

# UltraSafe™ US10

## Modular fuse-holders

### UL/CSA Fuse Holders

The innovative and comprehensive UltraSafe™ range of Mersen fuse-holders. Modular fuse-holders are finger-safe under IEC standards to an IP20 grade of protection, including fuse changing (with the flick of a finger). Modular fuse-holders are available in 1, 2, 3 or 4 poles, with or without visual blown fuse indicator, in UL + IEC version.

Multi-pole units can also be field assembled by ordering pin-ties assembly kit. UltraSafe™ range is made of tough and durable thermoplastic or thermoset material.

#### Features Benefits

- Finger safe
- Degree of protection: IP20
- Optional visual blown fuse indicator
- DIN rail mounting
- Modular design
- Lockable
- Multi-pole assembly kit available
- Sealable in closed and open position
- Plastic material UL94V2 mini
- Flame retardant materials with glow wire flammability index to 960°C

#### Applications

- All circuits up to 690V for protection of motors, transformers, low voltage distribution, control circuits, drive protection
- Non-load operation

#### Technical data overview

UL ratings AC	800 VAC, 32 A, 200 kA
UL ratings DC	1000 VDC, 32 A, 100 kA
Voltage AC	690 VAC
Voltage DC	690 VDC
Amper (A)	32 A
Rated operational current $I_e$	$\leq 32$ A
SCCR	200 kA
Mounting	Installation on to DIN rails to EN 60715
Product Size	For cylindrical fuse links 10x38.1 or Midget
Number of Poles	1 to 4 poles



#### Standards

UL Recognized Component, UL4248, guide IZLT2, file E52283

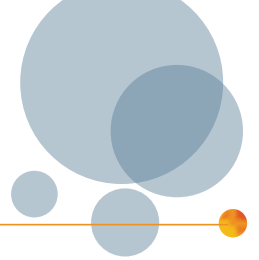
CSA Certified C22.2, class 6225, file 32169

IEC 60269-2 and IEC 60947-3

RoHS Compliant

Plastic material: NF 16101 & 16102 Requirement 2 Compliant





## Product range



US101

### UltraSafe™ fuse holders for 10.3x38.1 fuse-links, without indicator

Catalog number	Reference number	Number of poles/phases	Design	Package
US10N	H305056	N	US10 neutral conductor	12
US101	B305050	1	US10 single pole	12
US101N	C305051	1+N	US10 single pole + neutral conductor	6
US102	D305052	2	US10 double pole	6
US103	E305053	3	US10 triple pole	4
US103N	F305054	3+N	US10 triple pole + neutral conductor	3
US104	G305055	4	US10 quadruple pole	3



US1011

### UltraSafe™ fuse holders for 10,3x38,1 fuse-links, with indicator

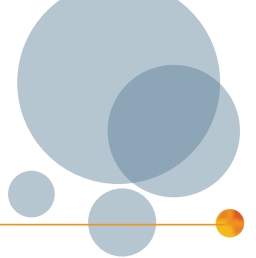
Catalog number	Reference number	Number of poles/phases	Design	Package
US1011	J305057	1	US10 single pole	12
US101NI	K305058	1+N	US10 single pole + neutral conductor	6
US1021	L305059	2	US10 double pole	6
US1031	M305060	3	US10 triple pole	4
US103NI	N305061	3+N	US10 triple pole + neutral conductor	3
US1041	P305062	4	US10 quadruple pole	3

## Technical Data

	US10	US101
Size	10x38	10x38
Number of poles/phases	1, 1+N, 2, 3, 3+N, 4	1, 1+N, 2, 3, 3+N, 4
UL ratings AC	800 VAC, 32 A, 200 kA	800 VAC, 32 A, 200 kA
UL ratings DC	1000 VDC, 32 A, 100 kA	1000 VDC, 32 A, 100 kA
Conventional free air thermal current with fuse links $I_{th}$	32 A	32 A
Power dissipation at $I_{th}$	3 W	3 W
Utilisation category	AC20B/DC20B	AC20B/DC20B
Rated insulation voltage $U_i$	690 V	690 V
SCCR	200 kA	200 kA
Rated impulse withstand voltage $U_{imp}$	6 kV	6 kV
Degree of protection	IP 20	IP 20
Voltage limit for blown fuse indicator	-	230 to 690V AC/DC
Indication System	-	with indicator
Connection	Max. tightening torque: 2.2Nm (19lb-in) Rigid wire = 1-16mm <sup>2</sup> (16-6AWG) Multistrand wire = 0.75-10mm <sup>2</sup> (18-8AWG) PZ2 or flat 5.5x1mm screw drivers recommended (max. diameter 6mm)	Max. tightening torque: 2.2Nm (19lb-in) Rigid wire = 1-16mm <sup>2</sup> (16-6AWG) Multistrand wire = 0.75-10mm <sup>2</sup> (18-8AWG) PZ2 or flat 5.5x1mm screw drivers recommended (max. diameter 6mm)
Operating temperature	-25°C to 60°C	-25°C to 60°C
Storage temperature	-25°C to 80°C	-25°C to 80°C

# UltraSafe™ US10

Modular fuse-holders



## Specific usage conditions

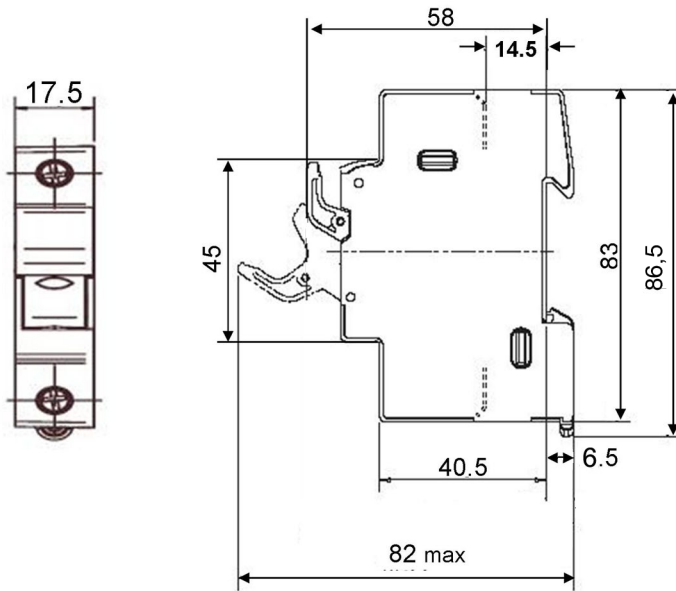
Ambient temperature	>20°C	30°C	40°C	50°C	60°C
Derating factor ( $I_e$ )	1	0.95	0.9	0.8	0.7

No of poles (side by side)	1 to 3	>= 4
Derating factor of current ( $I_{th}$ )	1	0.9

Nominal current of fuse-link gR	20 A	25 A	30 A	32 A
Max. operational current in fuse-holder	19 A	22 A	25 A	27 A
Cable wire section	2.5 mm <sup>2</sup>	4 mm <sup>2</sup>	6 mm <sup>2</sup>	6 mm <sup>2</sup>

## Dimensions

in mm



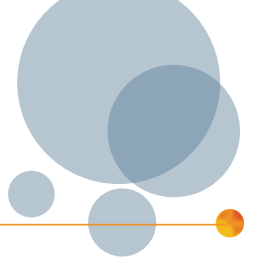
## Accessories



US810PAK + fuse-holder

### Kit for multi phase connection

Catalog number	Reference number	Description	Package
US810PAK	Z233725	Links for connection of multipole units	12



## Accessories

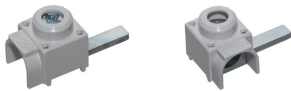


TAGLOCKCMS810

LOCK

### Locking devices

Catalog number	Reference number	Description	Weight kg <sup>1)</sup>	Package
TAGLOCKCMS810	A235773	Locking kit (Tag and lockout)	0.009	1
LOCK	M223525	Padlock	0.042	1

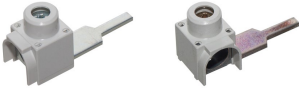


TBB1A

TBB1C

### Power supply

Catalog number	Reference number	Description	Application	Weight kg <sup>1)</sup>	Package
TBB1A	D210315	1 phase axial incoming power supply	Max. rms current 90A	0.010	50
TBB1C	E210316	1 phase lateral incoming power supply	Max. rms current 90A	0.010	50
TBB23A	F210317	2 & 3 phases axial incoming power supply	Max. rms current 90A	0.023	50
TBB23C	G210318	2 & 3 phases lateral incoming power supply	Max. rms current 90A	0.023	50

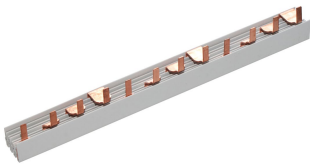


TBB23A

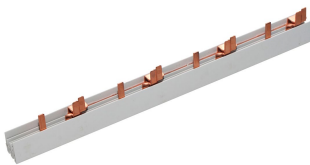
TBB23C

### Wiring bars / Insulated bus bars

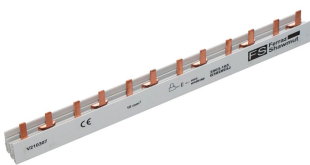
Catalog number	Reference number	Description	Application	Weight kg <sup>1)</sup>	Package
CMS810BB4F3	X210309	quadruple pole, 10 mm <sup>2</sup> , partition 17,5 mm (distance of poles), peg design, L-shaped	Max. rms current 100A, for installation of 3 modules	0.106	10
CMS810BB3F4	W210308	triple pole, 10 mm <sup>2</sup> , partition 17,5 mm (distance of poles), peg design, L-shaped	Max. rms current 100A, for installation of 4 modules	0.085	10
CMS810BB2F6	V210307	double pole, 10 mm <sup>2</sup> , partition 17,5 mm (distance of poles), peg design, L-shaped	Max. rms current 63A, for installation of 6 modules	0.075	10
CMS810BB1F13	T210306	single pole, 10 mm <sup>2</sup> , partition 17,5 mm (distance of poles), peg design, L-shaped	Max. rms current 63A, for installation of 13 modules	0.036	10



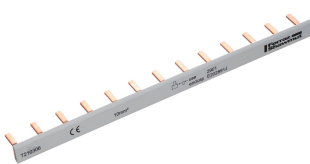
CMS810BB4F3



CMS810BB3F4



CMS810BB2F6



CMS810BB1F13

1) weight in kg per piece or set including package