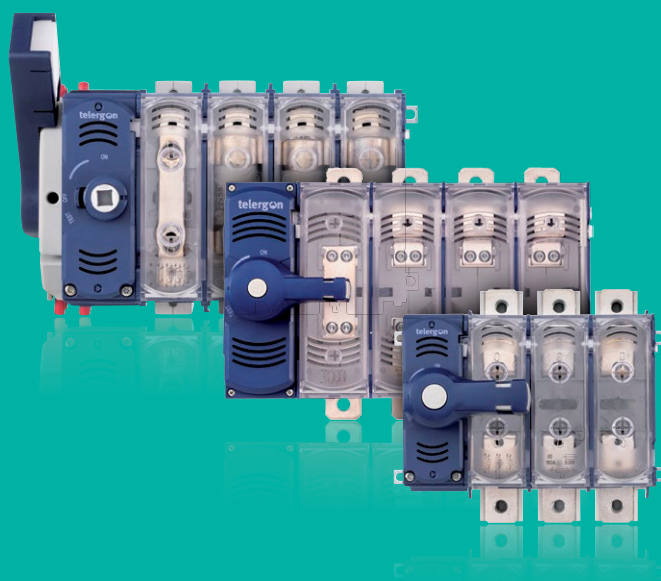


telergon
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M3 SERIES
Modular & compact switch fuses

www.telergon.com



gorlan

M3 SERIES

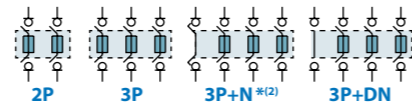
A FULLY NEW GENERATION OF SWITCH FUSES

The M3 Series from Telergon is a new fully modular range of switch-disconnectors with fuses. Available up to 250A and in 2P, 3P, 3P+N versions, along with the addition of a detachable neutral version. Compatible with a wide range of accessories (handles, auxiliary contacts, terminal shrouds...)

Designed to offer the most compact solution on the market, it is composed of 3 models - according to different sizes - which reinforce our competitiveness in the market thanks to a comprehensive and versatile range. Complete fuse isolation thanks to its double-break contact system.



M3 SERIES | SWITCH-FUSES | 2P, 3P, 3P+N & 3P+DN | 32A-250A



Amp.	Fuse ^{*(1)}	Size	Connection	Front operation				Direct handle			
				2P	3P	3P+N ^{*(2)}	3P+DN (detachable neutral)	Key	Standard		Emergency
									External handle ^{*(3)} (shaft included)		
				Code	Code	Code	Code	Code	L	ON-OFF Code	ON-OFF TEST Code
32	BS-A1-A2	00	00	M3-00322PBB10	M3-00323PBB10	M3-00323NBB10	M3-00323DDB10	DM3SIB1	177	DM3SAB2	DM3SAB1
50	14x51			M3-00502PBC20	M3-00503PBC20	M3-00503NBC20	M3-00503DBC20				
63	BS-A2-A3			M3-00632PBB20	M3-00633PBB20	M3-00633NBB20	M3-00633DDB20				
80	NH000			M3-00632PBD20	M3-00633PBD20	M3-00633NBD20	M3-00633DBD20				
100	BS-A3	0	0	M3-00802PBB30	M3-00803PBB30	M3-00803NBB30	M3-00803DDB30	DM3SIB1	177	DM3SRB2	DM3SRB1
100	22x58			M3-01002PBC30	M3-01003PBC30	M3-01003NBC30	M3-01003DBC30				
100	NH000			M3-01002PBD30	M3-01003PBD30	M3-01003NBD30	M3-01003DBD30				
125	BS-A3			M3-01002PTB30	M3-01003PTB30	M3-01003NTB30	M3-01003DTB30				
125	22x58	1	1	M3-01252PTC30	M3-01253PTC30	M3-01253NTC30	M3-01253DTC30	DM3SIB1	177	DM3SAB2	DM3SAB1
160	NH00			M3-01252PTD40	M3-01253PTD40	M3-01253NTD40	M3-01253DTD40				
160	NH00			M3-01602PTD40	M3-01603PTD40	M3-01603NTD40	M3-01603DTD40				
200	BS-A4			M3-02002PSB50	M3-02003PSB50	M3-02003NSB50	M3-02003DSB50				
200	BS-B1-B2	1	1	M3-02002PSB60	M3-02003PSB60	M3-02003NSB60	M3-02003DSB60	DM3SI11	227	DM3SA12	DM3SA11
250	NH1, 0, 0S			M3-02502PSD50	M3-02503PSD50	M3-02503NSD50	M3-02503DSD50				
250	BS-B3			M3-02502PSB80	M3-02503PSB80	M3-02503NSB80	M3-02503DSB80				
				M3-02502PSD80	M3-02503PSD80	M3-02503NSD80	M3-02503DSD80				

* For UL references, please consult.

^{*(1)} Fuses are not included.

^{*(2)} Neutral pole early make & late break. Also available 4P under request.

^{*(3)} Padlockable handle (direct and external) in OFF O position. Interlocked door (external handle) with the possibility of defeating it with a tool.

^{*(4)} With the direct side handle code, the auxiliary contacts holder is included (Code **A**), as it is required for installation.

Please indicate in your order the switch code and the handle code separately. In addition, the auxiliary contacts and the holder required are managed separately. Please see your configuration in the Auxiliary contacts table.



M21 SERIES

Completes our switch-fuses product range

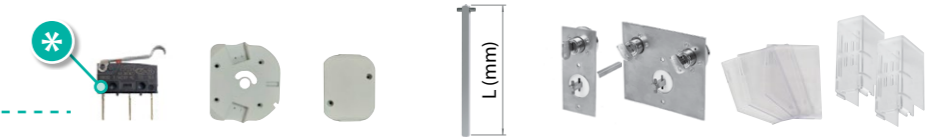
3P & 4P
400A up to 800A
Fuses NH2, 3 and BS B4, C1, C2, C3

For more information, check our Quick Selection Guide.

FUSE STANDARDS AND SUITABLE VERSIONS



	Up to 100A M3 00							125-160A M3 0		200-250A M3 1			
	BS A1-A2	NFC 14x51	BS A2-A3	NH 000	NFC 22x58	BS A3	NH 000	NH 00	NH 00	BS A4	BS B1-B2	NH1 0, 0S	BS B3
Amp	32	50	63	63	100	100	100	125	160	200	200	250	250
Pitch (mm)	27	27	27	27	31	31	31	35		55			
Depth (mm)	115			137	115		137	147		172			



Size	Side operation				Auxiliary contacts ^{*(5)} (1 unit)	Auxiliary contacts holder		Shaft extensions		Safety key lock device ^{*(6)}		Phase barriers ^{*(7)}	Terminal shrouds ^{*(8)}
	Direct handle ^{*(4)}	External handle ^{*(3)} (shaft included)		Early contacts A		Simultaneous contacts B	Simple	Double					
		Standard	Emergency										
	Code	L	ON-OFF Code	ON-OFF TEST Code		Code	Code	Code	L	Code	Code		
00	DM3SSB1	177	DM3SBB2	DM3SBB1	DM3AUB1	DM3AMB1	DM3ASB1	250	DS-EP04	DS-CAB1	DS-CEB1		
			DM3SEB2	DM3SEB1				387	DS-EP05				
0	DM3SSB1	177	DM3SBB2	DM3SBB1	DM3AUB1	DM3AMB1	DM3ASB1	250	DS-EP04	DS-CAB1	DS-CEB1	DM3SF01-2P	DM3CU01-2P
			DM3SEB2	DM3SEB1				387	DS-EP05			DM3SF02-3P	DM3CU02-3P
1	DM3SS11	227	DM3SBB12	DM3SBB11	DM3AUB1	DM3AM11	DM3AS11	375	DS-EP14	DS-CA11	DS-CE11	DM3SF11-2P	DM3CU11-2P
			DM3SE12	DM3SE11				536	DS-EP15			DM3SF12-3P	DM3CU12-3P
												DM3SF13-4P	DM3CU13-4P

^{*(5)} To be used as signaling or control contacts - I_e = 16A (resistive loads) 4A (inductive loads) at 250 Vac.

This code includes just an individual auxiliary contact (1 pc per package), so it is necessary to order as many pcs as it would be needed of any type of contact.

^{*(6)} Handle interlocked in OFF O position by using a key, that only can be removed when the handle is unlocked. Interlocking in other positions available under request.

^{*(7)} Phase barriers include one unit less than the required number of poles. For example, phase barriers for 3P include 2 units.

^{*(8)} One set for input or output.



Check the following table for the required auxiliary contacts configuration.

Depending on the case, it is necessary to order a holder as an accessory.

	AUX	TEST	Codes	
	Units			
Early aux contacts	1		x1	DM3AUB1
		1	x1	DM3AUB1
	1	1	x2	DM3AUB1
			x2	DM3AUB1
	2		x1	Code A
			x2	DM3AUB1
	2	2	x1	Code A
			x3	DM3AUB1
	2	1	x1	Code A
			x4	DM3AUB1
2	2	x1	Code A	
		x1	DM3AUB1	
Simultaneous contacts	1		x1	DM3AUB1
		2	x2	DM3AUB1
			x1	Code B

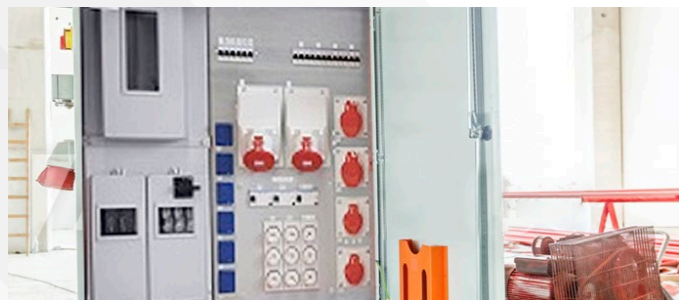
* For more configurations, please consult.

▶ A VERSATILE & WIDE PRODUCT RANGE WITH MULTIPLE BENEFITS



▶ APPLICATIONS

Temporary power distribution panels



HVAC



Motor control centers



Power electronics



Voltage Stabilizers

Drivers/soft starters

UPS



Models for different kind of fuses up to 250A

DIN (NH 000, 00, 1).
BS (A1-A2-A3-A4-B1-B2-B3).
NFC (14x51, 22x58).
UL* (CLASS J).
* under request.



Safety & simplicity

The interlocked fuse protection covers cannot be opened in "ON" position.
The transparent fuse protection covers allow visibility of fuses.
Optimized button contact system for improved short-circuit performance.
Laser engraving includes the appropriate fuse type and amperage for each reference.



Modular, compact & versatile design

The most compact switch-disconnector with fuses in the market.
The molded case is perfectly adapted to the number of poles.
Smaller footprint.
Ergonomically designed and manufactured to meet the needs of the industrial sector.



Most demanding standards & quality tests

Automatic test procedures undertaken during the manufacturing process.
Laser engraving avoiding possible marking errors.
Traceability of the batch and serial number.



High performance

Up to 250 A | AC-23 A.
Suitable for multiple applications in industry, distribution and power electronics.



Easy to install & maintain

Intuitive and safe fuse removal.
Adjustable shaft extension enables versatility with varying control panel depths.
Cage (size 00) and terminal (0 and 1) connection options.
Innovative design allows for multiple installation orientations: horizontal (standard), vertical or 45°.
The opening-closing does not depend on the speed of the operator.

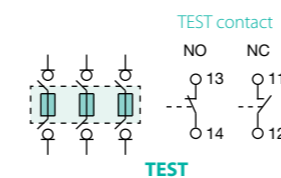


* For other standards (UL, CCC...) please consult.



Test position

Testing of the control circuit auxiliaries without switching the main contacts.
To simplify maintenance, while ensuring the safety of the device and the equipment.
In the TEST position, the fuse covers cannot be opened.



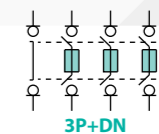
New direct handle with "push off to detach" system

Easy to remove and fit, making it much easier and quicker to operate.
It can be only removed in OFF position.
Simplified tool-free mounting and disassembly.
Direct and panel handle with front or side operation.



Detachable neutral

A simpler and safer disconnection.
The fixed neutral access cover can only be reinstalled with the jumper assembled.
Suitable for applications that require a fixed neutral.
Size optimization. Option of having a 3P+N, in the size of a 3P.

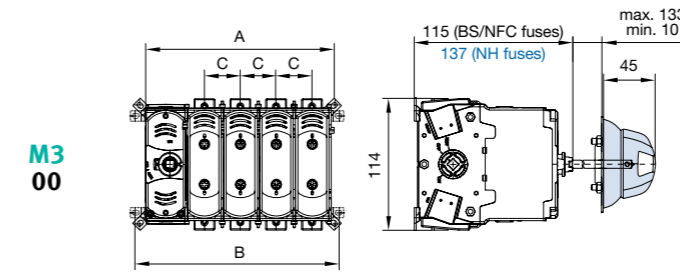


► TECHNICAL DATA

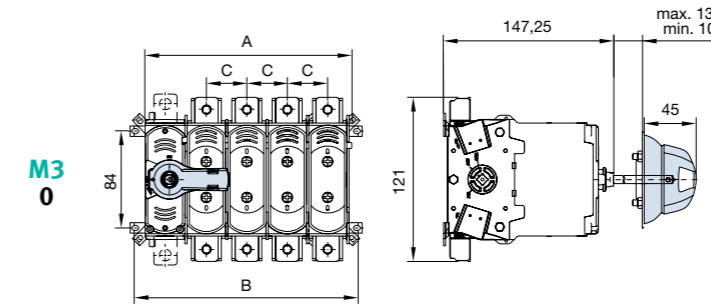
IEC-EN-UNE 60947-1 IEC-EN-UNE 60947-3			00				0		1		
			32 A	50 A	63 A	100 A	125 A	160 A	200 A	250 A	
Fuse type			BS-A1	NFC 14x51	NH000 BS-A2	NH000 BS-A3 NFC 22x58	NH00	NH00	BS-B1-B2 BS-A4	NH1 BS-B3	
Electrical features	Thermal current in ambient at 35°C (and temporarily 40 °C)	I _{th}	A	32	50	63	100	125	160	200	250
	Rated insulation voltage	U _i	Vac	1.000				1.000		1.000	
	Rated impulse withstand voltage	U _{imp}	kV	8				8		12	
	AC rated operational current ^{*(2)} (Rated frequency 50 / 60 Hz)	U _e 415 V AC21A	A	32	50	63	100	125	160	200	250
		U _e 415 V AC22A	A	32	50	63	100	125	160	200	250
		U _e 415 V AC23A/AC23B	A	32/32	50/50	63/63	-/-	-/125	-/160	200/200	250/250
	Power losses in fuses ^{*(1)}	NH/DIN	W	-	-	5.8	6.6	8.8	9.6	-	17
		BS	W	3	-	5.6	8.5	-	-	14	14
		NFC	W	-	4.8	-	9	-	-	-	-
	Rated breaking capacity	400 V; cos φ = 0,35÷0,45	A	256	400	504	-	1000	-	1600	2000
Rated making capacity	400 V; cos φ = 0,45	A	320	500	630	-	1250	-	2000	2500	
Short circuit behavior	Conditional short-circuit current ^{*(3)}	NH/DIN	kA rms	-	100	100	100	100	-	100	
		BS	kA rms	80	-	80	80	-	80	80	
	Maximum cut - off current	kA (peak)	4,2	9,5	10,5	14	16,5	19,5	29	32	
Mechanical data	Durability, number of operating cycles ^{*(4)}		Cycles	10.000				8.000		8.000	
	Maximum weight	2P	kg	-	-	-	-	-	-	2,6	
		3P	kg	0,85	0,85	0,85	1	1,3	1,3	3,4	
		3P+N	kg	1,1	1,1	1,1	1,3	1,6	1,6	4,2	
		3P+DN	kg	-	-	-	-	-	-	3,4	
Rigid Cu wire ^{*(5)}	Min. Section	mm ²	6	10	16	50	50	70	95	150	
	Max. Section	mm ²	25	25	25	50	70 ^{*(e1)}	70 ^{*(e1)}	185 ^{*(e1)}	185 ^{*(e1)}	
Connection capacity	Bar	Max. Width	mm	-	-	-	-	25	25	30	30
	Tightening torque (+5% / -10%)	Flange	Nm	2	2	2	2	-	-	-	-
		Terminal	Nm	-	-	-	-	6	6	18	18

^{*(1)} Power dissipation values of fuse - links used in type tests. Please consult for fuse - links with higher power dissipation.
^{*(2)} Other voltages and / or utilization categories. Please consult.
^{*(3)} With a protective device limiting the cut - off current and the joule integral to the indicated values.
^{*(4)} According to the standards, for other values please consult.
^{*(5)} The minimum sections are for the rated current of the equipment, in lower amperage fuses the minimum cable may be lower too.
^{*(e1)} Larger sections are allowed through the use of phase barriers.

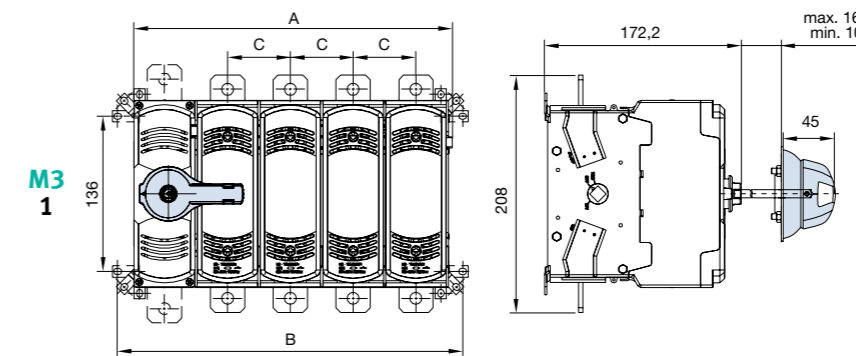
► DIMENSIONAL DRAWINGS (mm)



	A			B			C
	2P	3P	3P+N	2P	3P	3P+N	
32A	93	120	147	107	134	161	27
50A							
63A							
100A	101	132	163	115	146	177	31

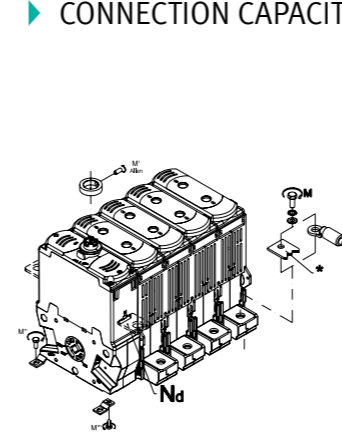


	A			B			C
	2P	3P	3P+N	2P	3P	3P+N	
125A	109	144	179	124	159	194	35
160A							



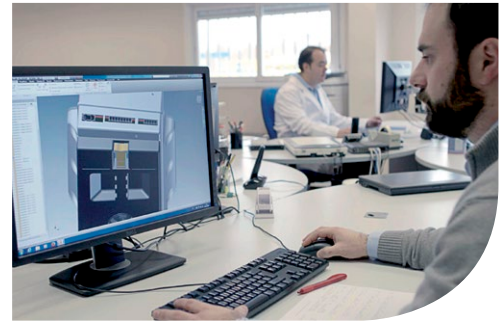
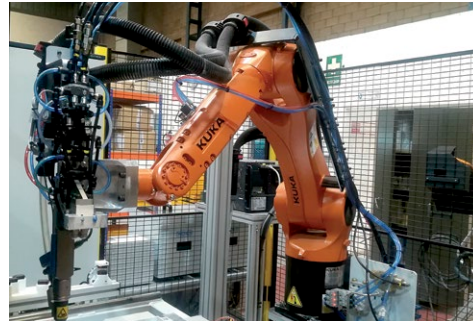
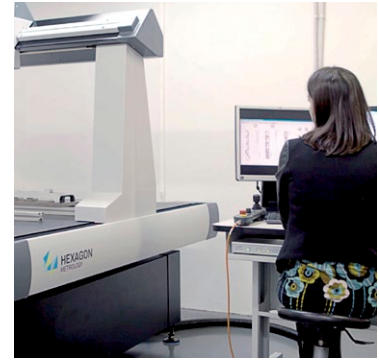
	A			B			C
	2P	3P	3P+N	2P	3P	3P+N	
200A	168,7	223,7	278,7	192	247	302	55
250A							

► CONNECTION CAPACITY (IEC)



Size	I _{th}	S min. (Cu)		S max. (Cu)		H max (Cu)		L max (Cu)		T	M	
		mm ²	AWG	mm ²	AWG	mm	In	mm	in		Nxm	lbf.in
00	32A	6	10	1x25	1x4	-	-	-	-	-	2	17.7
	50A	10	8									
	63A	16	6									
0	100A	50	1	50	1	-	-	-	-	-	2	17.7
	125A	50	1	70	00	3	1/8	25	1	M8	6	53
160A	70	00										
1	200A	95	000	185	350	7	9/32	30	1-3/16	M10	18	159
	250A	150	250 kmil									

Due to the continuous improvement & modifications of our products, the details included in this catalogue can be modified at any time without prior consent.



As the switch specialist, we design and manufacture low voltage switchgear solutions. We anticipate our customers' needs and offer electromechanical products for industrial applications, utilities, railway and green energy sector.

Telergon is an innovative, **customer orientated** firm and we are strongly committed to R&D as a tool to boost the future of the industry. Due to this attitude, the company offers a wide range of **standard products** but also the possibility to **customize** them according to special requirements.

Product range

- Cam switches
- Manual & motorized load break switches
- Fuse switches
- Manual & motorized changeover switches
- DC switch-disconnectors

Our knowledge, acquired through an experience of **more than 65 years**, together with the involvement of its highly qualified professionals, has allowed Telergon to be present in **more than 100 countries**, always providing the best service and working under the strictest **quality** standards.

Quality Telergon



General standards*



* Please, consult.

Other independent standards



Test in independent laboratories



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