

# CYLINDER

Cylinder Fuses are typically used in industrial applications to protect electrical devices such as motors, drives, etc.

They are available in four sizes with a current range from 1 to 125 Amps. Cylinder Fuses have metal caps at both ends, and a porcelain fuse body.

Please refer to pg 15 for ordering information for Cylinder Fuse Bases.

## Operating Class

### gI / gF - Line Protection

Slow Blow, typically used for power distribution and resistive loads.

Typical Markings: gI, gF

### aM - Motor Protection



Fast acting short circuit protection, but slow acting overload protection.

Typical Marking: aM

Green imprint.

### gR - Semiconductor Protection

Typially used for protecting semiconductors like diodes, SCR's etc. Current limiting, super fast blow.

Typical Markings: Ultra Rapid™, Ultra Quick™, Protister™, gR,    
Mostly red or blue imprint.



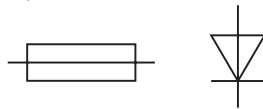
**8 x 32**

Ordering Information	Current/ Voltage	Cat. No.	Std. Pk.
<b>Slow Blow - Operating Class gI</b> (IEC 269 / CEI 32) Line Protection	1/380V AC	<b>1C8x32GI</b>	10
	2/380V AC	<b>2C8x32GI</b> <sup>1</sup>	10
	4/380V AC	<b>4C8x32GI</b> <sup>1</sup>	10
	6/380V AC	<b>6C8x32GI</b> <sup>1</sup>	10
	8/380V AC	<b>8C8x32GI</b> <sup>1</sup>	10
	10/380V AC	<b>10C8x32GI</b> <sup>1</sup>	10
	12/380V AC	<b>12C8x32GI</b> <sup>1</sup>	10
	16/380V AC	<b>16C8x32GI</b> <sup>1</sup>	10
	20/380V AC	<b>20C8x32GI</b> <sup>1</sup>	10
	25/380V AC	<b>25C8x32GI</b> <sup>1</sup>	10
	<b>Fast Blow - Operating Class aM</b> (IEC 269 / CEI 32) Motor Protection	1/380V AC	<b>1C8x32AM</b>
2/380V AC		<b>2C8x32AM</b>	10
4/380V AC		<b>4C8x32AM</b>	10
6/380V AC		<b>6C8x32AM</b>	10
8/380V AC		<b>8C8x32AM</b>	10
10/380V AC		<b>10C8x32AM</b>	10

### Semiconductor Protection - Operating Class gR (VDE 0636 / IEC 269) Semiconductor Protection



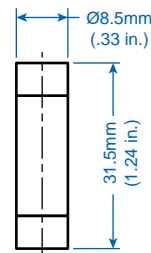
USA  
upon request



<sup>1</sup> Also available with Indicator. When ordering Fuse with Indicator, designate suffix "/I" after the Cat. No. (Ex. 2C10x38GI/I). Semiconductor fuses are supplied with Striker Pin as indicator.

<sup>2</sup> Also available with Striker Pin. When ordering Fuse with Striker Pin, designate suffix "/IS" after the Cat. No. (Ex. 2C14x51GI/IS).

<sup>3</sup> UL recognized version available upon request.



Dimensions to NFC 61200, NFC 63210, NFC 63211 (NFC = French Standard)



**10 x 38**

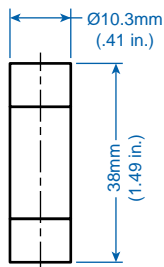


**14 x 51**

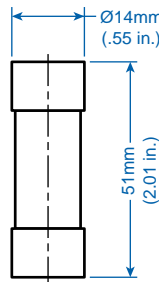


**22 x 58**

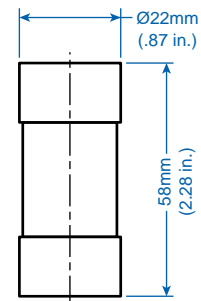
Current/ Voltage	Cat. No.	Std. Pk.	Current/ Voltage	Cat. No.	Std. Pk.	Current/ Voltage	Cat. No.	Std. Pk.
0.5/500V AC	<b>0.5C10x38GI</b>	10	1/660V AC	<b>1C14x51GI</b>	10	6/660V AC	<b>6C22x58GI<sup>1,2</sup></b>	10
1/500V AC	<b>1C10x38GI</b>	10	2/660V AC	<b>2C14x51GI<sup>1,2</sup></b>	10	8/660V AC	<b>8C22x58GI<sup>1,2</sup></b>	10
2/500V AC	<b>2C10x38GI<sup>1</sup></b>	10	4/660V AC	<b>4C14x51GI<sup>1,2</sup></b>	10	10/660V AC	<b>10C22x58GI<sup>1,2</sup></b>	10
4/500V AC	<b>4C10x38GI<sup>1</sup></b>	10	6/660V AC	<b>6C14x51GI<sup>1,2</sup></b>	10	12/660V AC	<b>12C22x58GI<sup>1,2</sup></b>	10
6/500V AC	<b>6C10x38GI<sup>1</sup></b>	10	8/660V AC	<b>8C14x51GI<sup>1,2</sup></b>	10	16/660V AC	<b>16C22x58GI<sup>1,2</sup></b>	10
8/500V AC	<b>8C10x38GI<sup>1</sup></b>	10	10/660V AC	<b>10C14x51GI<sup>1,2</sup></b>	10	20/660V AC	<b>20C22x58GI<sup>1,2</sup></b>	10
10/500V AC	<b>10C10x38GI<sup>1</sup></b>	10	12/660V AC	<b>12C14x51GI<sup>1,2</sup></b>	10	25/660V AC	<b>25C22x58GI<sup>1,2</sup></b>	10
12/500V AC	<b>12C10x38GI<sup>1</sup></b>	10	16/660V AC	<b>16C14x51GI<sup>1,2</sup></b>	10	32/660V AC	<b>32C22x58GI<sup>1,2</sup></b>	10
16/500V AC	<b>16C10x38GI<sup>1</sup></b>	10	20/660V AC	<b>20C14x51GI<sup>1,2</sup></b>	10	40/660V AC	<b>40C22x58GI<sup>1,2</sup></b>	10
20/500V AC	<b>20C10x38GI<sup>1</sup></b>	10	25/660V AC	<b>25C14x51GI<sup>1,2</sup></b>	10	50/660V AC	<b>50C22x58GI<sup>1,2</sup></b>	10
25/500V AC	<b>25C10x38GI<sup>1</sup></b>	10	32/500V AC	<b>32C14x51GI<sup>1,2</sup></b>	10	63/660V AC	<b>63C22x58GI<sup>1,2</sup></b>	10
32/400V AC	<b>32C10x38GI<sup>1</sup></b>	10	40/500V AC	<b>40C14x51GI<sup>1,2</sup></b>	10	80/660V AC	<b>80C22x58GI<sup>1,2</sup></b>	10
			50/400V AC	<b>50C14x51GI<sup>1,2</sup></b>	10	100/500V AC	<b>100C22x58GI<sup>1,2</sup></b>	10
						125/400V AC	<b>125C22x58GI<sup>1,2</sup></b>	10
0.5/500V AC	<b>0.5C10x38AM</b>	10	1/660V AC	<b>1C14x51AM<sup>1</sup></b>	10	6/660V AC	<b>6C22x58AM<sup>1,2</sup></b>	10
1/500V AC	<b>1C10x38AM<sup>1</sup></b>	10	2/660V AC	<b>2C14x51AM<sup>1,2</sup></b>	10	8/660V AC	<b>8C22x58AM<sup>1,2</sup></b>	10
2/500V AC	<b>2C10x38AM<sup>1</sup></b>	10	4/660V AC	<b>4C14x51AM<sup>1,2</sup></b>	10	10/660V AC	<b>10C22x58AM<sup>1,2</sup></b>	10
4/500V AC	<b>4C10x38AM<sup>1</sup></b>	10	6/660V AC	<b>6C14x51AM<sup>1,2</sup></b>	10	12/660V AC	<b>12C22x58AM<sup>1,2</sup></b>	10
6/500V AC	<b>6C10x38AM<sup>1</sup></b>	10	8/660V AC	<b>8C14x51AM<sup>1,2</sup></b>	10	16/660V AC	<b>16C22x58AM<sup>1,2</sup></b>	10
8/500V AC	<b>8C10x38AM<sup>1</sup></b>	10	10/660V AC	<b>10C14x51AM<sup>1,2</sup></b>	10	20/660V AC	<b>20C22x58AM<sup>1,2</sup></b>	10
10/500V AC	<b>10C10x38AM<sup>1</sup></b>	10	12/660V AC	<b>12C14x51AM<sup>1,2</sup></b>	10	25/660V AC	<b>25C22x58AM<sup>1,2</sup></b>	10
12/500V AC	<b>12C10x38AM<sup>1</sup></b>	10	16/660V AC	<b>16C14x51AM<sup>1,2</sup></b>	10	32/660V AC	<b>32C22x58AM<sup>1,2</sup></b>	10
16/500V AC	<b>16C10x38AM<sup>1</sup></b>	10	20/660V AC	<b>20C14x51AM<sup>1,2</sup></b>	10	40/660V AC	<b>40C22x58AM<sup>1,2</sup></b>	10
20/500V AC	<b>20C10x38AM<sup>1</sup></b>	10	25/660V AC	<b>25C14x51AM<sup>1,2</sup></b>	10	50/660V AC	<b>50C22x58AM<sup>1,2</sup></b>	10
25/400V AC	<b>25C10x38AM<sup>1</sup></b>	10	32/500V AC	<b>32C14x51AM<sup>1,2</sup></b>	10	63/660V AC	<b>63C22x58AM<sup>1,2</sup></b>	10
32/400V AC	<b>32C10x38AM<sup>1</sup></b>	10	40/500V AC	<b>40C14x51AM<sup>1,2</sup></b>	10	80/660V AC	<b>80C22x58AM<sup>1,2</sup></b>	10
			50/400V AC	<b>50C14x51AM<sup>1,2</sup></b>	10	100/500V AC	<b>100C22x58AM<sup>1,2</sup></b>	10
						125/400V AC	<b>125C22x58AM<sup>1,2</sup></b>	10
1/600V AC	<b>1C10x38SC</b>	10	1/660V AC	<b>1C14x51SC</b>	10	1/660V AC	<b>1C22x58SC<sup>1</sup></b>	10
2/600V AC	<b>2C10x38SC</b>	10	2/660V AC	<b>2C14x51SC<sup>1</sup></b>	10	2/660V AC	<b>2C22x58SC<sup>1</sup></b>	10
4/600V AC	<b>4C10x38SC<sup>3</sup></b>	10	4/660V AC	<b>4C14x51SC<sup>1</sup></b>	10	4/660V AC	<b>4C22x58SC<sup>1</sup></b>	10
6/600V AC	<b>6C10x38SC<sup>3</sup></b>	10	6/660V AC	<b>6C14x51SC<sup>1,3</sup></b>	10	6/660V AC	<b>6C22x58SC<sup>1</sup></b>	10
8/600V AC	<b>8C10x38SC<sup>3</sup></b>	10	8/660V AC	<b>8C14x51SC<sup>1,3</sup></b>	10	8/660V AC	<b>8C22x58SC<sup>1</sup></b>	10
10/600V AC	<b>10C10x38SC<sup>3</sup></b>	10	10/660V AC	<b>10C14x51SC<sup>1,3</sup></b>	10	10/660V AC	<b>10C22x58SC<sup>1</sup></b>	10
12/600V AC	<b>12C10x38SC<sup>3</sup></b>	10	12/660V AC	<b>12C14x51SC<sup>1,3</sup></b>	10	12/660V AC	<b>12C22x58SC<sup>1,3</sup></b>	10
16/600V AC	<b>16C10x38SC<sup>3</sup></b>	10	16/660V AC	<b>16C14x51SC<sup>1,3</sup></b>	10	16/660V AC	<b>16C22x58SC<sup>1,3</sup></b>	10
20/600V AC	<b>20C10x38SC<sup>3</sup></b>	10	20/660V AC	<b>20C14x51SC<sup>1,3</sup></b>	10	20/660V AC	<b>20C22x58SC<sup>1,3</sup></b>	10
25/600V AC	<b>25C10x38SC<sup>3</sup></b>	10	25/660V AC	<b>25C14x51SC<sup>1,3</sup></b>	10	25/660V AC	<b>25C22x58SC<sup>1,3</sup></b>	10
30/600V AC	<b>30C10x38SC<sup>3</sup></b>	10	32/660V AC	<b>32C14x51SC<sup>1,3</sup></b>	10	32/660V AC	<b>32C22x58SC<sup>1,3</sup></b>	10
			40/660V AC	<b>40C14x51SC<sup>1,3</sup></b>	10	40/660V AC	<b>40C22x58SC<sup>1,3</sup></b>	10
			50/500V AC	<b>50C14x51SC<sup>1,3</sup></b>	10	50/660V AC	<b>50C22x58SC<sup>1,3</sup></b>	10
						63/660V AC	<b>63C22x58SC<sup>1,3</sup></b>	10
						80/660V AC	<b>80C22x58SC<sup>1,3</sup></b>	10
						100/660V AC	<b>100C22x58SC<sup>1,3</sup></b>	10



Dimensions to NFC 60200, NFC 63210, NFC 63211 (NFC = French Standard)

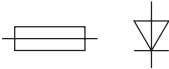


Dimensions to NFC 60200, NFC 63210, NFC 63211 (NFC = French Standard)



Dimensions to NFC 60200, NFC 63210, NFC 63211 (NFC = French Standard)

# CYLINDER with Bolt Tabs for Semiconductor Protection



Bolt tab cylinder fuses are typically used for protecting semiconductors like diodes, SCR's, etc. They are current limiting, super fast blow fuses in the gR operating class.

They are available in two diameters with multiple fixing centers. The fuses have a porcelain body, metal caps at both ends, and bolt tabs.



14(D) x 51(L)

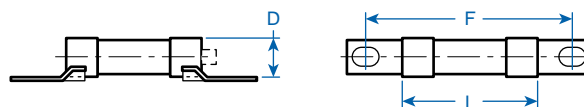


22(D) x 58(L)

Ordering Information	Current/ Voltage	Cat. No.	Std. Pk.	Current/ Voltage	Cat. No.	Std. Pk.
63mm (2.48 in.) Fixing Center (F) Fuse	1/660V AC	1C14x51SC-6B	10			
	2/660V AC	2C14x51SC-6B <sup>1</sup>	10			
	4/660V AC	4C14x51SC-6B <sup>1</sup>	10			
	6/660V AC	6C14x51SC-6B <sup>1,2</sup>	10			
	8/660V AC	8C14x51SC-6B <sup>1,2</sup>	10			
	10/660V AC	10C14x51SC-6B <sup>1,2</sup>	10			
	12/660V AC	12C14x51SC-6B <sup>1,2</sup>	10			
	16/660V AC	16C14x51SC-6B <sup>1,2</sup>	10			
	20/660V AC	20C14x51SC-6B <sup>1,2</sup>	10			
	25/660V AC	25C14x51SC-6B <sup>1,2</sup>	10			
	32/660V AC	32C14x51SC-6B <sup>1,2</sup>	10			
	40/660V AC	40C14x51SC-6B <sup>1,2</sup>	10			
	50/500V AC	50C14x51SC-6B <sup>1,2</sup>	10			
	80mm (3.15 in.) Fixing Center (F) Fuse	1/660V AC	1C14x51SC-8B	10	1/660V AC	1C22x58SC-8B
2/660V AC		2C14x51SC-8B <sup>1</sup>	10	2/660V AC	2C22x58SC-8B <sup>1</sup>	10
4/660V AC		4C14x51SC-8B <sup>1</sup>	10	4/660V AC	4C22x58SC-8B <sup>1</sup>	10
6/660V AC		6C14x51SC-8B <sup>1,2</sup>	10	6/660V AC	6C22x58SC-8B <sup>1</sup>	10
8/660V AC		8C14x51SC-8B <sup>1,2</sup>	10	8/660V AC	8C22x58SC-8B <sup>1</sup>	10
10/660V AC		10C14x51SC-8B <sup>1,2</sup>	10	10/660V AC	10C22x58SC-8B <sup>1</sup>	10
12/660V AC		12C14x51SC-8B <sup>1,2</sup>	10	12/660V AC	12C22x58SC-8B <sup>1,2</sup>	10
16/660V AC		16C14x51SC-8B <sup>1,2</sup>	10	16/660V AC	16C22x58SC-8B <sup>1,2</sup>	10
20/660V AC		20C14x51SC-8B <sup>1,2</sup>	10	20/660V AC	20C22x58SC-8B <sup>1,2</sup>	10
25/660V AC		25C14x51SC-8B <sup>1,2</sup>	10	25/660V AC	25C22x58SC-8B <sup>1,2</sup>	10
32/660V AC		32C14x51SC-8B <sup>1,2</sup>	10	32/660V AC	32C22x58SC-8B <sup>1,2</sup>	10
40/660V AC		40C14x51SC-8B <sup>1,2</sup>	10	40/660V AC	40C22x58SC-8B <sup>1,2</sup>	10
50/500V AC		50C14x51SC-8B <sup>1,2</sup>	10	50/660V AC	50C22x58SC-8B <sup>1,2</sup>	10
				63/660V AC	63C22x58SC-8B <sup>1,2</sup>	10
			80/660V AC	80C22x58SC-8B <sup>1,2</sup>	10	
			100/660V AC	100C22x58SC-8B <sup>1,2</sup>	10	
92mm (3.62 in.) Fixing Center (F) Fuse	1/660V AC			1/660V AC	1C22x58SC-9B	10
	2/660V AC			2/660V AC	2C22x58SC-9B <sup>1</sup>	10
	4/660V AC			4/660V AC	4C22x58SC-9B <sup>1</sup>	10
	6/660V AC			6/660V AC	6C22x58SC-9B <sup>1</sup>	10
	8/660V AC			8/660V AC	8C22x58SC-9B <sup>1</sup>	10
	10/660V AC			10/660V AC	10C22x58SC-9B <sup>1</sup>	10
	12/660V AC			12/660V AC	12C22x58SC-9B <sup>1,2</sup>	10
	16/660V AC			16/660V AC	16C22x58SC-9B <sup>1,2</sup>	10
	20/660V AC			20/660V AC	20C22x58SC-9B <sup>1,2</sup>	10
	25/660V AC			25/660V AC	25C22x58SC-9B <sup>1,2</sup>	10
	32/660V AC			32/660V AC	32C22x58SC-9B <sup>1,2</sup>	10
	40/660V AC			40/660V AC	40C22x58SC-9B <sup>1,2</sup>	10
	50/660V AC			50/660V AC	50C22x58SC-9B <sup>1,2</sup>	10
				63/660V AC	63C22x58SC-9B <sup>1,2</sup>	10
			80/660V AC	80C22x58SC-9B <sup>1,2</sup>	10	
			100/660V AC	100C22x58SC-9B <sup>1,2</sup>	10	
110mm (4.33 in.) Fixing Center (F) Fuse	1/660V AC			1/660V AC	1C22x58SC-1B	10
	2/660V AC			2/660V AC	2C22x58SC-1B <sup>1</sup>	10
	4/660V AC			4/660V AC	4C22x58SC-1B <sup>1</sup>	10
	6/660V AC			6/660V AC	6C22x58SC-1B <sup>1</sup>	10
	8/660V AC			8/660V AC	8C22x58SC-1B <sup>1</sup>	10
	10/660V AC			10/660V AC	10C22x58SC-1B <sup>1</sup>	10
	12/660V AC			12/660V AC	12C22x58SC-1B <sup>1,2</sup>	10
	16/660V AC			16/660V AC	16C22x58SC-1B <sup>1,2</sup>	10
	20/660V AC			20/660V AC	20C22x58SC-1B <sup>1,2</sup>	10
	25/660V AC			25/660V AC	25C22x58SC-1B <sup>1,2</sup>	10
	32/660V AC			32/660V AC	32C22x58SC-1B <sup>1,2</sup>	10
	40/660V AC			40/660V AC	40C22x58SC-1B <sup>1,2</sup>	10
	50/660V AC			50/660V AC	50C22x58SC-1B <sup>1,2</sup>	10
				63/660V AC	63C22x58SC-1B <sup>1,2</sup>	10
			80/660V AC	80C22x58SC-1B <sup>1,2</sup>	10	
			100/660V AC	100C22x58SC-1B <sup>1,2</sup>	10	

<sup>1</sup> Also available with striker pin blown fuse indicator. When ordering Fuse with striker pin, designate suffix "I" after the Cat. No. (Ex. 6C14x51SC-6B/I).

<sup>2</sup> UL recognized version available upon request. UL version rated at 700VAC.



## CYLINDER FUSE BASES

Fuse Bases secure the fuses in place and insure proper electrical connections. Fuse Bases are available in one, two, three and four pole designs.

Types 8x32 and 10x38 are easily DIN rail mounted; Types 14x51 and 22x58 can be DIN rail mounted or mounted to any flat surface.

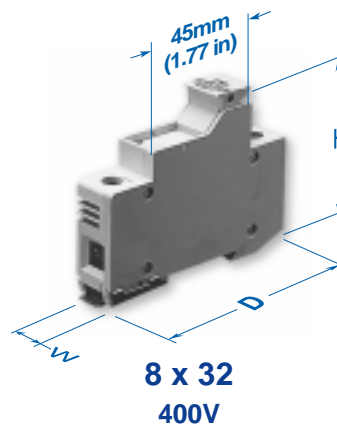
Cylinder Fuse Bases are available with optional blown fuse indication.<sup>1</sup>

### Maximum Rating for Cylinder Fuse Bases

Cylinder Base	Fuse		
	400V	500V	660V
8x32	20A	–	–
10x38	32A	25A	–
14x51	50A	32A	25A
22x58	125A	100A	80A

### Wire Range

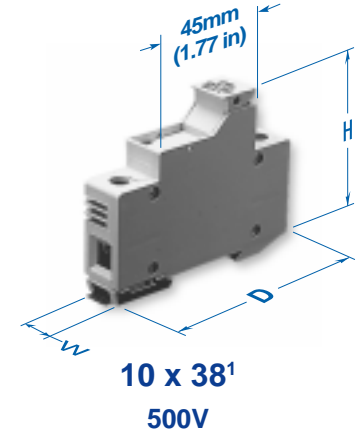
Cylinder Base	max		
	min	stranded wire	solid wire
8x32	1mm <sup>2</sup>	16mm <sup>2</sup>	25mm <sup>2</sup>
10x38	1mm <sup>2</sup>	16mm <sup>2</sup>	25mm <sup>2</sup>
14x51	1mm <sup>2</sup>	25mm <sup>2</sup>	35mm <sup>2</sup>
22x58	1.5mm <sup>2</sup>	35mm <sup>2</sup>	50mm <sup>2</sup>



**8 x 32**  
**400V**

No. of Poles	Cat. No.	Approx. Dim. mm (in.)		
		Height	Width	Depth
1	CB832-1	77 (3.03)	17.5 (0.69)	63.5 (2.50)
2	CB823-1N	77 (3.03)	35 (1.38)	63.5 (2.50)
2	CB832-2	77 (3.03)	35 (1.38)	63.5 (2.50)
3	CB823-3	77 (3.03)	52.5 (2.07)	63.5 (2.50)
4	CB823-3N	77 (3.03)	70 (2.76)	63.5 (2.50)

Std. Pk. 1



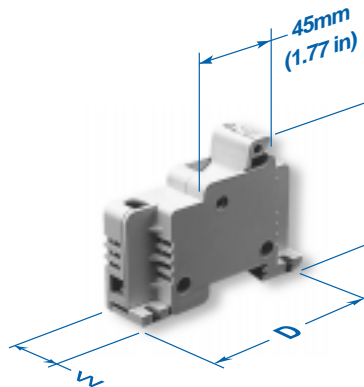
**10 x 38<sup>1</sup>**  
**500V**

No. of Poles	Cat. No.	Approx. Dim. mm (in.)		
		Height	Width	Depth
1	CB1038-1	77 (3.03)	17.5 (0.69)	63.5 (2.50)
2	CB1038-1N	77 (3.03)	35 (1.38)	63.5 (2.50)
2	CB1038-2	77 (3.03)	35 (1.38)	63.5 (2.50)
3	CB1038-3	77 (3.03)	52.5 (2.07)	63.5 (2.50)
4	CB1038-3N	77 (3.03)	70 (2.76)	63.5 (2.50)

Std. Pk. 1



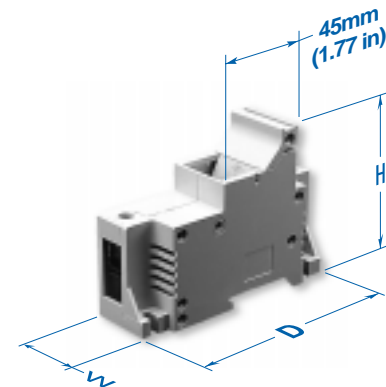
Rated at 600V, 30A



**14 x 51**  
**660V**

No. of Poles	Cat. No.	Approx. Dim. mm (in.)		
		Height	Width	Depth
1	CB1451-1	100 (3.94)	26 (1.02)	73 (2.87)
2	CB1451-1N	100 (3.94)	52 (2.05)	73 (2.87)
2	CB1451-2	100 (3.94)	52 (2.05)	73 (2.87)
3	CB1451-3	100 (3.94)	78 (3.07)	73 (2.87)
4	CB1451-3N	100 (3.94)	104 (4.09)	73 (2.87)

Std. Pk. 1



**22 x 58**  
**660V**

No. of Poles	Cat. No.	Approx. Dim. mm (in.)		
		Height	Width	Depth
1	CB2258-1	140 (5.51)	35 (1.38)	90 (3.54)
2	CB2258-1N	140 (5.51)	70 (2.76)	90 (3.54)
2	CB2258-2	140 (5.51)	70 (2.76)	90 (3.54)
3	CB2258-3	140 (5.51)	105 (4.13)	90 (3.54)
4	CB2258-3N	140 (5.51)	140 (5.51)	90 (3.54)

Std. Pk. 1

<sup>1</sup> To order with blown fuse indicator, designate suffix "I" after the Cat. No.