

Modulostar® CMS27 - Ultrasafe™ US27

Modular fuse-holders

FUSE HOLDERS, FUSE BASES AND SUPPORTS

UL/CSA FUSE HOLDERS



The innovative and comprehensive Modulostar® range of Mersen fuse-holders.

Modular fuse-holders are finger-safe in accordance with 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.

TECHNICAL DATA OVERVIEW

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

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
- 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 semi-conductor fuses for protection of small inverters, UPS systems, motor drives, etc.
- Non-load operation

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



CMS27I

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	0.303 kg	3
CMS271N	S210581	1 + N	single pole + neutral conductor	0.723 kg	1
CMS272	T210582	2	double pole	0.67 kg	1
CMS273	V210583	3	triple pole	0.914 kg	1
CMS273N	W210584	3 + N	triple pole + neutral conductor	1.25 kg	1
CMS27N	B210152	N	neutral conductor	0.3653 kg	3

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

Catalog number	Reference number	Number of poles/phases	Design	Weight	Package
US271I	J226420	1	single pole	0.303 kg	3
US271NI	K226421	1+N	single pole + neutral conductor	0.73 kg	1
US272I	L226422	2	double pole	0.665 kg	1
US273I	M226423	3	triple pole	0.665 kg	3
US273NI	N226424	3+N	triple pole + neutral conductor	1.27 kg	1

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



US273

Catalog number	Reference number	Number of poles/phases	Design	Weight	Package
US271	G320005	1	single pole	0.3033 kg	3
US272	H320006	2	double pole	0.656 kg	1
US273	J320007	3	triple pole	0.9 kg	3
US27N	R232729	N	neutral conductor	-	3

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



US271MI

Catalog number	Reference number	Number of poles/phases	Design	Weight	Package
US271MI	R227600	1	single pole	0.32 kg	1
US272M2I	T227602	2	double pole, 2 microswitches	0.7 kg	1
US272MI	S227601	2	double pole, 1 microswitch	0.681 kg	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	Weight	Package
US271MIRING	Z227607	1	single pole	0.536 kg	1
US272M2IRING	B227609	2	double pole, 2 microswitches	1.004 kg	1

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

Catalog number	Reference number	Number of poles/phases	Design	Weight	Package
US271NIRING	E223518	1+N	single pole + neutral conductor	0.4673 kg	1
US271RING	B223515	1	single pole	0.4673 kg	3
US272IRING	C223516	2	double pole	1.004 kg	1
US273IRING	D223517	3	triple pole	1.39 kg	3
US27NIRING	F223519	N	neutral conductor	0.34 kg	3

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TECHNICAL DATA

	CMS27	US27I	US27	US27M	US27MIRING	US27IRING
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, 1+N, 2, 3, 3+N	1, 1+N, 2, 3	1, 2	1, 2	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 indicator	-	with auxiliary microswitch	with auxiliary microswitch and special connection	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

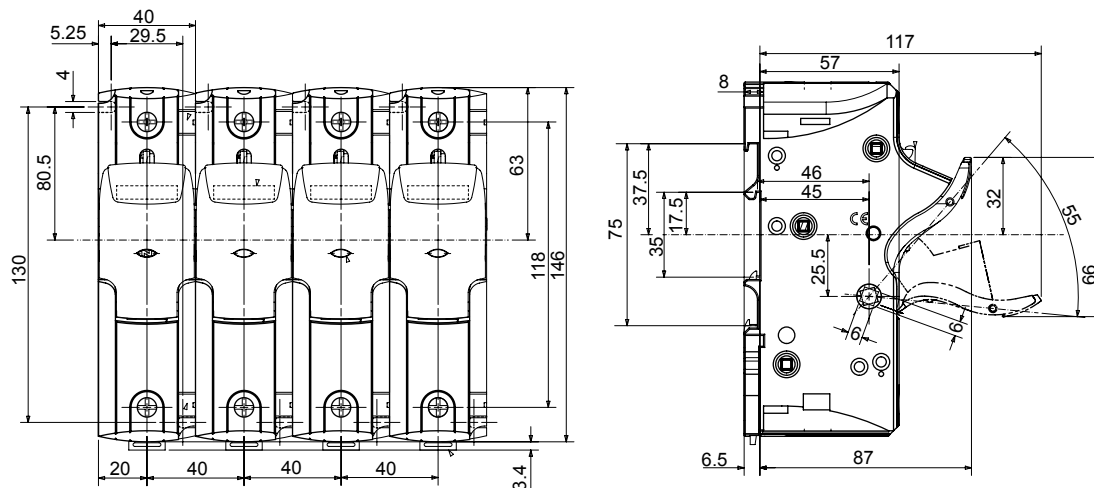
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DIMENSIONS

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

(0114931)



Dimensions in mm

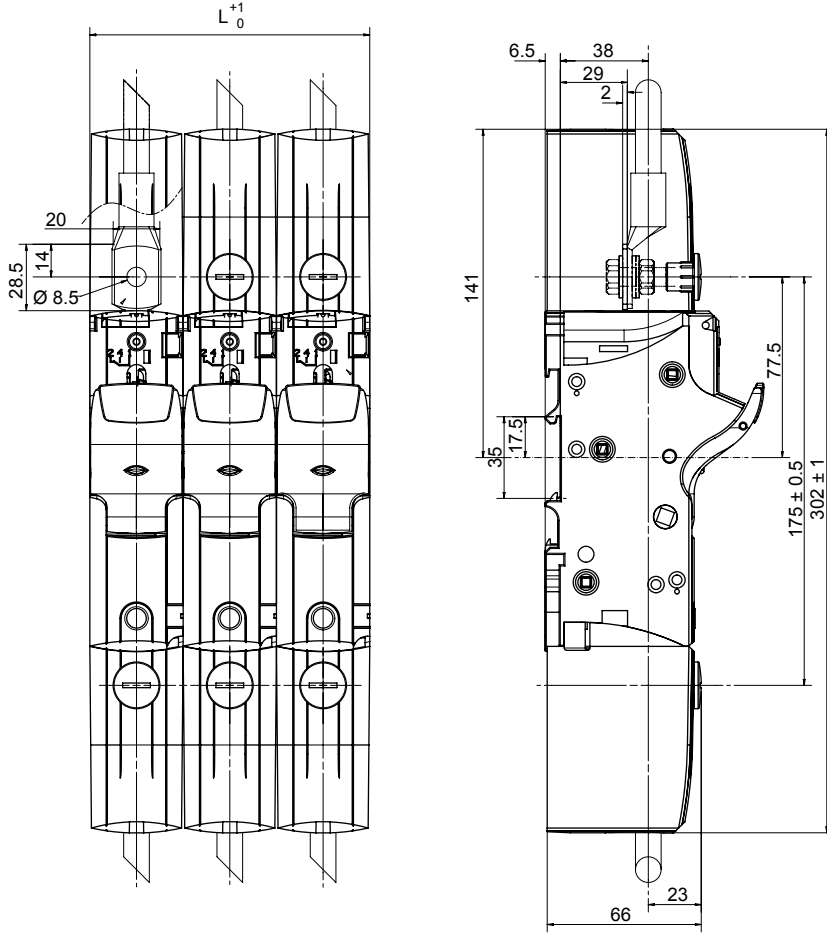
Modulostar® CMS27 - Ultrasafe™ US27

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DIMENSIONS

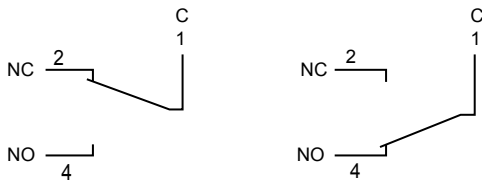
Modulostar® CMS27 Ultrasafe™ US27 fuse-holders for cylindrical fuse-links class 27x60mm
terminal connection: ring lug

(C118276)



Dimensions in mm

Auxiliary Microswitch



ACCESSORIES

Kit for multi phase connection

Catalog number	Reference number	Design	Weight	Package
US27PAK	H227615	links for connection of multipole units	3 g	10

ACCESSORIES

Auxiliary Switches

Catalog number	Reference number	Design	Weight	Package
US27W1	E227612	Microswitch kit	20 g	1

Wiring bars / Insulated bus bars

Catalog number	Reference number	Design	Weight	Package
RAILDINSY	J213172	35mm Mounting rail symmetric	362 g	40
RAILDINSYPERF	C213672	35mm Mounting rail symmetric drilled	325 g	40
RAILDINSYRENFZ	R215203	35mm Mounting rail symmetric reinforced	674 g	40