

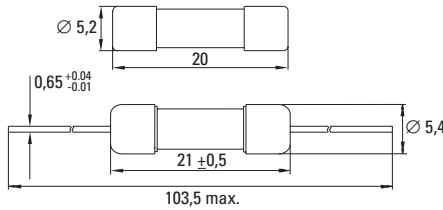
5x20mm / No. 193

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  
SEMKO: 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](http://www.wickmann.com/products/193.pdf)

Approval Certificates

[www.wickmann.com/approvals](http://www.wickmann.com/approvals)

Time-Current Curve

[www.wickmann.com/itcurves](http://www.wickmann.com/itcurves)

Packaging

[www.wickmann.com/pack](http://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

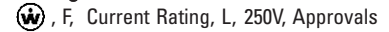
Solderability

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

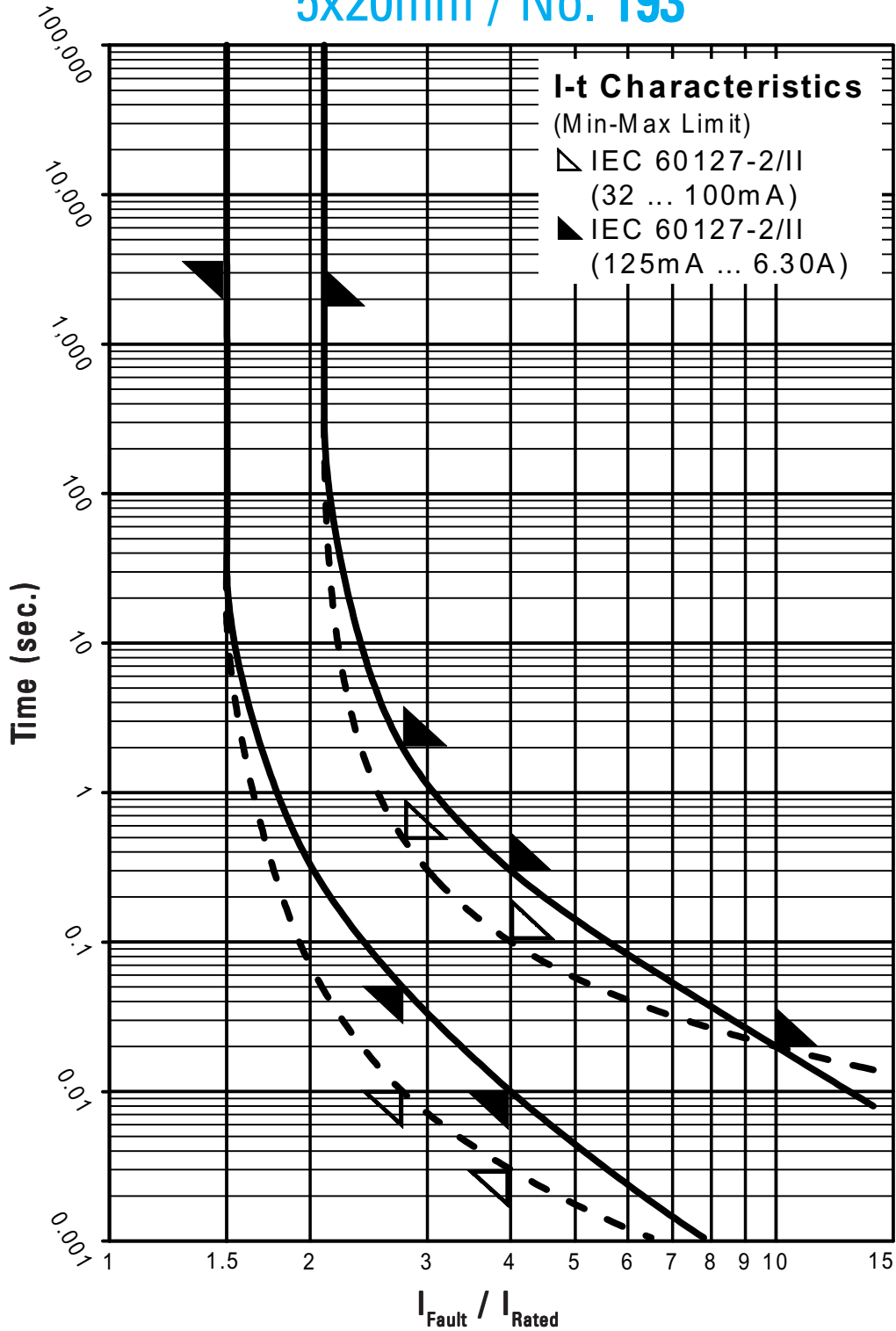


Permissible continuous operating current is ≤ 100% at ambient temperature of 23°C (73.4°F).									
Rated Current	Amp Code	Voltage Rating	Breaking Capacity	Voltage Drop 1.0 x I <sub>Rated</sub> max. (mV)	Power Dissipation 1.5 x I <sub>Rated</sub> max. (W)	Melting Integral 10 x I <sub>Rated</sub> max. (A²s)	Approvals		
							VDE	SEMKO	cULus
32mA	0032	250V		10000 <sup>1</sup>	1.6 <sup>1</sup>	0.0020			•
40mA	0040	250V		8000 <sup>1</sup>	1.6 <sup>1</sup>	0.0032			•
50mA	0050	250V		7000 <sup>1</sup>	1.6 <sup>1</sup>	0.0050	•	•	•
63mA	0063	250V		5000 <sup>1</sup>	1.6 <sup>1</sup>	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	•	•	•

<sup>1</sup> IEC 60127-2 values

Order Information	Qty.	Order-Number	Series	Amp Code	Packaging
				193	

## 5x20mm / No. 193



Contact WICKMANN for individual I-t curves