



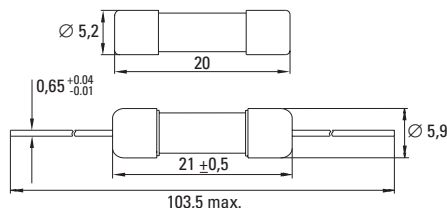
5x20mm / No. 193

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).

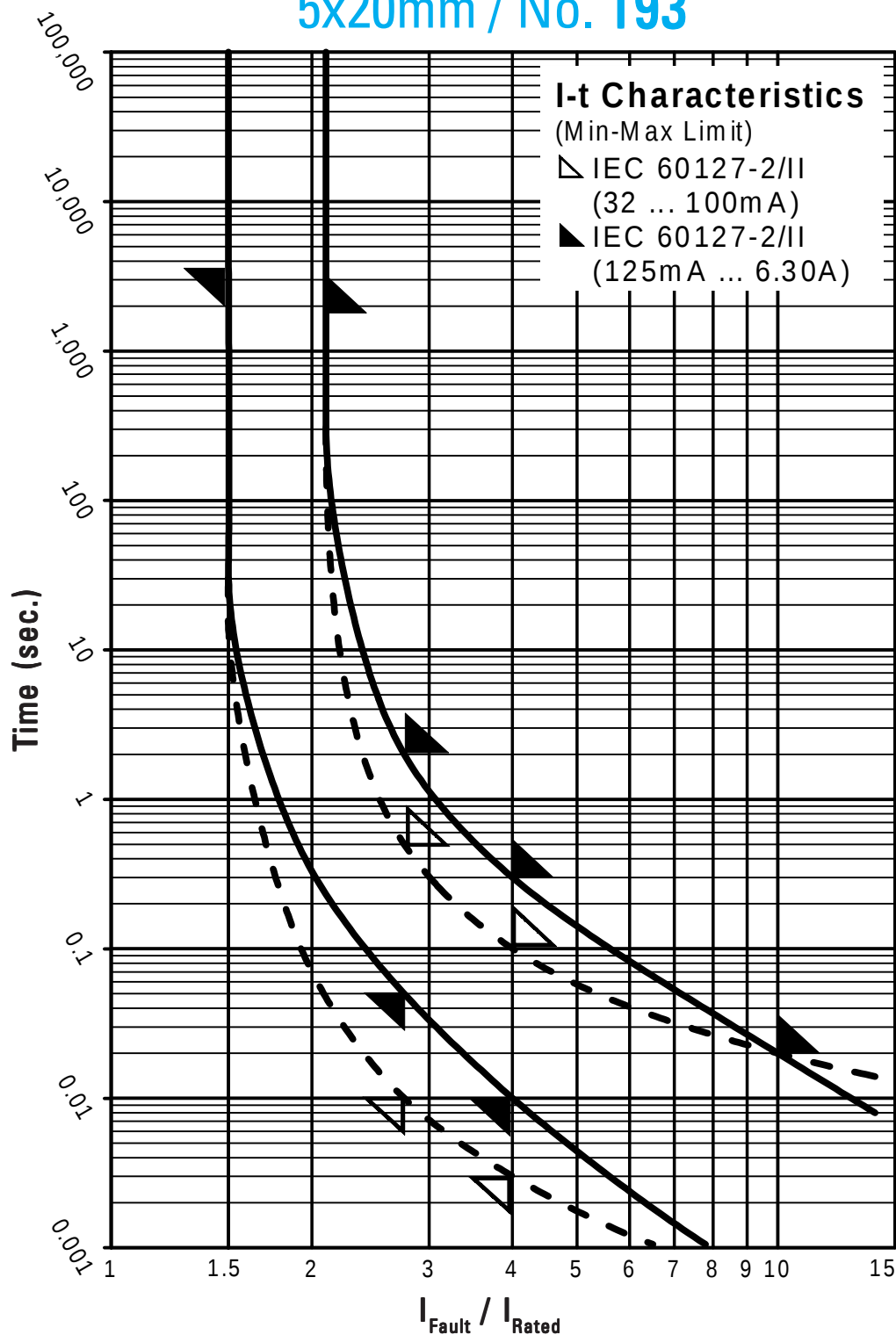
Rated Current	Amp Code	Voltage Rating	Breaking Capacity	Voltage Drop 1.0 x I _{Rated} max. (mV)	Power Dissipation 1.5 x I _{Rated} max. (W)	Melting Integral 10 x I _{Rated} max. (A²s)	Approvals VDE SEMKO cULus
32mA	0032	250V		10000 ¹	1.6 ¹	0.0020	
40mA	0040	250V		8000 ¹	1.6 ¹	0.0032	
50mA	0050	250V		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