

New!

Frost Fighter®

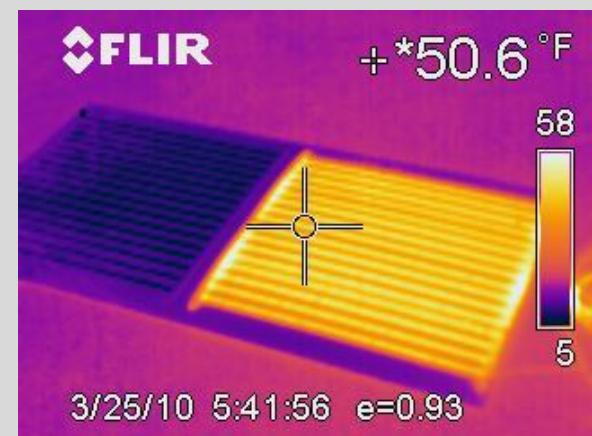
Clear View II Defrosters

Window defrosters and replacements made easy



www.frostfighter.com

12 VOLT



12V Master Defroster Catalog

World leader in aftermarket defrosters
and control solutions in 12 and 24 volt.

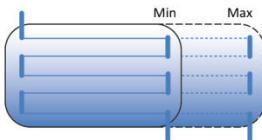
Frost Fighter® Clear View II Defrosters made easy

www.frostfighter.com



Clear View II Defrosters

Frost Fighter® Clear View II Defrosters match the heating performance of factory installed rear window defrosters, clearing snow and ice in minutes. Cost effective and easy to install, new Clear View II defrosters provide full window coverage with an attractive factory appearance.



Compatible with vehicles from cars and trucks to snow moving equipment, tractors and heavy equipment, Clear View makes adding a defroster easy. Use anywhere window defrosting is needed.

How they work

Clear View defrosters have an electrical resistance which when powered provides the heat needed to clear windows of snow and ice in minutes.

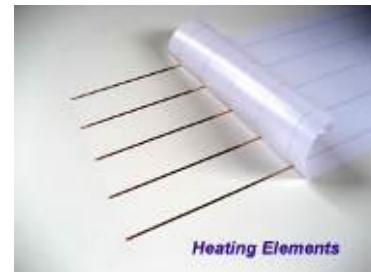
Heating is accomplished through contact between the defroster elements and the window. The defroster is connected electrically through the buss bar tabs and activated with the automatic ThermaSync defroster control.

Easy Application

The heating elements come on pre-spaced rolls for easy and accurate application. Heating elements bond directly to the window and are trimmed for a custom defroster fit.

Once the heating elements are bonded to the window the side buss bars are placed and a black plastic cover applied for a finished factory appearance.

Fully illustrated instructions come with every kit.



Connections

The side buss bars include integral tabs positioned for easy connection to ThermaSync® defroster controls or to existing defroster wiring.

Clear View II defrosters are available individually or with a full wiring harness, control and installation kit.



Bus Bar Tab and Cover

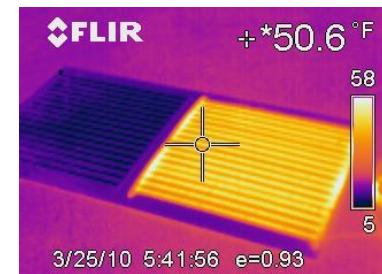


NEW Performance and Sizes

Clear View II Defrosters feature enhanced bonding, new controls and proven heating capability to defrost windows even in the most challenging winter conditions.

Now available in hundreds of sizes in 12 and 24 volt Clear View II defrosters fit almost any window.

Clear View II makes defrosters EASY!



Infrared image showing a Clear View II Defroster. Right side on.

Frost Fighter ThermaSync® Defroster controls with smarts

www.frostfighter.com



ThermaSync Defroster Controls

New Frost Fighter ThermaSync® defroster controls are the perfect companion for Clear View II and other defrosters.

Available in four models from the simple automatic ten minute timing to more sophisticated adjustable automatic shut off timing, power modulation and network control allowing a single switch to control multiple defrosters.



ThermaSync Defroster Control and Switch.

Power Modulation

ThermaSync controls can modulate the apparent power to the defroster from 3% up to 100%. This feature enables hundreds of new Clear View II defroster sizes to fit almost any window in 12 and 24 volt.

ThermaSync Automatic Timing

Press the defroster symbol on the remote switch to turn the defroster on. The defroster stays on until the switch is pressed again or the ThermaSync control times out.

The 2812/2824 controls can be set to time out from 10 to 160 minutes or can be left on indefinitely depending on the internal jumper settings. This feature is good for applications where longer timing cycles are desired like snow plow equipment.

One Switch, Multiple Defrosters

A single switch can activate many defrosters using the ThermaSync Switch Boss. This network control is good for applications that require several defrosters to be activated from a single switch.



Switch Boss defroster network control.
One switch controls many defrosters.

Mounting

The ThermaSync control can be secured out of sight under the dash while the switch can be mounted remotely in dash. A separate under dash mount is included with full kits.

Installation Options

Clear View II Defrosters and ThermaSync Controls are available individually or with a full installation package including a wire harness, fuse, fuse holder, switch mounting plate, power tap, wire ties, surface cleaner/adhesion promoter and full instructions.



Complete defroster. Representative photo only.

Clear View II defrosters and ThermaSync controls are available for 12 and 24 volt systems. See our [website](#) for all Clear View II defrosters and ThermaSync Controls.

[Click here to view our online catalog.](#)

Frost Fighter® Clear View II Ordering and Tips

www.frostfighter.com



How to order

To order Clear View II Defrosters follow the steps below.

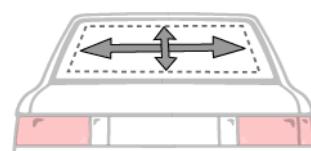
1 Determine Defrost Area

Take a good look at the window to establish the defrost area. The elements do not need to completely fill the area to be effective.



2 Measure the Defrost Area

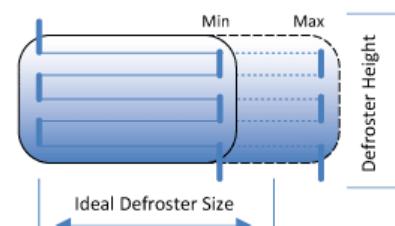
Allow at least 1.5 in (3.8 cm) clearance from the windows edge. On vehicles with tightly curving windows the defroster should stop before the radius. Take back up lights into account.



Important! The defroster height (top-to-bottom) is fixed by the number of grid lines and cannot be changed. The defroster width (side-to-side) can be trimmed within the minimum and maximum defroster sizes.

3 Select the Clear View Defroster

Start by selecting a defroster that fits the height (top-to-bottom) of the window. Then select the defroster width (side-to-side) between the maximum and minimum width for the defroster.



The height listed includes the tab ends which are 5/8 in (1.6 cm).

Important!

If replacing an existing defroster or when NOT using the ThermaSync defroster control – only defrosters with 100% power modulation MUST be used. Only ThermaSync has power modulation.

Secrets to Defroster Success

While Clear View II defrosters are easy to install there are a few things that are critical to success! All units come with full instructions.

1. Select a defroster that fits in the window. Respect the minimum and maximum allowed widths.
2. Do NOT add or remove heating elements from Clear View II Defrosters.
3. Follow the layout in the instructions regarding the number of heating elements per buss bar section.
4. Make sure surface is CLEAN. Clean with window cleaner and then use the GAP-1 wipe included with each kit.

Order stock Clear View Defrosters online. Frost Fighter Catalog.



Planned Products LLC
4699 Nautilus Court S.
Suite 201
Boulder, CO 80301
USA

Tel: 303.682.0274
Fax: 303.682.0678
info1@frostfighter.com
www.frostfighter.com



Peak Current

This is the current that is obtained by dividing the Voltage at the heater by the Resistance of the heater. It is important that the 25 ampere rating of the electronic switch not be exceeded. It is also important in calculating the voltage drop in the circuit feeding the heaters, and is independent of duty cycle.

RMS Current

This is the current that actually does the heating. It is obtained by multiplying the Peak Current times the square root of the duty cycle. To obtain adequate heat on the window, the RMS current needs to be at least 2.75 amperes in all conductors, and to prevent over heating the window, cannot be greater than 4.3 amperes in any conductor.

Average Current

This current represents the amount of drain on the battery. It is obtained by multiplying the Peak Current times the duty cycle. If the window is warmed for ten minutes without the engine running, the ampere-hour drain on the battery, the battery drain will never exceed a comfortable 4.2Ah.

ThermaSync Defroster Controls

The 2712/2724 ThermaSync defroster controls provide simple automatic timing while the 2812/2824 controls allow for selectable automatic shut off timing in 10, 20, 40, 80, 160 minutes or manual operation. See page 10 for more.

Fuse Ratings

Since fuses are sensitive to RMS current, recommended fuse ratings should be at least 20% higher than the RMS current.

Standard automotive fuse ratings are 5.0A, 7.5A, 10A, 15A, 20A, 25A and 30A. So the recommended fuse rating is obtained by multiplying the maximum RMS current times 1.2 and selecting the next higher standard fuse.

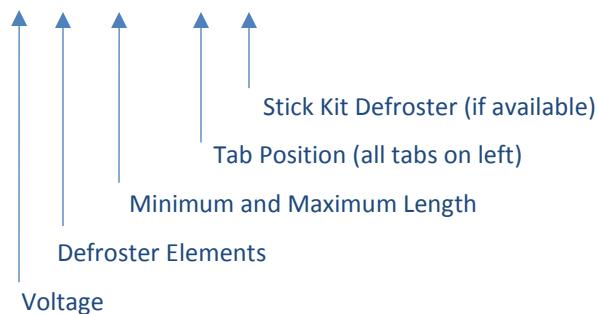
Duty Cycle

Duty Cycle is defined as the time that the heater is ON divided by the time the heater is OFF plus the time the heater is ON, and is generally express in percent. If the heater is ON all the time, the duty cycle is said to be 100%.

Part Numbers

Clear View defrosters have a simple part numbering set up.

1204 - 2031 - L - STK



Clear View II Defrosters – 12 Volt

Full Defroster Part Number	Stick Kit ¹ Part Number	Height inch (cm)	Length, inch (cm)		Heating Elements	Grid Format	Power Modulation	Tabs ²	Voltage	Peak Current (Amp) ³		Fuse (Amp)	Drawing?	Stick Kit Price	Full Kit Price
Start here, select height			Min	Max						Short	Long				
1202-1418-L		4.12 (10.4) ⁴	14 (36)	18 (46)	2	2 Ser 1 Par	3%	L	12	25.0	19.4	5.0	Yes	-	\$55.95
1202-1725-L		4.12 (10.4) ⁴	17 (43)	25 (64)	2	2 Ser 1 Par	6%	L	12	20.4	13.8	7.5	Yes	-	\$56.20
1202-2435-L		4.12 (10.4) ⁴	24 (61)	35 (89)	2	2 Ser 1 Par	12%	L	12	14.4	9.7	7.5	Yes	-	\$56.45
1202-3450-L		4.12 (10.4) ⁴	34 (86)	50 (127)	2	2 Ser 1 Par	25%	L	12	10.2	6.9	7.5	Yes	-	\$56.70
1202-4871-L		4.12 (10.4) ⁴	48 (119)	71 (180)	2	2 Ser 1 Par	50%	L	12	7.2	4.9	7.5	Yes	-	\$56.95
1202-6884-L	1202-6884-L-STK	4.12 (10.4) ⁴	68 (173)	84 (213)	2	2 Ser 1 Par	100%	L	12	5.1	3.4	7.5	Yes	\$30.20	\$57.20
1202-5571		2.56 (6.5)	55 (140)	71 (180)	2	1 Ser 2 Par	12%	L / R	12	25.0	19.4	10.0	Yes	-	\$57.45
1202-6884		2.56 (6.5)	68 (173)	84 (213)	2	1 Ser 2 Par	25%	L / R	12	20.4	16.4	15.0	Yes	-	\$57.70
1203-0912		3.75 (9.5)	09 (23)	12 (30)	3	3 Ser 1 Par	3%	L / R	12	25.0	19.4	5.0	Yes	-	\$57.95
1203-1117		3.75 (9.5)	11 (28)	17 (38)	3	3 Ser 1 Par	6%	L / R	12	20.4	13.8	7.5	Yes	-	\$58.20
1203-1624		3.75 (9.5)	16 (41)	24 (61)	3	3 Ser 1 Par	12%	L / R	12	14.4	9.7	7.5	Yes	-	\$58.45
1203-2333		3.75 (9.5)	23 (58)	33 (84)	3	3 Ser 1 Par	25%	L / R	12	10.2	6.9	7.5	Yes	-	\$58.70
1203-3247		3.75 (9.5)	32 (81)	47 (119)	3	3 Ser 1 Par	50%	L / R	12	7.2	4.9	7.5	Yes	-	\$58.95
1203-4567	1203-4567-STK	3.75 (9.5)	45 (114)	67 (170)	3	3 Ser 1 Par	100%	L / R	12	5.1	3.4	7.5	Yes	\$32.20	\$59.20
1203-8384		3.75 (9.5)	83 (211)	84 (213)	3	1 Ser 3 Par	25%	L / R	12	25.0	24.6	15.0	Yes	-	\$59.45
1204-0709-L		5.00 (12.7)	07 (18)	09 (23)	4	4 Ser 1 Par	3%	L	12	25.0	19.4	5.0	Yes	-	\$59.70
1204-0813-L		5.00 (12.7)	08 (20)	13 (33)	4	4 Ser 1 Par	6%	L	12	20.4	13.8	7.5	Yes	-	\$59.95
1204-1218-L		5.00 (12.7)	12 (30)	18 (46)	4	4 Ser 1 Par	12%	L	12	14.4	9.7	7.5	Yes	-	\$60.20
1204-1725-L		5.00 (12.7)	17 (43)	25 (64)	4	4 Ser 1 Par	25%	L	12	10.2	6.9	7.5	Yes	-	\$60.45
1204-2435-L		5.00 (12.7)	24 (61)	35 (89)	4	4 Ser 1 Par	50%	L	12	7.2	4.9	7.5	Yes	-	\$60.70
1204-3450-L1	1204-3450-L1-STK	5.00 (12.7)	34 (86)	50 (127)	4	4 Ser 1 Par	100%	L	12	5.1	3.4	7.5	Yes	\$33.95	\$60.95
1204-2835-L		5.00 (12.7)	28 (71)	35 (89)	4	2 Ser 2 Par	12%	L	12	25.0	19.4	10.0	Yes	-	\$61.20
1204-3450-L		5.00 (12.7)	34 (86)	50 (127)	4	2 Ser 2 Par	25%	L	12	20.4	13.8	15.0	Yes	-	\$61.45
1204-4871-L		5.00 (12.7)	48 (119)	71 (180)	4	2 Ser 2 Par	50%	L	12	14.4	9.7	15.0	Yes	-	\$61.70
1204-6884-L	1204-6884-L-STK	5.00 (12.7)	68 (173)	84 (213)	4	2 Ser 2 Par	100%	L	12	10.2	8.2	15.0	Yes	\$34.95	\$61.95
1205-0607		6.25 (15.8)	06 (15)	07 (18)	5	5 Ser 1 Par	3%	L / R	12	23.3	19.4	5.0	Yes	-	\$62.20

Full Defroster Part Number	Stick Kit ¹ Part Number	Height inch (cm)	Length, inch (cm)		Heating Elements	Grid Format	Power Modulation	Tabs ²	Voltage	Peak Current (Amp) ³		Fuse (Amp)	Drawing?	Stick Kit Price	Full Kit Price	
										Short	Long					
			Start here, select height	↓	Min	Max										
1205-0710		6.25 (15.8)	07 (18)	10 (25)	5	5 Ser 1 Par	6%	L / R	12	20.4	13.8	7.5	Yes	-	\$62.45	
1205-1014		6.25 (15.8)	10 (25)	14 (36)	5	5 Ser 1 Par	12%	L / R	12	14.4	9.7	7.5	Yes	-	\$62.70	
1205-1420		6.25 (15.8)	14 (36)	20 (51)	5	5 Ser 1 Par	25%	L / R	12	10.2	6.9	7.5	Yes	-	\$62.95	
1205-1928		6.25 (15.8)	19 (48)	28 (71)	5	5 Ser 1 Par	50%	L / R	12	7.2	4.9	7.5	Yes	-	\$63.20	
1205-2740	1205-2740-STK	6.25 (15.8)	27 (69)	40 (101)	5	5 Ser 1 Par	100%	L / R	12	5.1	3.4	7.5	Yes	\$36.45	\$63.45	
1206-0708-L		7.50 (19.0)	07 (18)	08 (20)	6	6 Ser 1 Par	6%	L	12	16.6	13.8	5.0	Yes	-	\$63.70	
1206-0812-L		7.50 (19.0)	08 (20)	12 (30)	6	6 Ser 1 Par	12%	L	12	14.4	9.7	7.5	Yes	-	\$63.95	
1206-1117-L		7.50 (19.0)	11 (23)	17 (43)	6	6 Ser 1 Par	25%	L	12	10.2	6.9	7.5	Yes	-	\$64.20	
1206-1624-L		7.50 (19.0)	16 (41)	24 (61)	6	6 Ser 1 Par	50%	L	12	7.2	4.9	7.5	Yes	-	\$64.45	
1206-2333-L	1205-2333-L-STK	7.50 (19.0)	23 (58)	33 (84)	6	6 Ser 1 Par	100%	L	12	5.1	3.4	7.5	Yes	\$37.70	\$64.70	
1206-1824		7.50 (19.0)	18 (46)	24 (61)	6	3 Ser 2 Par	12%	L / R	12	25.0	19.4	10.0	Yes	-	\$64.95	
1206-2333		7.50 (19.0)	23 (58)	33 (84)	6	3 Ser 2 Par	25%	L / R	12	13.8	10.4	15.0	Yes	-	\$65.20	
1206-3247		7.50 (19.0)	32 (81)	47 (119)	6	3 Ser 2 Par	50%	L / R	12	14.4	9.7	15.0	Yes	-	\$65.45	
1206-4567	1206-4567-STK	7.50 (19.0)	45 (114)	67 (170)	6	3 Ser 2 Par	100%	L / R	12	10.2	6.9	15.0	Yes	\$38.70	\$65.70	
1206-4150-L		7.50 (19.0)	41 (104)	50 (127)	6	2 Ser 3 Par	25%	L	12	25.0	20.6	15.0	Yes	-	\$65.95	
1206-4871-L		7.50 (19.0)	48 (122)	71 (180)	6	2 Ser 3 Par	50%	L	12	21.6	14.6	20.0	Yes	-	\$66.20	
1206-6884-L	1206-6884-L-STK	7.50 (19.0)	68 (173)	84 (213)	6	2 Ser 3 Par	100%	L	12	15.3	12.3	20.0	Yes	\$39.45	\$66.45	
1207-0810		8.75 (22.2)	08 (20)	10 (25)	7	7 Ser 1 Par	12%	L / R	12	12.3	9.7	5.0	Yes	-	\$66.70	
1207-1014		8.75 (22.2)	10 (25)	14 (36)	7	7 Ser 1 Par	25%	L / R	12	10.2	6.9	7.5	Yes	-	\$66.95	
1207-1420		8.75 (22.2)	14 (36)	20 (51)	7	7 Ser 1 Par	50%	L / R	12	7.2	4.9	7.5	Yes	-	\$67.20	
1207-1929	1207-1929-STK	8.75 (22.2)	19 (48)	29 (74)	7	7 Ser 1 Par	100%	L / R	12	5.1	3.4	7.5	Yes	\$40.45	\$67.45	
1208-0913-L		10.00 (25.4)	09 (23)	13 (33)	8	8 Ser 1 Par	25%	L	12	9.5	6.9	5.0	Yes	-	\$67.70	
1208-1218-L		10.00 (25.4)	12 (30)	18 (46)	8	8 Ser 1 Par	50%	L	12	7.2	4.9	7.5	Yes	-	\$67.95	
1208-1725-L1	1208-1725-L1-STK	10.00 (25.4)	17 (43)	25 (64)	8	8 Ser 1 Par	100%	L	12	5.1	3.4	7.5	Yes	\$41.20	\$68.20	
1208-1418-L		10.00 (25.4)	14 (36)	18 (46)	8	4 Ser 2 Par	12%	L	12	25.0	19.4	10.0	Yes	-	\$68.45	
1208-1725-L		10.00 (25.4)	17 (43)	25 (64)	8	4 Ser 2 Par	25%	L	12	20.4	13.8	15.0	Yes	-	\$68.70	
1208-2435-L		10.00 (25.4)	24 (61)	35 (89)	8	4 Ser 2 Par	50%	L	12	14.4	9.7	15.0	Yes	-	\$68.95	
1208-3450-L	1208-3450-L-STK	10.00 (25.4)	34 (86)	50 (127)	8	4 Ser 2 Par	100%	L	12	10.2	6.9	15.0	Yes	\$42.20	\$69.20	

Full Defroster Part Number	Stick Kit ¹ Part Number	Height inch (cm)	Length, inch (cm)		Heating Elements	Grid Format	Power Modulation	Tabs ²	Voltage	Peak Current (Amp) ³		Fuse (Amp)	Drawing?	Stick Kit Price	Full Kit Price
										Short	Long				
	Start here, select height 		Min	Max											
1208-5571-L		10.00 (25.4)	55 (140)	71 (180)	8	2 Ser 4 Par	50%	L	12	25.0	19.4	20.0	Yes	-	\$69.45
1208-6884-L	1208-6884-L	10.00 (25.4)	68 (173)	84 (213)	8	2 Ser 4 Par	100%	L	12	20.4	16.4	25.0	Yes	\$42.70	\$69.70
1209-1011		11.25 (28.5)	10 (25)	11 (28)	9	9 Ser 1 Par	25%	L / R	12	7.6	6.9	5.0	Yes	-	\$69.95
1209-1116		11.25 (28.5)	11 (28)	16 (41)	9	9 Ser 1 Par	50%	L / R	12	7.2	4.9	7.5	Yes	-	\$70.20
1209-1522	1209-1522-STK	11.25 (28.5)	15 (38)	22 (56)	9	9 Ser 1 Par	100%	L / R	12	5.1	3.4	7.5	Yes	\$43.45	\$70.45
1209-2833		11.25 (28.5)	28 (71)	33 (84)	9	3 Ser 3 Par	25%	L / R	12	25.0	20.6	15.0	Yes	-	\$70.70
1209-3247		11.25 (28.5)	32 (81)	47 (119)	9	3 Ser 3 Par	50%	L / R	12	21.6	14.6	20.0	Yes	-	\$70.95
1209-4567	1209-4567-STK	11.25 (28.5)	45 (114)	67 (170)	9	3 Ser 3 Par	100%	L / R	12	15.3	10.3	20.0	Yes	\$44.20	\$71.20
1210-1114-L		12.50 (31.7)	11 (28)	14 (36)	10	10 Ser 1 Par	50%	L	12	6.2	4.9	5.0	Yes	-	\$71.45
1210-1420-L	1210-1420-L-STK	12.50 (31.7)	14 (36)	20 (51)	10	10 Ser 1 Par	100%	L	12	5.1	3.4	7.5	Yes	\$44.70	\$71.70
1210-1114		12.50 (31.7)	11 (28)	14 (36)	10	5 Ser 2 Par	12%	L / R	12	24.8	19.4	10.0	Yes	-	\$71.95
1210-1420		12.50 (31.7)	14 (36)	20 (51)	10	5 Ser 2 Par	25%	L / R	12	20.4	13.8	15.0	Yes	-	\$72.20
1210-1928		12.50 (31.7)	19 (48)	28 (71)	10	5 Ser 2 Par	50%	L / R	12	14.4	9.7	15.0	Yes	-	\$72.45
1210-2740	1210-2740-STK	12.50 (31.7)	27 (69)	40 (102)	10	5 Ser 2 Par	100%	L / R	12	10.2	6.9	15.0	Yes	\$45.70	\$72.70
1210-6984-L	1210-6984-L-STK	12.50 (31.7)	69 (175)	84 (213)	10	2 Ser 5 Par	100%	L	12	25.0	20.5	25.0	Yes	\$45.95	\$72.95
1211-1218	1211-1218-STK	13.75 (34.9)	12 (30)	18 (46)	11	11 Ser 1 Par	100%	L / R	12	5.1	3.4	7.5	Yes	\$46.20	\$73.20
1212-1317-L1	1212-1317-L1-STK	15.00 (38.1)	13 (33)	17 (43)	12	12 Ser 1 Par	100%	L	12	4.3	3.4	7.5	Yes	\$46.45	\$73.45
1212-1317-L		15.00 (38.1)	13 (33)	17 (43)	12	6 Ser 2 Par	25%	L	12	17.4	13.8	10.0	Yes	-	\$73.70
1212-1624-L		15.00 (38.1)	16 (41)	24 (61)	12	6 Ser 2 Par	50%	L	12	14.4	9.7	15.0	Yes	-	\$73.95
1212-2333-L	1212-2333-L-STK	15.00 (38.1)	23 (58)	33 (84)	12	6 Ser 2 Par	100%	L	12	10.2	6.9	15.0	Yes	\$47.20	\$74.20
1212-2435-L		15.00 (38.1)	24 (61)	35 (89)	12	4 Ser 3 Par	50%	L	12	21.6	14.6	20.0	Yes	-	\$74.45
1212-3450-L	1212-3450-L-STK	15.00 (38.1)	34 (86)	50 (127)	12	4 Ser 3 Par	100%	L	12	15.3	10.3	20.0	Yes	\$47.70	\$74.70
1212-3747		15.00 (38.1)	37 (94)	47 (119)	12	3 Ser 4 Par	50%	L / R	12	25.0	19.4	20.0	Yes	-	\$74.95
1212-4567	1212-4567-STK	15.00 (38.1)	45 (114)	67 (170)	12	3 Ser 4 Par	100%	L / R	12	20.4	13.8	25.0	Yes	\$48.20	\$75.20
1212-8384-L	1212-8384-L-STK	15.00 (38.1)	83 (211)	84 (213)	12	2 Ser 6 Par	100%	L	12	25.0	24.6	25.0	Yes	\$48.45	\$75.45
1214-1520		17.50 (44.4)	15 (38)	20 (51)	14	7 Ser 2 Par	50%	L / R	12	12.8	9.7	10.0	Yes	-	\$75.70
1214-1929	1214-1929-STK	17.50 (44.4)	19 (48)	29 (74)	14	7 Ser 2 Par	100%	L / R	12	10.2	6.9	15.0	Yes	\$48.95	\$75.95
1215-1720		18.75 (47.6)	17 (43)	20 (51)	15	5 Ser 3 Par	25%	L / R	12	25.0	20.6	15.0	Yes	-	\$76.20

Full Defroster Part Number	Stick Kit ¹ Part Number	Height inch (cm)	Length, inch (cm)		Heating Elements	Grid Format	Power Modulation	Tabs ²	Voltage	Peak Current (Amp) ³		Fuse (Amp)	Drawing?	Stick Kit Price	Full Kit Price
										Short	Long				
	Start here, select height 		Min	Max											
1215-1928		18.75 (47.6)	19 (48)	28 (71)	15	5 Ser 3 Par	50%	L / R	12	21.6	14.6	20.0	Yes	-	\$76.45
1215-2740	1215-2740-STK	18.75 (47.6)	27 (69)	40 (102)	15	5 Ser 3 Par	100%	L / R	12	15.3	10.3	20.0	Yes	\$49.70	\$76.70
1215-4667	1215-4667-STK	18.75 (47.6)	46 (117)	67 (170)	15	3 Ser 5 Par	100%	L / R	12	25.0	17.2	25.0	Yes	\$49.95	\$76.95
1216-1725-L	1216-1725-L-STK	20.00 (50.8)	17 (43)	25 (64)	16	8 Ser 2 Par	100%	L	12	9.9	6.9	10.0	Yes	\$50.20	\$77.20
1216-2835-L		20.00 (50.8)	28 (71)	35 (89)	16	4 Ser 4 Par	50%	L	12	25.0	19.4	20.0	Yes	-	\$77.45
1216-3450-L	1216-3450-L-STK	20.00 (50.8)	34 (86)	50 (127)	16	4 Ser 4 Par	100%	L	12	20.4	13.8	25.0	Yes	\$50.70	\$77.70
1218-1922-L	1218-1922-L-STK	22.50 (57.1)	19 (48)	22 (56)	18	9 Ser 2 Par	100%	L	12	7.9	6.9	10.0	Yes	\$50.95	\$77.95
1218-1933-L	1218-1933-L-STK	22.50 (57.1)	19 (48)	33 (84)	18	6 Ser 3 Par	100%	L	12	17.7	10.3	20.0	Yes	\$51.20	\$78.20
1218-5567	1218-5567-STK	22.50 (57.1)	55 (140)	67 (170)	18	3 Ser 6 Par	100%	L / R	12	25.0	20.6	25.0	Yes	\$51.45	\$78.45
1220-2228		25.00 (63.5)	22 (56)	28 (72)	20	5 Ser 4 Par	50%	L / R	12	25.0	19.4	20.0	Yes	-	\$78.70
1220-2740	1220-2740-STK	25.00 (63.5)	27 (69)	40 (102)	20	5 Ser 4 Par	100%	L / R	12	20.4	13.8	25.0	Yes	\$51.95	\$78.95
1220-3450-L	1220-3450-L-STK	25.00 (63.5)	34 (86)	50 (127)	20	4 Ser 5 Par	100%	L	12	25.0	17.2	25.0	Yes	\$52.20	\$79.20
1221-2329	1221-2329-STK	26.25 (66.7)	23 (58)	29 (74)	21	7 Ser 3 Par	100%	L / R	12	13.1	10.3	15.0	Yes	\$52.45	\$79.45
1221-6467	1221-6467-STK	26.25 (66.7)	64 (163)	67 (170)	21	3 Ser 7 Par	100%	L / R	12	25.0	24.1	25.0	Yes	\$52.70	\$79.70
1224-2633-L	1224-2633-L-STK	30.00 (76.2)	26 (66)	33 (84)	24	6 Ser 4 Par	100%	L	12	17.8	13.8	20.0	Yes	\$52.95	\$79.95
1224-4150-L	1224-4150-L-STK	30.00 (76.2)	41 (104)	50 (127)	24	4 Ser 6 Par	100%	L	12	25.0	20.6	25.0	Yes	\$53.20	\$80.20
1225-2840	1225-2840-STK	31.25 (79.4)	28 (71)	40 (102)	25	5 Ser 5 Par	100%	L / R	12	25.0	17.2	25.0	Yes	\$53.45	\$80.45
1228-4850-L	1228-4850-L-STK	35.00 (88.9)	48 (122)	50 (127)	28	4 Ser 7 Par	100%	L	12	25.0	24.1	25.0	Yes	\$53.70	\$80.70

1. Stick Kit Defrosters. Include only the defroster. No wire harness, installation kit or controls are included.

2. Connection Tabs. "L" indicates all tabs on left while "L/R" indicates tabs on the left and right. Defrosters can be rotated for optimum tab alignment. See part drawing.

3. Amperage. Shorter defrosters pull more amperage than longer defrosters.

4. Two Element Defrosters. These defrosters require longer tabs so overall height is larger than standard.

© 2011 Planned Products LLC, All rights reserved.

Frost Fighter and ThermaSync are registered Trademarks of Planned Products LLC.

® ThermaSync Defroster Controls and Accessories

Part No.	Description	Type/Voltage	Price ea.	Image
2712	Defroster Control and Switch – 12 Volt ThermaSync RELAY controls provide an attractive defroster switch and relay with standard ten minute automatic shut off timing. Includes the ThermaSync control, switch and full instructors.	RELAY 12 Volts	\$33.95	
2812	Defroster Control and Switch – 12 Volt ThermaSync MOSFET controls provide power modulation, selectable automatic shutoff timing and full SwitchBoss network compatibility. The control can configured to shut off from 10 to 160 minutes or activated manually. Includes the ThermaSync control, switch and instructors.	MOSFET 12 Volts	\$39.95	
2724	Defroster Control and Switch – 24 Volt ThermaSync RELAY controls provide an attractive defroster switch and relay with standard ten minute automatic shut off timing. Includes the ThermaSync control, switch and full instructors. <i>*24 Volt RELAY available with longer lead times.</i>	RELAY* 24 Volts	\$43.95	
2824	Defroster Control and Switch – 24 Volt ThermaSync MOSFET controls provide power modulation, selectable automatic shutoff timing and full Switch Boss network compatibility. The control can configured to shut off from 10 to 160 minutes. Includes the ThermaSync control, switch and instructors.	MOSFET 24 Volts	\$49.95	
2728	Wire Harness Installation Pack The ThermSync installation pack makes it easy to install ThermaSync Defroster Controls. Includes a wire harness with color coded connectors, fuse, fuse holder, switch mounting plate, power tap, spare connectors, wire ties and full instructions. Does not include control or switch.	12/24 Volts	\$28.95	
2730	Switch Boss Defroster Control This control enables several Clear View II defrosters to be activated from a single master switch. Each defroster's ThermaSync control is plugged into the SwitchBoss. Up to four defrosters per SwitchBoss can be used. The networked defrosters can be different sizes. Automatic timing is set by the Master.	12/24 Volts	\$36.95	
2745	Tab Adaptor Wire Harness Connectors and wire to adapt existing defroster connectors to work with the Clear View II defroster tab locations. Includes ground wire and power wire to extend a vehicle's existing connector wires to work with any defrosters tab location. Plugs into defroster connector and Clear View defroster tabs.	12/24 Volts	\$8.95	



Planned Products LLC
4699 Nautilus Court S.
Suite 201
Boulder, CO 80301

Tel: 303.682.0274
Fax: 303.682.0678
info1@frostfighter.com
www.frostfighter.com

MADE IN THE

U. S. A.

4.12in (10.4) 2 Elements - Grid: Parallel-1, Series-2 12V

Part Number: 1202-1418-L

Modulation: 3%

Min. Length 13.8 in (36)

Max. Length 17.7 in (46)

Current

Peak 25.0A 19.4A

RMS 4.4A 3.4A

Avg. 0.8A 0.6A

Fuse 5.0A 5.0A



Part Number: 1202-1725-L

Modulation: 6%

Min. Length 16.9 in (43)

Max. Length 25.0 in (64)

Current

Peak 20.4A 13.8A

RMS 3.4A 5.1A

Avg. 1.3A 0.9A

Fuse 7.5A 7.5A



Part Number: 1202-2435-L

Modulation: 12%

Min. Length 23.9 in (61)

Max. Length 35.4 in (89)

Current

Peak 14.4A 9.7A

RMS 5.1A 3.4A

Avg. 1.8A 1.2A

Fuse 7.5A 7.5A



Part Number: 1202-3450-L

Modulation: 25%

Min. 33.8 in (86)

Max. Length 50.0 in (127)

Current

Peak 10.2A 6.9A

RMS 5.1A 3.4A

Avg. 2.5A 1.7A

Fuse 7.5A 7.5A



4.12in (10.4) 2 Elements - Grid: Parallel-1, Series-2 12V

Part Number: 1202-4871-L

Modulation: 50%

Min. Length 47.7 in (119)

Max. Length 70.7 in (180)

Current

Peak 7.2A 4.9A

RMS 5.1A 3.4A

Avg. 3.6A 2.4A

Fuse 7.5A 7.5A



Part Number: 1202-6884-L

Stick Kit: 1202-6884-L-STK

Modulation: 100%

Min. Length 67.5 in (173)

Max. Length 84.0 in (213)

Current

Peak 5.1A 3.4A

RMS 5.1A 3.4A

Avg. 5.1A 3.4A

Fuse 7.5A 7.5A



2.56 in (6.5) 2 Elements - Grid: Parallel-2, Series-1 12V

Part Number: 1202-5571

Modulation: 12%

Min. Length 55.0 in (140)

Max. Length 70.8 in (180)

Current

Peak 25.0A 19.4A

RMS 8.9A 6.9A

Avg. 3.1A 2.4A

Fuse 10.0A 10.0A



Part Number: 1202-6884

Modulation: 25%

Min. 67.5 in (173)

Max. Length 84.0 in (213)

Current

Peak 20.4A 16.4A

RMS 10.2A 8.2A

Avg. 5.1A 4.1A

Fuse 15.0A 15.0A



3.75 in (9.5) 3 Elements - Grid: Parallel-1, Series-3 12V

Part Number: 1203-0912

Modulation: 3%

Min. Length 9.2 in (23)

Max. Length 11.8 in (30)

Current

Peak 25.0A 19.4A

RMS 4.4A 3.4A

Avg. 0.8A 0.6A

Fuse 5.0A 5.0A



Part Number: 1203-1117

Modulation: 6%

Min. Length 11.3 in (28)

Max. Length 16.7in (38)

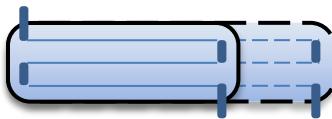
Current

Peak 20.4A 13.8A

RMS 5.1A 3.4A

Avg. 1.3A 0.9A

Fuse 7.5A 7.5A



Part Number: 1203-1624

Modulation: 12%

Min. Length 15.9 in (41)

Max. Length 23.6 in (61)

Current

Peak 14.4A 9.7A

RMS 5.1A 3.4A

Avg. 1.8A 1.2A

Fuse 7.5A 7.5A



Part Number: 1203-2333

Modulation: 25%

Min. Length 22.5 in (58)

Max. Length 33.3 in (84)

Current

Peak 10.2A 6.9A

RMS 5.1A 3.4A

Avg. 2.5A 1.7A

Fuse 7.5A 7.5A



3.75 in (9.5) 3 Elements - Grid: Parallel-1, Series-3 12V

Part Number: 1203-3247

Modulation: 50%

Min. Length 31.8 in (81)

Max. Length 47.1 in (119)

Current

Peak 7.2A 4.9A

RMS 5.1A 3.4A

Avg. 3.6A 2.4A

Fuse 7.5A 7.5A



Part Number: 1203-4567

Stick Kit: 1203-4567-STK

Modulation: 100%

Min. Length 45.0 in (114)

Max. Length 66.7 in (170)

Current

Peak 5.1A 3.4A

RMS 5.1A 3.4A

Avg. 5.1A 3.4A

Fuse 7.5A 7.5A



3.75 in (9.50) 3 Elements - Grid: Parallel-3, Series-1 12V

Part Number: 1203-8384

Modulation: 25%

Min. Length 82.5 in (211)

Max. Length 84.0 in (213)

Current

Peak 25.0A 24.6A

RMS 12.5A 12.3A

Avg. 6.3A 6.1A

Fuse 15.0A 15.0A



5.00 in (12.7) 4 Elements - Grid: Parallel-1, Series-4 12V

Part Number: 1204-0709-L

Modulation: 3%

Min. Length 6.9 in (18)

Max. Length 8.9 in (23)

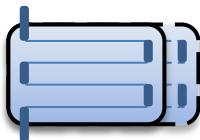
Current

Peak 25.0A 19.4A

RMS 4.4A 3.4A

Avg. 0.8A 0.6A

Fuse 5.0A 5.0A



Part Number: 1204-0813-L

Modulation: 6%

Min. Length 8.4 in (20)

Max. Length 12.5 in (33)

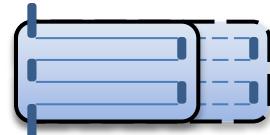
Current

Peak 20.4A 13.8A

RMS 5.1A 3.4A

Avg. 1.3A 0.9A

Fuse 7.5A 7.5A



Part Number: 1204-1218-L

Modulation: 12%

Min. Length 11.9 in (30)

Max. Length 17.7 in (46)

Current

Peak 14.4A 9.7A

RMS 5.1A 3.4A

Avg. 1.8A 1.2A

Fuse 7.5A 7.5A



Part Number: 1204-1725-L

Modulation: 25%

Min. Length 16.9 in (43)

Max. Length 25.0 in (64)

Current

Peak 10.2A 6.9A

RMS 5.1A 3.4A

Avg. 2.5A 1.7A

Fuse 7.5A 7.5A



5.00 in (12.7) 4 Elements - Grid: Parallel-1, Series-4 12V

Part Number: 1204-2435-L

Modulation: 50%

Min. Length 23.9 in (61)

Max. Length 35.4 in (89)

Current

Peak 7.2A 4.9A

RMS 5.1A 3.4A

Avg. 3.6A 2.4A

Fuse 7.5A 7.5A



Part Number: 1204-3450-L1

Stick Kit: 1204-3450-L1-STK

Modulation: 100%

Min. Length 33.8 in (86)

Max. Length 50.0 in (127)

Current

Peak 5.1A 3.4A

RMS 5.1A 3.4A

Avg. 5.1A 3.4A

Fuse 7.5A 7.5A



5.00 in (12.3) 4 Elements - Grid: Parallel-2, Series-2 12V

Part Number: 1204-2835-L

Modulation: 12%

Min. Length 27.5 in (71)

Max. Length 35.4 in (89)

Current

Peak 25.0A 19.4A

RMS 8.9A 6.9A

Avg. 3.1A 2.4A

Fuse 10.0A 10.0A



Part Number: 1204-3450-L

Modulation: 25%

Min. Length 33.8 in (86)

Max. Length 50.0 in (127)

Current

Peak 20.4A 13.8A

RMS 10.2A 6.9A

Avg. 5.1A 3.4A

Fuse 15.0A 15.0A



Part Number: 1204-4871-L

Modulation: 50%

Min. Length 47.7 in (119)

Max. Length 70.7 in (180)

Current

Peak 14.4A 9.7A

RMS 10.2A 6.9A

Avg. 7.2A 4.9A

Fuse 15.0A 15.0A



Part Number: 1204-6884-L

Stick Kit: 1204-6884-L-STK

Modulation: 100%

Min. Length 67.5 in (173)

Max. Length 84.0 in (213)

Current

Peak 10.2A 8.2A

RMS 10.2A 8.2A

Avg. 10.2A 8.2A

Fuse 15.0A 15.0A



6.25 in (15.8) 5 Elements - Grid: Parallel-1, Series-5 12V

Part Number: 1205-0607

Modulation: 3%

Min. Length 5.9 in (15)

Max. Length 7.1 in (18)

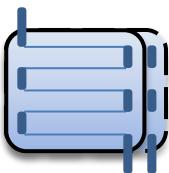
Current

Peak 23.3A 19.4A

RMS 4.1A 3.4A

Avg. 0.7A 0.6A

Fuse 5.0A 5.0A



Part Number: 1205-0710

Modulation: 6%

Min. Length 6.8 in (18)

Max. Length 10.0 in (25)

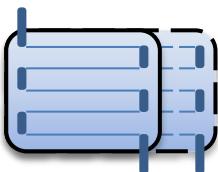
Current

Peak 20.4A 13.8A

RMS 5.1A 3.4A

Avg. 1.3A 0.9A

Fuse 7.5A 7.5A



Part Number: 1205-1014

Modulation: 12%

Min. Length 9.6 in (25)

Max. Length 14.2 in (36)

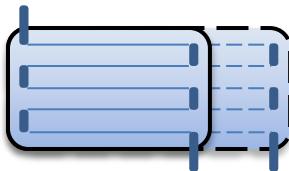
Current

Peak 14.4A 9.7A

RMS 5.1A 3.4A

Avg. 1.8A 1.2A

Fuse 7.5A 7.5A



Part Number: 1205-1420

Modulation: 25%

Min. Length 13.5 in (36)

Max. Length 20.0 in (51)

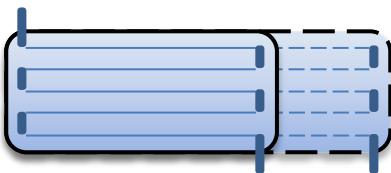
Current

Peak 10.2A 6.9A

RMS 5.1A 3.4A

Avg. 2.5A 1.7A

Fuse 7.5A 7.5A



6.25 in (15.8) 5 Elements - Grid: Parallel-1, Series-5 12V

Part Number: 1205-1928

Modulation: 50%

Min. Length 19.1 in (48)

Max. Length 28.3 in (71)

Current

Peak 7.2A 4.9A

RMS 5.1A 3.4A

Avg. 3.6A 2.4A

Fuse 7.5A 7.5A



Part Number: 1205-2740

Stick Kit: 1205-2740-STK

Modulation: 100%

Min. Length 27.0 in (69)

Max. Length 40.0 in (101)

Current

Peak 5.1A 3.4A

RMS 5.1A 3.4A

Avg. 5.1A 3.4A

Fuse 7.5A 7.5A



7.50in (19.0) 6 Elements - Grid: Parallel-1, Series-6 12V

Part Number: 1206-0708-L

Modulation: 6%

Min. Length 6.9 in (18)

Max. Length 8.3 in (20)

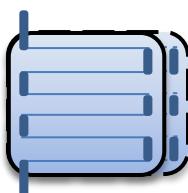
Current

Peak 16.6A 13.8A

RMS 4.2A 3.4A

Avg. 1.0A 0.9A

Fuse 5.0A 5.0A



Part Number: 1206-0812-L

Modulation: 12%

Min. Length 8.0 in (20)

Max. Length 11.8 in (30)

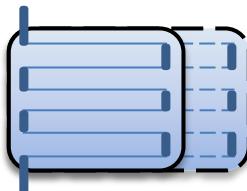
Current

Peak 14.4A 9.7A

RMS 5.1A 3.4A

Avg. 1.8A 1.2A

Fuse 7.5A 7.5A



Part Number: 1206-1117-L

Modulation: 25%

Min. Length 11.3 in (23)

Max. Length 16.7 in (43)

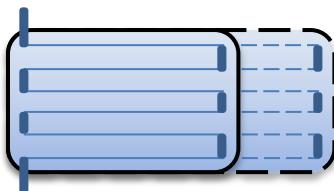
Current

Peak 10.2A 6.9A

RMS 5.1A 3.4A

Avg. 2.5A 1.7A

Fuse 7.5A 7.5A



Part Number: 1206-1624-L

Modulation: 50%

Min. Length 15.9 in (41)

Max. Length 23.6 in (61)

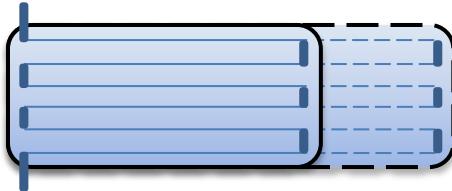
Current

Peak 7.2A 4.9A

RMS 5.1A 3.4A

Avg. 3.6A 2.4A

Fuse 7.5A 7.5A



7.50in (19.0) 6 Elements - Grid: Parallel-1, Series-6 12V

Part Number:	1206-2333-L	
Stick Kit:	1206-2333-L-STK	
Modulation:	100%	
Min. Length	22.5 in (58)	
Max. Length	33.3 in (84)	
Current		
Peak	5.1A	3.4A
RMS	5.1A	3.4A
Avg.	5.1A	3.4A
Fuse	7.5A	7.5A



7.50 in (19.0) 6 Elements - Grid: Parallel-2, Series-3 12V

Part Number: 1206-1824

Modulation: 12%

Min. Length 18.3 in (46)

Max. Length 23.6 in (61)

Current

Peak 25.0A 19.4A

RMS 8.9A 6.9A

Avg. 3.1A 2.4A

Fuse 10.0A 10.0A



Part Number: 1206-2333

Modulation: 25%

Min. Length 22.5 in (58)

Max. Length 33.3 in (84)

Current

Peak 13.8A 10.4A

RMS 10.2A 6.9A

Avg. 5.1A 3.4A

Fuse 15.0A 15.0A



Part Number: 1206-3247

Modulation: 50%

Min. Length 31.8 in (81)

Max. Length 47.1 in (119)

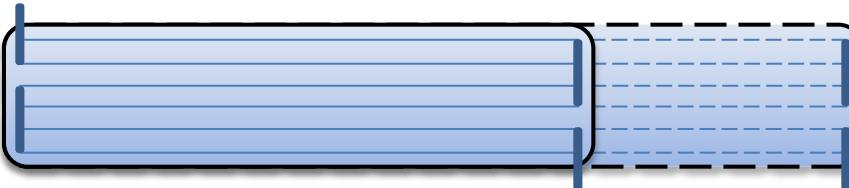
Current

Peak 14.4A 9.7A

RMS 10.2A 6.9A

Avg. 7.2A 4.9A

Fuse 15.0A 15.0A



Part Number: 1206-4567

Stick Kit: 1206-4567-STK

Modulation: 100%

Min. Length 45.0 in (114)

Max. Length 66.7 in (170)

Current

Peak 10.2A 6.9A

RMS 10.2A 6.9A

Avg. 10.2A 6.9A

Fuse 15.0A 15.0A



7.50 in (19.0) 6 Elements - Grid: Parallel-3, Series-2 12V

Part Number: 1206-4150-L

Modulation: 25%

Min. Length 41.3 in (104)

Max. Length 50.0 in (127)

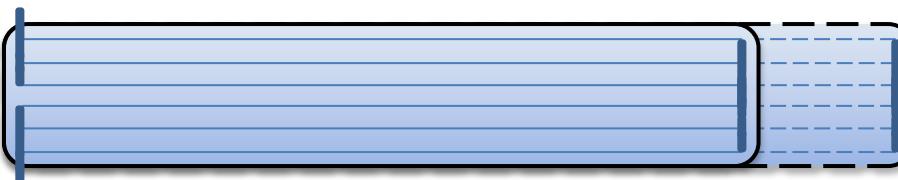
Current

Peak 25.0A 20.6A

RMS 12.5A 10.3A

Avg. 6.3A 5.2A

Fuse 15.0A 15.0A



Part Number: 1206-4871-L

Modulation: 50%

Min. Length 47.7 in (122)

Max. Length 70.7 in (180)

Current

Peak 21.6A 14.6A

RMS 15.3A 10.3A

Avg. 10.8A 7.3A

Fuse 20.0A 20.0A



Part Number: 1206-6884-L

Stick Kit: 1206-6884-L-STK

Modulation: 100%

Min. Length 67.5 in (173)

Max. Length 84.0 in (213)

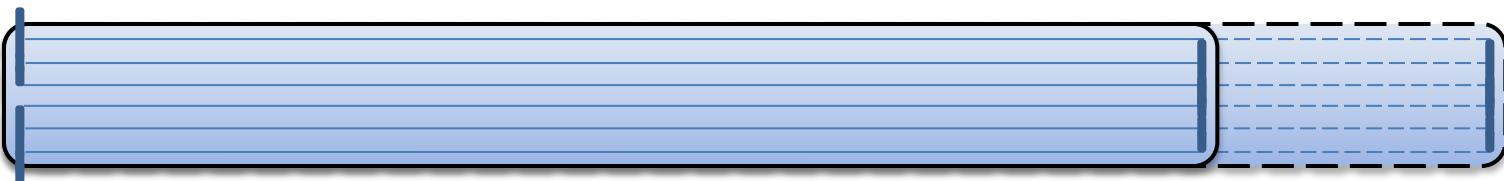
Current

Peak 15.3A 12.3A

RMS 15.3A 12.3A

Avg. 15.3A 12.3A

Fuse 20.0A 20.0A



8.75 in (22.2) 7 Elements - Grid: Parallel-1, Series-7 12V

Part Number: 1207-0810

Modulation: 12%

Min. Length 8.0 in (20)

Max. Length 10.1 in (25)

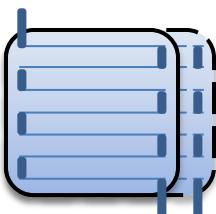
Current

Peak 12.3A 9.7A

RMS 4.3A 3.4A

Avg. 1.5A 1.2A

Fuse 5.0A 5.0A



Part Number: 1207-1014

Modulation: 25%

Min. Length 9.6 in (25)

Max. Length 14.3 in (36)

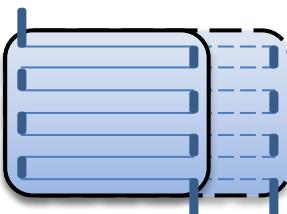
Current

Peak 10.2A 6.9A

RMS 5.1A 3.4A

Avg. 2.5A 1.7A

Fuse 7.5A 7.5A



Part Number: 1207-1420

Modulation: 50%

Min. Length 13.6 in (36)

Max. Length 20.2 in (51)

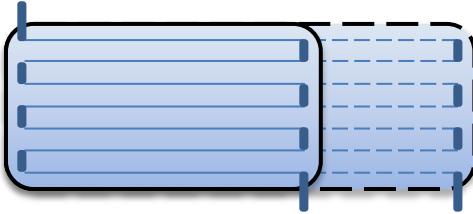
Current

Peak 7.2A 4.9A

RMS 5.1A .4A

Avg. 3.6A 2.4A

Fuse 7.5A 7.5A



Part Number: 1207-1929

Stick Kit: 1207-1929- STK

Modulation: 100%

Min. Length 19.3 in (48)

Max. Length 28.6 in (74)

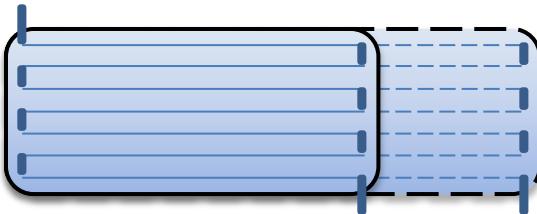
Current

Peak 5.1A 3.4A

RMS 5.1A 3.4A

Avg. 5.1A 3.4A

Fuse 7.5A 7.5A



10.00 in (25.4) 8 Elements - Grid: Parallel-1, Series-8 12V

Part Number: 1208-0913-L

Modulation: 25%

Min. Length 9.0 in (23)

Max. Length 12.5 in (33)

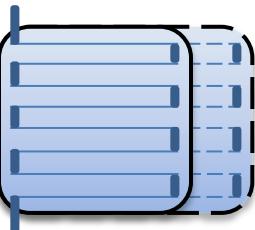
Current

Peak 9.5A 6.9A

RMS 4.8A 3.4A

Avg. 2.4A 1.7A

Fuse 5.0A 5.0A



Part Number: 1208-1218-L

Modulation: 50%

Min. Length 11.9 in (30)

Max. Length 17.7 in (46)

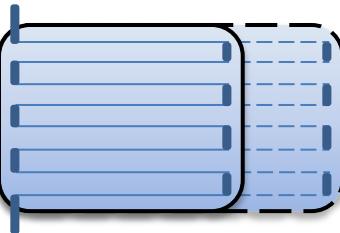
Current

Peak 7.2A 4.9A

RMS 5.1A 3.4A

Avg. 3.6A 2.4A

Fuse 7.5A 7.5A



Part Number: 1208-1725-L1

Stick Kit: 1208-1725-L1-STK

Modulation: 100%

Min. Length 16.9 in (43)

Max. Length 25.0 in (64)

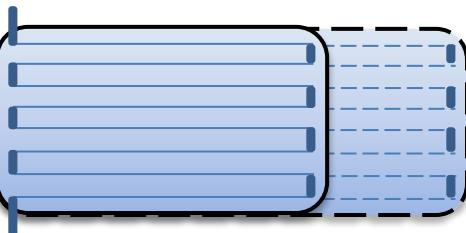
Current

Peak 5.1A 3.4A

RMS 5.1A 3.4A

Avg. 5.1A 3.4A

Fuse 7.5A 7.5A



10.00 in (25.4) 8 Element - Grid: Parallel-2, Series-4 12V

Part Number: 1208-1418-L

Modulation: 12%

Min. Length 13.8 in (36)

Max. Length 17.7 in (46)

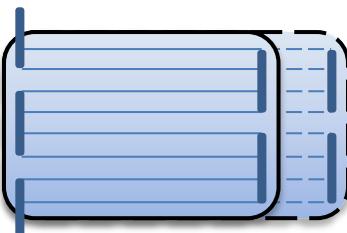
Current

Peak 25.0A 19.4A

RMS 8.9A 6.9A

Avg. 3.1A 2.4A

Fuse 10.0A 10.0A



Part Number: 1208-1725-L

Modulation: 25%

Min. Length 16.9 in (43)

Max. Length 25.0 in (64)

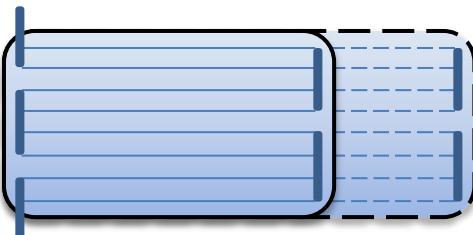
Current

Peak 20.4A 13.8A

RMS 10.2A 6.9A

Avg. 5.1A 3.4A

Fuse 15.0A 15.0A



Part Number: 1208-2435-L

Modulation: 50%

Min. Length 23.9 in (61)

Max. Length 35.4 in (89)

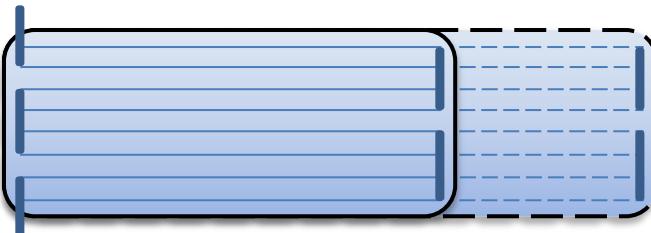
Current

Peak 14.4A 9.7A

RMS 10.2A 6.9A

Avg. 7.2A 4.9A

Fuse 15.0A 15.0A



Part Number: 1208-3450-L

Stick Kit: 1208-3450-L-STK

Modulation: 100%

Min. Length 33.8 in (86)

Max. Length 50.0 in (127)

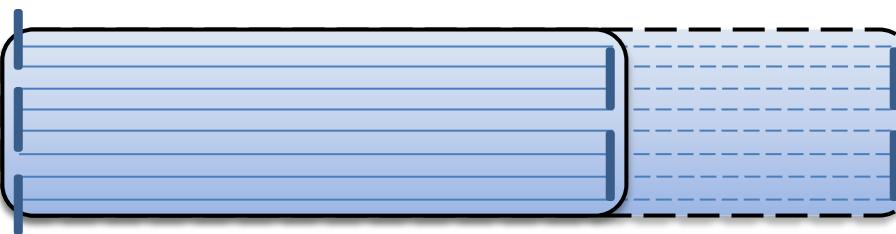
Current

Peak 10.2A 6.9A

RMS 10.2A 6.9A

Avg. 10.2A 6.9A

Fuse 15.0A 15.0A



10.00 in (25.4) 8 Elements - Grid: Parallel-4, Series-2 12V

Part Number: 1208-5571-L

Modulation: 50%

Min. Length 55.0 in (140)

Max. Length 70.7 in (180)

Current

Peak 25.0A 19.4A

RMS 17.7A 13.8A

Avg. 12.5A 9.7A

Fuse 20.0A 20.0A



Part Number: 1208-6884-L

Stick Kit: 1208-6884-L-STK

Modulation: 100%

Min. Length 67.5 in (173)

Max. Length 84.0 in (213)

Current

Peak 20.4A 16.4A

RMS 20.4A 16.4A

Avg. 20.4A 16.4A

Fuse 25.0A 25.0A



11.25 in (28.6) 9 Elements - Grid: Parallel-1, Series-9 12V

Part Number: 1209-1011

Modulation: 25%

Min. Length 10.0 in (25)

Max. Length 11.1 in (28)

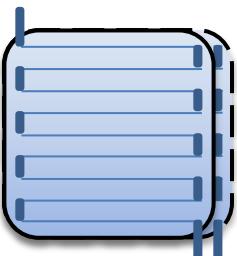
Current

Peak 7.6A 6.9A

RMS 3.8A 3.4A

Avg. 1.9A 1.7A

Fuse 5.0A 5.0A



Part Number: 1209-1116

Modulation: 50%

Min. Length 10.6 in (28)

Max. Length 15.7 in (41)

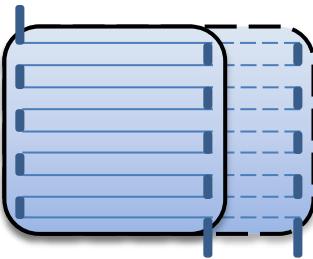
Current

Peak 7.2A 4.9A

RMS 5.1A 3.4A

Avg. 3.6A 2.4A

Fuse 7.5A 7.5A



Part Number: 1209-1522

Stick Kit: 1209-1522-STK

Modulation: 100%

Min. Length 15.0 in (38)

Max. Length 22.2 in (56)

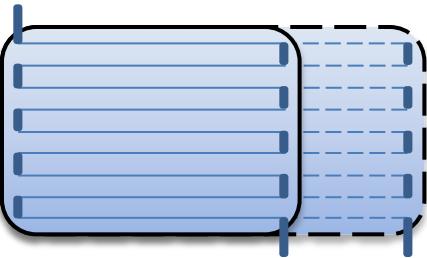
Current

Peak 5.1A 3.4A

RMS 5.1A 3.4A

Avg. 5.1A 3.4A

Fuse 7.5A 7.5A



11.25 in (28.6) 9 Elements - Grid: Parallel-3, Series-3 12V

Part Number: 1209-2833

Modulation: 25%

Min. Length 27.5 in (71)

Max. Length 33.3 in (84)

Current

Peak 25.0A 20.6A

RMS 12.5A 10.3A

Avg. 6.3A 5.2A

Fuse 15.0A 15.0A



Part Number: 1209-3247

Modulation: 50%

Min. Length 31.8 in (81)

Max. Length 47.1 in (119)

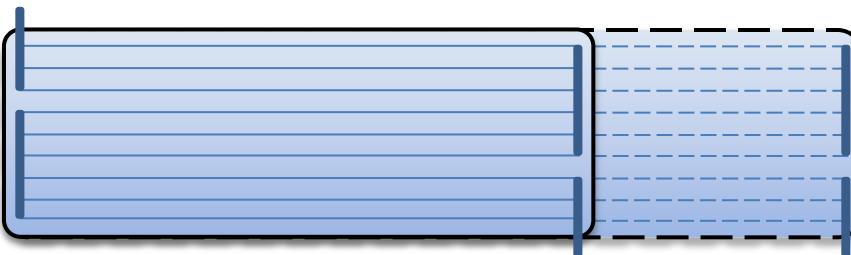
Current

Peak 21.6A 14.6A

RMS 15.3A 10.3A

Avg. 10.8A 7.3A

Fuse 20.0A 20.0A



Part Number: 1209-4567

Stick Kit: 1209-4567-STK

Modulation: 100%

Min. Length 45.0 in (114)

Max. Length 66.7 in (170)

Current

Peak 15.3A 10.3A

RMS 15.3A 10.3A

Avg. 15.3A 10.3A

Fuse 20.0A 20.0A



12.50 in (31.7) 10 Elements - Grid: Parallel-1, Series-10 12V

Part Number: 1210-1114-L

Modulation: 50%

Min. Length 11.1 in (28)

Max. Length 14.1 in (36)

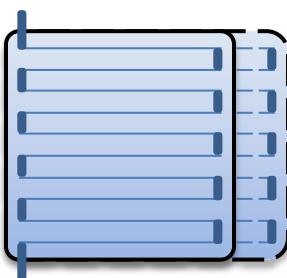
Current

Peak 6.2A 4.9A

RMS 4.4A 3.4A

Avg. 3.1A 2.4A

Fuse 5.0A 5.0A



Part Number: 1210-1420-L

Stick Kit: 1210-1420-L-STK

Modulation: 100%

Min. Length 13.5 in (36)

Max. Length 20.0 in (51)

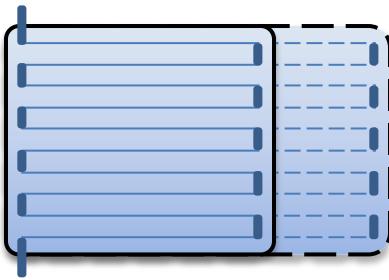
Current

Peak 5.1A 3.4A

RMS 5.1A 3.4A

Avg. 5.1A 3.4A

Fuse 7.5A 7.5A



12.50 in (31.7) 10 Elements - Grid: Parallel-2, Series-5 12V

Part Number: 1210-1114

Modulation: 12%

Min. Length 11.1 in (28)

Max. Length 14.2 in (36)

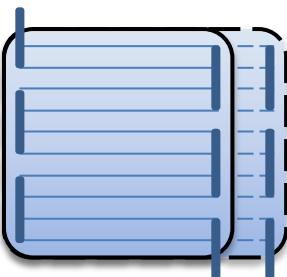
Current

Peak 24.8A 19.4A

RMS 8.8A 6.9A

Avg. 3.1A 2.4A

Fuse 10.0A 10.0A



Part Number: 1210-1420

Modulation: 25%

Min. Length 13.5 in (34)

Max. Length 20.0 in (51)

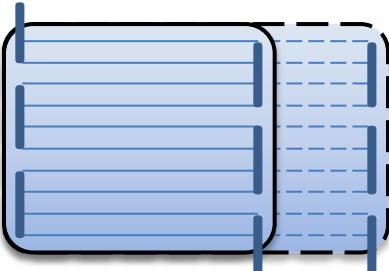
Current

Peak 20.4A 13.8A

RMS 10.2A 6.9A

Avg. 5.1A 3.4A

Fuse 15.0A 15.0A



Part Number: 1210-1928

Modulation: 50%

Min. Length 19.1 in (48)

Max. Length 28.3 in (71)

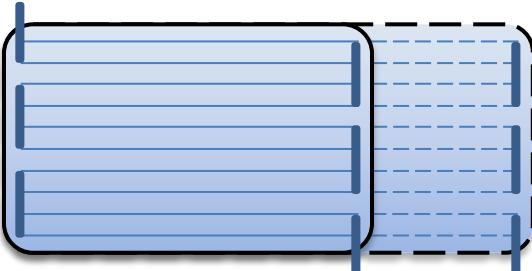
Current

Peak 14.4A 9.7A

RMS 10.2A 6.9A

Avg. 7.2A 4.9A

Fuse 15.0A 15.0A



Part Number: 1210-2740

Stick Kit: 1210-2740-STK

Modulation: 100%

Min. Length 27.0 in (69)

Max. Length 40.0 in (102)

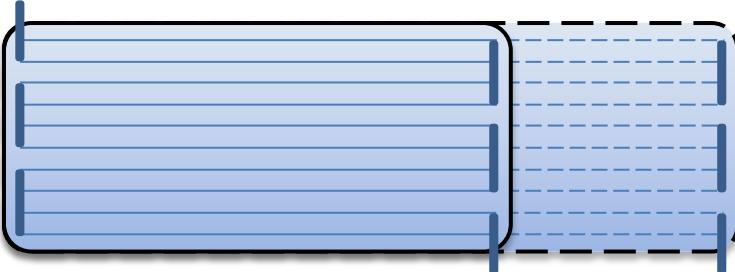
Current

Peak 10.2A 6.9A

RMS 10.2A 6.9A

Avg. 10.2A 6.9A

Fuse 15.0A 15.0A



12.50 in (31.7) 10 Elements - Grid: Parallel-5, Series-2 12V

Part Number:	1210-6984-L	
Stick Kit:	1210-6984-L-STK	
Modulation:	100%	
Min. Length	68.8 in (175)	
Max. Length	84.0 in (213)	
Current		
Peak	25.0A	20.5A
RMS	25.0A	20.5A
Avg.	25.0A	20.5A
Fuse	25.0A	25.0A



13.75 (34.9) 11 Elements - Grid: Parallel-1, Series-11 12V

Part Number: 1211-1218

Stick Kit: 1211-1218-STK

Modulation: 100%

Min. Length 12.3 in (30)

Max. Length 18.2 in (46)

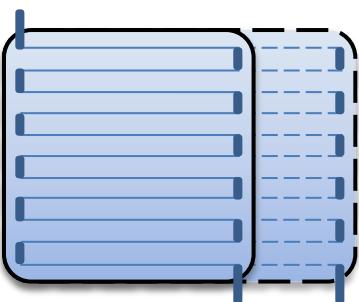
Current

Peak 5.1A 3.4A

RMS 5.1A 3.4A

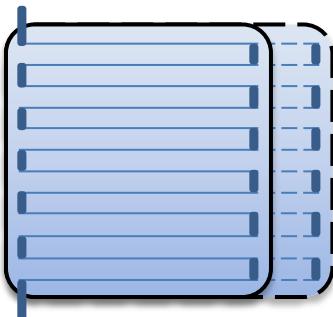
Avg. 5.1A 3.4A

Fuse 7.5A 7.5A



15.00 in (38.1) 12 Elements - Grid: Parallel-1, Series-12 12V

Part Number: 1212-1317-L1
Stick Kit: 1212-1317-L1-STK
Modulation: 100%
Min. Length 13.2 in (33)
Max. Length 16.7 in (43)
Current
Peak 4.3A 3.4A
RMS 4.3A 3.4A
Avg. 4.3A 3.4A
Fuse 5.0A 5.0A



15.00 in (38.1) 12 Elements - Grid: Parallel-2, Series-6 12V

Part Number: 1212-1317-L

Modulation: 25%

Min. Length 13.2 in (33)

Max. Length 16.7 in (43)

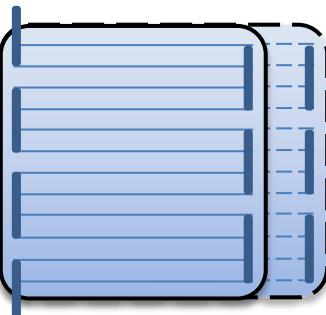
Current

Peak 17.4A 13.8A

RMS 8.7A 6.9A

Avg. 4.3A 3.4A

Fuse 10.0A 10.0A



Part Number: 1212-1624-L

Modulation: 50%

Min. Length 15.9 in (41)

Max. Length 23.6 in (61)

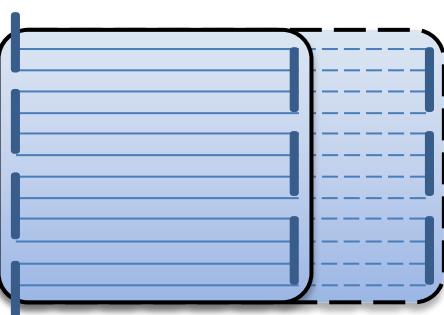
Current

Peak 14.4A 9.7A

RMS 10.2A 6.9A

Avg. 7.2A 4.9A

Fuse 15.0A 15.0A



Part Number: 1212-2333-L

Stick Kit: 1212-2333-L-STK

Modulation: 100%

Min. Length 22.5 in (58)

Max. Length 33.3 in (84)

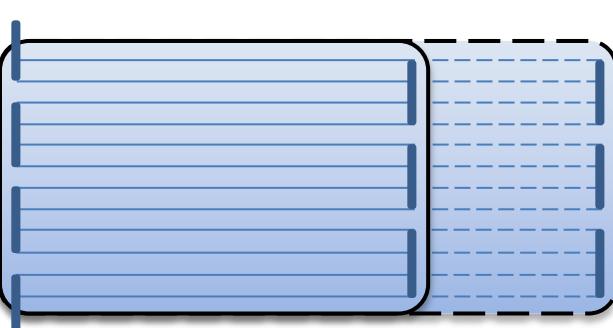
Current

Peak 10.2A 6.9A

RMS 10.2A 6.9A

Avg. 10.2A 6.9A

Fuse 15.0A 15.0A



15.00 in (38.1) 12 Elements - Grid: Parallel-3, Series-4 12V

Part Number: 1212-2435-L

Modulation: 50%

Min. Length 23.9 in (61)

Max. Length 35.4 in (89)

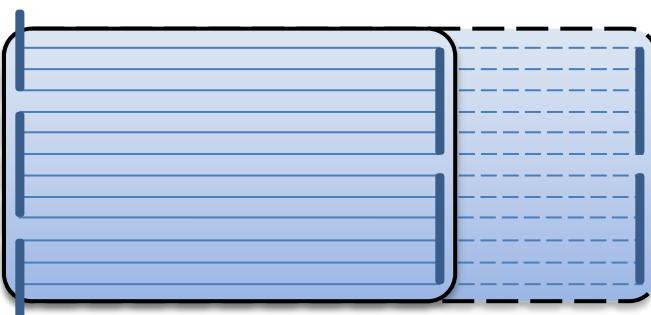
Current

Peak 21.6A 14.6A

RMS 15.3A 10.3A

Avg. 10.8A 7.3A

Fuse 20.0A 20.0A



Part Number: 1212-3450-L

Stick Kit: 1212-3450-L-STK

Modulation: 100%

Min. Length 33.8 in (86)

Max. Length 50.0 in (127)

Current

Peak 15.3A 10.3A

RMS 15.3A 10.3A

Avg. 15.3A 10.3A

Fuse 20.0A 20.0A



15.00 in (38.1) 12 Elements - Grid: Parallel-4, Series-3 12V

Part Number: 1212-3747

Modulation: 50%

Min. Length 36.7 in (94)

Max. Length 47.1 in (119)

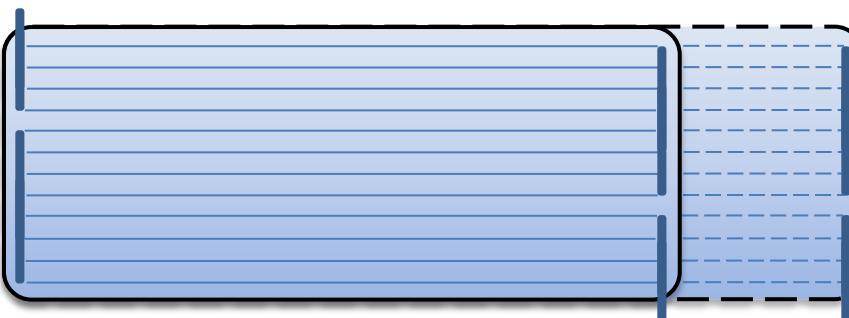
Current

Peak 25.0A 19.4A

RMS 17.7A 13.8A

Avg. 12.5A 9.7A

Fuse 20.0A 20.0A



Part Number: 1212-4567

Stick Kit: 1212-4567-STK

Modulation: 100%

Min. Length 45.0 in (114)

Max. Length 66.7 in (170)

Current

Peak 20.4A 13.8A

RMS 20.4A 13.8A

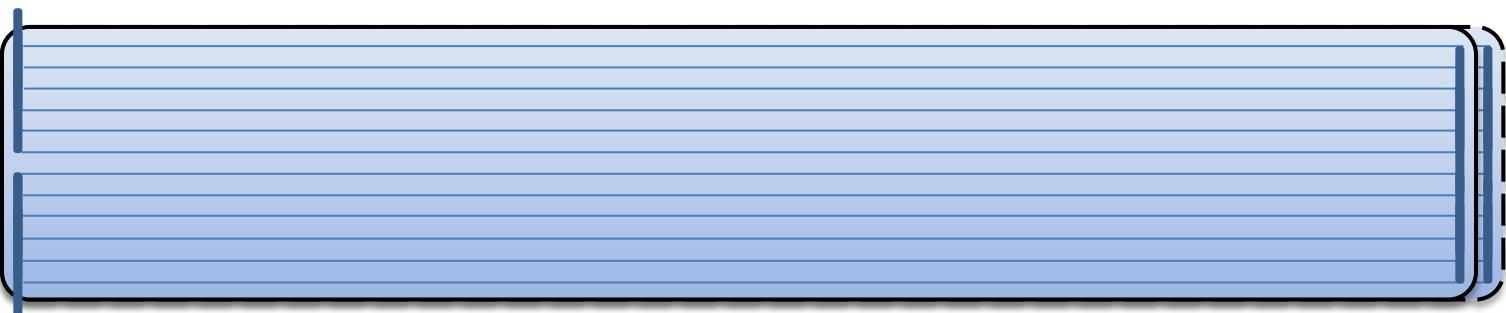
Avg. 20.4A 13.8A

Fuse 25.0A 25.0A



15.00 in (38.1) 12 Elements - Grid: Parallel-6, Series-2 12V

Part Number: 1212-8384-L
Stick Kit: 1212-8384-L-STK
Modulation: 100%
Min. Length 82.5 in (83)
Max. Length 84.0 in (84)
Current
Peak 25.0A 24.6A
RMS 25.0A 24.6A
Avg. 25.0A 24.6A
Fuse 25.0A 25.0A



17.50 in (44.4) 14 Elements - Grid: Parallel-2, Series-7 12V

Part Number: 1214-1520

Modulation: 50%

Min. Length 15.3 in (38)

Max. Length 20.2 in (51)

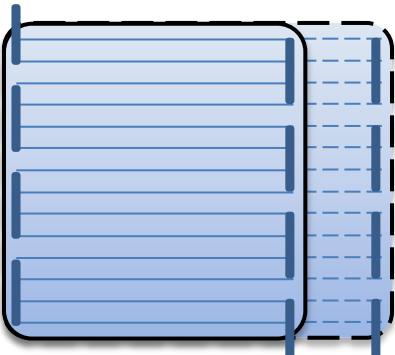
Current

Peak 12.8A 9.7A

RMS 9.1A 6.9A

Avg. 6.4A 4.9A

Fuse 10.0A 10.0A



Part Number: 1214-1929

Stick Kit: 1214-1929-STK

Modulation: 100%

Min. Length 19.3 in (48)

Max. Length 28.6 in (74)

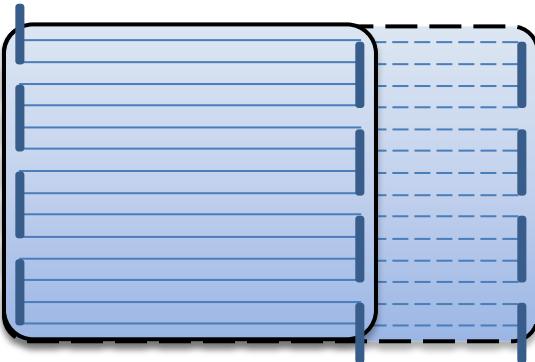
Current

Peak 10.2A 6.9A

RMS 10.2A 6.9A

Avg. 10.2A 6.9A

Fuse 15.0A 15.0A



18.75 in (47.6) 15 Elements - Grid: Parallel-3, Series-5 12V

Part Number: 1215-1720

Modulation: 25%

Min. Length 16.5 in (43)

Max. Length 20.0 in (51)

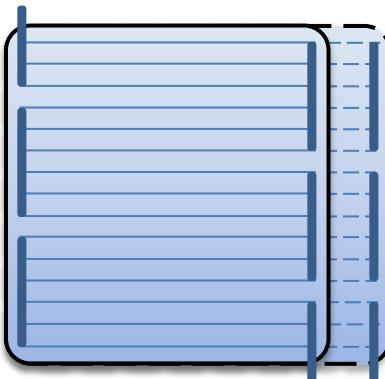
Current

Peak 25.0A 20.6A

RMS 12.5A 10.3A

Avg. 6.3A 5.2A

Fuse 15.0A 15.0A



Part Number: 1215-1928

Modulation: 50%

Min. Length 19.1 in (48)

Max. Length 28.3 in (71)

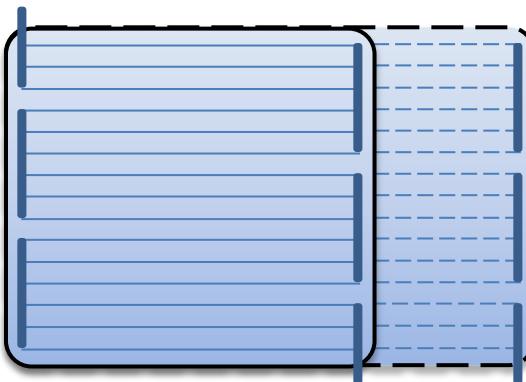
Current

Peak 21.6A 14.6A

RMS 15.3A 10.3A

Avg. 10.8A 7.3A

Fuse 20.0A 20.0A



Part Number: 1215-2740

Stick Kit: 1215-2740-STK

Modulation: 100%

Min. Length 27.0 in (69)

Max. Length 40.0 in (102)

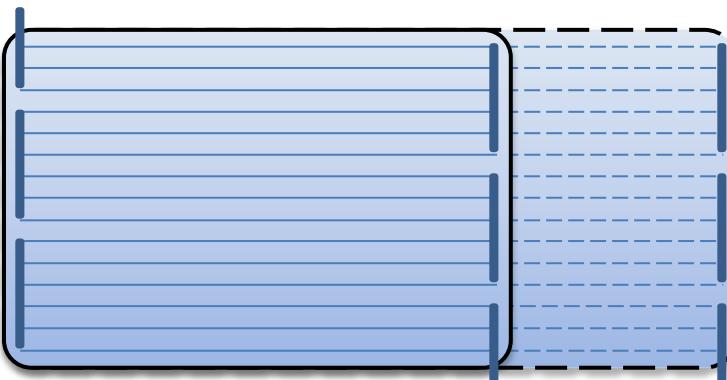
Current

Peak 15.3A 10.3A

RMS 15.3A 10.3A

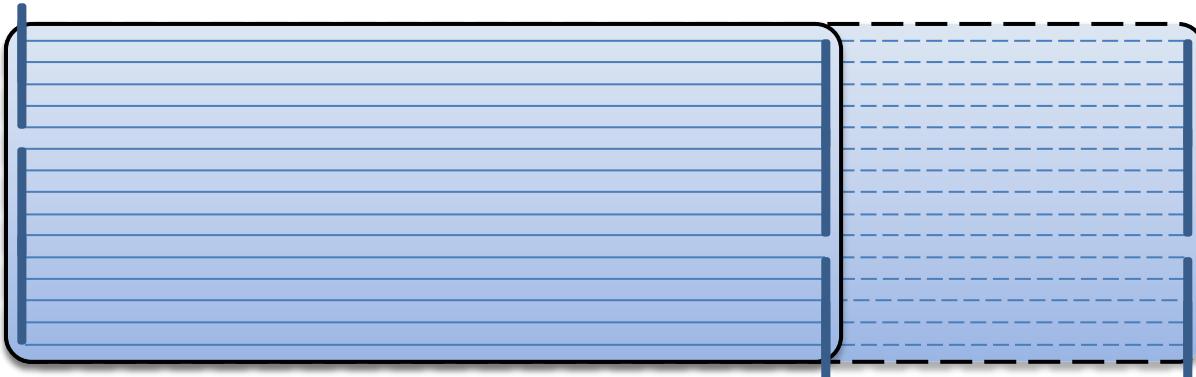
Avg. 15.3A 10.3A

Fuse 20.0A 20.0A



18.75 in (47.6) 15 Elements - Grid: Parallel-5, Series-3 12V

Part Number: 1215-4667
Stick Kit: 1228-4667-STK
Modulation: 100%
Min. Length 45.8 in (117)
Max. Length 66.7 in (170)
Current
Peak 25.0A 17.2A
RMS 25.0A 17.2A
Avg. 25.0A 17.2A
Fuse 25.0A 25.0A



20.00 in (50.8) 16 Elements - Grid: Parallel-2, Series-8 12V

Part Number: 1216-1725-L

Stick Kit: 1216-1725-L-STK

Modulation: 100%

Min. Length 17.3 in (43)

Max. Length 25.0 in (64)

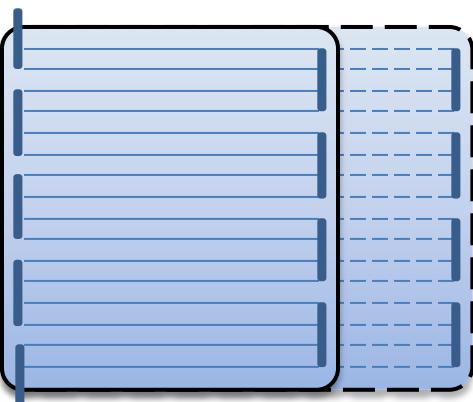
Current

Peak 9.9A 6.9A

RMS 9.9A 6.9A

Avg. 9.9A 6.9A

Fuse 10.0A 10.0A



20.00 in (50.8) 16 Elements - Grid: Parallel-4, Series-4 12V

Part Number: 1216-2835-L

Modulation: 50%

Min. Length 27.5 in (71)

Max. Length 35.4 in (89)

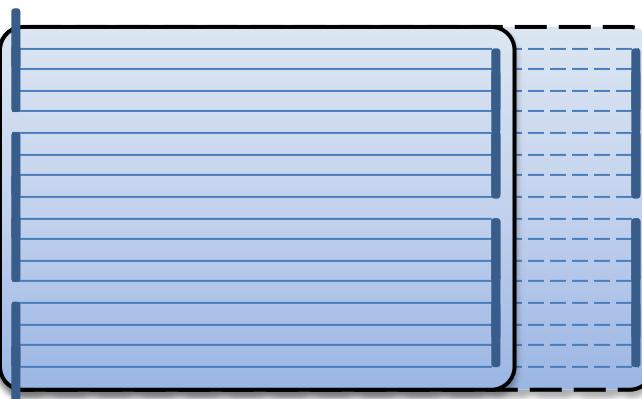
Current

Peak 25.0A 19.4A

RMS 17.7A 13.8A

Avg. 12.5A 9.7A

Fuse 20.0A 20.0A



Part Number: 1216-3450-L

Stick Kit: 1216-3450-L-STK

Modulation: 100%

Min. Length 33.8 in (86)

Max. Length 50.0 in (127)

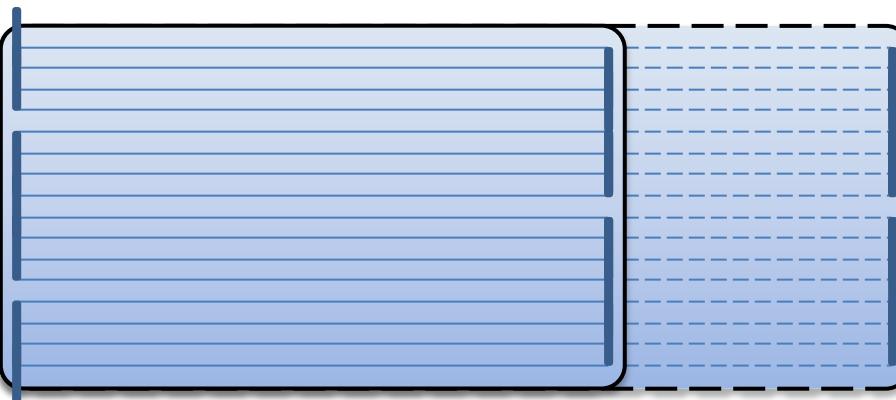
Current

Peak 20.4A 13.8A

RMS 20.4A 13.8A

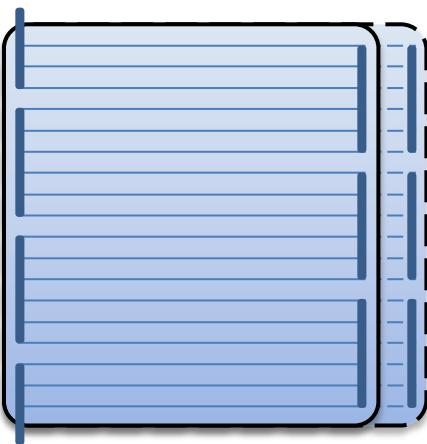
Avg. 20.4A 13.8A

Fuse 25.0A 25.0A



22.5 in (57.1) 18 Elements - Grid: Parallel-2, Series-9 12V

Part Number:	1218-1922-L	
Stick Kit:	1228-1922-L-STK	
Modulation:	100%	
Min. Length	19.4 in (48)	
Max. Length	22.2 in (56)	
Current		
Peak	7.9A	6.9A
RMS	7.9A	6.9A
Avg.	7.9A	6.9A
Fuse	10.0A	10.0A



22.5 in (57.1) 18 Elements - Grid: Parallel-3, Series-6 12V

Part Number: 1218-1933-L

Stick Kit: 1218-1933-L-STK

Modulation: 100%

Min. Length 19.4 in (48)

Max. Length 33.3 in (84)

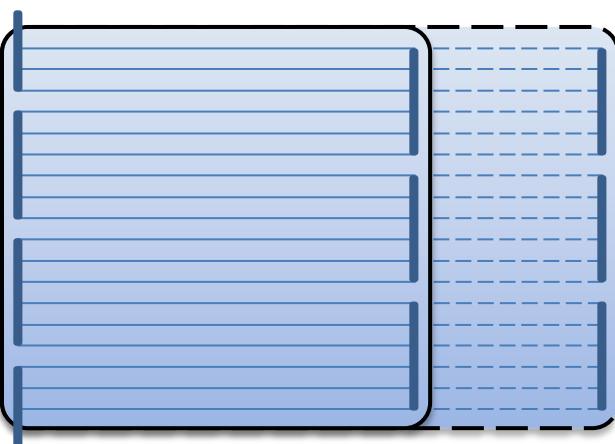
Current

Peak 17.7A 10.3A

RMS 17.7A 10.3A

Avg. 17.7A 10.3A

Fuse 20.0A 20.0A



22.50 in (57.1) 18 Elements - Grid: Parallel-6, Series-3 12V

Part Number: 1218-5567

Stick Kit: 1218-5567-STK

Modulation: 100%

Min. Length 55.0 in (140)

Max. Length 66.7 in (170)

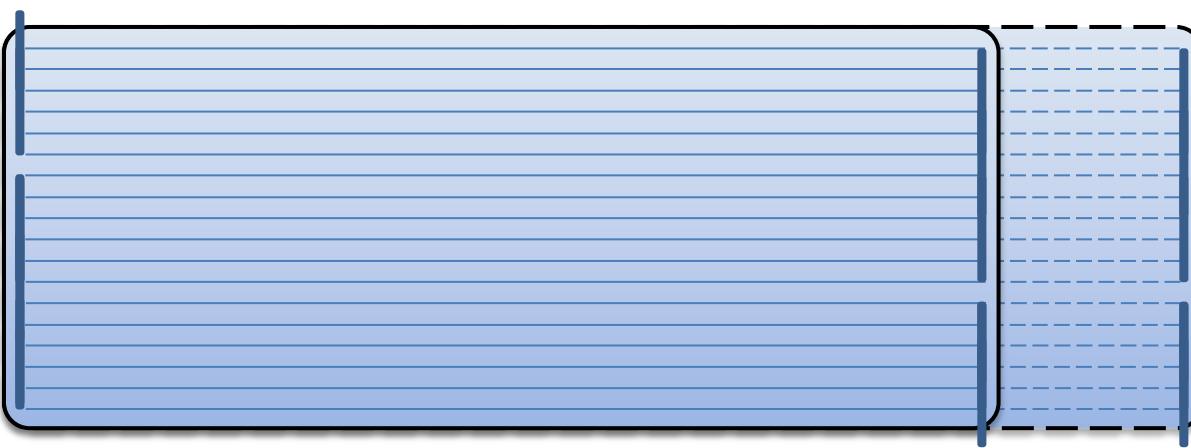
Current

Peak 25.0A 20.6A

RMS 25.0A 20.6A

Avg. 25.0A 20.6A

Fuse 25.0A 25.0A



25.00 in (63.5) 20 Elements - Grid: Parallel-4, Series-5 12V

Part Number: 1220-2228

Stick Kit: 1220-2228-STK

Modulation: 50%

Min. Length 22.0 in (56)

Max. Length 28.3 in (72)

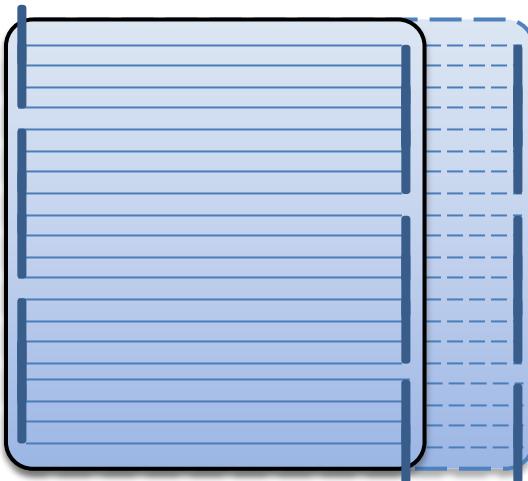
Current

Peak 25.0A 19.4A

RMS 17.0A 13.8A

Avg. 12.5A 9.7A

Fuse 20.0A 20.0A



Part Number: 1220-2740

Stick Kit: 1220-2740-STK

Modulation: 100%

Min. Length 27.0 in (69)

Max. Length 40.0 in (102)

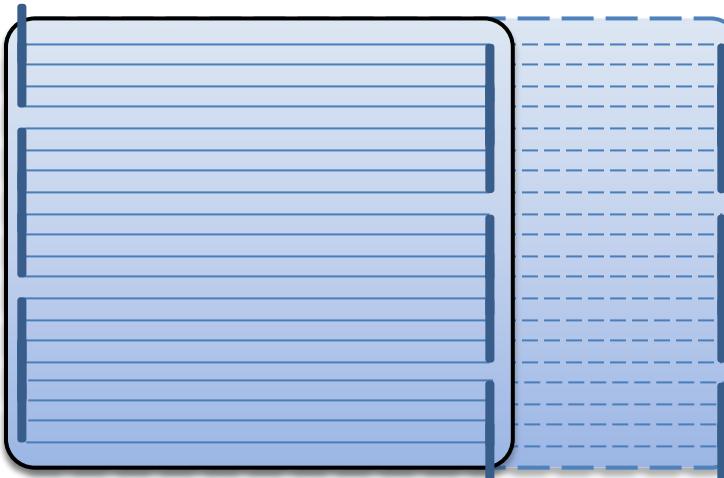
Current

Peak 20.4A 13.8A

RMS 20.4A 13.8A

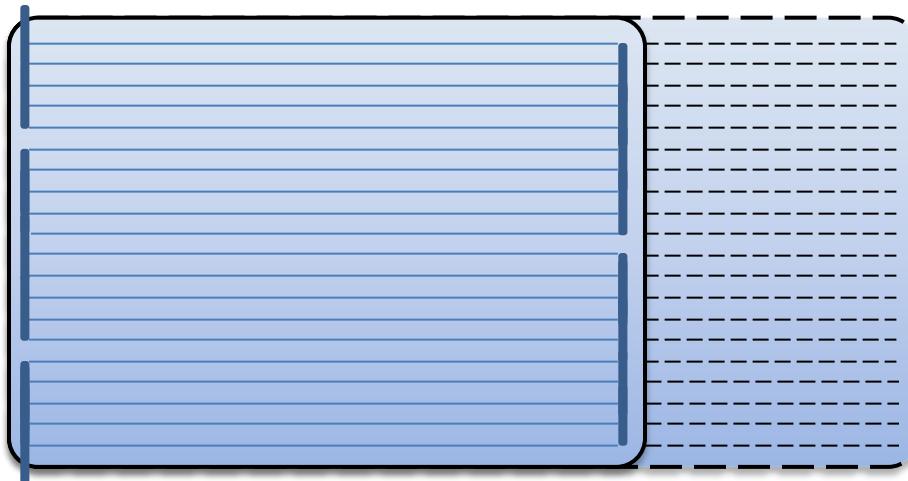
Avg. 20.4A 13.8A

Fuse 25.0A 25.0A



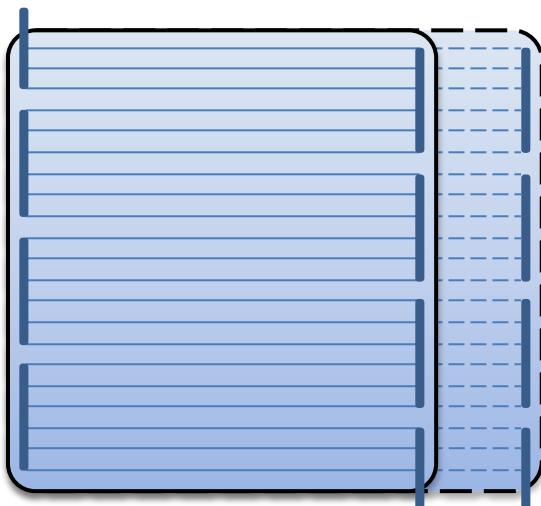
25.00 in (63.5) 20 Elements - Grid: Parallel-5, Series-4 12V

Part Number: 1220-3450-L
Stick Kit: 1220-3450-L-STK
Modulation: 100%
Min. Length 34.4 in (86)
Max. Length 50.0 in (127)
Current
Peak 25.0A 17.2A
RMS 25.0A 17.2A
Avg. 25.0A 17.2A
Fuse 25.0A 25.0A



26.25 in (66.6) 21 Elements - Grid: Parallel-3, Series-7 12V

Part Number: 1221-2329
Stick Kit: 1221-2329-STK
Modulation: 100%
Min. Length 22.5 in (58)
Max. Length 28.6 in (74)
Current
Peak 13.1A 10.3A
RMS 13.1A 10.3A
Avg. 13.1A 10.3A
Fuse 15.0A 15.0A



26.25 in (66.6) 21 Elements - Grid: Parallel-7, Series-3 12V

Part Number: 1221-6467

Stick Kit: 1221-6467-STK

Modulation: 100%

Min. Length 64.2 in (163)

Max. Length 66.7 in (170)

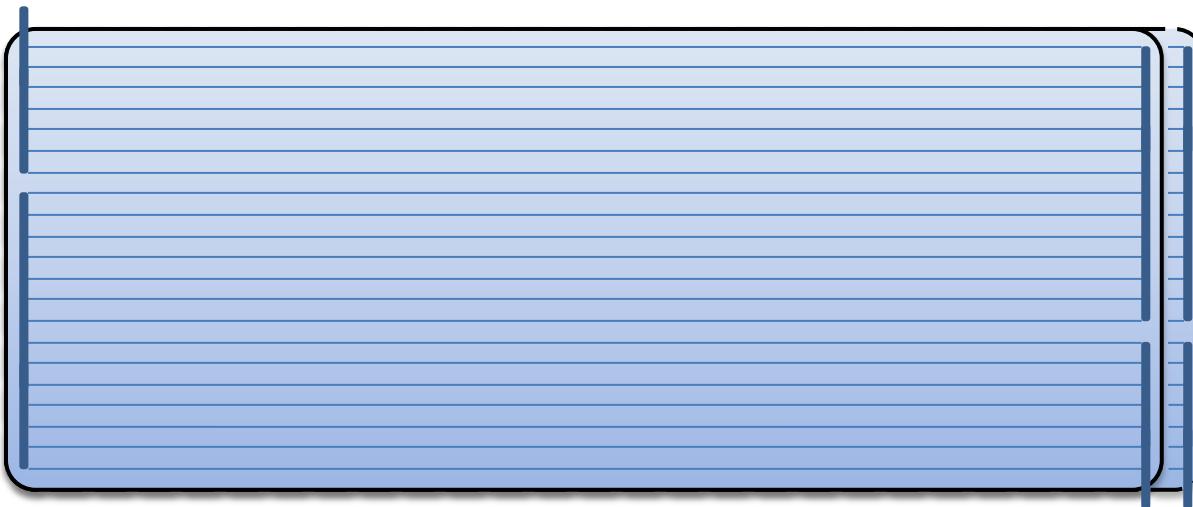
Current

Peak	25.0A	24.1A
------	-------	-------

RMS	25.0A	24.1A
-----	-------	-------

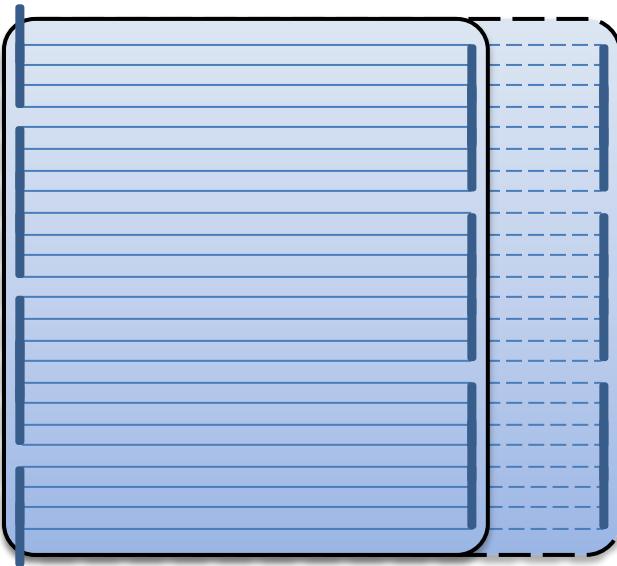
Avg.	25.0A	24.1A
------	-------	-------

Fuse	25.0A	25.0A
------	-------	-------



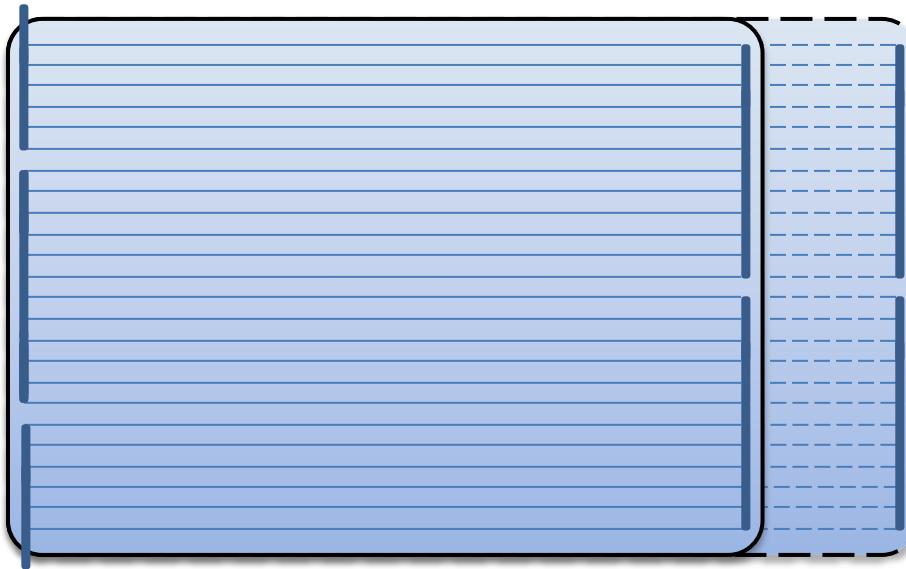
30 in (76.2) 24 Elements - Grid: Parallel-4, Series-6 12V

Part Number: 1224-2633-L
Stick Kit: 1224-2633-L-STK
Modulation: 100%
Min. Length 25.7 in (66)
Max. Length 33.3 in (84)
Current
Peak 17.8A 13.8A
RMS 17.8A 13.8A
Avg. 17.8A 13.8A
Fuse 20.0A 20.0A



30.00 In (76.2) 24 Elements - Grid: Parallel-6, Series-4 12V

Part Number: 1224-4150-L
Stick Kit: 1224-4150-L-STK
Modulation: 100%
Min. Length 41.3 in (104)
Max. Length 50.0 in (127)
Current
Peak 25.0A 20.6A
RMS 25.0A 20.6A
Avg. 25.0A 20.6A
Fuse 25.0A 25.0A



31.25 (79.4) 25 Elements - Grid: Parallel-5, Series-5 12V

Part Number: 1225-2840

Stick Kit: 1225-2840-STK

Modulation: 100%

Min. Length 27.5 in (71)

Max. Length 40.0 in (102)

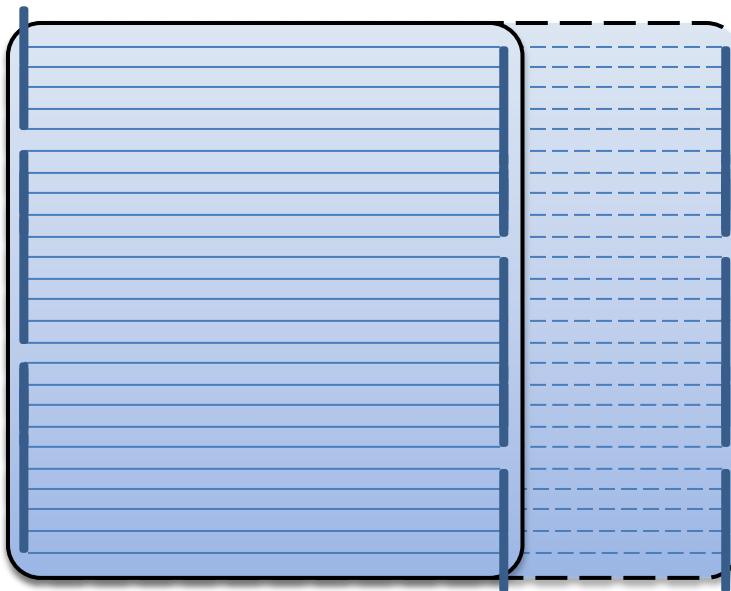
Current

Peak 25.0A 17.2A

RMS 25.0A 17.2A

Avg. 25.0A 17.2A

Fuse 25.0A 25.0A



35.00in (88.9) 28 Elements - Grid: Parallel-7, Series-4 12V

Part Number: 1228-4850-L
Stick Kit: 1228-4850-L-STK
Modulation: 100%
Min. Length 48.1 in (122)
Max. Length 50.0 in (127)
Current
Peak 25.0A 24.1A
RMS 25.0A 24.1A
Avg. 25.0A 24.1A
Fuse 25.0A 25.0A

