# Cartridge Fuses





MCASE+<sup>™</sup> Slotted



MCASE+<sup>™</sup> Slotted HT



MCASE+<sup>™</sup> Unslotted



MCASE+<sup>™</sup> Unslotted HT

# MCASE+<sup>™</sup> Cartridge Fuses Rated 32V

MCASE+™ is a time delayed fuse designed to withstand inrush currents within a miniaturized footprint for optimal performance in minimal space. The Unslotted MCASE+™ cartridge style fuse can protect up to 40A with female terminals for 2.8 mm male terminals. The Slotted MCASE+™ Fuse is rated up to 60A and can mate with 6.3mm male terminals or even mount performance in minimal space directly onto a busbar. MCASE+ High Temperature (HT) have a lower voltage drop and are designed to operate with a lower temperature rise in harsher environmental applications.

#### **Specification**

Voltage Rating Interrupting Rating: **Operating Temperature Range:** Housing Material: Cover Material: Net Weight Per Fuse: Fuse Insertion Force: Extraction Force: Conforms to:

32VDC 1000 @ 32VDC -40°C to +125°C PPA-GF33 (U.L. 94 Flammability rating - HB) PA66 (U.L. 94 Flammability rating - V2) 1.15g ±10% 50N (11.2 lb) - Typical 4N Min. (0.9 lb) / 24.5N Max (5.5 lb) - Single Terminal SAE 2 mecha

# RoHS

#### **Ordering Information**

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Part Number	Туре	Package Size		Openi
0695xxx.PXPS	Slotted	2000	% of Rating	Min /
0695xxx.PXPS-HT	Slotted	2000	110	100
0695xxx.PXP	Unslotted	2000	135	60 ,
0695xxx.PXP-HT	Unslotted	2000	200	2
			350	0

2741 and ISO 8820-4 in reference to electrical,
anical and environmental performance requirements
Time-Current Characteristics

% of Rating	Opening Time Min / Max (s)
110	100 hrs / ∞
135	60 / 1800
200	2 / 60
350	0.2 / 7
600	0.04 / 1

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Part Number	Туре	Current Rating (A)	Housing Material Color	Wire Size (mm²)	Typ. Voltage Drop (mV)	Cold Resistance (mΩ)	Melting I²t (A²s)
0695015.PXPS	Slotted	15		1.25	97	4.8	294
0695020.PXPS	Slotted	20		1.25	100	3.4	565
0695025.PXPS	Slotted	25		2	99	2.5	1369
0695030.PXPS	Slotted	30		2	112	1.8	1032
0695040.PXPS	Slotted	40		3	107	1.1	1439
0695050.PXPS	Slotted	50		5	109	0.77	3829
0695060.PXPS	Slotted	60		5	102	0.54	8026
0695040.PXPS-HT	Slotted	40		3	111	0.89	2487
0695050.PXPS-HT	Slotted	50		5	74	0.64	5718
0695060.PXPS-HT	Slotted	60		5	90	0.46	13074
0695015.PXP	Unslotted	15		1.25	97	4.8	309
0695020.PXP	Unslotted	20		1.25	106	3.4	596
0695025.PXP	Unslotted	25		2	114	2.5	1230
0695030.PXP	Unslotted	30		2	96	1.8	1041
0695040.PXP	Unslotted	40		3	101	1	1688
0695040.PXP-HT	Unslotted	40		3	109	0.89	2519

The performance of the male terminal is critical to ensuring the fuse will function as designed. The current carrying capabili ty of the mating terminal must be verified to ensure proper system operation.

\*\* Melting I<sup>2</sup>t description: To determine the I<sup>2</sup>t value for very short overcurrents (ms) in the adiabatic zone, the current from the breacking : capacity test is used.

The I<sup>2</sup>t value is calculated from the breaking capacity tests by using the current time profile before the arcing occurs.

#### REV08312020

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# Cartridge Fuses

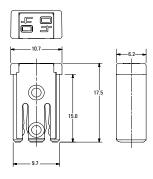


# MCASE+<sup>™</sup> Cartridge Fuses Rated 32V

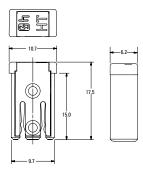
#### Dimensions

Dimensions in mm

### MCASE+<sup>™</sup> Slotted



# MCASE+<sup>™</sup> Slotted HT



MCASE+<sup>™</sup> Unslotted

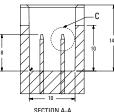
10.7

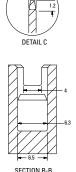
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# В

**Slotted Recommended Mating Cavity** 

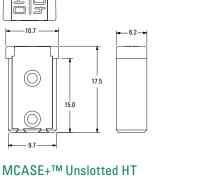


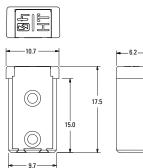


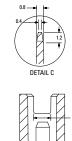
The performance of the male terminal is critical to ensuring the fuse will function as designed. The current carrying capability of the mating terminal must be verified to ensure proper system operation. Fixture Test Set Up

Refer To ISO 8820 4 (Plated Mating Tab Terminals). Please contact us for the details of Test Set Up Definition.

# **Unslotted Recommended Mating Cavity**







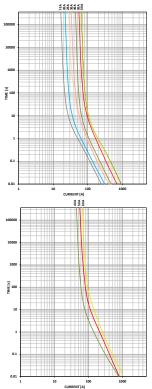
SECTION B-B

SECTION A-A

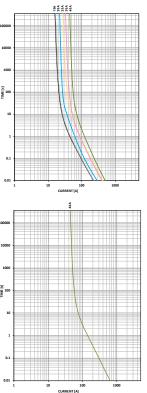


### **Recommended MCASE Fuse Puller** MATERIAL NUMBER 00970054XPA

# **Time-Current Characteristic Curves**



### **Time-Current Characteristic Curves**



REV08312020

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# Cartridge Fuses

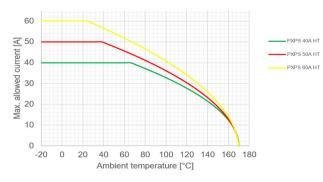


# MCASE+<sup>™</sup> Cartridge Fuses Rated 32V

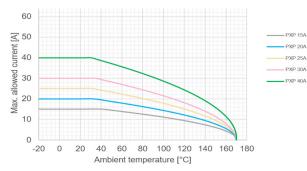
#### 60 ₹ 50 XPS 15A PXPS 20A current 40 PXPS 25A PXPS 30A . allowed ( 30 PXPS 40A PXPS 50A 20 PXPS 60A Max. 10 0 0 20 80 100 120 140 160 180 -20 40 60 Ambient temperature [°C]

# MCASE+<sup>™</sup> Slotted HT

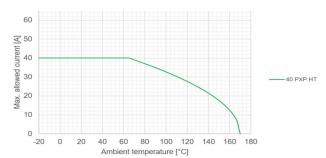
MCASE+<sup>™</sup> Slotted



## MCASE+<sup>™</sup> Unslotted



### MCASE+<sup>™</sup> Unslotted HT



# **Typical Derating Of Fuse Melting Element**

Temperature Security Margin is 20% Fixture Test Set Up Refer To ISO 8820-4 With (Plated Mating Tab Terminals) Please contact us for the details of Test Set Up Definition

### **Temperature Table**

	max. allowed current load [A] at ambient temperature)									
	-20°C	0°C	20°C	65°C	85°C	95°C	105°C	125°C		
15A	15	15	15	13	12	11	10	9		
20A	20	20	20	18	16	15	14	12		
25A	25	25	25	23	20	19	18	15		
30A	30	30	30	27	25	23	22	18		
40A	40	40	40	37	33	31	29	25		
50A	50	50	50	42	38	35	33	28		
60A	60	60	56	46	41	39	36	29		

## **Temperature Table**

	max. allowed current load [A] at ambient temperature)									
	-20°C	0°C	20°C	65°C	85°C	95°C	105°C	125°C		
40A HT	40	40	40	40	36	34	32	26		
50A HT	50	50	50	45	40	37	35	29		
60A HT	60	60	60	51	45	42	39	32		

# **Temperature Table**

	max. allowed current load [A] at ambient temperature)									
	-20°C	0°C	20°C	65°C	85°C	95°C	105°C	125°C		
15A	15	15	15	14	12	11	11	9		
20A	20	20	20	18	16	15	14	12		
25A	25	25	25	22	20	18	17	14		
30A	30	30	30	26	24	22	21	17		
40 <b>A</b>	40	40	40	35	31	30	28	23		

### **Temperature Table**

	max. allowed current load [A] at ambient temperature)								
	-20°C	0°C	20°C	65°C	85°C	95°C	105°C	125°C	
40A HT	40	40	40	40	36	34	32	26	

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