

Protistor® Limited Range size 32 aR

690 VAC (IEC) / 760VAC (UL)

SEMICONDUCTOR PROTECTION FUSES

SQUARE BODY HIGH-SPEED FUSE-LINKS AC PROTECTION



The 690/760V Protistor® fuse-links “OEM series” is a specific range to offer cost effective protection without concession on performance for power conversion equipment. These fuses have been engineered to provide protection for all semiconductors: diodes, thyristors and IGBT devices. They are assembled with bimetal silver and copper elements embedded in solidified sand, which helps control arcing characteristics for a lower I²t and high interrupting rating level. Contact surfaces are tin plated to get an optimized interface with the best quality/price ratio.

This OEM range has been specially conceived to match integrators’ and OEMs’ main requirements while offering a limited number of part values to promote a “one rating, one size” policy that will support the reduction of parts to be stocked.

TECHNICAL DATA OVERVIEW

Voltage AC	690 VAC
Ampere Range (A)	500 ... 800 A
Speed/Characteristic	aR
I.R. AC (IEC)	200 kA
Product Size	32

FEATURES & BENEFITS

- “One rating, one size” range
- aR Class according to IEC 60269-4 and VDE 636-23
- Very low I²t for improved semiconductor protection
- High speed AC & DC protection
- Current limiting

APPLICATIONS

- Protection of standard power conversion systems such as low voltage drives, UPS, inverter systems and similar
- All AC standard networks (up to 690V) or DC standard networks

STANDARDS

- IEC 60269-1 & -4 Compliance in AC and DC voltage
- UL/CSA Recognized E76491 in AC and DC voltage
- CCC GB 1539.4



Protistor® Limited Range size 32 aR

690 VAC (IEC) / 760VAC (UL)

PRODUCT RANGE



SC32AR69V800TFU

Size 32 type TTF without indicator

Catalog number	Item number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated voltage DC (UL)	Rated current I _n	Pre-arcing I ² t	Clearing I ² t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I _n	Package	Weight
SC32AR69V500TFU	Y1046935	690 V	760 V	550 V	500 A	27.8 kA ² s	160 kA ² s	200 kA	95 W	12	0.5 kg
SC32AR69V550TFU	Z1046936	690 V	760 V	550 V	550 A	36.9 kA ² s	215 kA ² s	200 kA	99 W	12	0.5 kg
SC32AR69V630TFU	A1046937	690 V	760 V	550 V	630 A	54.6 kA ² s	315 kA ² s	200 kA	105 W	12	0.5 kg
SC32AR69V700TFU	B1046938	690 V	760 V	550 V	700 A	76.8 kA ² s	442 kA ² s	200 kA	110 W	12	0.5 kg
SC32AR69V800TFU	C1046939	690 V	760 V	550 V	800 A	113.4 kA ² s	660 kA ² s	200 kA	121 W	12	0.5 kg



SC32AR69V800TF

Size 32 type TTF with indicator

Catalog number	Item number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated voltage DC (UL)	Rated current I _n	Pre-arcing I ² t	Clearing I ² t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I _n	Package	Weight
SC32AR69V500TF	S1046930	690 V	760 V	550 V	500 A	27.8 kA ² s	160 kA ² s	200 kA	95 W	12	0.5 kg
SC32AR69V550TF	T1046931	690 V	760 V	550 V	550 A	36.9 kA ² s	215 kA ² s	200 kA	99 W	12	0.5 kg
SC32AR69V630TF	V1046932	690 V	760 V	550 V	630 A	54.6 kA ² s	315 kA ² s	200 kA	105 W	12	0.5 kg
SC32AR69V700TF	W1046933	690 V	760 V	550 V	700 A	76.8 kA ² s	442 kA ² s	200 kA	110 W	12	0.5 kg
SC32AR69V800TF	X1046934	690 V	760 V	550 V	800 A	113.4 kA ² s	660 kA ² s	200 kA	121 W	12	0.5 kg



SC32AR69V800TFM

Size 32 type TTF with striker and microswitch

Catalog number	Item number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated voltage DC (UL)	Rated current I _n	Pre-arcing I ² t	Clearing I ² t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I _n	Package	Weight
SC32AR69V500TFM	M1046925	690 V	760 V	550 V	500 A	27.8 kA ² s	160 kA ² s	200 kA	95 W	12	0.55 kg
SC32AR69V550TFM	N1046926	690 V	760 V	550 V	550 A	36.9 kA ² s	215 kA ² s	200 kA	99 W	12	0.55 kg
SC32AR69V630TFM	P1046927	690 V	760 V	550 V	630 A	54.6 kA ² s	315 kA ² s	200 kA	105 W	12	0.55 kg
SC32AR69V700TFM	Q1046928	690 V	760 V	550 V	700 A	76.8 kA ² s	442 kA ² s	200 kA	110 W	12	0.55 kg
SC32AR69V800TFM	R1046929	690 V	760 V	550 V	800 A	113.4 kA ² s	660 kA ² s	200 kA	121 W	12	0.55 kg

Protistor® Limited Range size 32 aR

690 VAC (IEC) / 760VAC (UL)

PRODUCT RANGE



SC32AR69V800TIU

Size 32 type TTI without indicator

Catalog number	Item number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated voltage DC (UL)	Rated current I _n	Pre-arcing I ² t	Clearing I ² t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I _n	Package	Weight
SC32AR69V500TIU	P1047065	690 V	760 V	550 V	500 A	27.8 kA ² s	160 kA ² s	200 kA	95 W	12	0.5 kg
SC32AR69V550TIU	Q1047066	690 V	760 V	550 V	550 A	36.9 kA ² s	215 kA ² s	200 kA	99 W	12	0.5 kg
SC32AR69V630TIU	R1047067	690 V	760 V	550 V	630 A	54.6 kA ² s	315 kA ² s	200 kA	105 W	12	0.5 kg
SC32AR69V700TIU	S1047068	690 V	760 V	550 V	700 A	76.8 kA ² s	442 kA ² s	200 kA	110 W	12	0.5 kg
SC32AR69V800TIU	T1047069	690 V	760 V	550 V	800 A	113.4 kA ² s	660 kA ² s	200 kA	121 W	12	0.5 kg



SC32AR69V800TI

Size 32 type TTI with indicator

Catalog number	Item number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated voltage DC (UL)	Rated current I _n	Pre-arcing I ² t	Clearing I ² t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I _n	Package	Weight
SC32AR69V500TI	H1047059	690 V	760 V	550 V	500 A	27.8 kA ² s	160 kA ² s	200 kA	95 W	12	0.5 kg
SC32AR69V550TI	J1047060	690 V	760 V	550 V	550 A	36.9 kA ² s	215 kA ² s	200 kA	99 W	12	0.5 kg
SC32AR69V630TI	K1047061	690 V	760 V	550 V	630 A	54.6 kA ² s	315 kA ² s	200 kA	105 W	12	0.5 kg
SC32AR69V700TI	M1047063	690 V	760 V	550 V	700 A	76.8 kA ² s	442 kA ² s	200 kA	110 W	12	0.5 kg
SC32AR69V800TI	N1047064	690 V	760 V	550 V	800 A	113.4 kA ² s	660 kA ² s	200 kA	121 W	12	0.5 kg



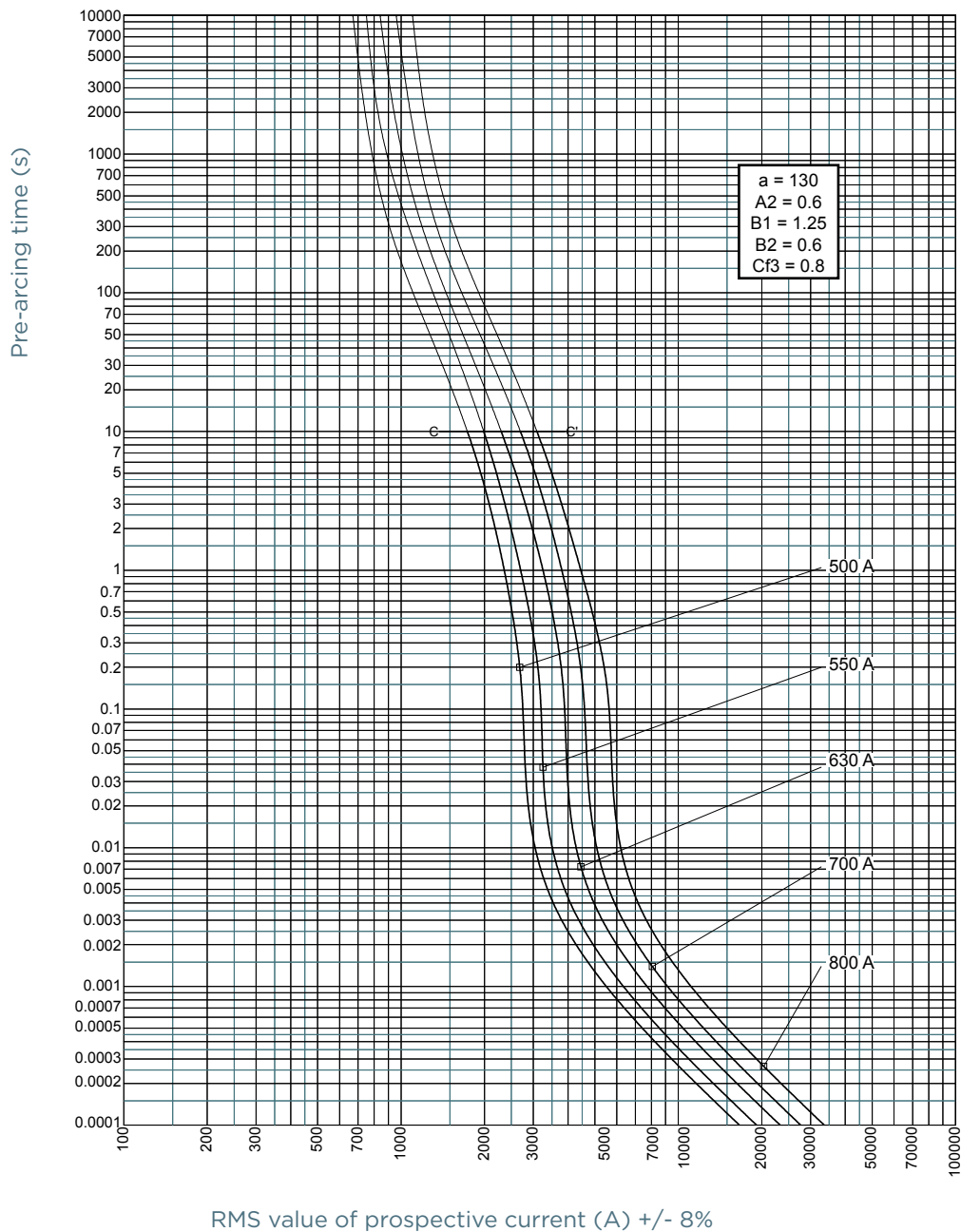
SC32AR69V800TIM

Size 32 type TTI with striker and microswitch

Catalog number	Item number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated voltage DC (UL)	Rated current I _n	Pre-arcing I ² t	Clearing I ² t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I _n	Package	Weight
SC32AR69V500TIM	C1047054	690 V	760 V	550 V	500 A	27.8 kA ² s	160 kA ² s	200 kA	95 W	12	0.55 kg
SC32AR69V550TIM	D1047055	690 V	760 V	550 V	550 A	36.9 kA ² s	215 kA ² s	200 kA	99 W	12	0.55 kg
SC32AR69V630TIM	E1047056	690 V	760 V	550 V	630 A	54.6 kA ² s	315 kA ² s	200 kA	105 W	12	0.55 kg
SC32AR69V700TIM	F1047057	690 V	760 V	550 V	700 A	76.8 kA ² s	442 kA ² s	200 kA	110 W	12	0.55 kg
SC32AR69V800TIM	G1047058	690 V	760 V	550 V	800 A	113.4 kA ² s	660 kA ² s	200 kA	121 W	12	0.55 kg

TIME CURRENT CHARACTERISTIC CURVES

Size 32



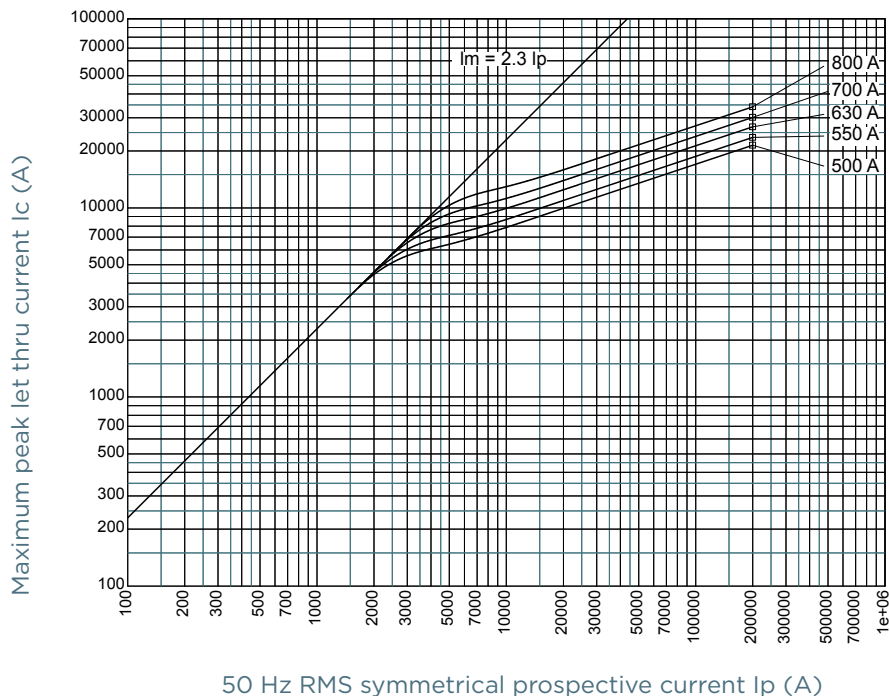
MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

Protistor® Limited Range size 32 aR

690 VAC (IEC) / 760VAC (UL)

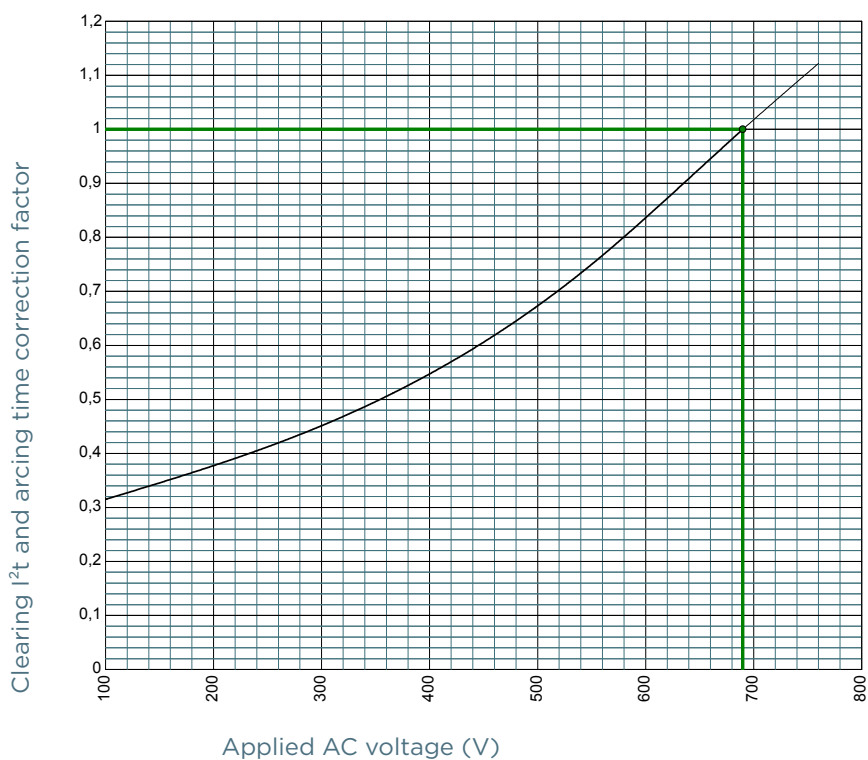
CUT-OFF CURRENT CHARACTERISTIC

Size 32



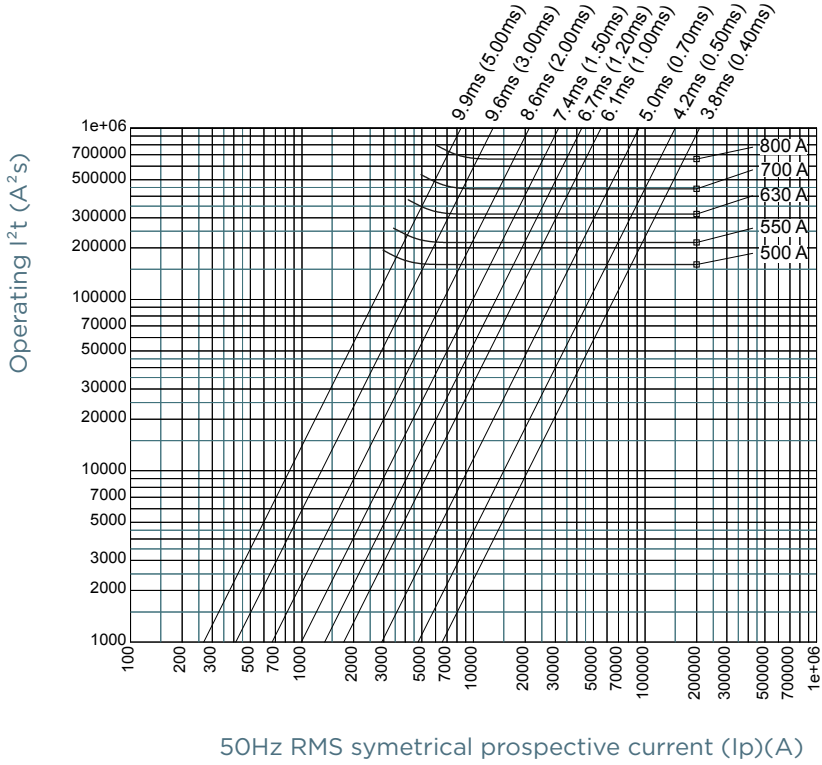
I²T MULTIPLIER COEFFICIENT

Size 32

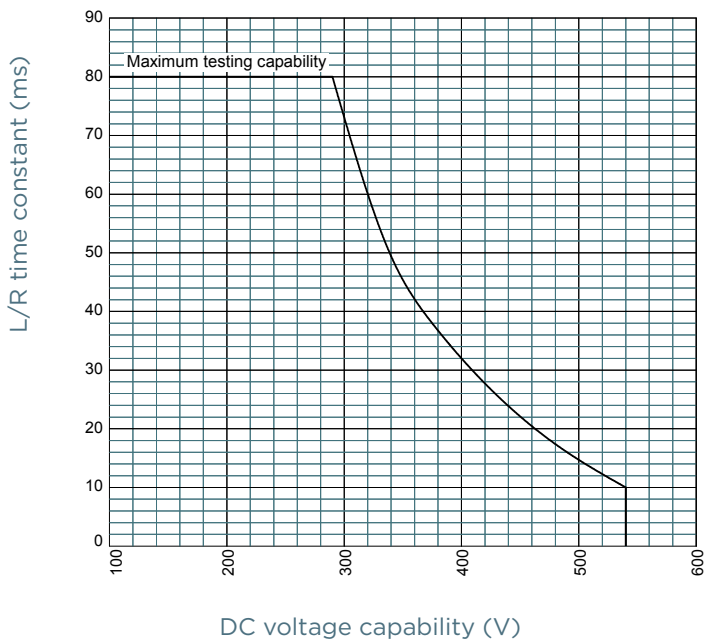


CHARACTERISTICS TOTAL I²T CURVE

Size 32



L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY

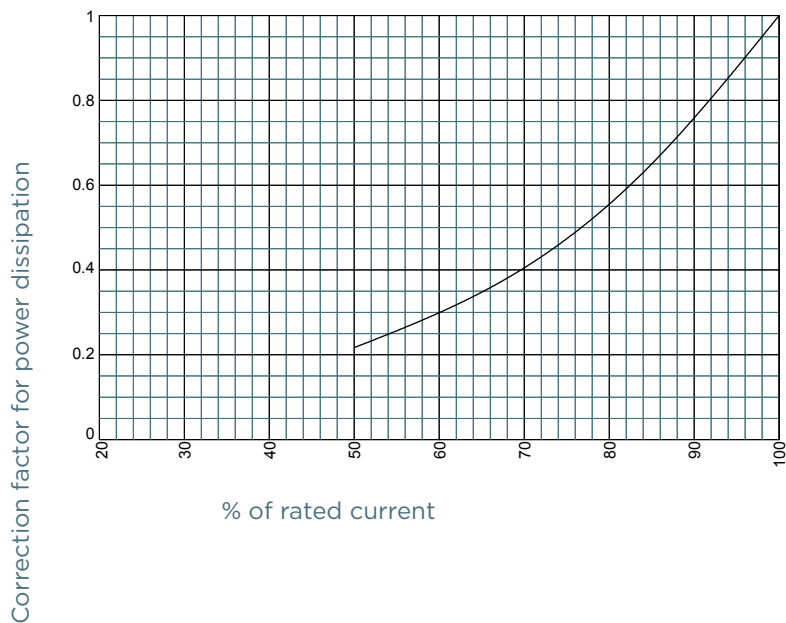


Protistor® Limited Range size 32 aR

690 VAC (IEC) / 760VAC (UL)

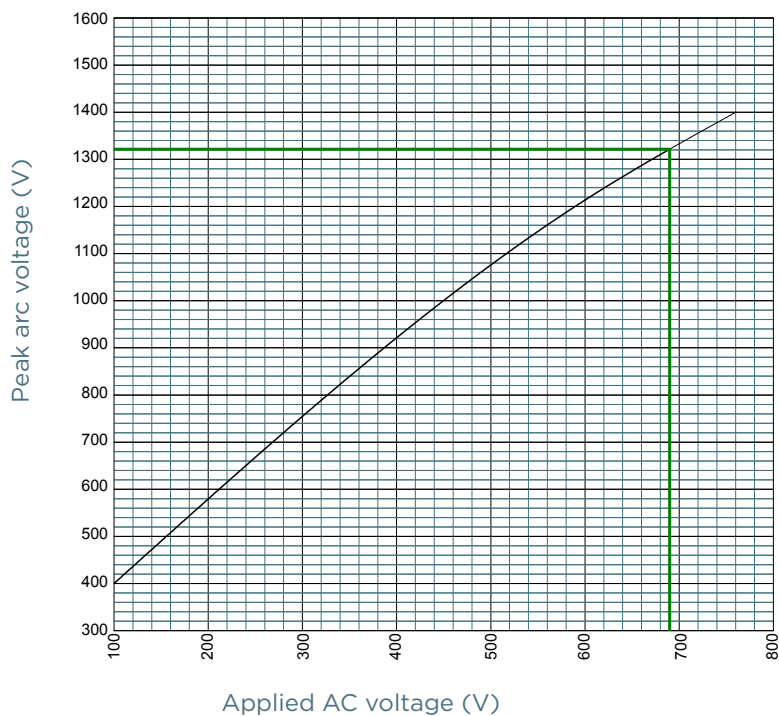
POWER DISSIPATION

Size 32



PEAK ARC VOLTAGE

Size 32



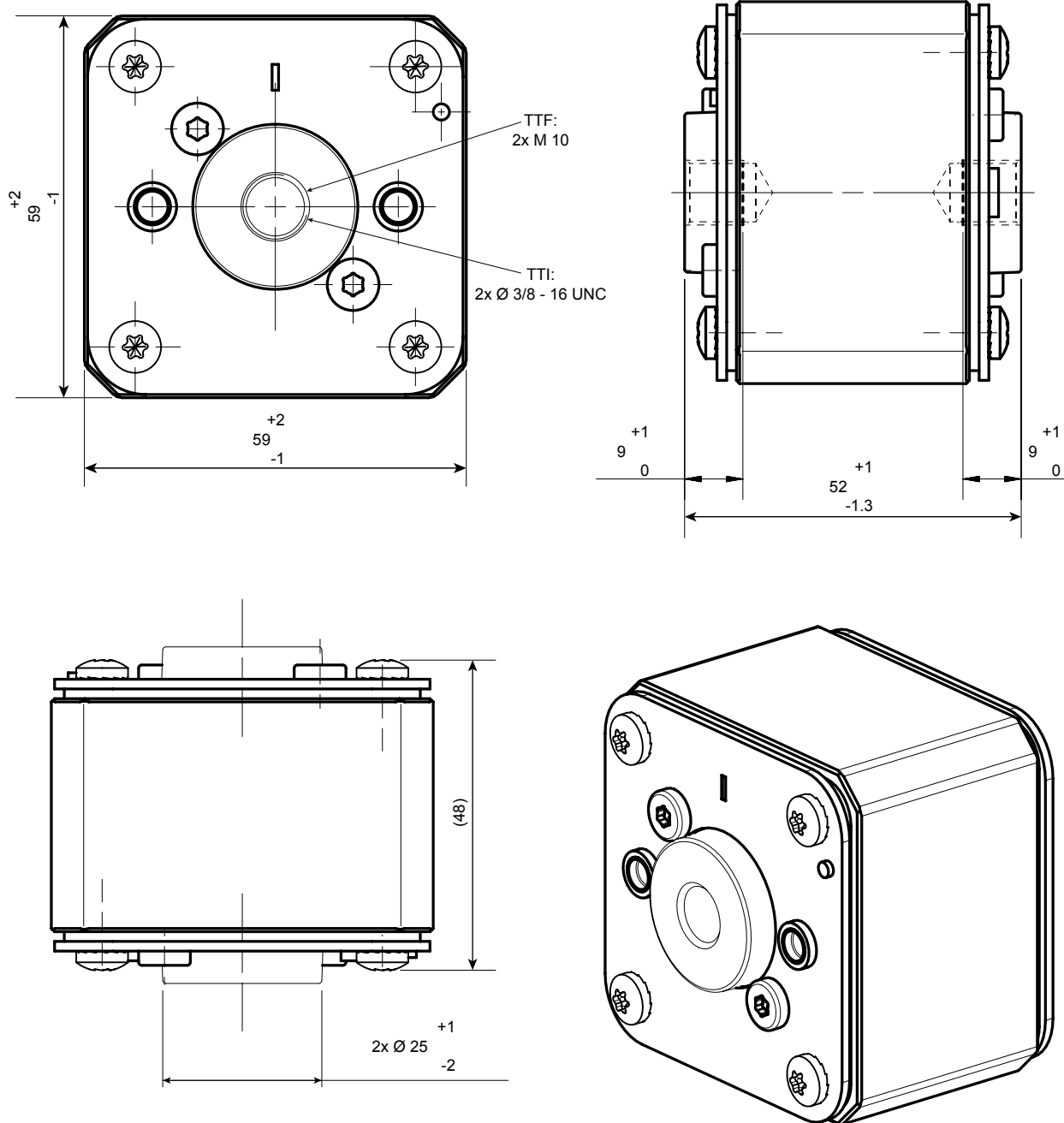
MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

Protistor® Limited Range size 32 aR

690 VAC (IEC) / 760VAC (UL)

DIMENSIONS

Size 32 type TTF / TTI without indicator



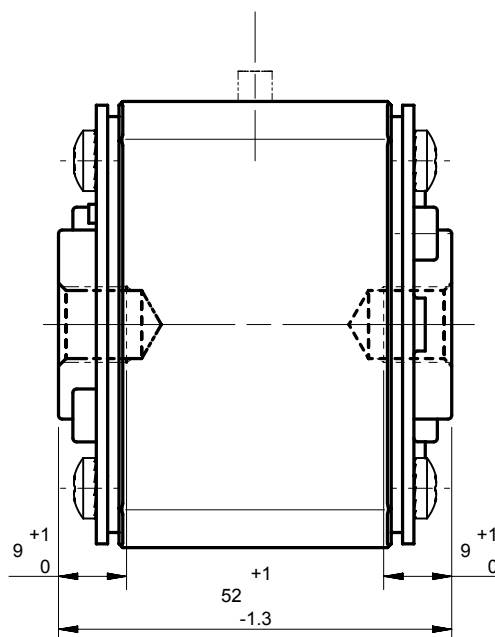
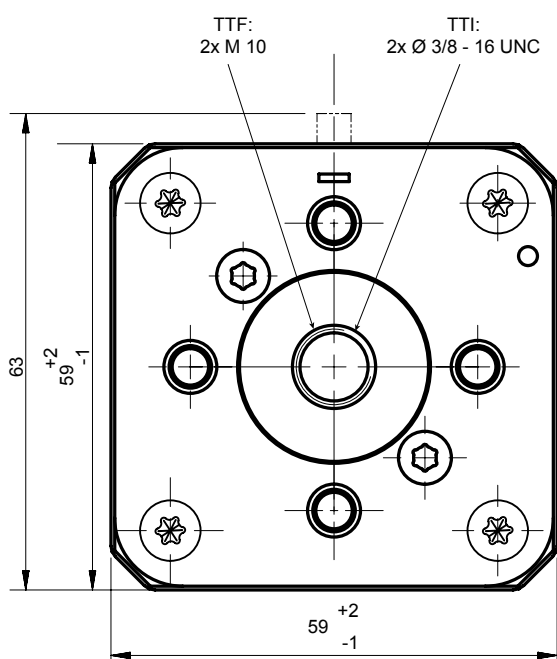
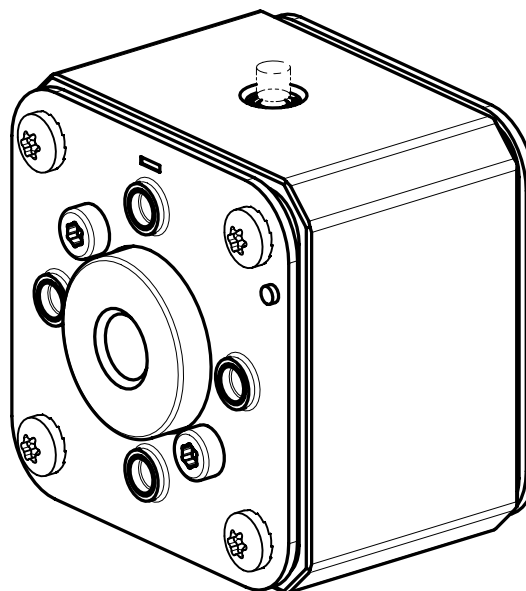
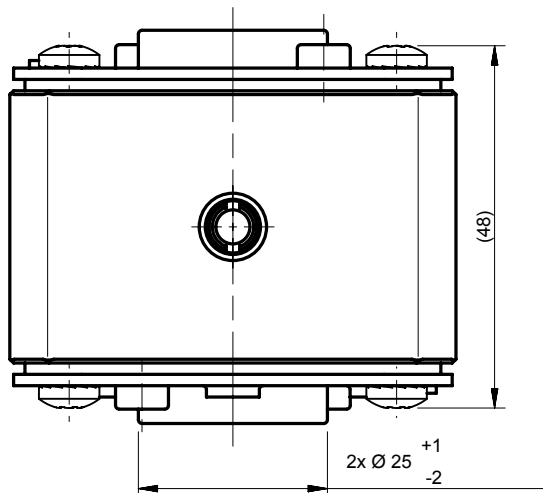
MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

Protistor® Limited Range size 32 aR

690 VAC (IEC) / 760VAC (UL)

DIMENSIONS

Size 32 type TTF / TTI with indicator



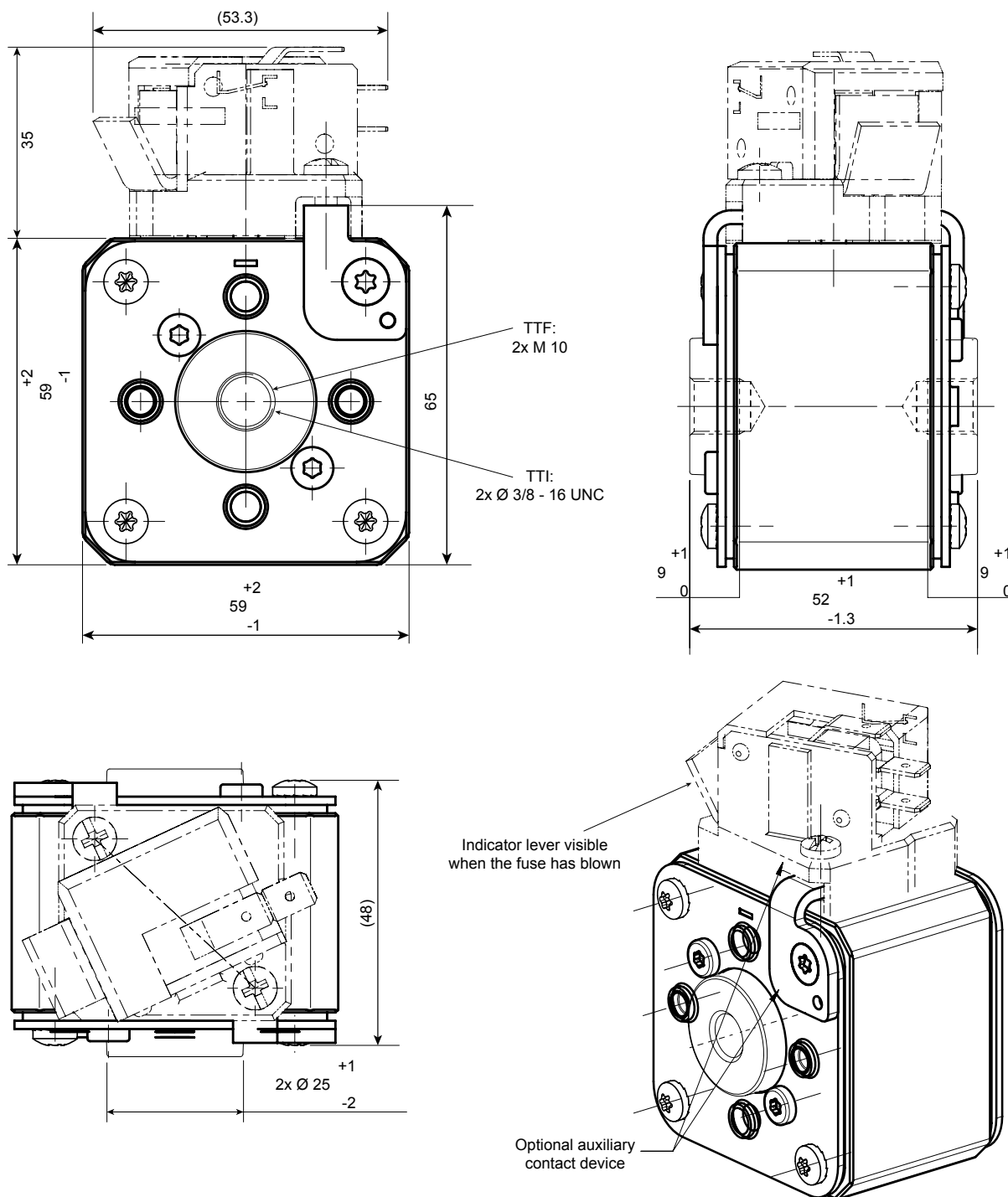
MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

Protistor® Limited Range size 32 aR

690 VAC (IEC) / 760VAC (UL)

DIMENSIONS

Size 32 type TTF / TTI with microswitch



MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.