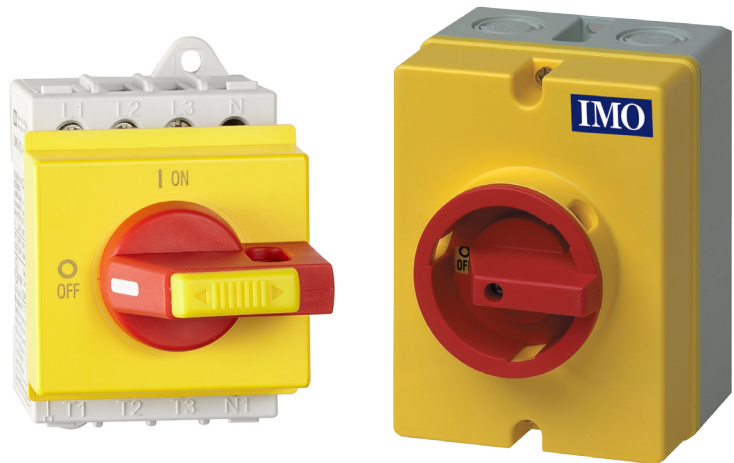


Isolators 69 Series

- 3, 4, 6 & 8 Pole
- On Load 20A - 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 Approval



Options & Ordering Codes

	PM69	—	30	20	RY64	
IP65 Enclosed	PE69				RY48	Direct Red / Yellow 48mm Handle
Base Mount Door Interlock	LB69				RY64	Direct Red / Yellow 64mm Handle
Front Panel Mount	PM69				B48	Direct Black 48mm Handle
Direct Handle Base Mount	DM69				B64	Direct Black 64mm Handle
Single Hole Mount	SH69					Enclosed / Door Interlocked Handle

3 Pole	30
4 Pole	40
6 Pole	60
8 Pole	80

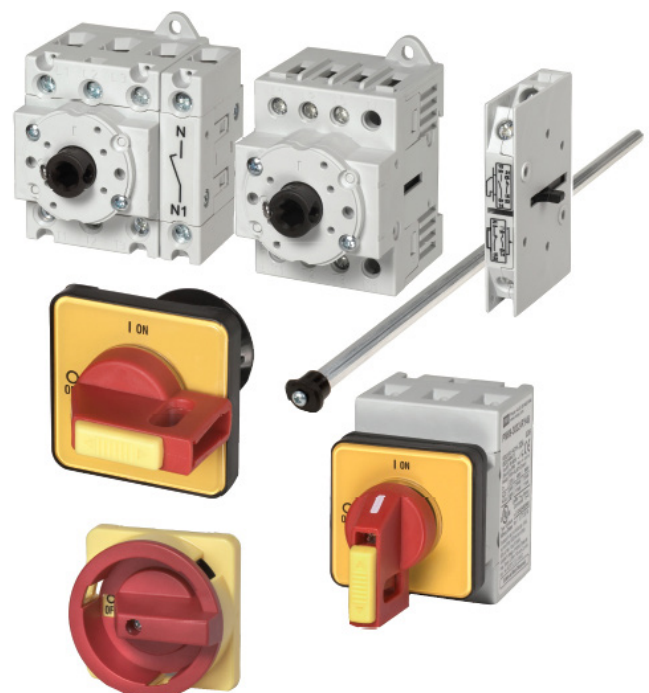
Rating @ 400V

AC21A/Amps	20	25	32	40	63	80	100¹⁾	125¹⁾
AC23B/KW	7.5	10	12.5	16	22	22	37	45

¹⁾ 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



Isolators 69 Series continued

Technical Data

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_o AC21A	A	20	25	32	40	63	80	100	125
Making capacity I_{eff} 3x380-440V	A	160	190	220	300	370	440	725	850
Breaking capacity 3x220-240V	A	160	180	200	250	330	380	580	680
	A	160	180	200	250	330	380	580	680
	A	80	110	140	170	190	220	330	420
Disconnection property performed up to	V	690	690	690	690	690	690	1000	1000
Motor switch AC3 3x400V	A	12	16	23	30	37	37	60	72
Motor switch AC3 3x220-240V	kW	3	4	5.5	7.5	11	11	18.5	22
Direct switching of single motors 3x380-440V	kW	5.5	7.5	11	15	18.5	18.5	30	37
	kW	5.5	7.5	11	15	18.5	18.5	22	30
Main switch AC23 3x400V	A	16	20	25	32	45	45	72	85
Motor switch AC23A 3x220-240V	kW	4	5.5	7.5	9	15	15	22	30
Main switch AC23B 3x380-440V	kW	7.5	10	12.5	16	22	22	37	45
Safety switch 3x660-690V	kW	5.5	7.5	11	15	18.5	18.5	30	37
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	125
Mechanical life x10 ⁵	x10 ⁵	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	8.328
	LB, DM, PE	0.364	0.569	0.933	1.458	2.739	4.416	5.330	8.328
R/pole [mΩ]	PM, SH	0.805	0.805	0.805	0.805	0.690	0.690	0.533	0.533
	LB, DM, PE	0.911	0.911	0.911	0.911	0.690	0.690	0.533	0.533
Cable cross sections									
solid or stranded	mm ²	0.5 - 10			1 - 25			4 - 50	
	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			
	A					1.5			
Rated conditional short-circuit current	kA _{eff}					3			
Max. short circuit protection gL (gG)	A					10			
Cable cross sections									
Solid or stranded	mm ²					0.75 - 2.5			
Flexible (+ multicore cable end)	AWG					14 - 12			
	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	15
	HP	3	5	5	5	10	10	25	30
	HP	7.5	10	10	10	20	20	50	60
	HP	10	10	15	15	25	25	60	60
DOL rating 1-phase 110 - 120V	HP	1	1	1	1	2	2	5	7.5
	HP	1	2	2	2	3	3	10	10
	HP	2	2	3	3	5	5	15	15
Fuse size (RK5) Manual motor controller	A	40	50	50	70	90	110	125	125
5kA / 600V Motor disconnect	A	40	50	50	50	70	70	125	125
Tightening torque	Nm	1.2 - 2.3			2.8 - 4			1.7 - 4.5	
	lb.inch	11 - 20			24 - 35			15 - 40	

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

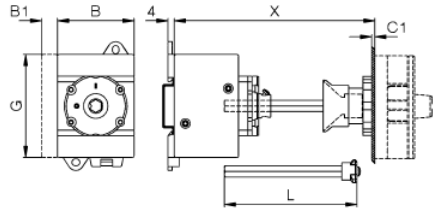
Isolators 69 Series continued

Dimensions (mm)

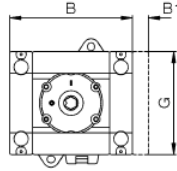
Base mounting LB69..

ON-OFF Switches 3-Pole, 4-Pole

L = X - 40 ± 3 20-80A
L = X - 44 ± 3 100-125A

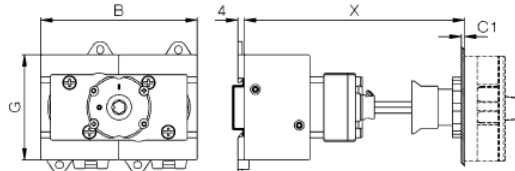


6-pole
for 20-40A only
L = X - 40 ± 3

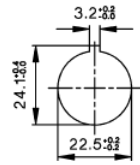


ON-OFF Switches 6-pole, 8-pole

L = X - 60 ± 3



Mounting
holes

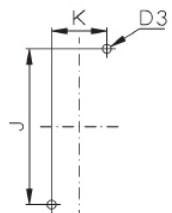


Type	3-pole			4-pole	6-pole	3, 4-pole 8-pole	aux. contact	4-pole PE								
	A	B	B	B	B	B	B1	B2	C1	D1	D2	D3	E	G	K	K1
LB69..20-40	64	48	48	77	97	10	14.5	1-5	9	5	M4	48	64	25	48	70
LB69..63-80	64	48	62.5	97	126	10	14.5	1-5	9	5	M4	48	64	25	48	70
LB69..100-125	64	78	78	-	-	10	-	1-5	9	5	M4	48	85	38	-	90

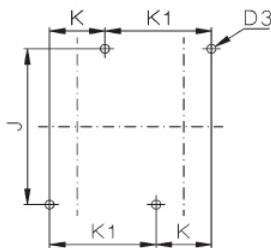
Base mounting

ON-OFF Switches LB69..20-80A

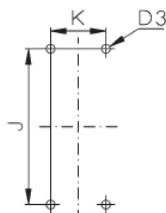
3-pole, 4-pole
6-pole LB69..40A



6-pole, 8-pole
Changeover Switches



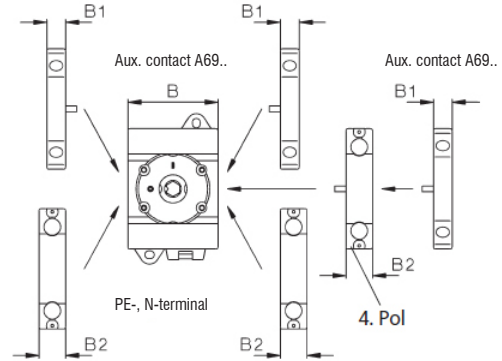
3-pole, 4-pole



LB69..100-125A

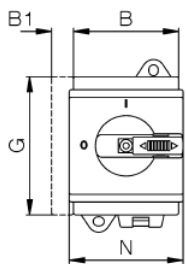
Mounting of Accessories LB69..20-80A

Base mounting, for distribution boards

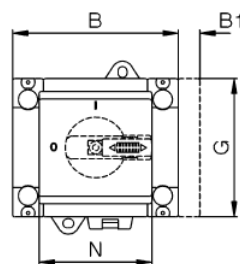


Installation cover DM69..

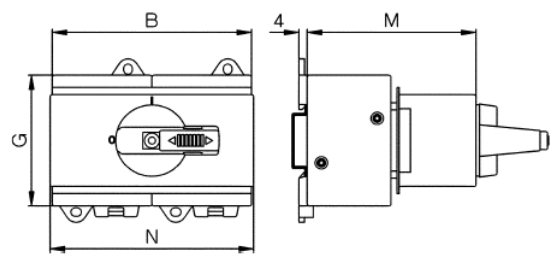
ON-OFF Switches 3-Pole, 4-Pole



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



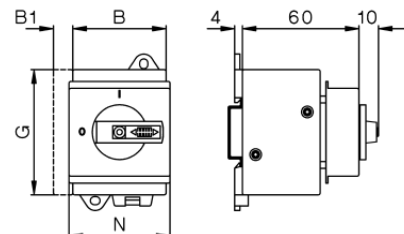
ON-OFF Switches 6-pole, 8-pole



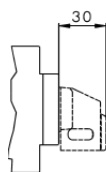
Type	Handle Type	3-pole	4-pole	6-pole	8-pole	aux. contact	4-pole N	4-pole N	3-pole 4-pole	6-pole	8-pole	3-pole 4-pole	6-pole	8-pole
		B	B	B	B	B1	B2	G	M	M	M	N	N	N
DM69..20-40	RY48/B48	48	48	77	96	10	14.5	64	60	60	74	52	52	97
DM69..63-80	RY48/B48	48	62.5	96	125	10	14.5	64	60	74	74	52	97	126
DM69..100-125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

Installation cover with low height handle DM69.. -LH

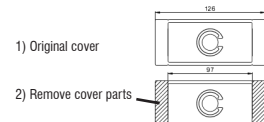
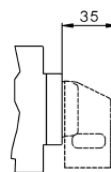
Main switch 3-pole, 4-pole DM69..20-80A



Padlock device RY48/B48
DM69..20-80A



Padlock device RY48/B48
DM69..100-125A



Isolators 69 Series continued

Dimensions (mm)

Maintenance and Safety Switches PE69..

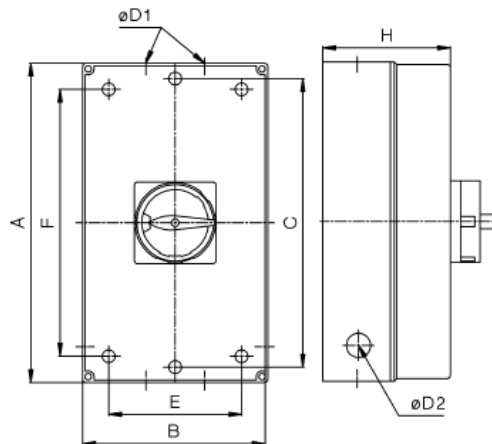
Type PE69..	Pole	A	B	C	D1	D2	E	F	H
20-40A Standard Enc. ³⁾	3, 4	130	98	121	2 x 25.5/20.5	-	75	100	76
20-40A Tall Enc. ³⁾	3, 4	180	98	170	2 x 25.5/20.5 / 16.5/12.5	-	75	150	76
20-40A Large Enc. ⁴⁾	6	200	140	-	40.5/32.5 + 16.5 + 12.5	-	100	160	86
63-80A Large Enc. ⁴⁾	3, 4	200	140	-	40.5/32.5 + 16.5 + 12.5	-	100	160	86
100-125A Large Enc. ⁴⁾	3, 4	200	140	-	40.5/32.5 + 16.5 + 12.5	-	100	160	86
20-40A Tall Enc. ⁵⁾	8	240	176	-	2 x 40.5/32.5	-	120	200	120
63-80A Large Enc. ⁵⁾	6, 8	240	176	-	2 x 40.5/32.5	-	120	200	120
100-125A Large Enc. ⁵⁾	3, 4	240	176	-	50.5/40.5	-	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

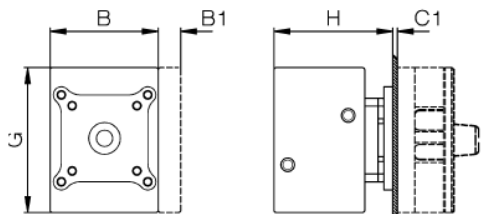
5) 20-40A + 2 additional poles, 63-80A 8 pole no addition, 63-80A 6 pole + 1 auxiliary



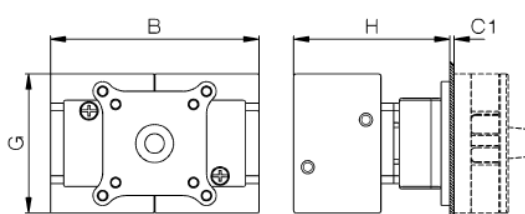
Main Switches, Switches Disconnectors PM69..

Panel mounting PM69..

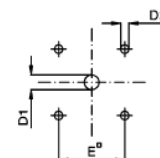
ON-OFF Switches 3-pole, 4-pole



ON-OFF Switches 6-pole, 8-pole

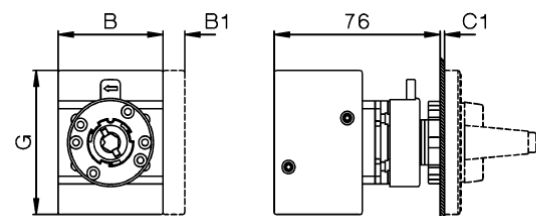


Mounting holes



Single hole mounting SH69..

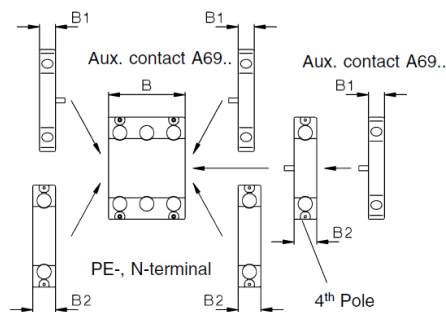
ON-OFF Switches 3-pole, 4-pole



Mounting holes

Mounting of add-on modules 20-80A

Panel mounting, Single hole mounting



Type	Handle Type	3-pole		4-pole	6-pole	8-pole	aux contact	4-pole N			D2	E	F	3-pole 4-pole		6-pole 8-pole
		A	B	B	B	B	B1	B2	C1	D1				G	H	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

