


4 11/16" Sq. x 2 1/8"

Max # of Circuits
 Allowable Combinations

<u>20A</u>	<u>30A</u>
4	0
3	1
2	2
1	3
0	4

Used on:
 75" strip: P
 60" strips: X3 and X7
 30" strips: Y33 and Y66

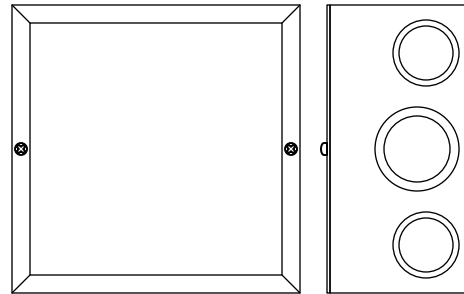


4" x 4" x 4"

Max # of Circuits
 Allowable
 Combinations

<u>20A</u>	<u>30A</u>
6	0
5	1
4	2
3	3
2	4
1	5
0	6

Used on:
 75" strip: Q
 60" strips: X4 and X8

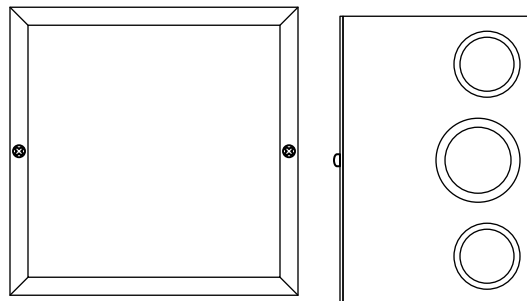


6" x 6" x 3"

Max # of Circuits
 Allowable
 Combinations

<u>20A</u>	<u>30A</u>
12	0
10	1
9	2
7	3
6	4
4	5
2	6
0	7

Used on:
 75" strip: R



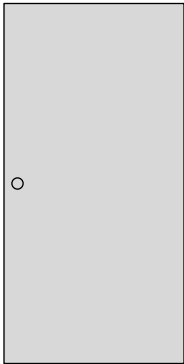
6" x 6" x 4"

Max # of Circuits
 Allowable Combinations

<u>20A</u>	<u>30A</u>
15	0
14	1
13	2
12	3
11	4
10	5
9	6
7	7
6	8
5	9
4	10
3	11
2	12
1	13
0	14

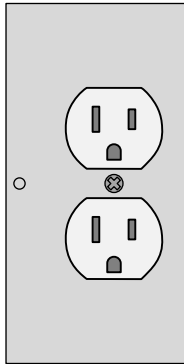
Worksheet Designations for Five Inch POWERSTAC™ Modules

1



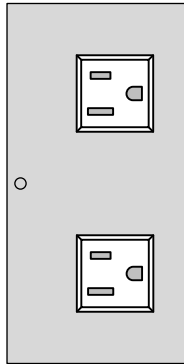
Blank
(space filler)

2



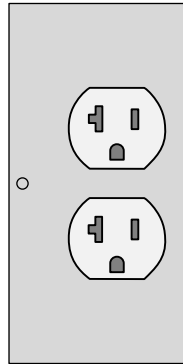
NEMA 5-15R
1 duplex

3



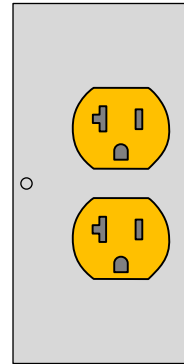
NEMA 5-15R
2 singles

4



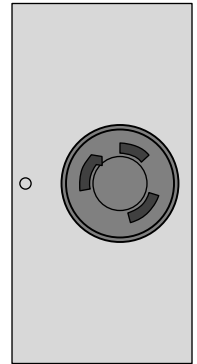
NEMA 5-20R
1 duplex

5



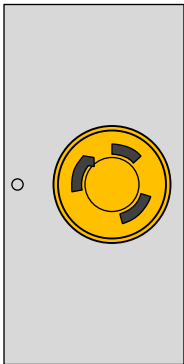
NEMA 5-20R IG
1 duplex, iso. Gnd.

6



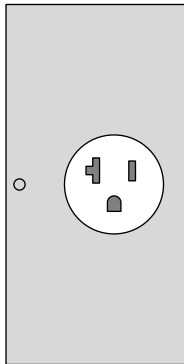
NEMA L5-30R
Twist-lock
125V 30A

7



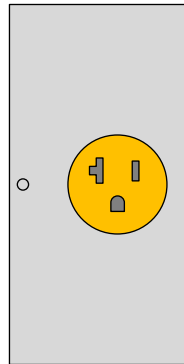
NEMA L5-30R IG
Twist-lock
iso. ground
125V 30A

8



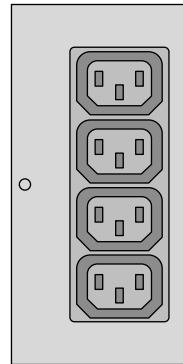
NEMA 5-20R
(single)

9



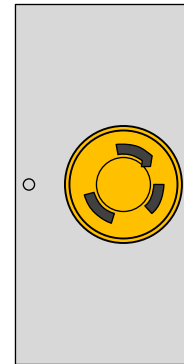
NEMA 5-20R IG
(single,
iso. ground)

G



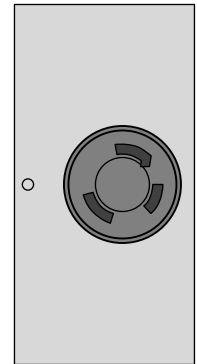
IEC-C13 (4)
15A

L



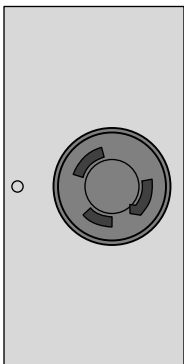
NEMA L6-20R IG
Twist-lock
iso. ground
250V 20A

M



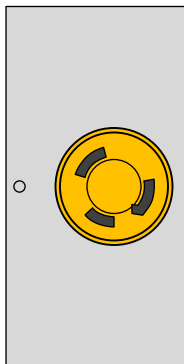
NEMA L6-30R
Twist-lock
250V 30A

V



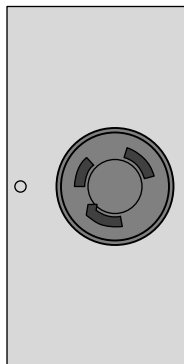
NEMA L5-20R
Twist-lock
125V 20A

X



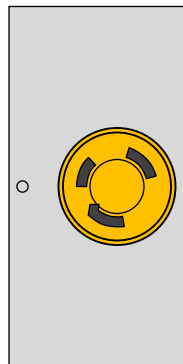
NEMA L5-20R IG
Twist-lock
iso. ground
125V 20A

Y



NEMA L6-20R
Twist-lock
250V 20A

Z



NEMA L6-30R IG
Twist-lock
iso. ground
250V 30A

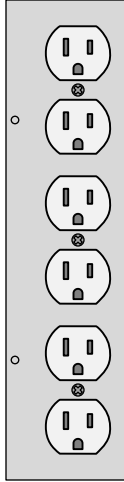
Worksheet Designations for *Ten Inch POWERSTAC™* Modules

B1



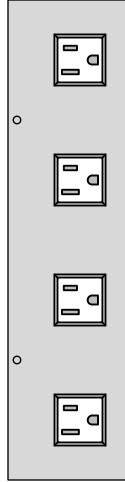
Blank
(space filler)

B2



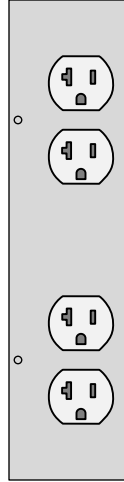
NEMA 5-15R
3 duplex

B3



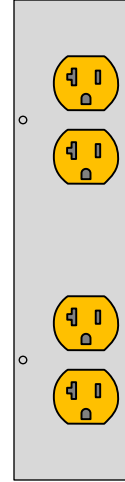
NEMA 5-15R
4 single

B4



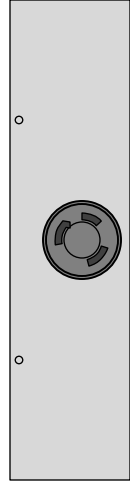
NEMA 5-20R
2 duplex

B5



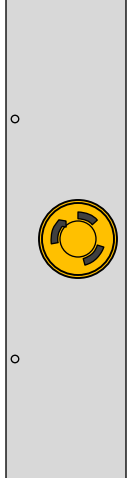
NEMA 5-20R IG
2 duplex,
iso. ground

B6



NEMA L5-30R
Twist-lock
125V 30A

B7



NEMA L5-30R IG
Twist-lock iso. gnd
125V 30A

B8



NEMA 5-20R
1 duplex
w/ RPC

B9



NEMA 5-20R IG
1 duplex, iso. gnd
w/ RPC

BA



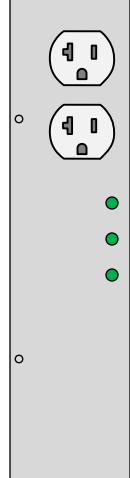
NEMA L5-30R
Twist-lock
125V 30A
w/ RPC

BB



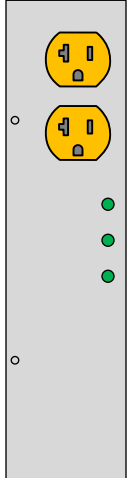
NEMA L5-30R IG
Twist-lock iso. Gnd.
125V 30A
w/ RPC

BC



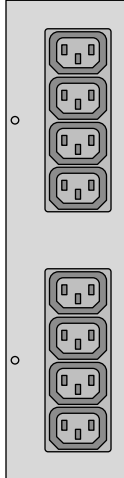
NEMA 5-20R
1 duplex
w/ premium surge
protection

BD



NEMA 5-20R IG
1 duplex, iso. gnd
w/ premium surge
protection

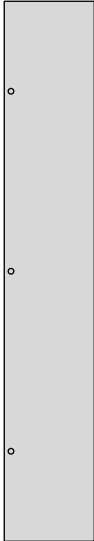
BJ



IEC-C13 (8)
15A

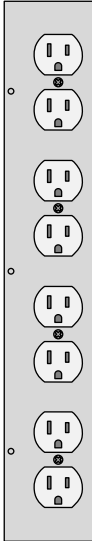
Worksheet Designations for Fifteen Inch POWERSTAC™ Modules

C11



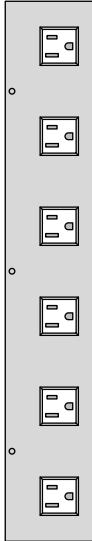
Blank
(space filler)

C12



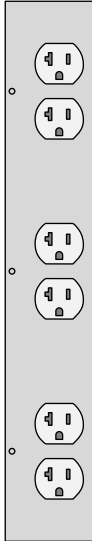
NEMA 5-15R
4 duplex

C13



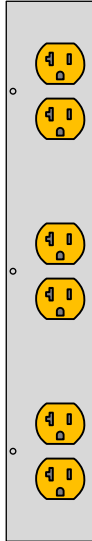
NEMA 5-15R
6 single

C14



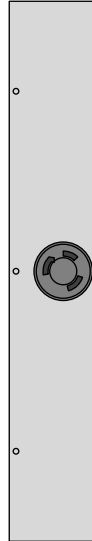
NEMA 5-20R
3 duplex

C15



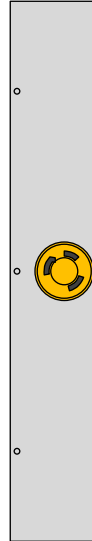
NEMA 5-20R IG
3 duplex,
iso. ground

C16



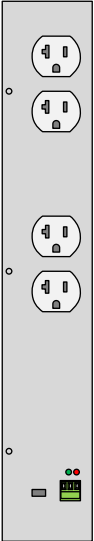
NEMA L5-30R
Twist-lock
125V 30A

C17



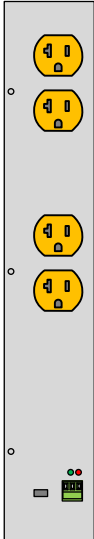
NEMA L5-30R IG
Twist-lock
iso. ground
125V 30A

C18



NEMA 5-20R
2 duplex
w/ RPC

C19



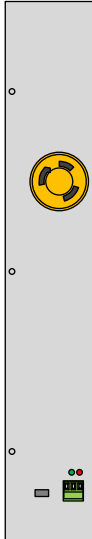
NEMA 5-20R IG
2 duplex,
iso. Ground
w/ RPC

C20



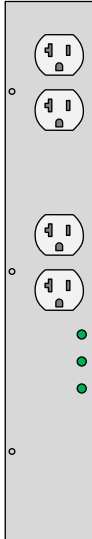
NEMA L5-30R
Twist-lock
125V 30A
w/ RPC

C21



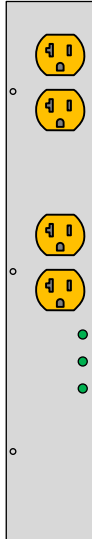
NEMA L5-30R IG
Twist-lock
iso. ground
125V 30A
w/ RPC

C22



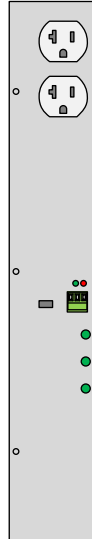
NEMA 5-20R
2 duplex
w/ premium
surge protection

C23



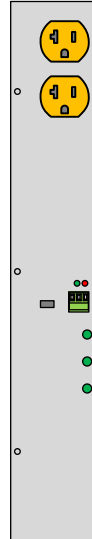
NEMA 5-20R IG
2 duplex,
iso. Ground
w/ premium
surge protection

C24



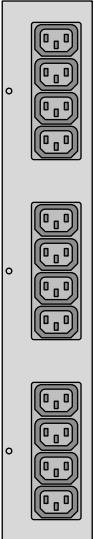
NEMA 5-20R
1 duplex
w/ RPC and premium
surge protection

C25



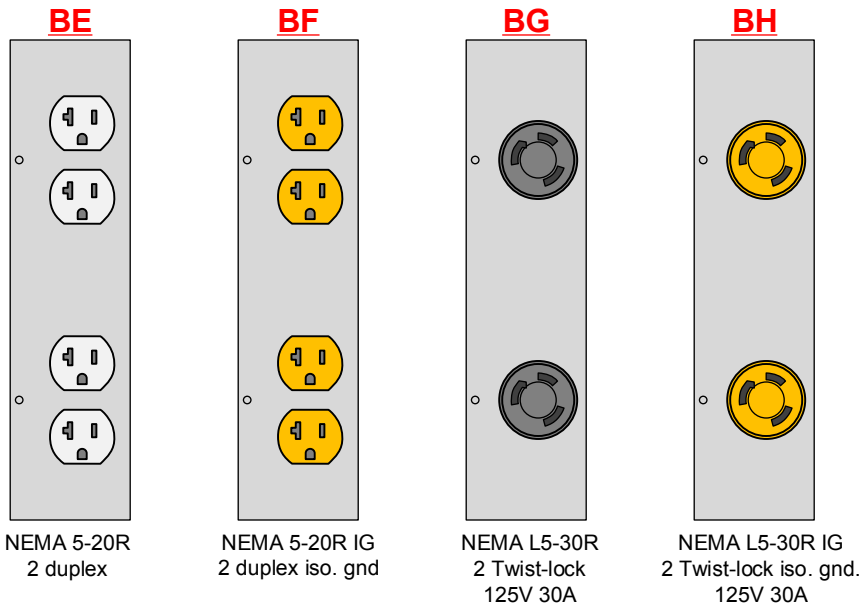
NEMA 5-20R IG
1 duplex, iso. Ground
w/ RPC and premium
surge protection

C30

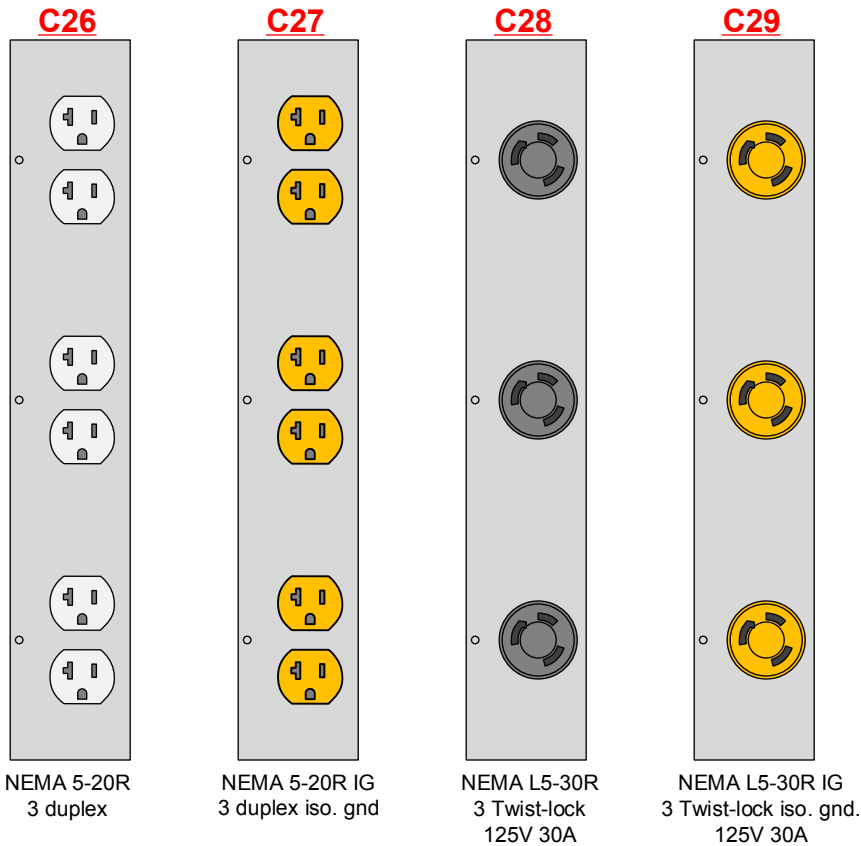


IEC-C13 (12)
15A

Worksheet Designations for **Multi-Circuit POWERSTAC™** Modules

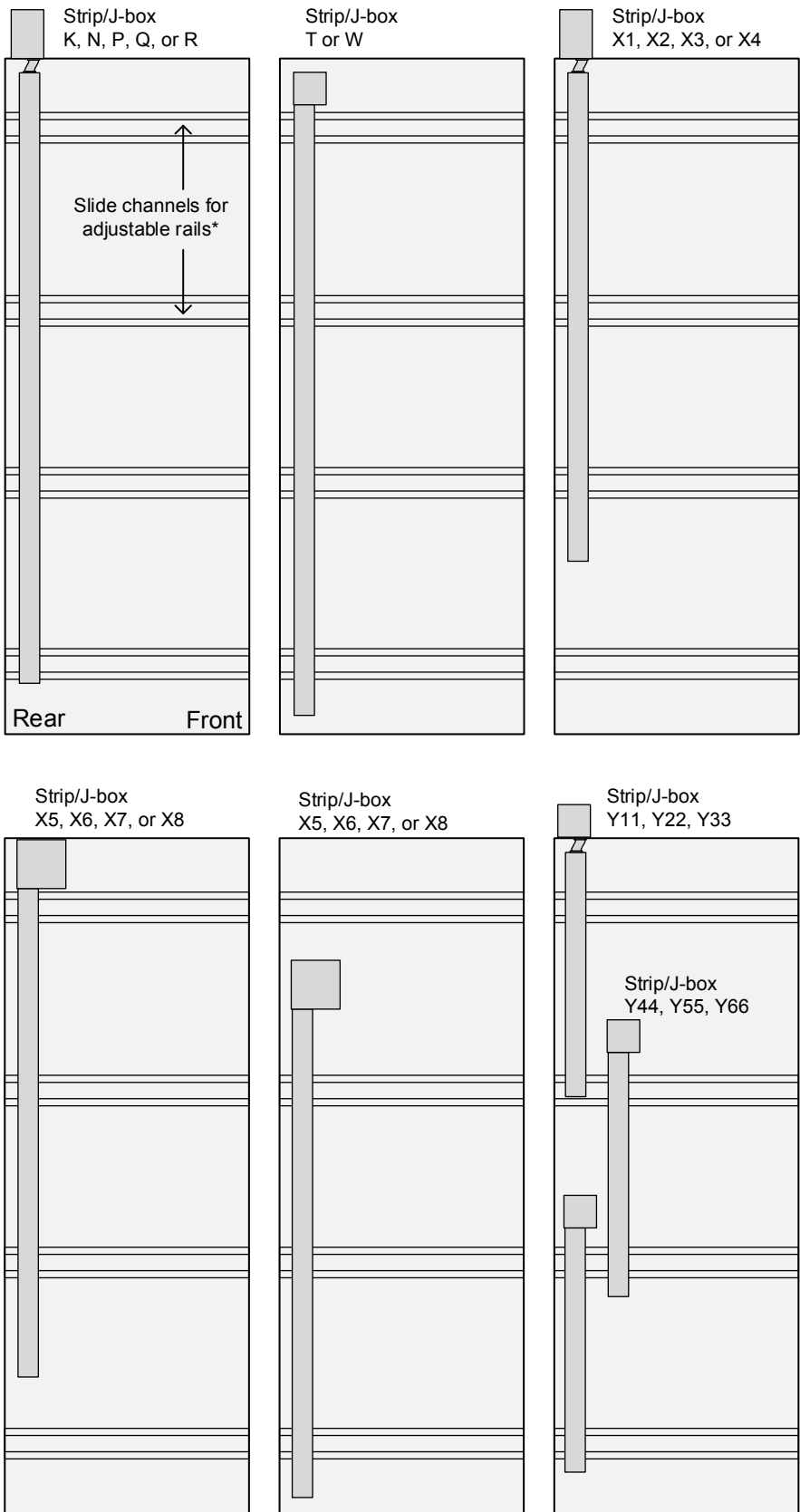


TEN-INCH MODULES
EACH RECEPTACLE SEPARATELY WIRED
COUNTS AS TWO (2) CIRCUITS FOR
WIRE FILL CONSIDERATIONS



FIFTEEN-INCH MODULES
EACH RECEPTACLE SEPARATELY WIRED
COUNTS AS THREE (3) CIRCUITS FOR WIRE FILL
CONSIDERATIONS

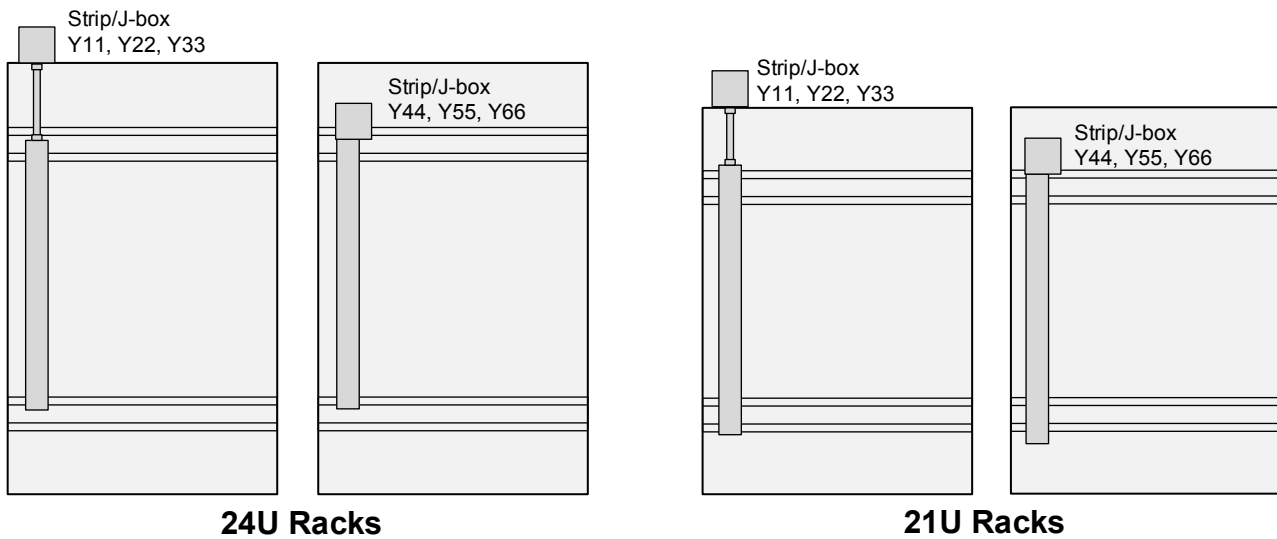
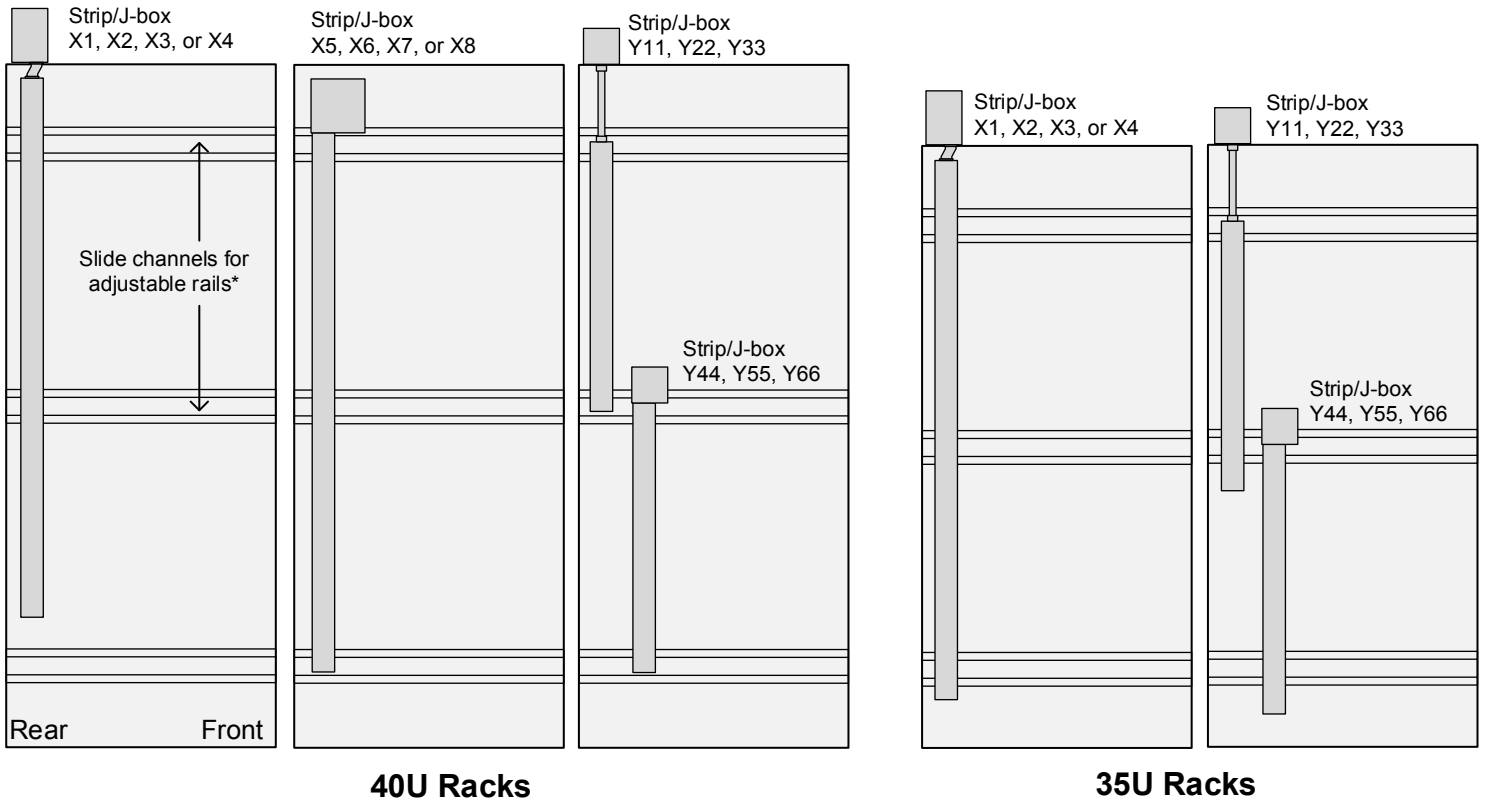
POWERSTAC™ Placement Options for 44U Racks



Strips shown installed in left rear corner
(as viewed from rack rear)

*Note Strips may also be installed
in racks with fixed rails

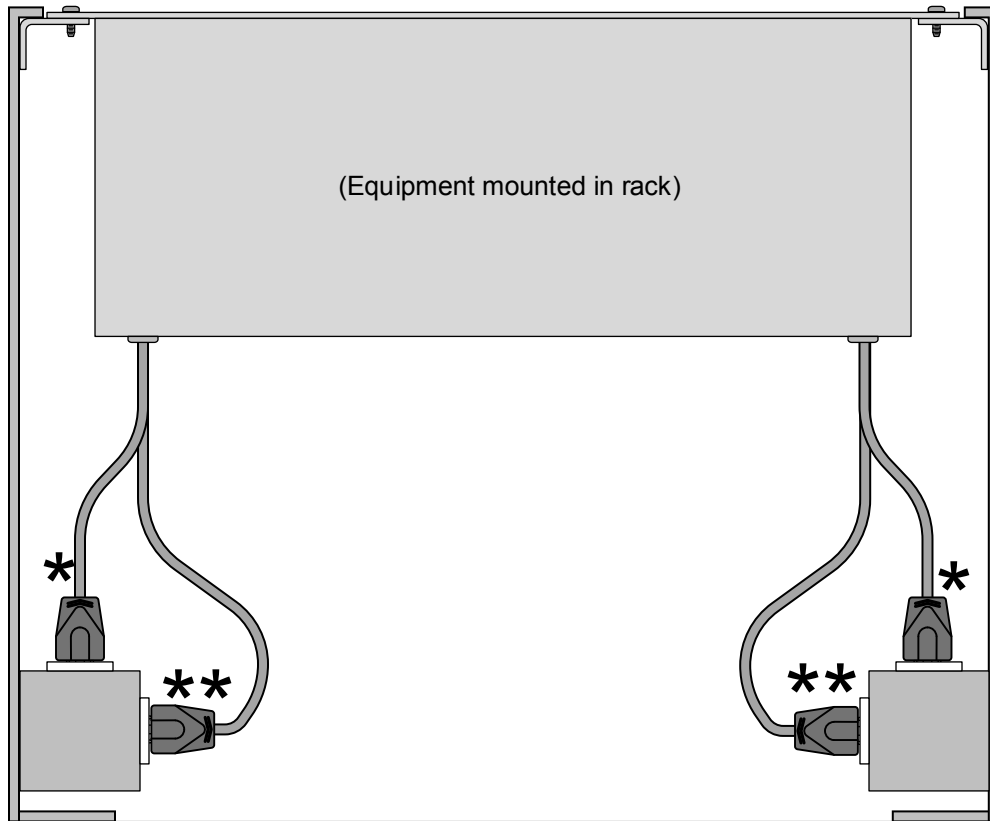
POWERSTAC™ Placement Options for 40U, 35U, 24U, and 21U Racks



Strips shown installed in left rear corner
(as viewed from rack rear)

*Note Strips may also be installed
in racks with fixed rails

POWERSTAC™ Module Orientation Options



Default PowerStac location:

Unless otherwise specified, power strip will be factory installed in REAR LEFT-HAND CORNER OF RACK.

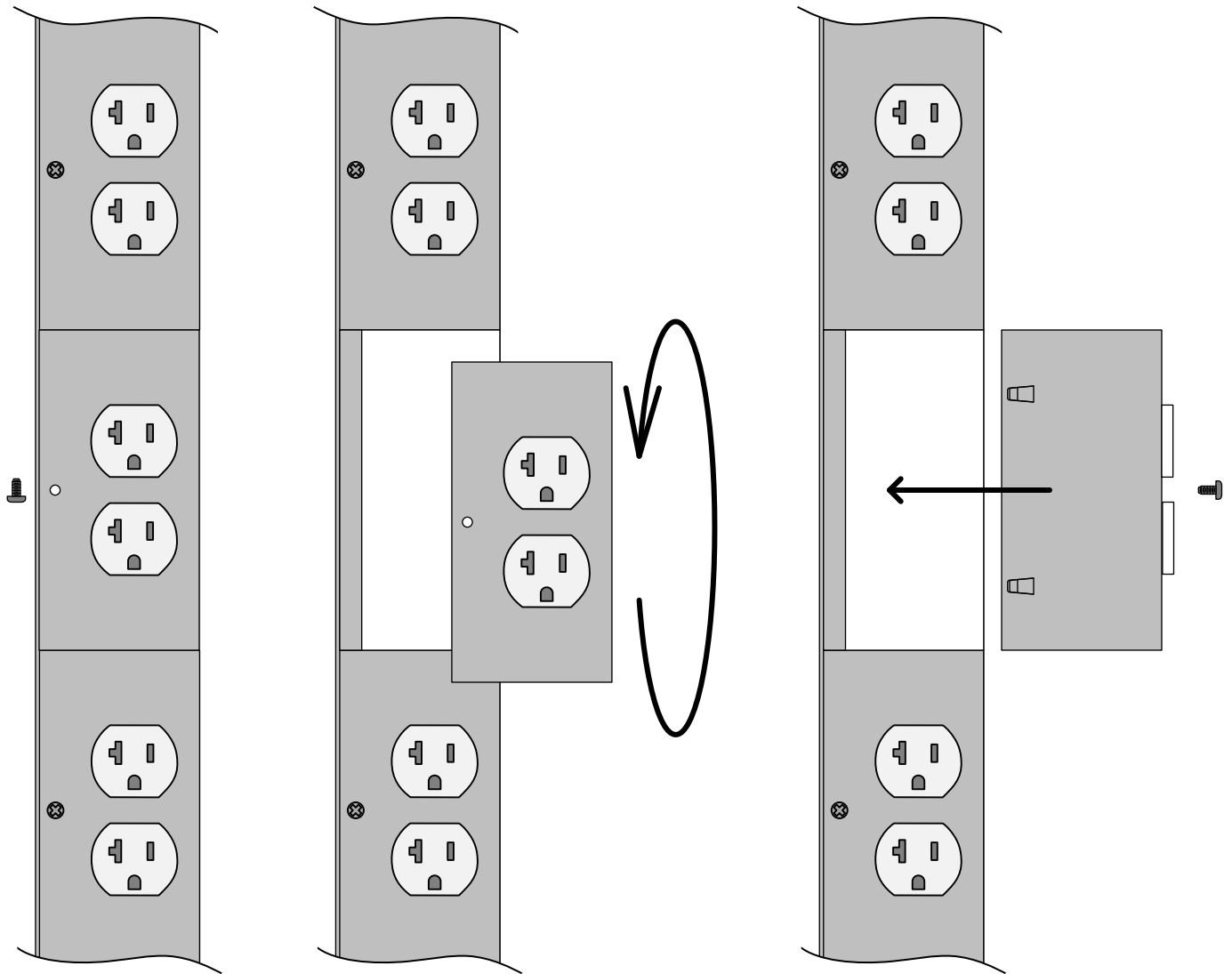
If desired, power strip can be installed in right rear corner of rack.

For applications requiring greater power density, strips may be installed in both left and right rear corners.

***** Receptacles toward FRONT minimize cord clutter and are recommended for equipment that is rarely, if ever, unplugged and/or equipment with detachable cords (IEC type).

****** Receptacles toward INSIDE are recommended for equipment that may need to be disconnected and removed for service or replacement and for modules that have indicators or controls that need to be accessible and visible, such as RPC and surge suppressor modules.

POWERSTAC™ Module Reorientation Instructions



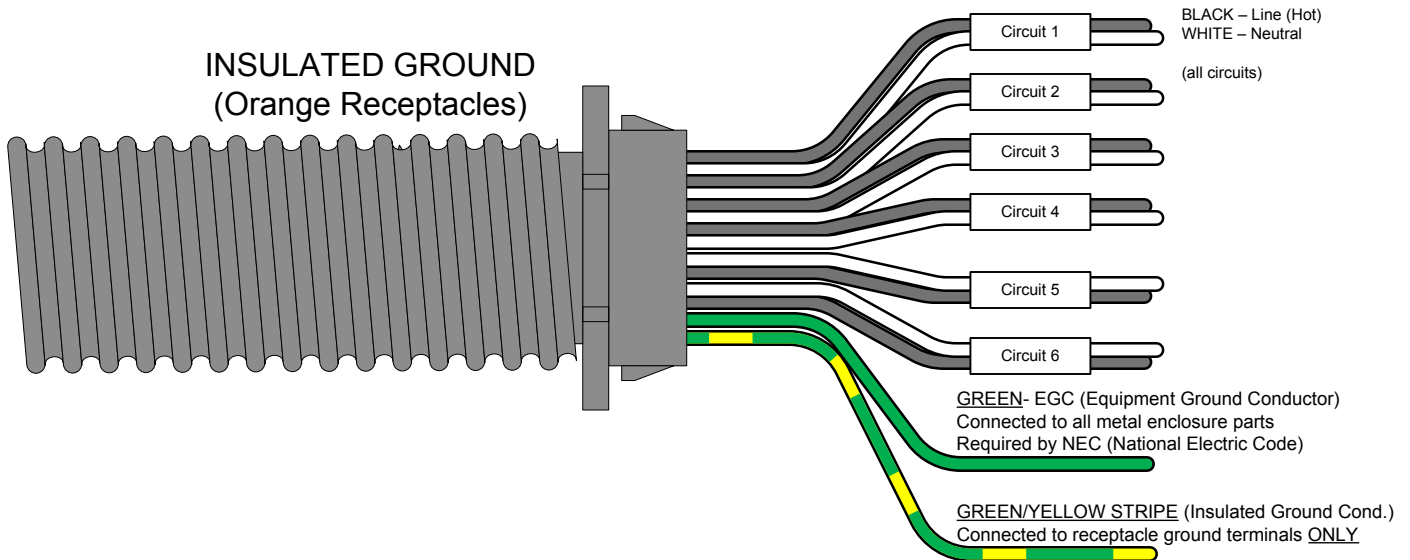
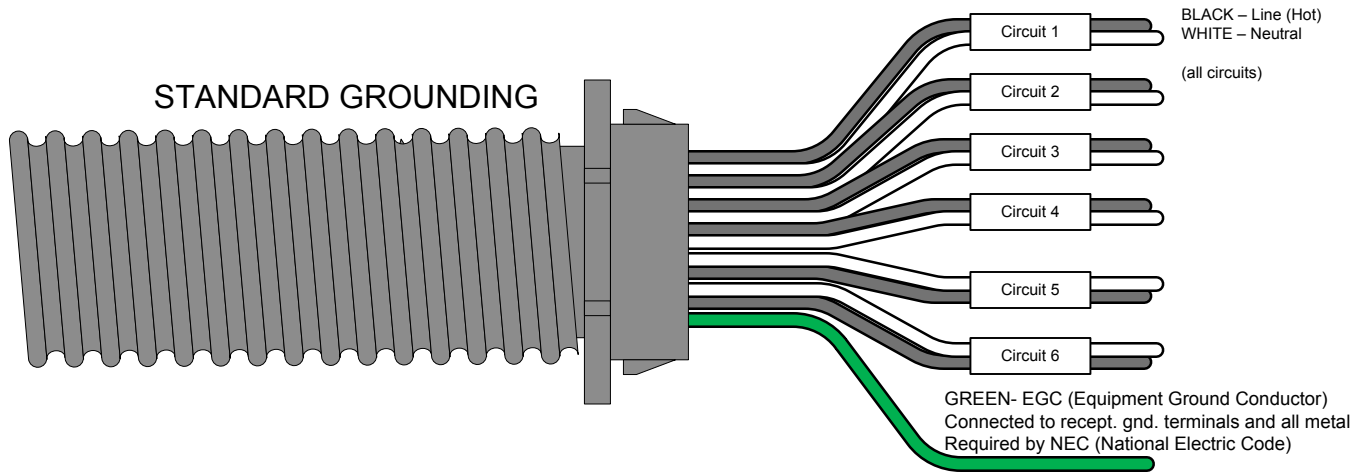
1) Remove screw(s) holding module to chassis.

2) Pull module away from chassis. Rotate 180 deg. If needed, loosen bonding wires and reposition, then retighten.

3) Reinstall module to chassis. Replace screw(s).

PowerstAC Modular Power Distribution System

Flex Conduit Conductor Fill Limits



3/4" Flex Allowable Circuit Combinations

20A Circuits	30A Circuits
6	0
5	1
4	1
3	2
2	3
1	3
0	4

1" Flex Allowable Circuit Combinations

20A Circuits	30A Circuits
10	0
9	1
8	2
7	3
6	3
5	4
4	4
3	5
2	5
1	6
0	7

1-1/4" Flex Allowable Circuit Combinations

20A Circuits	30A Circuits
15	0
14	1
13	2
12	3
11	4
10	5
9	6
8	7
7	8
6	9
5	10
4	11
3	11
2	12
1	13
0	13

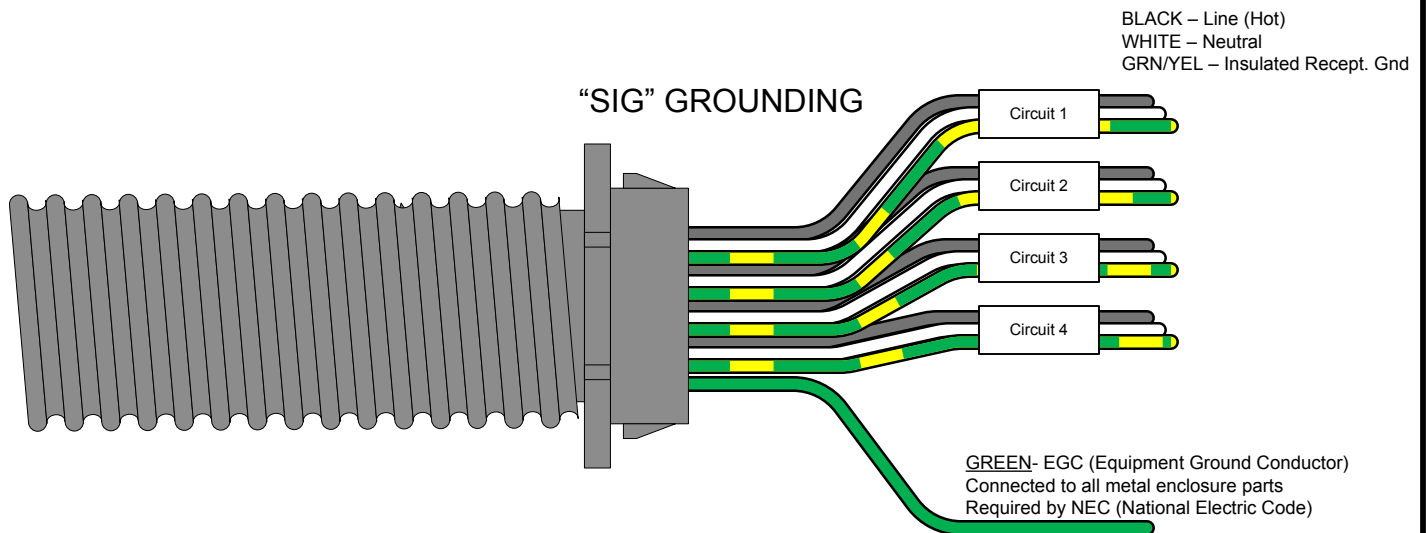
NOTE: The above information is based on the 2011 National Electric Code book Annex C, Table C.5.

PowerstAC Modular Power Distribution System Flex Conduit Conductor Fill Limits

Separate Insulated Ground (SIG) Option

Notes on SIG Option:

- 1) Due to increased conductor count, maximum number of circuits are reduced.
- 2) Junction box size and conduit size may be increased as required, at factory assembler's discretion.



3/4" Flex Allowable Circuit Combinations

<u>20A Circuits</u>	<u>30A Circuits</u>
5	0
4	0
3	1
2	1
1	2
0	3

1" Flex Allowable Circuit Combinations

<u>20A Circuits</u>	<u>30A Circuits</u>
8	0
7	0
6	1
5	2
4	3
3	4
2	4
1	4
0	5

1-1/4" Flex Allowable Circuit Combinations

<u>20A Circuits</u>	<u>30A Circuits</u>
15	0
14	0
13	1
12	1
11	2
10	3
9	3
8	4
7	5
6	5
5	6
4	6
3	7
2	8
1	8
0	9

NOTE: The above information is based on the 2011 National Electric Code book Annex C, Table C.5.

Model Number Worksheet for 75" POWERSTAC™ Modular Power Strip

—

Chassis/
J-box

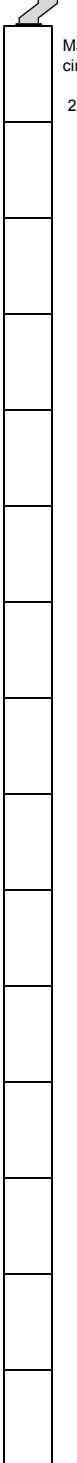
Top

Bottom

Modules (must use all 15 spaces) Insert designators in order desired. One character per space.

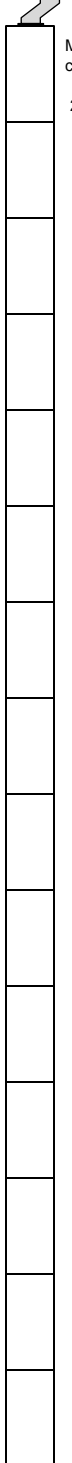
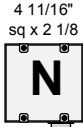
Min. Rack Size: 44U

External Junction Box



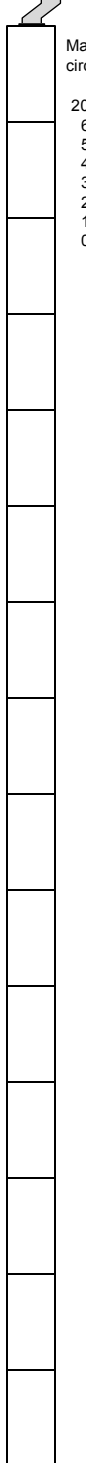
Max # circuits

20A	30A
3	0
2	1
0	2



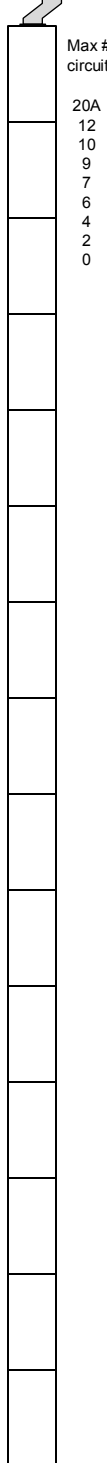
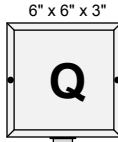
Max # circuits

20A	30A
4	0
3	1
2	2
1	3
0	4



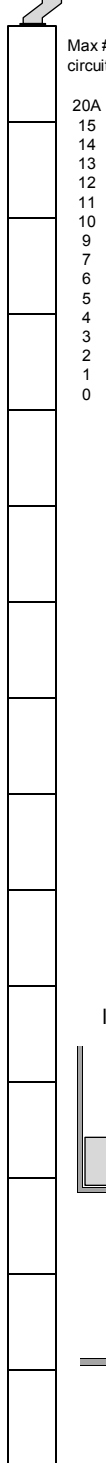
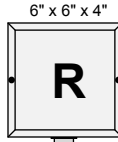
Max # circuits

20A	30A
6	0
5	1
4	2
3	3
2	4
1	5
0	6



Max # circuits

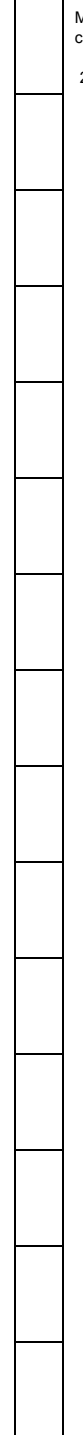
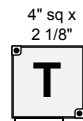
20A	30A
12	0
10	1
9	2
7	3
6	4
4	5
2	6
0	7



Max # circuits

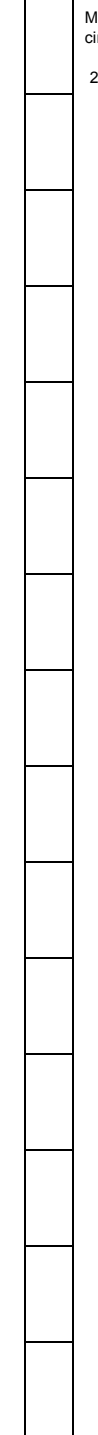
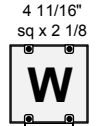
20A	30A
15	0
14	1
13	2
12	3
11	4
10	5
9	6
7	7
6	8
5	9
4	10
3	11
2	12
1	13
0	14

Internal Junction Box



Max # circuits

20A	30A
3	0
2	1
0	2



Max # circuits

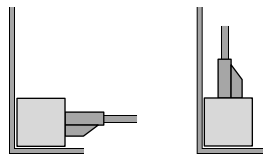
20A	30A
4	0
3	1
2	2
1	3
0	4

Factory installed
in Rack?

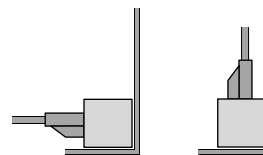
Yes

No

Indicate desired strip
location and orientation



Left Rear Corner



Right Rear Corner

Model Number Worksheet for 60" POWERSTAC™ Modular Power Strip

Chassis/J-box Top Bottom

Modules (must use all 12 spaces) Insert designators in order desired. One character per space.

Min. Rack Size: 35U

External Junction Box

X1



Max # circuits	
20A	30A
3	0
2	1
0	2

X2



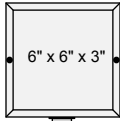
Max # circuits	
20A	30A
4	0
3	1
2	2
1	3
0	4

X3



Max # circuits	
20A	30A
6	0
5	1
4	2
3	3
2	4
1	5
0	6

X4



Max # circuits	
20A	30A
12	0
10	1
9	2
7	3
6	4
4	5
2	6
0	7

Internal Junction Box

X5



Max # circuits	
20A	30A
3	0
2	1
0	2

X6



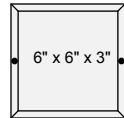
Max # circuits	
20A	30A
4	0
3	1
2	2
1	3
0	4

X7



Max # circuits	
20A	30A
6	0
5	1
4	2
3	3
2	4
1	5
0	6

X8

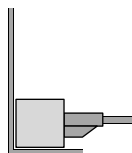


Max # circuits	
20A	30A
12	0
10	1
9	2
7	3
6	4
4	5
2	6
0	7

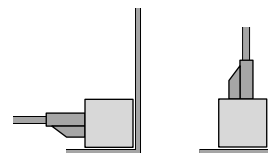
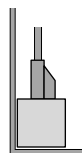
Indicate desired strip location and orientation

Factory installed in Rack?

Yes No

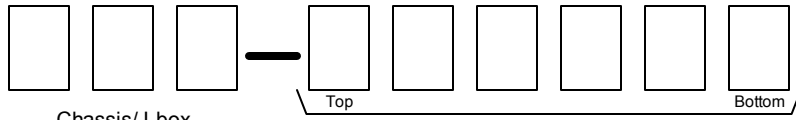


Left Rear Corner



Right Rear Corner

Model Number Worksheet for 30" POWERSTAC™ Modular Power Strip



Min. Rack Size: 21U

Modules (must use all 6 spaces)
 Insert designators in order desired.
One character per space.

External Junction Box

Y11

4" sq x
2 1/8"

Max # circuits	
20A	30A
3	0
2	1
0	2

Y22

4 11/16"
sq x 2 1/8"

Max # circuits	
20A	30A
4	0
3	1
2	2
1	3
0	4

Y33

4" x 4"
x 4"

Max # circuits	
20A	30A
6	0
5	1
4	2
3	3
2	4
1	5
0	6

Internal Junction Box

Y44

4" sq x
2 1/8"

Max # circuits	
20A	30A
3	0
2	1
0	2

Y55

4 11/16"
sq x 2 1/8"

Max # circuits	
20A	30A
4	0
3	1
2	2
1	3
0	4

Y66

4" x 4"
x 4"

Max # circuits	
20A	30A
6	0
5	1
4	2
3	3
2	4
1	5
0	6

Y77

Max # circuits	
20A	30A
3	0
2	1
0	2

Indicate desired strip location and orientation

Factory installed
in Rack?

Yes No

Left Rear Corner

Right Rear Corner

VE1763B 1/13/21 TW

16

Model Number Worksheet for 75" POWERSTAC™ with Flexible Conduit SIG option shown (Separate Insulated Ground for each IG module)

—

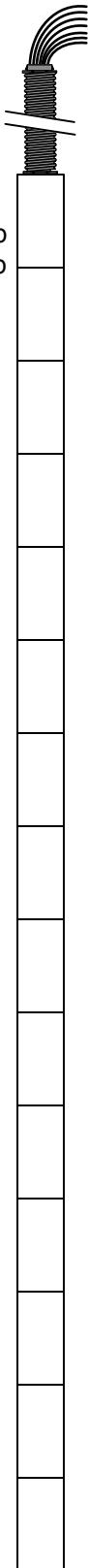
Flex Conduit (1¼") Option
Top or Bottom
(H or J)

Modules (must use all 15 spaces) Insert designators in order desired. One character per space.

Min. Rack Size: 44U

H

6-ft. 1¼" Flex Whip
Exiting **TOP** of Strip



— **S I G**

Add to end of model number, if required

Max # circuits allowable in 1¼" non-metallic flexible conduit per NEC

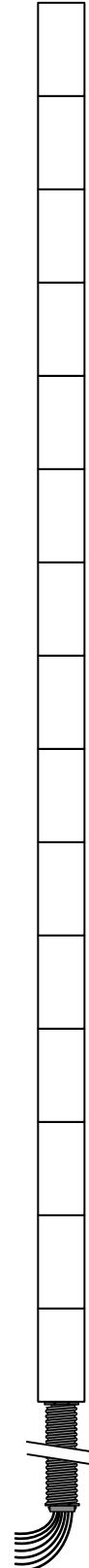
Without SIG Option
(one common insulated ground wire for all IG modules)

With SIG Option
(separate insulated ground wires for each IG module)

<u>20A</u>	<u>30A</u>	<u>20A</u>	<u>30A</u>
15	0	15	0
14	1	14	0
13	3	13	1
12	3	12	1
11	4	11	2
10	5	10	3
9	6	9	3
8	7	8	4
7	8	7	5
6	9	6	5
5	9	5	6
4	11	4	6
3	11	3	7
2	12	2	8
1	13	1	8
0	13	0	9

J

6-ft. 1¼" Flex Whip
Exiting **BOTTOM** of Strip

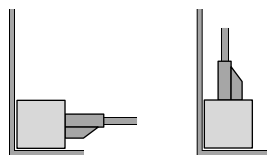


Factory installed
in Rack?

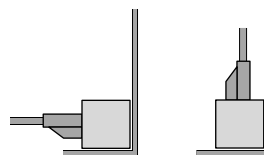
Yes

No

Indicate desired strip location and orientation

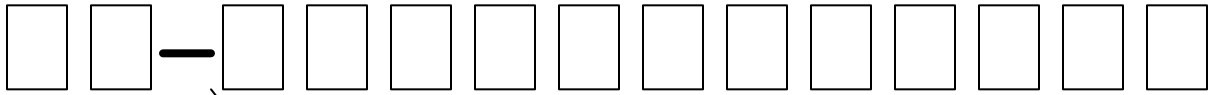


Left Rear Corner



Right Rear Corner

Model Number Worksheet for 60" POWERSTAC™ with Flexible Conduit SIG option shown (Separate Insulated Ground for each IG module)



Flex Conduit
(1 1/4") Option
Top or Bottom
(X9 or X0)

Modules (must use all 12 spaces) Insert designators in order desired. One character per space.

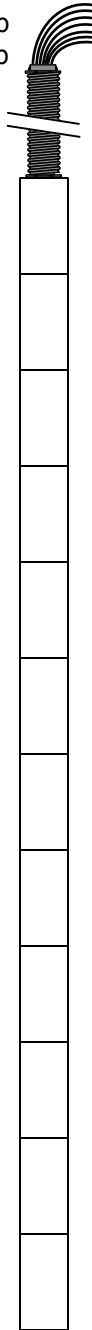
Min. Rack Size: 35U

— S I G

Add to end of model number if required

X9

6-ft. 1 1/4" Flex Whip
Exiting **TOP** of Strip



Max # circuits allowable in 1 1/4" non-metallic flexible conduit per NEC

Without SIG Option
(one common insulated ground
wire for all IG modules)

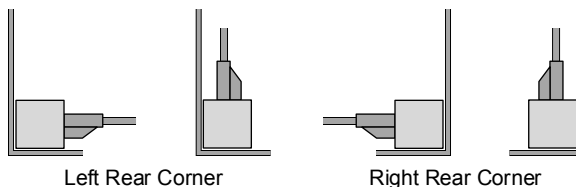
With SIG Option
(separate insulated ground
wires for each IG module)

<u>20A</u>	<u>30A</u>
12	0
11	1
10	2
9	3
8	4
7	5
6	6
5	7
4	8
3	9
2	10
1	11
0	12

<u>20A</u>	<u>30A</u>
12	0
11	1
10	1
9	2
8	3
7	3
6	4
5	4
4	5
3	6
2	7
1	7
0	8

Factory installed
in Rack? Yes No

Indicate desired strip location and orientation

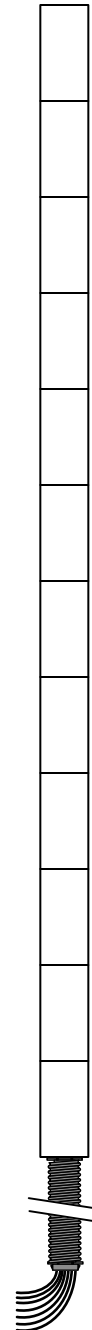


Left Rear Corner

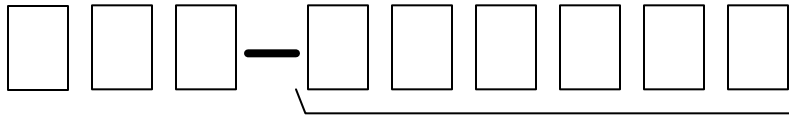
Right Rear Corner

X0

6-ft. 1 1/4" Flex Whip
Exiting **BOTTOM** of Strip



Model Number Worksheet for 30" POWERSTAC™ with Flexible Conduit SIG option shown (Separate Insulated Ground for each IG module)



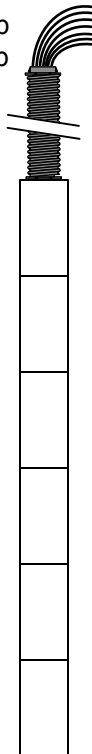
Flex Conduit
(1") Option
Top or Bottom
(X9 or X0)

Modules (must use all 6 spaces) Insert designators in order desired. One character per space.

Min. Rack Size: 21U

Y77

6-ft. 1" Flex Whip
Exiting **TOP** of Strip



S I G

Add to end of model number if required

Max # circuits allowable in 1¼" non-metallic flexible conduit per NEC

Without SIG Option
(one common insulated ground wire for all IG modules)

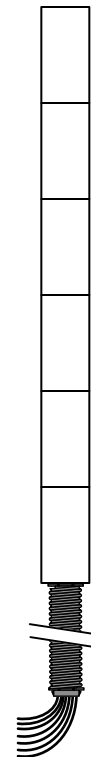
With SIG Option
(separate insulated ground wires for each IG module)

<u>20A</u>	<u>30A</u>
6	0
5	1
4	3
3	3
2	4
1	5
0	6

<u>20A</u>	<u>30A</u>
6	0
5	1
4	2
3	3
2	3
1	4
0	5

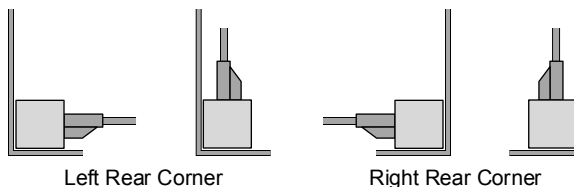
Y88

6-ft. 1" Flex Whip
Exiting **BOTTOM** of Strip



Factory installed
in Rack? Yes No

Indicate desired strip location and orientation



Model Number Worksheet for 75" POWERSTAC™ Modular Power Strip

Q — **4** **B** **J** **7** **C** **2** **3** **B** **2** **B** **A** **B** **8** **B** **3**

Top Bottom

Chassis/
J-box

Modules (must use all 15 spaces) Insert designators in order desired. One character per space.

Min. Rack Size: 44U

External Junction Box

4" sq x 2 1/8" **K**

4 11/16" sq x 2 1/8" **N**

4" x 4" x 4" **P**

6" x 6" x 3" **Q**

6" x 6" x 4" **R**

EXAMPLE

Internal Junction Box

4" sq x 2 1/8" **T**

4 11/16" sq x 2 1/8" **W**

Max # circuits	
20A	30A
3	0
2	1
0	2

Max # circuits	
20A	30A
4	0
3	1
2	2
1	3
0	4

Max # circuits	
20A	30A
6	0
5	1
4	2
3	3
2	4
1	5
0	6

Max # circuits	
20A	30A
12	0
10	1
9	2
7	3
6	4
4	5
2	6
0	7

Max # circuits	
20A	30A
15	0
14	1
13	2
12	3
11	4
10	5
9	6
7	7
6	8
5	9
4	10
3	11
2	12
1	13
0	14

Max # circuits	
20A	30A
3	0
2	1
0	2

Max # circuits	
20A	30A
4	0
3	1
2	2
1	3
0	4

Factory installed in Rack? Yes No

Indicate desired strip location and orientation



Left Rear Corner



Right Rear Corner