SEMICONDUCTOR PROTECTION FUSES

SQUARE BODY HIGH-SPEED FUSE-LINKS DC PROTECTION



Mersen DC high performance power fuses were developed to provide superior protection for railway power circuits.

These fuse-links are typically operated at more elevated temperatures than other fuse types.

They have lower I²t to minimize damage to components in case of short circuits, and have lower watts loss and longer life.

TECHNICAL DATA OVERVIEW

Voltage Range DC	2000 VDC
Ampere Range (A)	100 280A
Speed/Characteristic	gR
Product Size	302
Package	1
Weight	2 kg

FEATURES & BENEFITS

- Extremely fast acting
- Current limiting
- Very low I²t
- Worldwide acceptability
- Superior cycling ability

APPLICATIONS

• Suburban lines: 1,5kVDC

PRODUCT RANGE



D302GE20C160QF

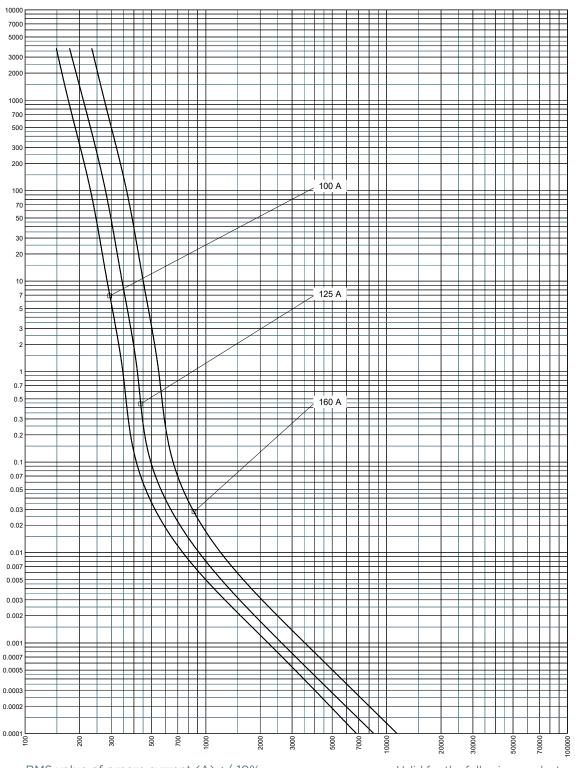
Bracket size 302 gR 2000VDC

Catalog number	Item number	Rated voltage DC	Rated current I _n	Pre-arcing I ² t	Max. Interrupting Rating IR @2000VDC	Watt Loss @0,81 _n	Watt Loss @In
D302GC20C100QF	N086929	2000	100	4.61 kA ² s	30 kA, L/R = 30 ms	30 W	58.5 W
D302GC20C125QF	P086930	2000	125	5.75 kA ² s	30 kA, L/R = 30 ms	37 W	72 W
D302GC20C160QF	Q086931	2000	160	12.2 kA ² s	30 kA, L/R = 30 ms	48 W	93 W
D302GE20C160QF	S075755	2000	160	11.8 kA²s	30 kA, L/R = 14 ms	35 W	70 W
D302GE20C200QF	T075756	2000	200	18.8 kA ² s	30 kA, L/R = 14 ms	40 W	80 W
D302GE20C250QF	V075757	2000	250	27.7 kA ² s	30 kA, L/R = 14 ms	48 W	95 W
D302GE20C280QF	W075758	2000	280	39.7 kA²s	30 kA, L/R = 14 ms	51 W	100 W

TIME CURRENT CHARACTERISTIC CURVES

100-160A

Actual prearcing time (s)



RMS value of prearc current (A) +/-10%

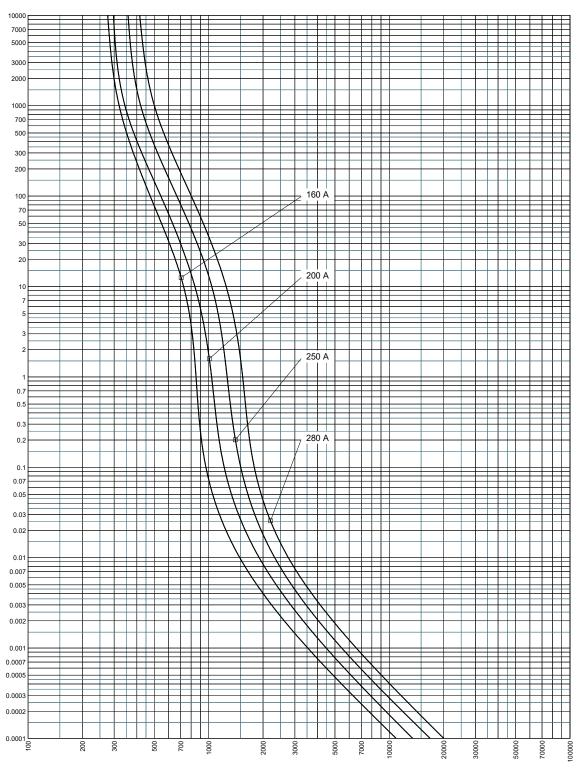
Valid for the following products:

D302GC20C100QF	N086929
D302GC20C125QF	P086930
D302GC20C160QF	Q086931

TIME CURRENT CHARACTERISTIC CURVES

160-280A

Actual prearcing time (s)



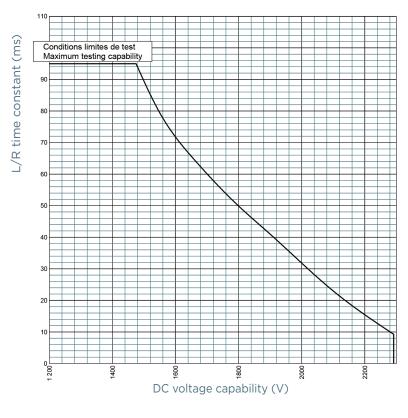
RMS value of prearc current (A) +/-10%

Valid for the following products:

D302GE20C160QF	S075755
D302GE20C200QF	T075756
D302GE20C250QF	V075757
D302GE20C280QF	W075758

L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY

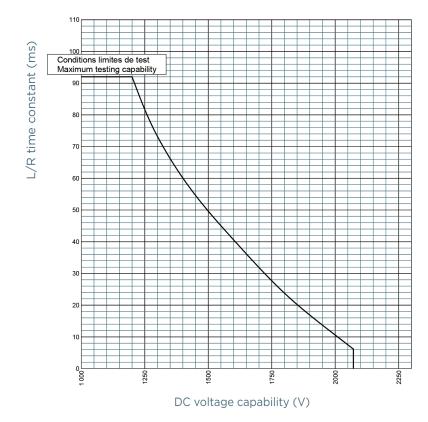
100-160A



Valid for the following products:

D302GC20C100QF	N086929
D302GC20C125QF	P086930
D302GC20C160QF	Q086931

160-280A

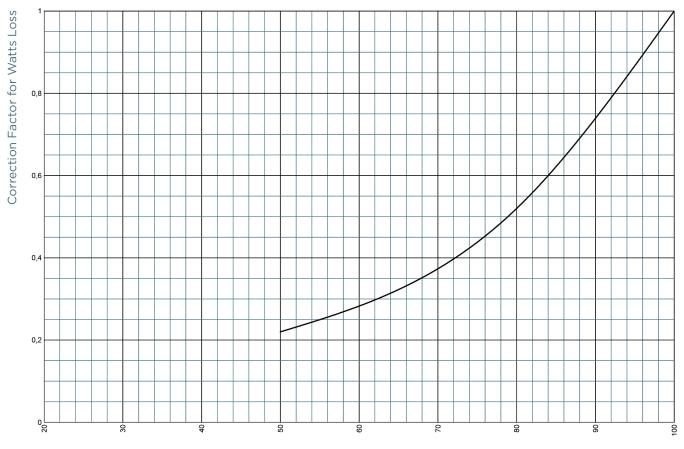


Valid for the following products:

D302GE20C160QF	S075755
D302GE20C200QF	T075756
D302GE20C250QF	V075757
D302GE20C280QF	W075758

Semiconductor Protection Fuses / DS-PROTISTOR-302gR-10-1225-EN

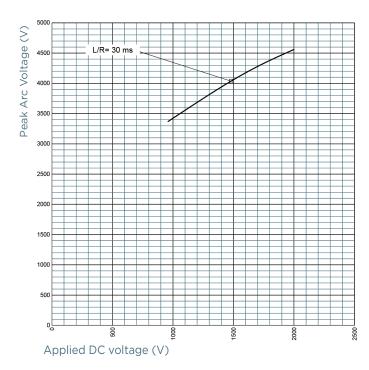
POWER DISSIPATION



% rated current

PEAK ARC VOLTAGE

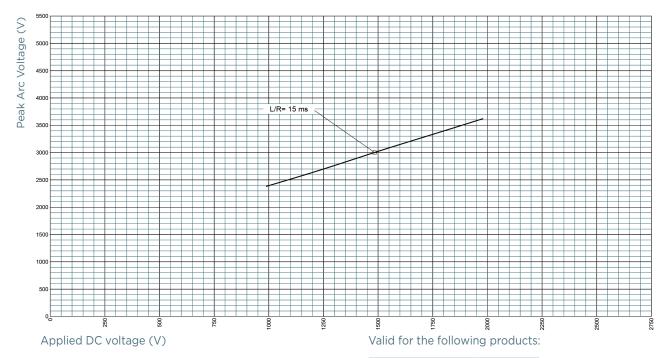
100-160A



Valid for the following products:

D302GC20C100QF		N086929	
	D302GC20C125QF	P086930	
	D302GC20C160QF	Q086931	

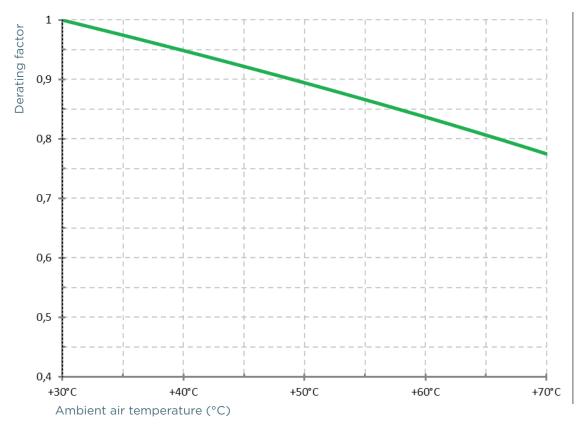
160-280A



D302GE20C160QF	S075755
D302GE20C200QF	T075756
D302GE20C250QF	V075757
D302GE20C280QF	W075758

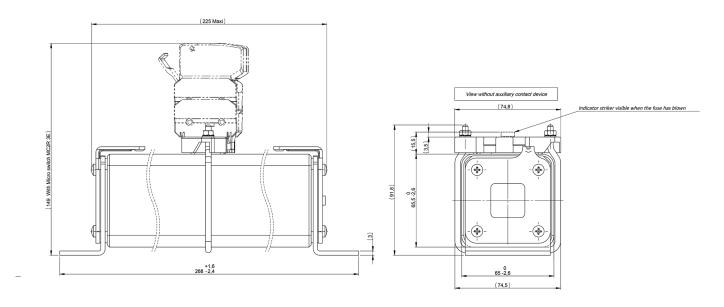
TEMPERATURE DERATING

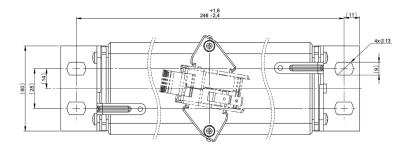
Derating factor of rated current according to ambient air temperature (°C)



DIMENSIONS

Bracket size 302 gR 2000VDC





Dimensions in mm