



LV Fuses

LV Fuses

1 Basic information

1.1 Features and benefits

- Excellent cycling capability and DC performance
- Low arc voltage and low energy let-through (I^2t)
- Low watts loss

1.2 Typical applications

- DC common bus
- DC drives
- Power converters/rectifiers
- Reduced voltage starters

1.3 Part Number System

LFR15 - **A 06 -BT



Mounting Style	Description
BT	Bolt Connection
Rated Voltage	Description
06	500VDC/690VAC
Rated Current	Description
**A	32-100A
Body Size	Description
15	Φ15mm

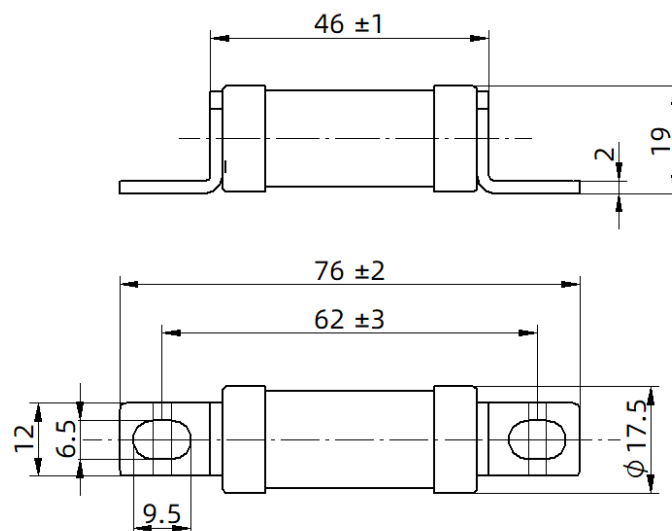
1.4 Specifications

Model	Rated Voltage (DC/AC)	Rated Current I_n	Pre-arcing I^2t	Typical Melting I^2t	Breaking Capacity (DC/AC)	Watt loss at I_n	Agency certification		Minimum package (MPQ)	Single weight
	V	A	A ² S	A ² S	kA	W	TUV	cURus	pcs	g
LFR15-32A06-BT	500/690	32	46	230	50/100	8	●	●	12	40 ± 3
LFR15-40A06-BT	500/690	40	88	450	50/100	10	●	●	12	40 ± 3
LFR15-50A06-BT	500/690	50	162	950	50/100	12	●	●	12	40 ± 3
LFR15-63A06-BT	500/690	63	288	2050	50/100	12	●	●	12	40 ± 3
LFR15-80A06-BT	500/690	80	450	3150	50/100	17	●	●	12	40 ± 3
LFR15-100A06-BT	500/690	100	650	5850	50/100	24	●	●	12	40 ± 3

Attention:

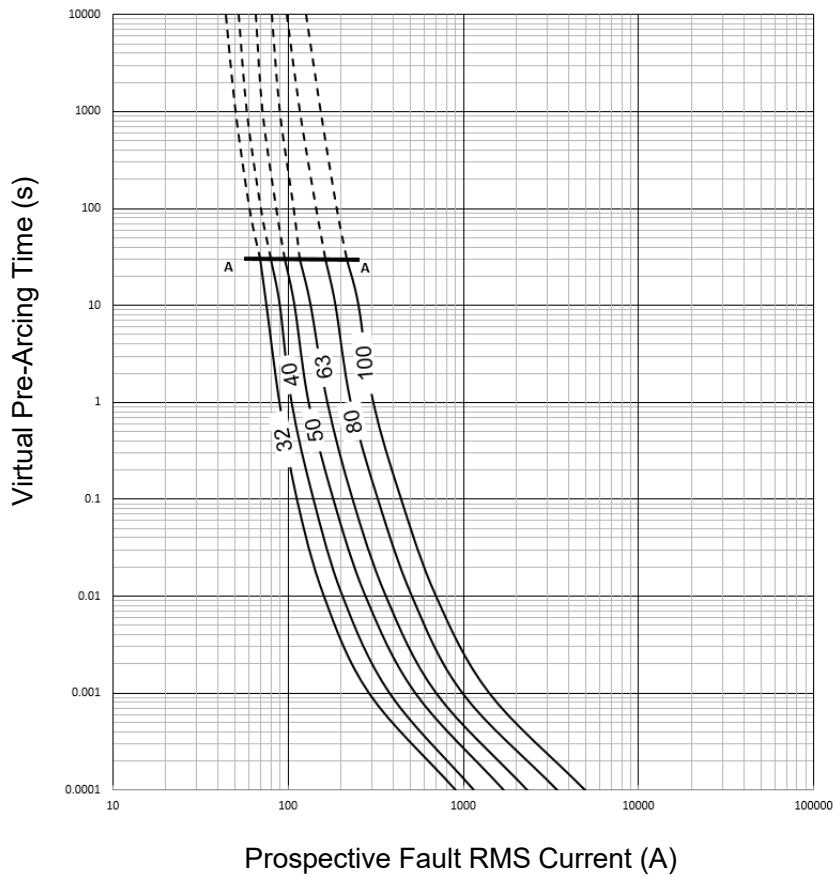
- 1 “●” Indicates that the product has passed the certification
- 2 “0” Indicates that the product plan applies for certification

2 Dimensions (mm)

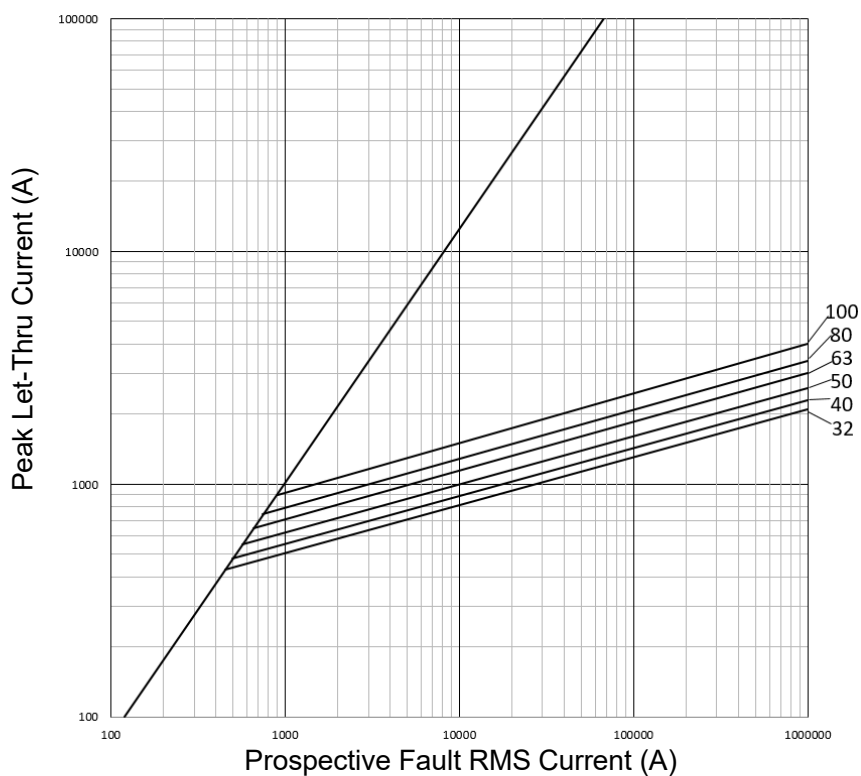


3 Characteristic curve

Time-Current Curve



Cut-Off Current Curve



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4 Storage

Product storage temperature: - 40 °C~+90 °C.
Relative humidity :not more than 90% at 20°C.

5 Working and Operating instructions

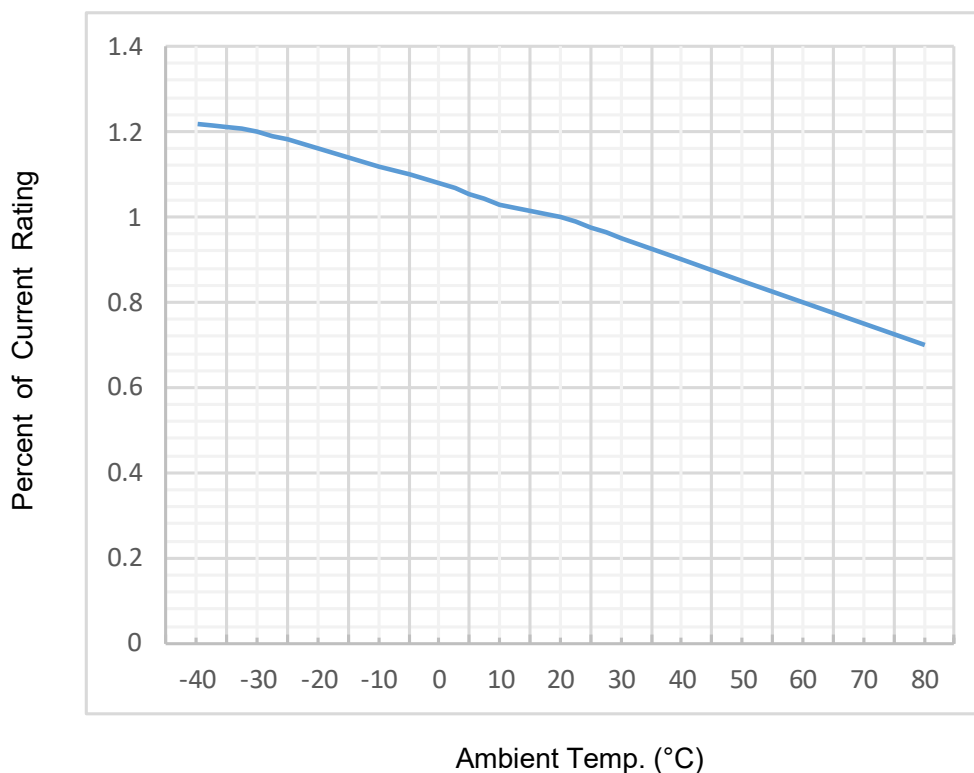
5.1 Ambient temperature

Normal operating temperature: -5°C~40°C

Normal operating temperature: -40°C~85°C

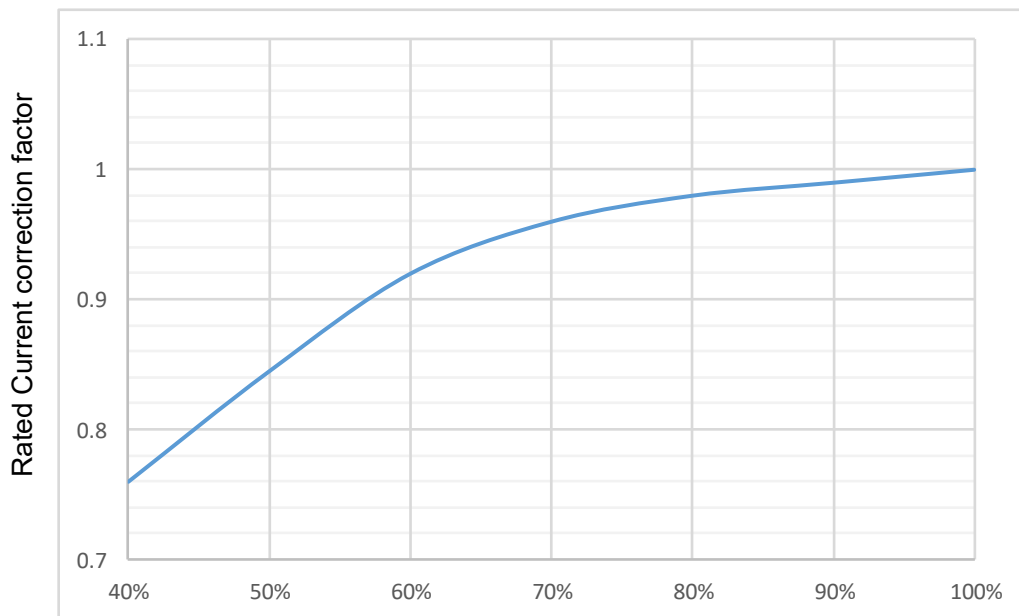
When the fuse operates above 40 °C, the rated current needs additional correction, and the correction factor is - Kt, as shown in the figure below.

Temperature Derating Curve



5.2 Connecting conductor (For reference only)

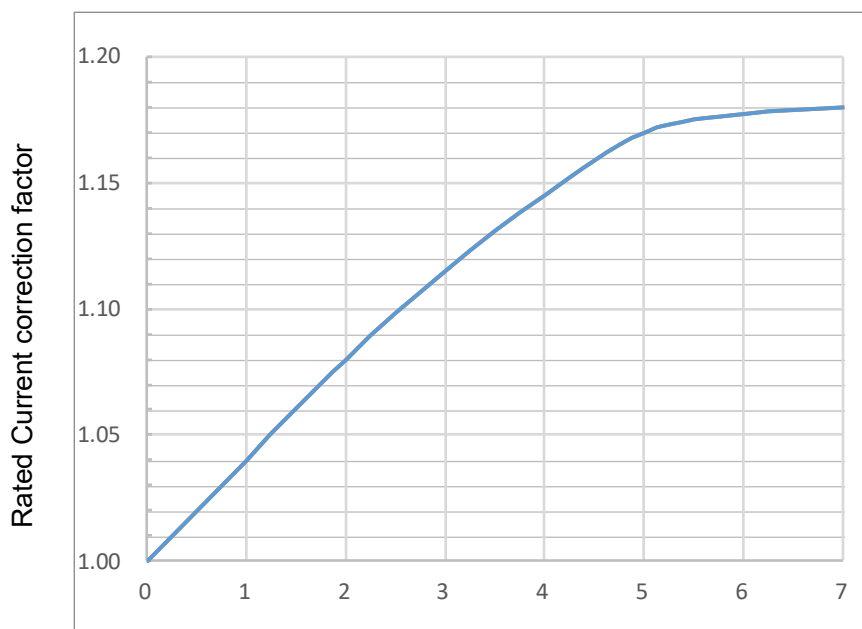
The nominal bus bar current density on which the fuses are mounted should be 1.3A/mm² (IEC 60269 Part 4 defines 1.0 to 1.6/mm²). If the bus bar carries a current density more than this, then the fuse should be derated. The correction factor is shown in the following figure



100% current density 1.3A/mm²

5.3 Cooling air

When fuses works in the environment with cooling air, the rated current value of the fuse needs to be corrected, and the correction factor is shown in the following figure.



Cooling air correction (m/s)

5.4 Altitude correction factors (For reference only)

When fuses are used at high altitudes, the current rating should be corrected, the correction factor is shown in the following table.

Altitude above sea level (m)	Derating factor
2000	1.000
2500	0.975
3000	0.950
3500	0.925
4000	0.900
4500	0.875
5000	0.850