

69 Series Isolators

Key Features

- 3, 4, 6 & 8 Pole Versions
- On Load 10A - 125A
- Red/Yellow or Black Handles
- Up to 3 Padlock Positions
- Enclosed IP66 - NEMA 4X
- Enclosed, DIN Rail, Base or Panel Mount Versions
- Lightweight Extension Shafts (100 - 400mm)
- Side Mounted Auxiliary Contacts
- UL Approved



Technical Datasheet



Options & Ordering Codes

PE69		-	30	-	20	-	L
Series Name							
IP66 Enclosed	PE69						
Base Mount Door Interlock	LB69						
Front Panel Mount	PM69						
Direct Handle Base Mount	DM69						
Single Hole Mount	SH69						
Number of Poles		Rating @ 400V					
3 Pole	30	20	20 Amps AC21 (7.5kW AC23B)				
4 Pole	40	25	25 Amps AC21 (10kW AC23B)				
6 Pole	60	32	32 Amps AC21 (12.5kW AC23B)				
8 Pole	80	40	40 Amps AC21 (16kW AC23B)				
		63	63 Amps AC21 (22kW AC23B)				
		80	80 Amps AC21 (22kW AC23B)				
		100*	100 Amps AC21 (37kW AC23B)				
		125*	125 Amps AC21 (45kW AC23B)				
		Handle Type					
		RY48	Direct Red/Yellow 48mm Handle				
		RY64	Direct Red/Yellow 64mm Handle				
		B48	Direct Black 48mm Handle				
		B64	Direct Black 64mm Handle				
		GREY	Grey with Black Handle				
			Enclosed / Door Interlocked Handle				
		L	Large Enclosed / Door Interlocked Handle				

* 3/4 pole only

* 3/4 pole only

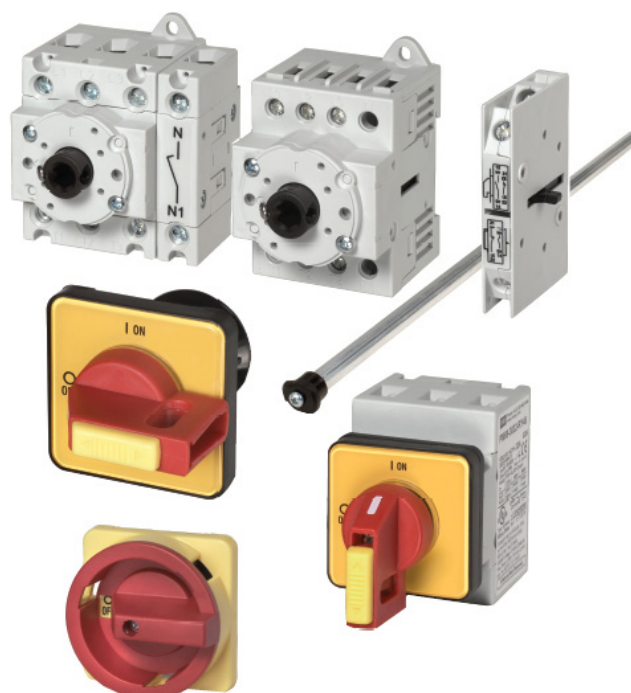
Accessories

Part Number	Description
H69-0001	Red / Yellow Handle 64x64mm
H69-0001-B	Black Handle 64x64mm
H69-0003	Red / Yellow Handle 48x48mm
H69-0004	Black Handle 48x48mm
EP69-0001	Legend Plate "MAIN SWITCH" 64mm Red/Yellow
J7049	Door Handle Mounting Tool

E69-0001	Extension Shaft - 100mm
E69-0002	Extension Shaft - 200mm
E69-0003	Extension Shaft - 300mm
E69-0004	Extension Shaft - 400mm

A69-0001	Auxiliary Contacts 1NO + 1NC
A69-0002	Auxiliary Contacts 2NO
A69-0003	Auxiliary Contacts 1NO + 1NC Overlapping
SN69-0001	Solid Neutral Block
SP69-0001	Add-On Neutral Switching Pole 20-40A

TS69-0001	Terminal Cover 20-40A 3/4P Base Mount Switch
TS69-0002	Terminal Cover 3P for 63-80A Base Mount Switch & 20-80A Panel Mount Switch
TS69-0003	Terminal Cover 4P for 63-80A Base Mount Switch & 20-80A Panel Mount Switch



69 Series Isolators

Technical Specifications

Technical Datasheet

Data according to IEC 947-3, IEC 947-5-1, VDE 0660, EN 60947-3, EN 60947-5-1

Type		..69..20	..69..25	..69..32	..69..40	..69..63	..69..80	..69..100	..69..125
Main Contacts									
Rated thermal current I _{th} open	A	20	25	32	40	63	80	100	125
Rated thermal current I _{th} enclosed	A	20	25	32	40	63	80	100	110
Rated insulation voltage U _i ¹⁾	V	690	690	690	690	690	690	1000	1000
Rated operational current I _n AC21A	A	20	25	32	40	63	80	100	125
Making capacity I _{eff}	3x380-440V	A	160	190	220	300	370	440	725
Breaking capacity	3x220-240V	A	160	180	200	250	330	380	580
	3x380-440V	A	160	180	200	250	330	380	580
	3x660-690V	A	80	110	140	170	190	220	330
Disconnection property performed up to	V	690	690	690	690	690	690	1000	1000
Motor switch	AC3 3x400V	A	12	16	23	30	37	60	72
Motor switch	AC3 3x220-240V	kW	3	4	5.5	7.5	11	11	18.5
Direct switching of single motors	3x380-440V	kW	5.5	7.5	11	15	18.5	18.5	30
	3x660-690V	kW	5.5	7.5	11	15	18.5	18.5	22
Main switch	AC23 3x400V	A	16	20	25	32	45	45	72
Motor switch	AC23A 3x220-240V	kW	4	5.5	7.5	9	15	15	22
Main switch	AC23B 3x380-440V	kW	7.5	10	12.5	16	22	22	37
Safety switch	3x660-690V	kW	5.5	7.5	11	15	18.5	18.5	30
Rated conditional short-circuit current	kA _{eff}	10	10	10	10	10	10	10	5
Max. fuse size	gL (gG)	A	25	35	40	40	63	80	100
Mechanical life	x10 ³	200	200	200	200	100	100	100	100
Rated short-time withstand current (1 sec. current)	A	250	300	400	500	600	850	1200	1500
Power loss per pole AC21 = I _{th}									
	P/pole [W]	PM, SH	0.322	0.503	0.824	1.288	2.739	4.416	5.330
		LB, DM, PE	0.364	0.569	0.933	1.458	2.739	4.416	5.330
	R/pole [mΩ]	PM, SH	0.805	0.805	0.805	0.805	0.690	0.690	0.533
		LB, DM, PE	0.911	0.911	0.911	0.911	0.690	0.690	0.533
Cable cross sections		mm ²	0.5 - 10			1 - 25		4 - 50	
solid or stranded		AWG	20 - 8 (10)			16 - 4 (10)		10 - 0 (10)	
flexible		mm ²	0.5 - 6			4 - 16		10 - 35	
		AWG	20 - 10			16 - 6		8 - 2	
flexible (+ multicore cable end)		mm ²	0.5 - 6			0.75 - 16		6 - 35	
		AWG	20 - 10			16 - 6		8 - 2	
Size of terminal screw			M3.5			M5		M6	
Tightening torque	Nm		0.8 - 1.7			2.5 - 4		3.5 - 4.5	
Auxiliary contacts									
Rated insulation voltage U _i ¹⁾	V		690						
Rated thermal current I _{th} i _{th}	A		10						
Switching capacity	AC15 220-240V	A	2.5						
	AC15 380-440V	A	1.5						
Rated conditional short-circuit current	kA _{eff}		3						
Max. short circuit protection	gL (gG)	A	10						
Cable cross sections		mm ²	0.75 - 2.5						
Solid or stranded		AWG	14 - 12						
Flexible (+ multicore cable end)		mm ²	0.75 - 2.5 (1.5)						
		AWG	18 - 14						
Data according to UL and cUL									
Rated voltage	V	600	600	600	600	600	600	600	600
Ampere rating "General Use"	A	20	25	32	40	63	80	100	125
DOL rating 3-phase	110 - 120V	HP	1	1.5	2	2	3	5	10
	220 - 240V	HP	3	5	5	5	10	10	25
	440 - 480V	HP	7.5	10	10	10	20	20	50
	550 - 600V	HP	10	10	15	15	25	25	60
DOL rating 1-phase	110 - 120V	HP	1	1	1	1	2	2	5
	200 - 208V	HP	1	2	2	2	3	3	10
	220 - 240V	HP	2	2	3	3	5	5	15
Fuse size (RK5)	Manual motor controller	A	40	50	50	70	90	110	125
5kA / 600V	Motor disconnect	A	40	50	50	50	70	70	125
Tightening torque	Nm		1.2 - 2.3			2.8 - 4		1.7 - 4.5	
	lb.inch		11 - 20			24 - 35		15 - 40	
Max. Ambient Temperature		Operation	-40°C to +60°C (90°C)						
		Enclosed	-40°C to +40°C						
	Storage		-50°C to +90°C						

1) Suitable for: earthed-neutral systems, overvoltage category I to III, pollution degree 3 (standard-industry); Uimp = 6kV. Data for other conditions on request

2) The values after the slash are valid for switches 6-pole or more

3) Suitable for no load application (A20A) above 690V

4) Fuse RK1 / 10kA / 600V

5) Uimp = 8kV

69 Series Isolators

Dimensions (mm)

Base Mounting LB69..

ON-OFF Switches 3-Pole, 4-Pole

$$L = X - 40 \pm 3 \quad 20-80A$$

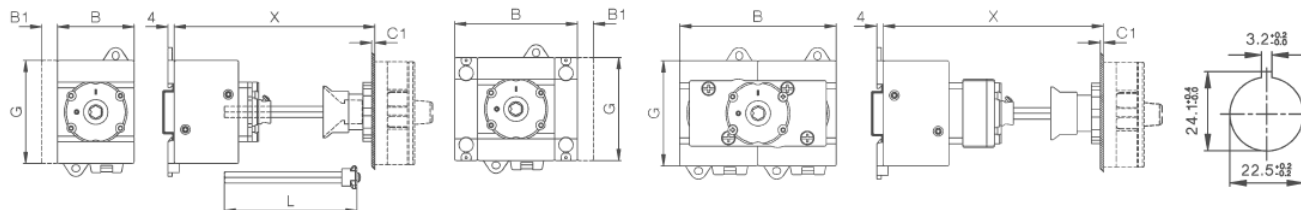
$$L = X - 44 \pm 3 \quad 100-125A$$

6-pole
for 20-40A only
 $L = X - 40 \pm 3$

ON-OFF Switches 6-Pole, 8-Pole

$$L = X - 60 \pm 3$$

Mounting
holes



Type	A	3-pole B	4-pole B	6-pole B	3, 4-pole 8-pole B	aux. contact B1	4-pole PE B2	C1	D1	D2	D3	E	G	K	K1	J
LB69..20-40	64	48	48	77	97	10	14.5	1 - 5	9	5	M4	48	64	25	48	70
LB69..63-80	64	48	62.5	97	126	10	14.5	1 - 5	9	5	M4	48	64	25	48	70
LB69..100-125	64	78	78	-	-	10	-	1 - 5	9	5	M4	48	85	38	-	90

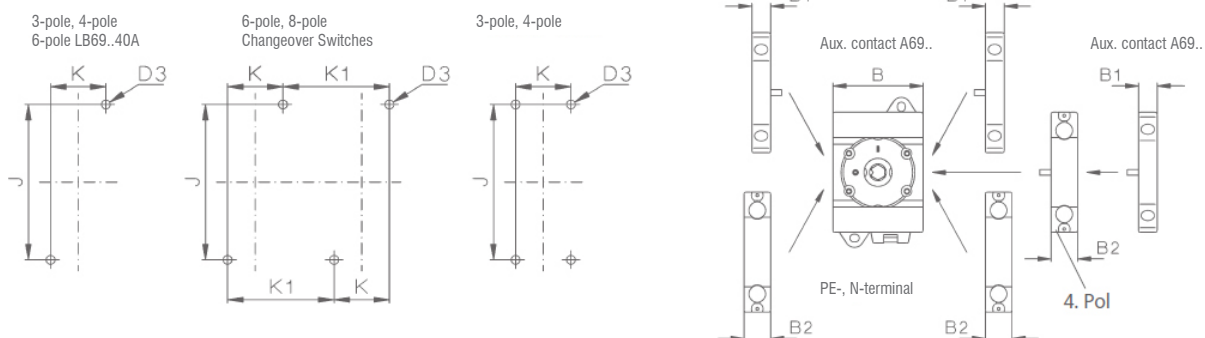
Base mounting

ON-OFF Switches LB69..20-80A

LB69..100-125A

Mounting of Accessories LB69..20-80A

Base mounting, for distribution boards

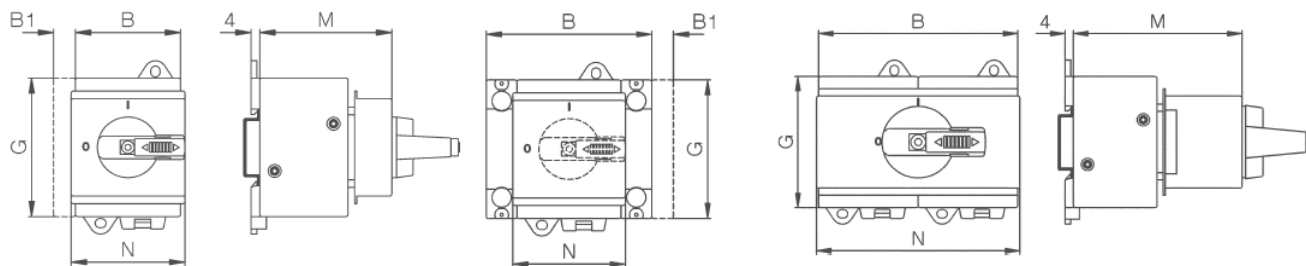


Installation cover DM69..

ON-OFF Switches 3-Pole, 4-Pole

ON-OFF Switches 6-pole
for DM69..20-40A only

ON-OFF Switches 6-pole, 8-pole



Type	Handle Type	3-pole B	4-pole B	6-pole B	8-pole B	aux. contact B1	4-pole N B2	4-pole N G	3-pole 4-pole M	6-pole M	8-pole M	3-pole 4-pole N	6-pole N	8-pole N
DM69..20-40	RY48/B48	48	48	77	96	10	14.5	64	60	60	74	52	52	97
DM69..63-80	RY48/B48	48	62.5	96	125	10	14.5	64	60	74	74	52	97	126
DM69..100-125	RY48/B48	78	78	-	-	10	-	85	60	-	-	78	-	-

Installation cover with low height handle DM69.. -LH

Main switch 3-pole, 4-pole

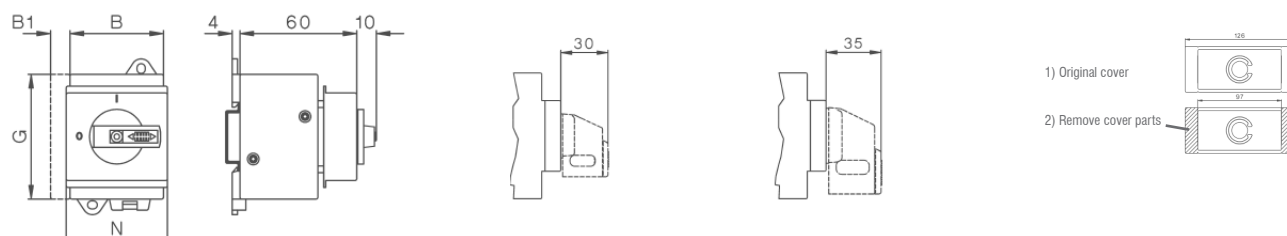
DM69..20-80A

Padlock device RY48/B48

DM69..20-80A

Padlock device RY48/B48

DM69..100-125A

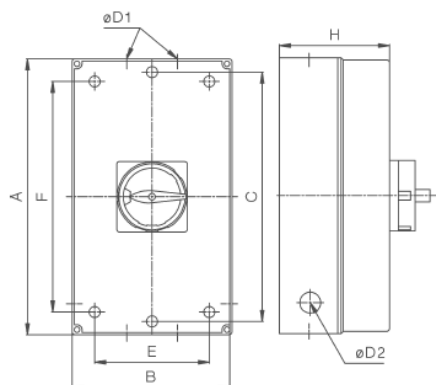


69 Series Isolators

Dimensions (mm)

Maintenance and Safety Switches PE69..

Technical Datasheet



Type PE69..	Pole	A	B	C	D1	D2	E	F	H
20-40A Standard Enc. ³⁾	3, 4	130	98	120	2 x 25.5/20.5	-	75	100	76
20-40A Tall Enc. ³⁾	3, 4	180	98	170	2 x 25.5/20.5 / 16.5/12.5	-	75	150	76
20-40A Large Enc. ⁴⁾	6	200	140	188.5	40.5/32.5 + 16.5 + 12.5	-	100	160	86
63-80A Large Enc. ⁴⁾	3, 4	200	140	188.5	40.5/32.5 + 16.5 + 12.5	-	100	160	86
100-125A Large Enc. ⁴⁾	3, 4	200	140	188.5	40.5/32.5 + 16.5 + 12.5	-	100	160	86
20-40A Large Enc. ⁵⁾	8	240	176	228.5	2 x 40.5/32.5	-	120	200	120
63-80A Large Enc. ⁵⁾	6, 8	240	176	228.5	2 x 40.5/32.5	-	120	200	120

Max. quantity of poles + aux. contact in enclosure:-

3) 1 additional pole + 1 auxiliary

4) 20-40A no addition, 63-80A + 1 additional pole + 1 auxiliary, 100-125A no addition

5) 20-40A + 2 additional poles, 63-80A 8 pole no addition, 63-80A 6 pole + 1 auxiliary

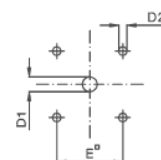
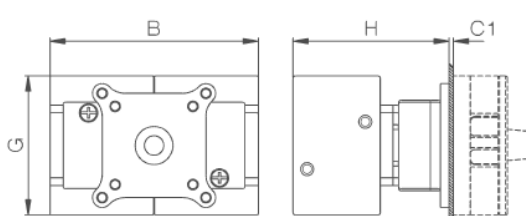
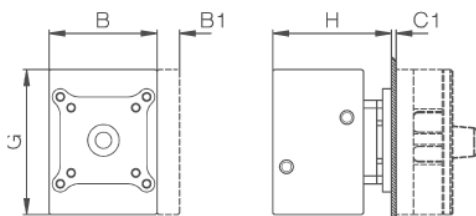
Main Switches, Switches Disconnectors PM69..

Panel mounting PM69..

ON-OFF Switches 3-pole, 4-pole

ON-OFF Switches 6-pole, 8-pole

Mounting holes



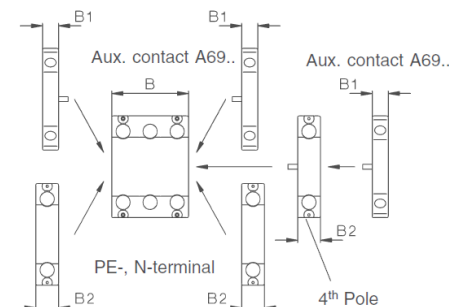
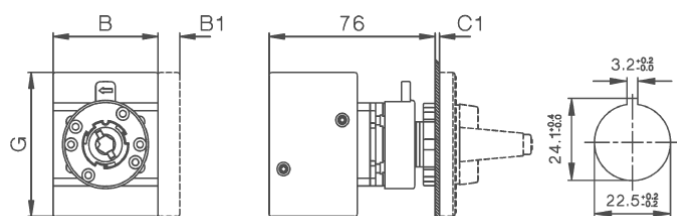
Single hole mounting SH69..

ON-OFF Switches 3-pole, 4-pole

Mounting holes

Mounting of add-on modules 20-80A

Panel mounting, Single hole mounting



Type	Handle Type	A	3-pole B	4-pole B	6-pole B	8-pole B	aux contact B1	4-pole N B2	C1	D1	D2	E	F	G	3-pole 4-pole H	6-pole 8-pole H
PM69/SH69	RY48/B48	48	48	62.5	-	-	10	14.5	1 - 5	9	5	36	-	64	54	-
PM69/SH69	RY64/B64	64	48	62.5	97	126	10	14.5	1 - 5	9	5	48	-	64	54	74
PM69/SH69 100-125A	RY64/B64	64	78	78	-	-	10	-	1 - 5	9	5	48	-	85	60	-

Handles for LB69.. Switches

H69-0001 / RY64
H69-0001-B / B64

H69-0003 / RY48
H69-0004 / B48

