

Modulostar® CMS27 - Ultrasafe™ US27

Modular fuse-holders

UL/CSA Fuseholder

The innovative and comprehensive Modulostar® 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 in size 27 are available in 1, 2 or 3 poles, with or without visual blown fuse indicators, in IEC + UL version.

Multi-pole units can also be field assembled by ordering pin-ties assembly kit. In size 27 the range offers the possibility to use microswitches (supplied with the holders or ordered separately) to allow remote indication. Modulostar® range is made of tough and durable thermoplastic or thermoset material.

Features Benefits

- Finger safe
- Degree of protection: IP20
- Optional visual blown fuse indicator & microswitch
- Designs available for DIN rail mounting and direct mounting on board
- Modular design
- Lockable
- Multi-pole assembly kit available
- Plastic material UL94V2 mini
- Flame retardant materials with glow wire flammability index to 960°C

Applications

- All circuits up to 800V using semiconductor fuses for protection of small inverters, UPS systems, motor drives, etc.
- Non-load operation.

Technical data overview

Voltage AC	800 VAC
Voltage DC	800 VDC
Amper (A)	150 A
Product Size	For cylindrical fuse links 27x60
Mounting	Installation on to DIN rails to EN 60718
Number of Poles	1-pole, 2-pole, 3-pole, 4-pole, 1+N, 3+N



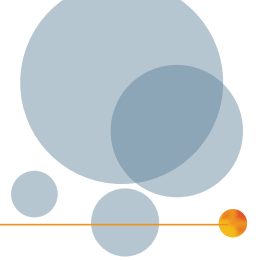
Standards

IEC 60269-2 and IEC 60947-3
Compliance
RoHS Compliant
Plastic material: NF 16101 & 16102
Requirement 2 Compliant
Vibration tested for marine and railway applications



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Product range



CMS271

Modulostar® fuse holders for 27x60 fuse-links, without indicator

Catalog number	Reference number	Number of poles/phases	Design	Weight	Package
CMS271	R210580	1	single pole	290 g	3
CMS271N	S210581	1 + N	single pole + neutral conductor	570 g	1
CMS272	T210582	2	double pole	570 g	1
CMS273	V210583	3	triple pole	870 g	1
CMS273N	W210584	3 + N	triple pole + neutral conductor	1250 g	1
CMS27N	B210152	N	neutral conductor	285 g	3



US271MI

UltraSafe™ fuse holders for 27x60 fuse-links, with auxiliary microswitch and indicator

Catalog number	Reference number	Number of poles/phases	Design	Package
US271MI	R227600	1	single pole	1
US272M2I	T227602	2	double pole, 2 microswitches	1
US272MI	S227601	2	double pole, 1 microswitch	1

UltraSafe™ fuse holders for 27x60 fuse-links, with auxiliary microswitch, indicator and ring lug connection

Catalog number	Reference number	Number of poles/phases	Design	Package
US271MIRING	Z227607	1	single pole	1
US272M2IRING	B227609	2	double pole, 2 microswitches	1

UltraSafe™ fuse holders for 27x60 fuse-links, with indicator

Catalog number	Reference number	Number of poles/phases	Design	Package
US271I	J226420	1	single pole	3
US271NI	K226421	1+N	single pole + neutral conductor	1
US272I	L226422	2	double pole	1
US273I	M226423	3	triple pole	3
US273NI	N226424	3+N	triple pole + neutral conductor	1

UltraSafe™ fuse holders for 27x60 fuse-links, with indicator and ring lug connection

Catalog number	Reference number	Number of poles/phases	Design	Package
US272IRING	C223516	2	double pole	1
US273IRING	F223519	3	triple pole	3
US27IRING	B223515	1	single pole	3
US27IRING	E223518	1+N	single pole + neutral conductor	1
US27NIRING	F223519	N	neutral conductor	3

UltraSafe™ fuse holders for 27x60 fuse-links, without indicator

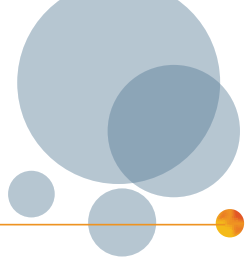
Catalog number	Reference number	Number of poles/phases	Design	Package
US271	G320005	1	single pole	3
US272	H320007	2	double pole	1
US273	J320007	3	triple pole	3
US27N	R232729	N	neutral conductor	3



US273

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Technical Data

	CMS27	US27M	US27MIRING	US27I	US27IRING	US27
Size	27x60	27x60	27x60	27x60	27x60	27x60
Installation mode	direct mounting on board: 2xM4 screw with tightening torque 1-1.2Nm (8 to 10.6lbs-in)	direct mounting on board: 2xM4 screw with tightening torque 1-1.2Nm (8 to 10.6lbs-in)	direct mounting on board: 2xM4 screw with tightening torque 1-1.2Nm (8 to 10.6lbs-in)	direct mounting on board: 2xM4 screw with tightening torque 1-1.2Nm (8 to 10.6lbs-in)	direct mounting on board: 2xM4 screw with tightening torque 1-1.2Nm (8 to 10.6lbs-in)	direct mounting on board: 2xM4 screw with tightening torque 1-1.2Nm (8 to 10.6lbs-in)
Number of poles/phases	1, 1+N, 2, 3, 3+N	1, 2	1, 2	1, 1+N, 2, 3, 3+N	1, 1+N, 2, 3	1, 1+N, 2, 3
Conventional free air thermal current with fuse links I_{th}	150 A	150 A	150 A	150 A	150 A	150 A
Utilisation category	AC20B/DC20B	AC20B/DC20B	AC20B/DC20B	AC20B/DC20B	AC20B/DC20B	AC20B/DC20B
Rated insulation voltage U_i	800 V	800 V	800 V	800 V	800 V	800 V
Rated impulse withstand voltage U_{imp}	8 kV	8 kV	8 kV	8 kV	8 kV	8 kV
Degree of protection	IP 20	IP 20	IP 20	IP 20	IP 20	IP 20
Voltage limit for blown fuse indicator	-	-	-	230 to 690V AC/DC	230 to 690V AC/DC	-
Indication System	-	with auxiliary microswitch	with auxiliary microswitch and special connection	with indicator	with indicator and special connection	-
Connection	rigid wire = 35mm ² (3AWG) multistrand wire = 16mm ² (6AWG) max. tightening torque: 2.8-3.5Nm (30lbs-in) PZ3 or flat 8x1.2mm screw drivers recommended	rigid wire = 35mm ² (3AWG) multistrand wire = 16mm ² (6AWG) max. tightening torque: 2.8-3.5Nm (30lbs-in) PZ3 or flat 8x1.2mm screw drivers recommended	rigid wire = 35mm ² (3AWG) multistrand wire = 16mm ² (6AWG) max. tightening torque: 2.8-3.5Nm (30lbs-in) PZ3 or flat 8x1.2mm screw drivers recommended	rigid wire = 35mm ² (3AWG) multistrand wire = 16mm ² (6AWG) max. tightening torque: 2.8-3.5Nm (30lbs-in) PZ3 or flat 8x1.2mm screw drivers recommended	rigid wire = 35mm ² (3AWG) multistrand wire = 16mm ² (6AWG) max. tightening torque: 2.8-3.5Nm (30lbs-in) PZ3 or flat 8x1.2mm screw drivers recommended	rigid wire = 35mm ² (3AWG) multistrand wire = 16mm ² (6AWG) max. tightening torque: 2.8-3.5Nm (30lbs-in) PZ3 or flat 8x1.2mm screw drivers recommended
Standard cable terminal	-	-	-	-	-	-
Operating temperature	-25°C to 60°C	-25°C to 60°C	-25°C to 60°C	-25°C to 60°C	-25°C to 60°C	-25°C to 60°C
Storage temperature	-25°C to 80°C	-25°C to 80°C	-25°C to 80°C	-25°C to 80°C	-25°C to 80°C	-25°C to 80°C

Auxiliary switches

Rated insulation voltage AC	250 V	250 V	250 V	250 V	250 V	250 V
Rated operational current to IEC 60947-5-1/AC15	4A/24V, 4A/48V, 3A/127V, 2.5A/240V	4A/24V, 4A/48V, 3A/127V, 2.5A/240V	4A/24V, 4A/48V, 3A/127V, 2.5A/240V	4A/24V, 4A/48V, 3A/127V, 2.5A/240V	4A/24V, 4A/48V, 3A/127V, 2.5A/240V	4A/24V, 4A/48V, 3A/127V, 2.5A/240V
Rated operational current to IEC 60947-5-1/AC13	3A/24V, 1A/48V, 0,2A/127V, 0,1A/240V	3A/24V, 1A/48V, 0,2A/127V, 0,1A/240V	3A/24V, 1A/48V, 0,2A/127V, 0,1A/240V	3A/24V, 1A/48V, 0,2A/127V, 0,1A/240V	3A/24V, 1A/48V, 0,2A/127V, 0,1A/240V	3A/24V, 1A/48V, 0,2A/127V, 0,1A/240V
Min. operational current AC/DC	100 mA	100 mA	100 mA	100 mA	100 mA	100 mA
Min_operational_voltage AC/DC	20 V	20 V	20 V	20 V	20 V	20 V
Connection	faston lugs	faston lugs	faston lugs	faston lugs	faston lugs	faston lugs

Specific usage conditions

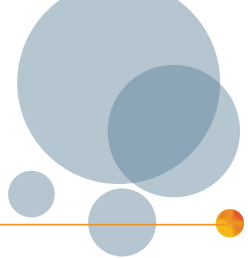
Ambient temperature	> 20°C	30°C	40°C	50°C	60°C
Derating factor (I_e)	1	0.95	0.9	0.8	0.7

No of poles (side by side)	1 to 3	4 to 6	>= 7
Derating factor of current (I_{th})	1	0.95	0.9

Nominal current of fuse-link gR	100 A	110 A
Max. operational current in fuse-holder	96 A	102 A
Cable wire section	25 mm ²	35 mm ²

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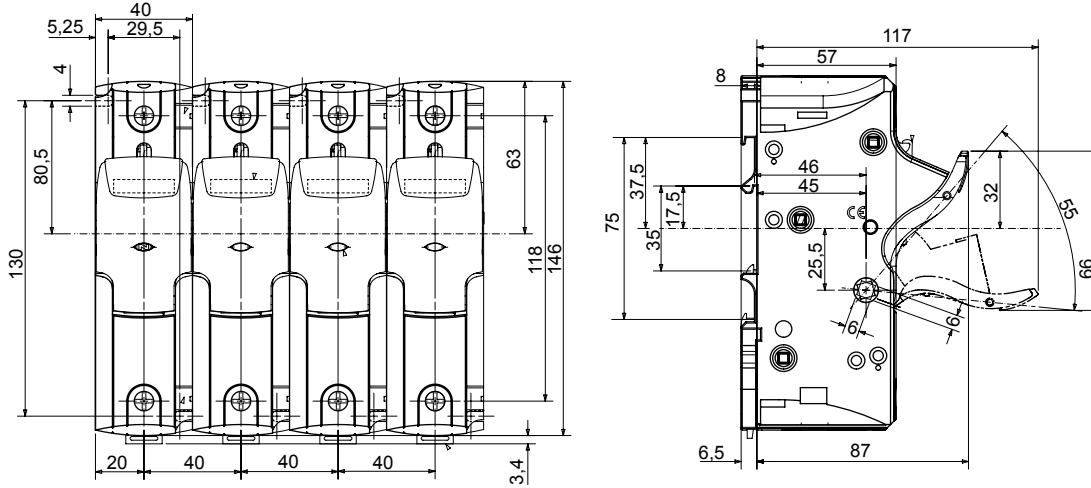
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Dimensions

Modulostar® CMS27 Ultrasafe™ US27 fuse-holders for cylindrical fuse-links class 27x60mm
terminal connection: screw, U bolt or connector

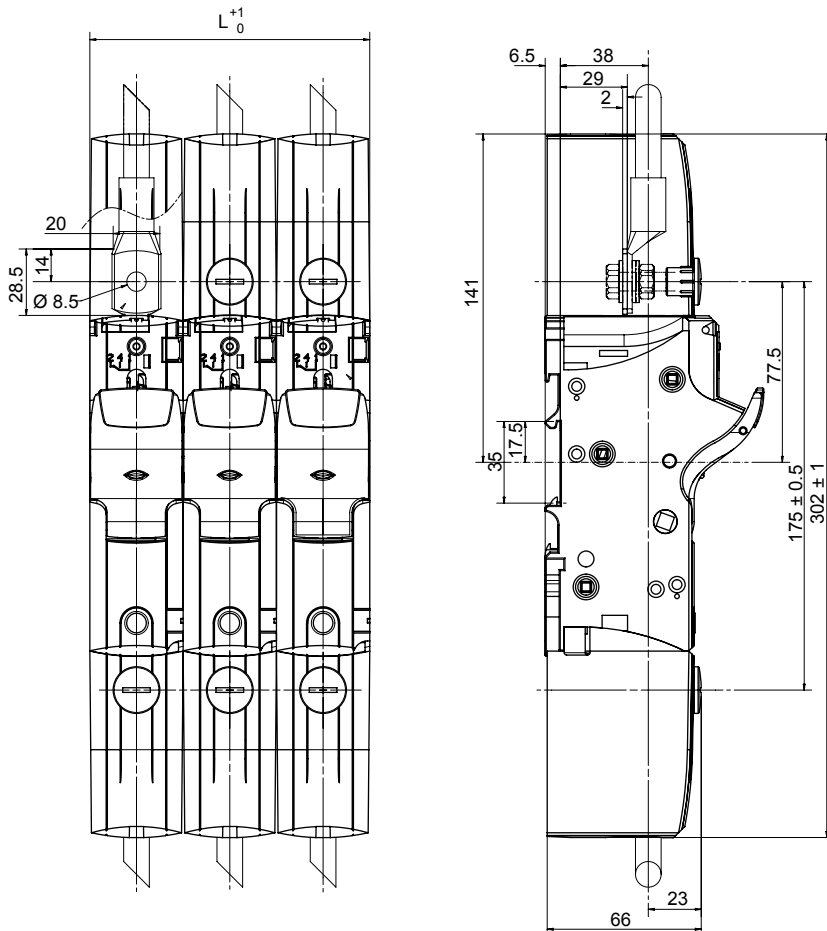
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Dimensions in mm

Modulostar® CMS27 Ultrasafe™ US27 fuse-holders for cylindrical fuse-links class 27x60mm
terminal connection: ring lug

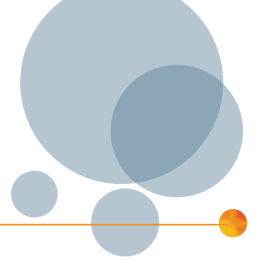
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Dimensions in mm

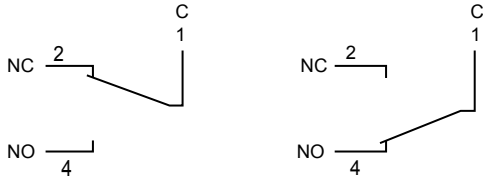
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Dimensions

Auxiliary Microswitch



Accessories

Kit for multi phase connection

Catalog number	Reference number	Design	Weight kg ¹⁾	Package
US27PAK	H227615	links for connection of multipole units	-	10

Auxiliary Switches

Catalog number	Reference number	Design	Package
US27W1	E227612	Microswitch kit	1

Wiring bars / Insulated bus bars

Catalog number	Reference number	Design	Package
RAILDINSY	J213172	35mm Mounting rail symmetric	40
RAILDINSYPERF	C213672	35mm Mounting rail symmetric drilled	40
RAILDINSYRENFZ	R215203	35mm Mounting rail symmetric reinforced	40

1) weight in kg per piece or set including package