



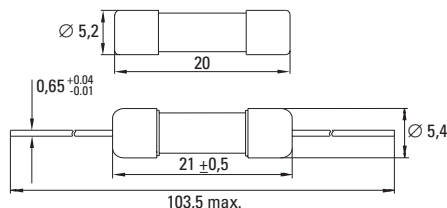
5x20mm / No. 193

IEC 60127-2/II, 250V, F

Specifications



Dimensions (mm)



Time-Current Characteristic

Quick Acting (F)

Standard

IEC 60127-2/II
DIN 41661

Approvals

VDE: License No. 115271/87867
SEMCO: Certificate No. 9847165
cULus Recognized: File No. E 67006

Features

Visual fault indication
Direct solderable or plug-in versions
Internationally approved
Worldwide availability

WebLinks

Data Sheet

www.wickmann.com/products/193.pdf

Approval Certificates

www.wickmann.com/approvals

Time-Current Curve

www.wickmann.com/itcurves

Packaging

www.wickmann.com/pack

FaxBack Document # 202

Packaging

000: Bulk (1000 pcs.)
002: Bulk (10 pcs.)
040: Axial Leads - Bulk (1000 pcs.)
043: Axial Leads - Tape/Reel (1250 pcs.)

Materials

Tube: Glass
End Caps: Nickel-plated brass
Axial Leads: Silver-plated caps
Tin-plated copper wires

Operating Temperature

-25°C to +70°C (consider de-rating)

Climatic Category

-25°C/+70°C/21 days (EN 60068-1.3)

Stock Conditions

+10°C to +60°C
relative humidity ≤ 75% yearly average,
without dew, maximum value for 30 days-95%

Vibration Resistance

24 cycles at 15 min. each (EN 60068-6)
10 - 60Hz at 0.75mm amplitude
60 - 2000Hz at 10g acceleration

Solderability

260°C, ≤ 3 sec. (Wave)
350°C, ≤ 1 sec. (Hand)

Soldering Heat Resistance

260°C, 10 sec. (IEC 60068-2-20)

Marking

Ⓢ, F, Current Rating, L, 250V, Approvals

Unit Weight

1.0g (approx.)
1.9g (with leads)



Limits for Pre-arcing Time

Rated Current	1.5 x I _{Rated}	2.1 x I _{Rated}	2.75 x I _{Rated}	4 x I _{Rated}	10 x I _{Rated}
32mA ... 100mA	> 1h	< 30 min	10ms ... 500ms	3ms ... 100ms	<20ms
125mA ... 6.30A	> 1h	< 30 min	50ms ... 2s	10ms ... 300ms	<20ms

Permissible continuous operating current is ≤ 100% at ambient temperature of 23°C (73.4°F).

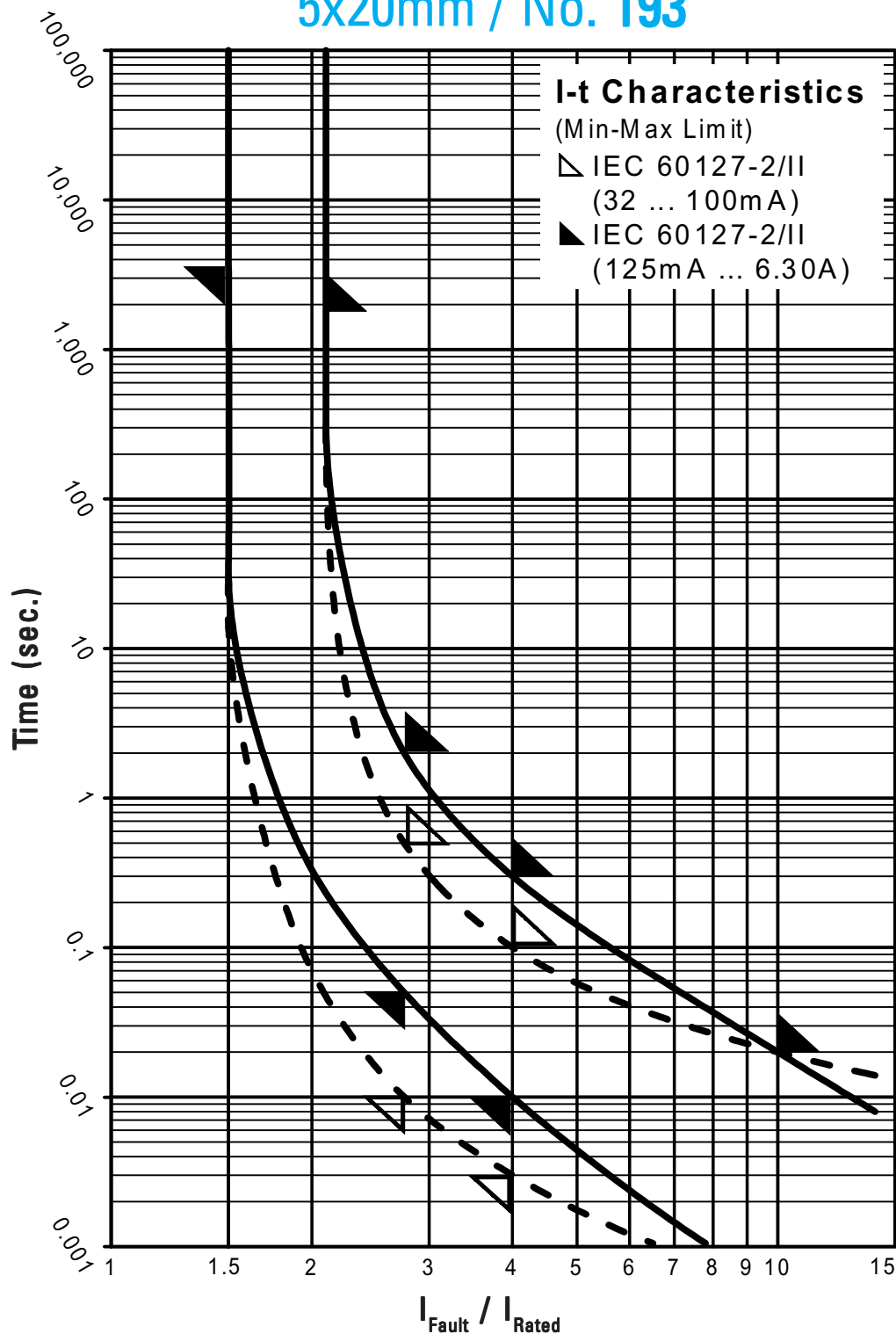
Rated Current	Amp Code	Voltage Rating	Breaking Capacity	Voltage Drop 1.0 x I _{Rated} max. (mV)	Power Dissipation 1.5 x I _{Rated} max. (W)	Melting Integral 10 x I _{Rated} max. (A²s)	Approvals VDE SEMKO cULus
32mA	0032	250V		10000 ¹	1.6 ¹	0.0020	
40mA	0040	250V		8000 ¹	1.6 ¹	0.0032	
50mA	0050	250V		7000 ¹	1.6 ¹	0.0050	
63mA	0063	250V		5000 ¹	1.6 ¹	0.0079	
80mA	0080	250V		3300	0.6	0.0032	
100mA	0100	250V		2600	0.7	0.007	
125mA	0125	250V		2000	0.8	0.014	
160mA	0160	250V		2000	0.9	0.024	
200mA	0200	250V		300	0.2	0.018	
250mA	0250	250V	35A / 250VAC	270	0.3	0.032	
315mA	0315	250V	50-60Hz	250	0.3	0.062	
400mA	0400	250V	cos φ = 1.0	200	0.3	0.13	
500mA	0500	250V		190	0.3	0.23	
630mA	0630	250V		180	0.4	0.44	
800mA	0800	250V		170	0.5	1.0	
1.00A	1100	250V		165	0.6	1.4	
1.25A	1125	250V		160	0.8	2.7	
1.60A	1160	250V		155	1.0	4.3	
2.00A	1200	250V		150	1.0	7.8	
2.50A	1250	250V		145	1.1	13	
3.15A	1315	250V		140	1.3	20	
4.00A	1400	250V	40A/250VAC/cos φ=1.0	130	2.1	21	
5.00A	1500	250V	50A/250VAC/cos φ=1.0	125	2.3	38	
6.30A	1630	250V	63A/250VAC/cos φ=1.0	100	2.5	72	

¹ IEC 60127-2 values

Order Information

Qty.	Order-Number	Series	Amp Code	Packaging
		193		

5x20mm / No. 193



Contact WICKMANN for individual I-t curves