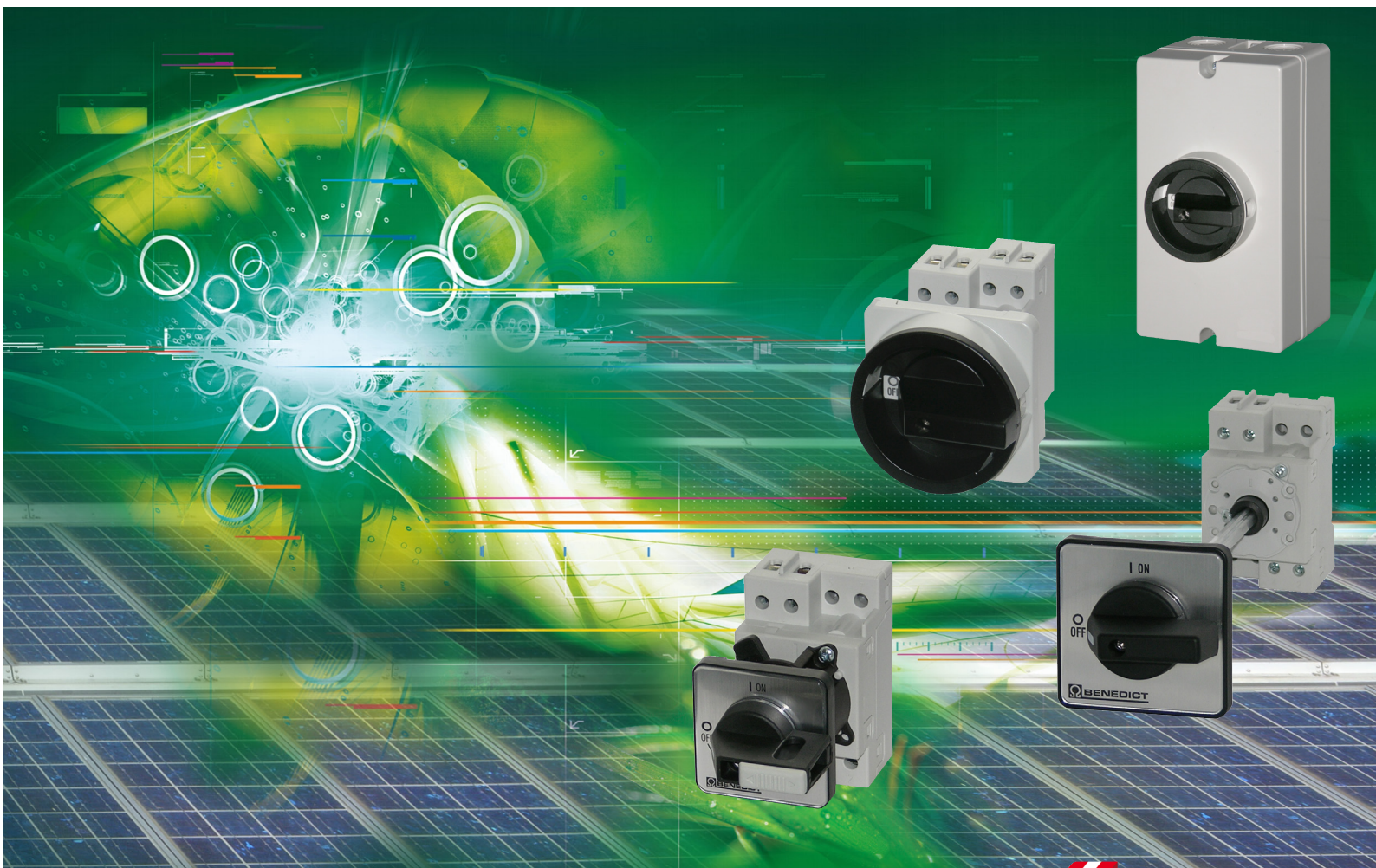


# Mini DC - Isolators for Photovoltaic

acc. to IEC 60364-7-712



Quality made in 

D1024E191



**Contactors  
Motor-Starter**

Mini-Contactors  
Contactors  
Overload Relays  
Compacitor Switching Contactors  
Motor-Starters  
Modular Contactors

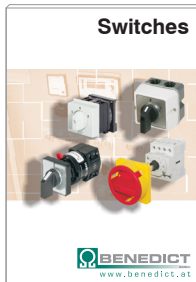
Catalogue **D677E..**



**Circuit  
Breakers**

M4-32T.. up to 32A  
M4-32R.. up to 32A  
M4-63R.. up to 63A  
M4-100R.. up to 100A

Catalogue **D795E..**



**Switches**

On-Off-Switches  
Changeover Switches  
Motor Switches  
Step Switches  
Main Switches  
Modular Switches  
Key Operated Switches

Catalogue **D371E..**



**Main  
Switches**

Emergency Off  
Main Switches  
On-Off-Switches  
Add-On-Module

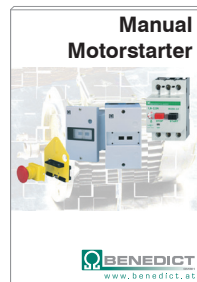
Catalogue **D656E..**



**Capacitor Switching  
Contactors**

Contactors for reactive and  
non reactive capacitor banks

Catalogue **D385E..**



**Manual  
Motorstarter**

MU25A up to 32A  
Auxiliary Contact Blocks  
Trip Alarm Auxiliary Switches  
Busbar Connectors  
Enclosure

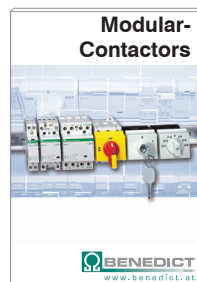
Catalogue **D509E..**



**Push Buttons**

Push Buttons  
Emergency Stop  
Key Operated Rotary Switches  
Rotary Knobs  
Illuminated Push Buttons  
Assembled Stations

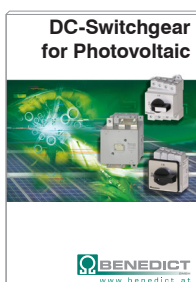
Catalogue **D580E..**



**Modular-  
Contactors**

Modular Contactors  
Accessories  
Emergency Off Switches  
Main Switches  
On-Off Switches  
Control Switches

Catalogue **D681E..**



**DC-Switchgear  
for Photovoltaic**

Main Switches  
On-Off-Switches  
Contactors for DC-Switching

Catalogue **D911E..**



**Low Voltage  
Control Gear**

Contactors  
D.O.L. Starter  
Overload Relays  
Manual Motor Starter  
Main Switches  
Cam Switches  
Push Buttons  
Emergency Stop

Catalogue **D651E..**



**Content**

Page



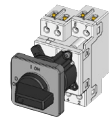
Mini DC-Isolators for Panel Mounting (4 holes) 6  
Lockable Mini DC-Isolators for Panel Mounting (4 holes) 6

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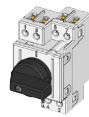
Mini DC-Isolators for Panel Mounting (2 holes) 7  
Lockable Mini DC-Isolators for Panel Mounting (2 holes) 7

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Mini DC-Isolators for Single Hole Mounting (Ø22,5mm) 8  
Lockable Mini DC-Isolators for Single Hole Mounting (Ø22,5mm) 9

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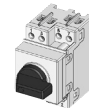
Mini DC-Isolators for Single Hole Mounting (Ø16mm) 9  
Lockable Mini DC-Isolators for Single Hole Mounting (Ø16mm) 10

---



Mini DC-Isolators for Base Mounting 10  
Lockable Mini DC-Isolators for Base Mounting 11

---



Mini DC-Isolators for Distribution Boards 11  
Lockable Mini DC-Isolators for Distribution Boards 12

---



Lockable Mini DC-Isolators in Plastic Enclosure 12

---



Technical Data 13 - 23  
Approvals 17  
Dimensions 24 - 29

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## Ratings

### Rated Current

Type	$I_{th}$ open A	DC21B(DC-PV1) 4 poles in series A	at $U_e$ V
------	--------------------	---	---------------

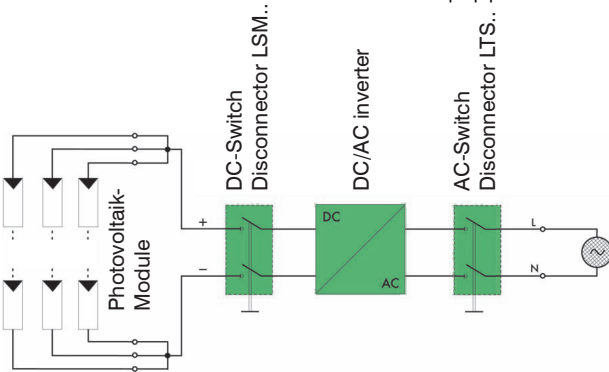
<b>LSM16</b>	16	<b>16</b>	1500	..E, EH4..	..E2, E2H1..	..Z(O), ZH1..	..Z16, Z16H448..
<b>LSM25</b>	25	<b>25</b>	1500	..E, EH4..	..E2, E2H1..	..Z(O), ZH1..	..Z16, Z16H448..
<b>LSM32</b>	32	<b>32</b>	1500	..E, EH4..	..E2, E2H1..	..Z(O), ZH1..	..Z16, Z16H448..
<b>LSM38</b>	45	<b>45</b>	1500	..E, EH4..	..E2, E2H1..	..Z(O), ZH1..	..Z16, Z16H448..
<b>LSMO16</b>	16	<b>16</b>	1500	..E, EH4..	..E2, E2H1..	..Z(O), ZH1..	..Z16, Z16H448..
<b>LSMO25</b>	25	<b>25</b>	1500	..E, EH4..	..E2, E2H1..	..Z(O), ZH1..	..Z16, Z16H448..
<b>LSMO32</b>	32	<b>32</b>	1500	..E, EH4..	..E2, E2H1..	..Z(O), ZH1..	..Z16, Z16H448..
<b>LSMO38</b>	45	<b>45</b>	1500	..E, EH4..	..E2, E2H1..	..Z(O), ZH1..	..Z16, Z16H448..

## Mini DC-Switch Disconnectors

Design	Panel mounting 4 hole mounting IP66 <sup>1)</sup> Type 3R	Panel mounting 2 hole mounting IP66 <sup>1)</sup> Type 3R	Single hole Ø22,5mm IP66 <sup>1)</sup> Type 4X	Single hole Ø16mm IP66 <sup>1)</sup> Type 4X

## Mini Switch Disconnectors for Photovoltaic

Mini Switch Disconnectors „LSM“ are switch gears for interrupting the DC/AC-Inverter from solar-panels. Photovoltaic-Installations have to be equipped with DC-Isolators acc. to IEC 60364-7-712.



Mini Switch Disconnectors LSM ensure a reliable switching up to 50A at 1200V in the category DC-PV1 (= DC21B).

The construction of the contacts and the material selection guarantee that no oxidations develop (because of small switching frequency) and further it is prevented that inadmissible heating-up is effected.

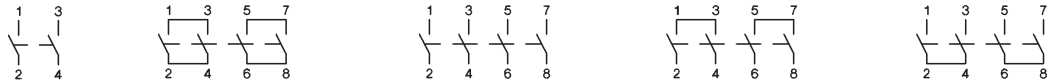
Mini Switch Disconnectors LSM are equipped with 2 or 4 switchable, singular contacts. By serial or parallel wiring of the contacts the contact rating will be increased.

The switching speed by the manually driven handle does not have an effect on the switching attitude of the contacts.

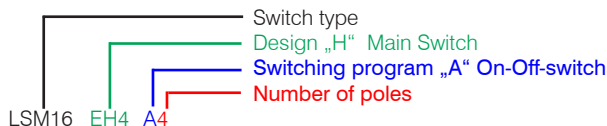
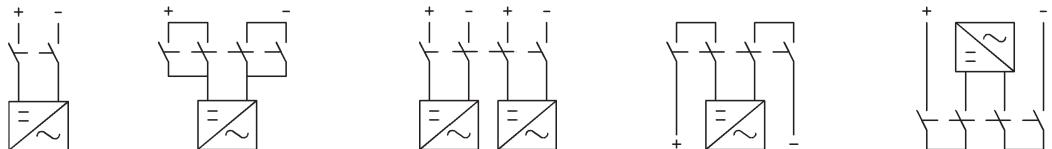
## Switching programs

Type	2-pole	2+2-pole 2 poles in series + 2 Pole parallel	4-pole	4-pole 2 jumpers top Input and Output bottom	4-pole 2 jumpers bottom Input and Output top
<b>LSM16 ... LSM38</b>	.. A2	.. A2+2	.. A4(2 x A2)	.. A4O	.. A4U

Contact  
Wiring diagram



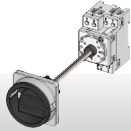
Switching example



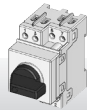
1) Protection in front and built in

## Mini DC-Switch Disconnectors

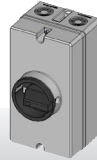
Base mounting with door coupling, single hole, Ø22,5mm, IP66<sup>1)</sup> Type 4X



Modular Switch IP40<sup>1)</sup> Open Type



Plastic enclosed PFL..IP67<sup>1)</sup> Type 4X



..VZV, VZVH4..	..SMA, SMAH1N..	..PFLH4..
..VZV, VZVH4..	..SMA, SMAH1N..	..PFLH4..
..VZV, VZVH4..	..SMA, SMAH1N..	..PFLH4..
..VZV, VZVH4..	..SMA, SMAH1N..	..PFLH4..

## Technical data for DC, acc. to IEC 60947-3, VDE0660

Type			DC-PV1 (= DC21B)							DC-PV2				
			500V	600V	700V	800V	900V	1000V	1200V	1500V	500V	600V	800V	1000V
2 Poles in Series 	<b>LSM16..</b>	A	16	16	16	16	16	10	7	3	16	14	12	4
	<b>LSM25..</b>	A	25	25	25	20	17	11,5	8,5	5	25	21	15	5
	<b>LSM32..</b>	A	32	32	32	23	20	13	10	6	32	27	17	6
	<b>LSM38..</b>	A	45	45	36	30	25	20	10	6	38	31	19	7
2 Poles in Series + 2 parallel 	<b>LSM16..</b>	A	29	29	22	17	16	10	7	3	25	20	12	4
	<b>LSM25..</b>	A	45	36	27	20	17	11,5	8,5	5	39	32	15	5
	<b>LSM32..</b>	A	50	50	32	23	20	13	10	6	50	35	17	6
	<b>LSM38..</b>	A	50	50	36	30	25	20	10	6	50	38	19	7
4 Poles in Series 	<b>LSM16..</b>	A	16	16	16	16	16	16	16	16	16	16	16	16
	<b>LSM25..</b>	A	25	25	25	25	25	25	25	25	25	25	25	
	<b>LSM32..</b>	A	32	32	32	32	32	32	32	32	32	32	32	
	<b>LSM38..</b>	A	45	45	45	45	45	38	32	32	45	45	38	38
4 Poles in Series + 2 parallel 	<b>LSMO16..</b>	A	29	29	29	29	29	29	29	20	29	29	21	16
	<b>LSMO25..</b>	A	45	45	45	45	45	45	33	26	45	45	35	25
	<b>LSMO32..</b>	A	50	50	50	50	50	50	50	32	50	50	45	32
	<b>LSMO38..</b>	A	50	50	50	50	50	50	50	32	50	50	50	50

## Switching programs

Type

6-poles

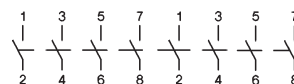
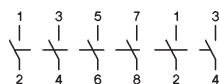
8-poles

**LSMO16 ... LSMO38**

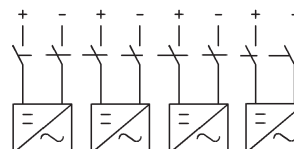
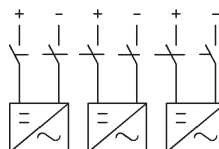
...A6

...A8

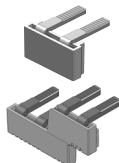
Contact Wiring diagram



Switching example



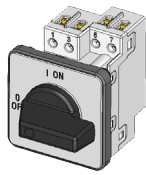
**Isolated connectors LSMV..** for Series and Parallel switching of contacts (terminals 1-3, 5-7, 2-4, 6-8)



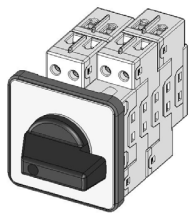
	Type	Pack	weight
<b>LSM16 ... LSM38</b>	<b>LSMV-B1</b>	100 pcs.	6,0 g/piece
<b>LSMO16 ... LSMO38</b>	<b>LSMOV-B1</b>	100 pcs.	6,0 g/piece

1) Protection in front and built in

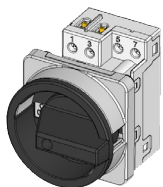
## Mini DC-Isolators for Panel Mounting, 4 holes, Plate 64, IP66, Type 3R



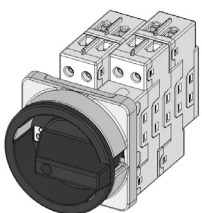
DC-PV1 (=DC21B)		Poles in Series	Number of Strings	Type	Pack pcs.	Weight kg/pce.
600V	1000V					
16A	10A	2	1	<b>LSM16 E A2</b>	1	0,18
25A	11,5A	2	1	<b>LSM25 E A2</b>	1	0,18
32A	13A	2	1	<b>LSM32 E A2</b>	1	0,18
45A	20A	2	1	<b>LSM38 E A2</b>	1	0,18
29A	10A	2	1	<b>LSM16 E A2+2</b>	1	0,24
36A	11,5A	2	1	<b>LSM25 E A2+2</b>	1	0,24
50A	13A	2	1	<b>LSM32 E A2+2</b>	1	0,24
50A	20A	2	1	<b>LSM38 E A2+2</b>	1	0,24
16A	16A	2	2	<b>LSM16 E A4</b>	1	0,23
25A	25A	2	2	<b>LSM25 E A4</b>	1	0,23
32A	32A	2	2	<b>LSM32 E A4</b>	1	0,23
45A	38A	2	2	<b>LSM38 E A4</b>	1	0,23
16A	16A	4	1	<b>LSM16 E A4O</b>	1	0,25
25A	25A	4	1	<b>LSM25 E A4O</b>	1	0,25
32A	32A	4	1	<b>LSM32 E A4O</b>	1	0,25
45A	38A	4	1	<b>LSM38 E A4O</b>	1	0,25
16A	16A	4	1	<b>LSM16 E A4U</b>	1	0,25
25A	25A	4	1	<b>LSM25 E A4U</b>	1	0,25
32A	32A	4	1	<b>LSM32 E A4U</b>	1	0,25
45A	38A	4	1	<b>LSM38 E A4U</b>	1	0,25
16A	10A	2	3	<b>LSMO16 E A6</b>	1	0,50
25A	11,5A	2	3	<b>LSMO25 E A6</b>	1	0,50
32A	13A	2	3	<b>LSMO32 E A6</b>	1	0,50
45A	20A	2	3	<b>LSMO38 E A6</b>	1	0,50
16A	10A	2	4	<b>LSMO16 E A8</b>	1	0,52
25A	11,5A	2	4	<b>LSMO25 E A8</b>	1	0,52
32A	13A	2	4	<b>LSMO32 E A8</b>	1	0,52
45A	20A	2	4	<b>LSMO38 E A8</b>	1	0,52



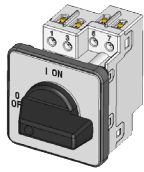
## Lockable Mini DC-Isolators for Panel Mounting, 4 holes, Plate 64, IP66, Type 3R



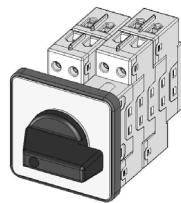
16A	10A	2	1	<b>LSM16 EH4 A2</b>	1	0,19
25A	11,5A	2	1	<b>LSM25 EH4 A2</b>	1	0,19
32A	13A	2	1	<b>LSM32 EH4 A2</b>	1	0,19
45A	20A	2	1	<b>LSM38 EH4 A2</b>	1	0,19
29A	10A	2	1	<b>LSM16 EH4 A2+2</b>	1	0,25
36A	11,5A	2	1	<b>LSM25 EH4 A2+2</b>	1	0,25
50A	13A	2	1	<b>LSM32 EH4 A2+2</b>	1	0,25
50A	20A	2	1	<b>LSM38 EH4 A2+2</b>	1	0,25
16A	16A	2	2	<b>LSM16 EH4 A4</b>	1	0,24
25A	25A	2	2	<b>LSM25 EH4 A4</b>	1	0,24
32A	32A	2	2	<b>LSM32 EH4 A4</b>	1	0,24
45A	38A	2	2	<b>LSM38 EH4 A4</b>	1	0,24
16A	16A	4	1	<b>LSM16 EH4 A4O</b>	1	0,26
25A	25A	4	1	<b>LSM25 EH4 A4O</b>	1	0,26
32A	32A	4	1	<b>LSM32 EH4 A4O</b>	1	0,26
45A	38A	4	1	<b>LSM38 EH4 A4O</b>	1	0,26
16A	16A	4	1	<b>LSM16 EH4 A4U</b>	1	0,26
25A	25A	4	1	<b>LSM25 EH4 A4U</b>	1	0,26
32A	32A	4	1	<b>LSM32 EH4 A4U</b>	1	0,26
45A	38A	4	1	<b>LSM38 EH4 A4U</b>	1	0,26
16A	10A	2	3	<b>LSMO16 EH4 A6</b>	1	0,51
25A	11,5A	2	3	<b>LSMO25 EH4 A6</b>	1	0,51
32A	13A	2	3	<b>LSMO32 EH4 A6</b>	1	0,51
45A	20A	2	3	<b>LSMO38 EH4 A6</b>	1	0,51
16A	10A	2	4	<b>LSMO16 EH4 A8</b>	1	0,53
25A	11,5A	2	4	<b>LSMO25 EH4 A8</b>	1	0,53
32A	13A	2	4	<b>LSMO32 EH4 A8</b>	1	0,53
45A	20A	2	4	<b>LSMO38 EH4 A8</b>	1	0,53



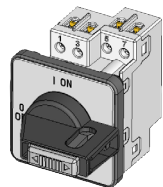
## Mini DC-Isolators for Single Hole Mounting, 2 holes, Plate 64, IP66, Type 3R



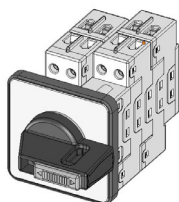
DC-PV1 (=DC21B)		Poles in Series	Number of Strings	Type	Pack pcs.	Weight kg/pce.
600V	1000V					
16A	10A	2	1	<b>LSM16 E2 A2</b>	1	0,18
25A	11,5A	2	1	<b>LSM25 E2 A2</b>	1	0,18
32A	13A	2	1	<b>LSM32 E2 A2</b>	1	0,18
45A	20A	2	1	<b>LSM38 E2 A2</b>	1	0,18
29A	10A	2	1	<b>LSM16 E2 A2+2</b>	1	0,24
36A	11,5A	2	1	<b>LSM25 E2 A2+2</b>	1	0,24
50A	13A	2	1	<b>LSM32 E2 A2+2</b>	1	0,24
50A	20A	2	1	<b>LSM38 E2 A2+2</b>	1	0,24
16A	16A	2	2	<b>LSM16 E2 A4</b>	1	0,23
25A	25A	2	2	<b>LSM25 E2 A4</b>	1	0,23
32A	32A	2	2	<b>LSM32 E2 A4</b>	1	0,23
45A	38A	2	2	<b>LSM38 E2 A4</b>	1	0,23
16A	16A	4	1	<b>LSM16 E2 A4O</b>	1	0,25
25A	25A	4	1	<b>LSM25 E2 A4O</b>	1	0,25
32A	32A	4	1	<b>LSM32 E2 A4O</b>	1	0,25
45A	38A	4	1	<b>LSM38 E2 A4O</b>	1	0,25
16A	16A	4	1	<b>LSM16 E2 A4U</b>	1	0,25
25A	25A	4	1	<b>LSM25 E2 A4U</b>	1	0,25
32A	32A	4	1	<b>LSM32 E2 A4U</b>	1	0,25
45A	38A	4	1	<b>LSM38 E2 A4U</b>	1	0,25
16A	10A	2	3	<b>LSMO16 E2 A6</b>	1	0,50
25A	11,5A	2	3	<b>LSMO25 E2 A6</b>	1	0,50
32A	13A	2	3	<b>LSMO32 E2 A6</b>	1	0,50
45A	20A	2	3	<b>LSMO38 E2 A6</b>	1	0,50
16A	10A	2	4	<b>LSMO16 E2 A8</b>	1	0,52
25A	11,5A	2	4	<b>LSMO25 E2 A8</b>	1	0,52
32A	13A	2	4	<b>LSMO32 E2 A8</b>	1	0,52
45A	20A	2	4	<b>LSMO38 E2 A8</b>	1	0,52



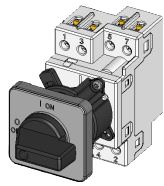
## Mini DC-Isolators for Panel Mounting, 2 holes, Plate 64, IP66, Type 3R



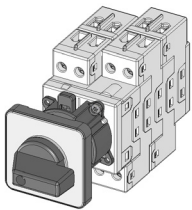
16A	10A	2	1	<b>LSM16 E2H1 A2</b>	1	0,19
25A	11,5A	2	1	<b>LSM25 E2H1 A2</b>	1	0,19
32A	13A	2	1	<b>LSM32 E2H1 A2</b>	1	0,19
45A	20A	2	1	<b>LSM38 E2H1 A2</b>	1	0,19
29A	10A	2	1	<b>LSM16 E2H1 A2+2</b>	1	0,25
36A	11,5A	2	1	<b>LSM25 E2H1 A2+2</b>	1	0,25
50A	13A	2	1	<b>LSM32 E2H1 A2+2</b>	1	0,25
50A	20A	2	1	<b>LSM38 E2H1 A2+2</b>	1	0,25
16A	16A	2	2	<b>LSM16 E2H1 A4</b>	1	0,24
25A	25A	2	2	<b>LSM25 E2H1 A4</b>	1	0,24
32A	32A	2	2	<b>LSM32 E2H1 A4</b>	1	0,24
45A	38A	2	2	<b>LSM38 E2H1 A4</b>	1	0,24
16A	16A	4	1	<b>LSM16 E2H1 A4O</b>	1	0,26
25A	25A	4	1	<b>LSM25 E2H1 A4O</b>	1	0,26
32A	32A	4	1	<b>LSM32 E2H1 A4O</b>	1	0,26
45A	38A	4	1	<b>LSM38 E2H1 A4O</b>	1	0,26
16A	16A	4	1	<b>LSM16 E2H1 A4U</b>	1	0,26
25A	25A	4	1	<b>LSM25 E2H1 A4U</b>	1	0,26
32A	32A	4	1	<b>LSM32 E2H1 A4U</b>	1	0,26
45A	38A	4	1	<b>LSM38 E2H1 A4U</b>	1	0,26
16A	10A	2	3	<b>LSMO16 E2H1 A6</b>	1	0,51
25A	11,5A	2	3	<b>LSMO25 E2H1 A6</b>	1	0,51
32A	13A	2	3	<b>LSMO32 E2H1 A6</b>	1	0,51
45A	20A	2	3	<b>LSMO38 E2H1 A6</b>	1	0,51
16A	10A	2	4	<b>LSMO16 E2H1 A8</b>	1	0,53
25A	11,5A	2	4	<b>LSMO25 E2H1 A8</b>	1	0,53
32A	13A	2	4	<b>LSMO32 E2H1 A8</b>	1	0,53
45A	20A	2	4	<b>LSMO38 E2H1 A8</b>	1	0,53



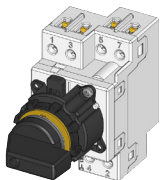
## Mini DC-Isolators for Single Hole Mounting, Ø22,5mm, Plate 48, IP66, Type 4X



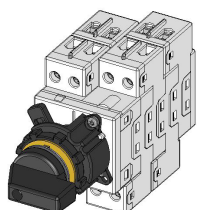
DC-PV1 (=DC21B)		Poles in Series	Number of Strings	Type	Pack pcs.	Weight kg/pce.
600V	1000V					
16A	10A	2	1	<b>LSM16 Z A2</b>	1	0,17
25A	11,5A	2	1	<b>LSM25 Z A2</b>	1	0,17
32A	13A	2	1	<b>LSM32 Z A2</b>	1	0,17
45A	20A	2	1	<b>LSM38 Z A2</b>	1	0,17
29A	10A	2	1	<b>LSM16 Z A2+2</b>	1	0,22
36A	11,5A	2	1	<b>LSM25 Z A2+2</b>	1	0,22
50A	13A	2	1	<b>LSM32 Z A2+2</b>	1	0,22
50A	20A	2	1	<b>LSM38 Z A2+2</b>	1	0,22
16A	16A	2	2	<b>LSM16 Z A4</b>	1	0,21
25A	25A	2	2	<b>LSM25 Z A4</b>	1	0,21
32A	32A	2	2	<b>LSM32 Z A4</b>	1	0,21
45A	38A	2	2	<b>LSM38 Z A4</b>	1	0,21
16A	16A	4	1	<b>LSM16 Z A4O</b>	1	0,23
25A	25A	4	1	<b>LSM25 Z A4O</b>	1	0,23
32A	32A	4	1	<b>LSM32 Z A4O</b>	1	0,23
45A	38A	4	1	<b>LSM38 Z A4O</b>	1	0,23
16A	16A	4	1	<b>LSM16 Z A4U</b>	1	0,23
25A	25A	4	1	<b>LSM25 Z A4U</b>	1	0,23
32A	32A	4	1	<b>LSM32 Z A4U</b>	1	0,23
45A	38A	4	1	<b>LSM38 Z A4U</b>	1	0,23
16A	10A	2	3	<b>LSMO16 Z A6</b>	1	0,50
25A	11,5A	2	3	<b>LSMO25 Z A6</b>	1	0,50
32A	13A	2	3	<b>LSMO32 Z A6</b>	1	0,50
45A	20A	2	3	<b>LSMO38 Z A6</b>	1	0,50
16A	10A	2	4	<b>LSMO16 Z A8</b>	1	0,52
25A	11,5A	2	4	<b>LSMO25 Z A8</b>	1	0,52
32A	13A	2	4	<b>LSMO32 Z A8</b>	1	0,52
45A	20A	2	4	<b>LSMO38 Z A8</b>	1	0,52



## Mini DC-Isolators for Single Hole Mounting, Ø22,5mm, without Plate, IP66, Type 4X

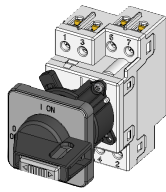


16A	10A	2	1	<b>LSM16 ZO A2</b>	1	0,15
25A	11,5A	2	1	<b>LSM25 ZO A2</b>	1	0,15
32A	13A	2	1	<b>LSM32 ZO A2</b>	1	0,15
45A	20A	2	1	<b>LSM38 ZO A2</b>	1	0,15
29A	10A	2	1	<b>LSM16 ZO A2+2</b>	1	0,19
36A	11,5A	2	1	<b>LSM25 ZO A2+2</b>	1	0,19
50A	13A	2	1	<b>LSM32 ZO A2+2</b>	1	0,19
50A	20A	2	1	<b>LSM38 ZO A2+2</b>	1	0,19
16A	16A	2	2	<b>LSM16 ZO A4</b>	1	0,18
25A	25A	2	2	<b>LSM25 ZO A4</b>	1	0,18
32A	32A	2	2	<b>LSM32 ZO A4</b>	1	0,18
45A	38A	2	2	<b>LSM38 ZO A4</b>	1	0,18
16A	16A	4	1	<b>LSM16 ZO A4O</b>	1	0,19
25A	25A	4	1	<b>LSM25 ZO A4O</b>	1	0,19
32A	32A	4	1	<b>LSM32 ZO A4O</b>	1	0,19
45A	38A	4	1	<b>LSM38 ZO A4O</b>	1	0,19
16A	16A	4	1	<b>LSM16 ZO A4U</b>	1	0,19
25A	25A	4	1	<b>LSM25 ZO A4U</b>	1	0,19
32A	32A	4	1	<b>LSM32 ZO A4U</b>	1	0,19
45A	38A	4	1	<b>LSM38 ZO A4U</b>	1	0,19
16A	10A	2	3	<b>LSMO16 ZO A6</b>	1	0,45
25A	11,5A	2	3	<b>LSMO25 ZO A6</b>	1	0,45
32A	13A	2	3	<b>LSMO32 ZO A6</b>	1	0,45
45A	20A	2	3	<b>LSMO38 ZO A6</b>	1	0,45
16A	10A	2	4	<b>LSMO16 ZO A8</b>	1	0,47
25A	11,5A	2	4	<b>LSMO25 ZO A8</b>	1	0,47
32A	13A	2	4	<b>LSMO32 ZO A8</b>	1	0,47
45A	20A	2	4	<b>LSMO38 ZO A8</b>	1	0,47

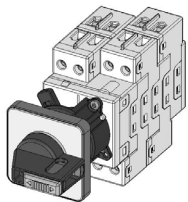




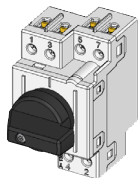
## Mini DC-Isolators for Single Hole Mounting, Ø22,5mm, Plate 48, IP66, Type 4X



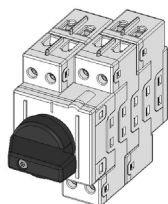
DC-PV1 (=DC21B)		Poles in Series	Number of Strings	Type	Pack pcs.	Weight kg/pce.
600V	1000V					
16A	10A	2	1	<b>LSM16 ZH1 A2</b>	1	0,17
25A	11,5A	2	1	<b>LSM25 ZH1 A2</b>	1	0,17
32A	13A	2	1	<b>LSM32 ZH1 A2</b>	1	0,17
45A	20A	2	1	<b>LSM38 ZH1 A2</b>	1	0,17
29A	10A	2	1	<b>LSM16 ZH1 A2+2</b>	1	0,22
36A	11,5A	2	1	<b>LSM25 ZH1 A2+2</b>	1	0,22
50A	13A	2	1	<b>LSM32 ZH1 A2+2</b>	1	0,22
50A	20A	2	1	<b>LSM38 ZH1 A2+2</b>	1	0,22
16A	16A	2	2	<b>LSM16 ZH1 A4</b>	1	0,21
25A	25A	2	2	<b>LSM25 ZH1 A4</b>	1	0,21
32A	32A	2	2	<b>LSM32 ZH1 A4</b>	1	0,21
45A	38A	2	2	<b>LSM38 ZH1 A4</b>	1	0,21
16A	16A	4	1	<b>LSM16 ZH1 A4O</b>	1	0,23
25A	25A	4	1	<b>LSM25 ZH1 A4O</b>	1	0,23
32A	32A	4	1	<b>LSM32 ZH1 A4O</b>	1	0,23
45A	38A	4	1	<b>LSM38 ZH1 A4O</b>	1	0,23
16A	16A	4	1	<b>LSM16 ZH1 A4U</b>	1	0,23
25A	25A	4	1	<b>LSM25 ZH1 A4U</b>	1	0,23
32A	32A	4	1	<b>LSM32 ZH1 A4U</b>	1	0,23
45A	38A	4	1	<b>LSM38 ZH1 A4U</b>	1	0,23
16A	10A	2	3	<b>LSMO16 ZH1 A6</b>	1	0,50
25A	11,5A	2	3	<b>LSMO25 ZH1 A6</b>	1	0,50
32A	13A	2	3	<b>LSMO32 ZH1 A6</b>	1	0,50
45A	20A	2	3	<b>LSMO38 ZH1 A6</b>	1	0,50
16A	10A	2	4	<b>LSMO16 ZH1 A8</b>	1	0,52
25A	11,5A	2	4	<b>LSMO25 ZH1 A8</b>	1	0,52
32A	13A	2	4	<b>LSMO32 ZH1 A8</b>	1	0,52
45A	20A	2	4	<b>LSMO38 ZH1 A8</b>	1	0,52



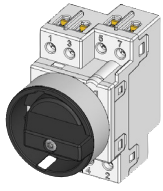
## Mini DC-Isolators for Single Hole Mounting, Ø16mm, without Plate, IP66, Type 4X



16A	10A	2	1	<b>LSM16 Z16 A2</b>	1	0,15
25A	11,5A	2	1	<b>LSM25 Z16 A2</b>	1	0,15
32A	13A	2	1	<b>LSM32 Z16 A2</b>	1	0,15
45A	20A	2	1	<b>LSM38 Z16 A2</b>	1	0,15
29A	10A	2	1	<b>LSM16 Z16 A2+2</b>	1	0,19
36A	11,5A	2	1	<b>LSM25 Z16 A2+2</b>	1	0,19
50A	13A	2	1	<b>LSM32 Z16 A2+2</b>	1	0,19
50A	20A	2	1	<b>LSM38 Z16 A2+2</b>	1	0,19
16A	16A	2	2	<b>LSM16 Z16 A4</b>	1	0,18
25A	25A	2	2	<b>LSM25 Z16 A4</b>	1	0,18
32A	32A	2	2	<b>LSM32 Z16 A4</b>	1	0,18
45A	38A	2	2	<b>LSM38 Z16 A4</b>	1	0,18
16A	16A	4	1	<b>LSM16 Z16 A4O</b>	1	0,19
25A	25A	4	1	<b>LSM25 Z16 A4O</b>	1	0,19
32A	32A	4	1	<b>LSM32 Z16 A4O</b>	1	0,19
45A	38A	4	1	<b>LSM38 Z16 A4O</b>	1	0,19
16A	16A	4	1	<b>LSM16 Z16 A4U</b>	1	0,19
25A	25A	4	1	<b>LSM25 Z16 A4U</b>	1	0,19
32A	32A	4	1	<b>LSM32 Z16 A4U</b>	1	0,19
45A	38A	4	1	<b>LSM38 Z16 A4U</b>	1	0,19
16A	10A	2	3	<b>LSMO16 Z16 A6</b>	1	0,45
25A	11,5A	2	3	<b>LSMO25 Z16 A6</b>	1	0,45
32A	13A	2	3	<b>LSMO32 Z16 A6</b>	1	0,45
45A	20A	2	3	<b>LSMO38 Z16 A6</b>	1	0,45
16A	10A	2	4	<b>LSMO16 Z16 A8</b>	1	0,47
25A	11,5A	2	4	<b>LSMO25 Z16 A8</b>	1	0,47
32A	13A	2	4	<b>LSMO32 Z16 A8</b>	1	0,47
45A	20A	2	4	<b>LSMO38 Z16 A8</b>	1	0,47

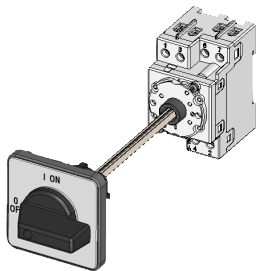


## Lockable Mini DC-Isolators for Single Hole Mounting, Ø16mm, Plate 48, IP66, Type 4X



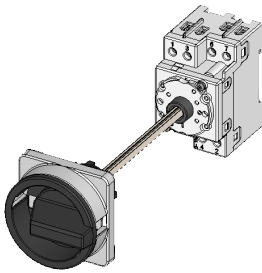
DC-PV1 (=DC21B)		Poles in Series	Number of Strings	Type	Pack pcs.	Weight kg/pce.
600V	1000V					
16A	10A	2	1	<b>LSM16 Z16H448 A2</b>	1	0,19
25A	11,5A	2	1	<b>LSM25 Z16H448 A2</b>	1	0,19
32A	13A	2	1	<b>LSM32 Z16H448 A2</b>	1	0,19
45A	20A	2	1	<b>LSM38 Z16H448 A2</b>	1	0,19
29A	10A	2	1	<b>LSM16 Z16H448 A2+2</b>	1	0,25
36A	11,5A	2	1	<b>LSM25 Z16H448 A2+2</b>	1	0,25
50A	13A	2	1	<b>LSM32 Z16H448 A2+2</b>	1	0,25
50A	20A	2	1	<b>LSM38 Z16H448 A2+2</b>	1	0,25
16A	16A	2	2	<b>LSM16 Z16H448 A4</b>	1	0,24
25A	25A	2	2	<b>LSM25 Z16H448 A4</b>	1	0,24
32A	32A	2	2	<b>LSM32 Z16H448 A4</b>	1	0,24
45A	38A	2	2	<b>LSM38 Z16H448 A4</b>	1	0,24
16A	16A	4	1	<b>LSM16 Z16H448 A4O</b>	1	0,26
25A	25A	4	1	<b>LSM25 Z16H448 A4O</b>	1	0,26
32A	32A	4	1	<b>LSM32 Z16H448 A4O</b>	1	0,26
45A	38A	4	1	<b>LSM38 Z16H448 A4O</b>	1	0,26
16A	16A	4	1	<b>LSM16 Z16H448 A4U</b>	1	0,26
25A	25A	4	1	<b>LSM25 Z16H448 A4U</b>	1	0,26
32A	32A	4	1	<b>LSM32 Z16H448 A4U</b>	1	0,26
45A	38A	4	1	<b>LSM38 Z16H448 A4U</b>	1	0,26
16A	10A	2	3	<b>LSMO16 Z16H448 A6</b>	1	0,51
25A	11,5A	2	3	<b>LSMO25 Z16H448 A6</b>	1	0,51
32A	13A	2	3	<b>LSMO32 Z16H448 A6</b>	1	0,51
45A	20A	2	3	<b>LSMO38 Z16H448 A6</b>	1	0,51
16A	10A	2	4	<b>LSMO16 Z16H448 A8</b>	1	0,53
25A	11,5A	2	4	<b>LSMO25 Z16H448 A8</b>	1	0,53
32A	13A	2	4	<b>LSMO32 Z16H448 A8</b>	1	0,53
45A	20A	2	4	<b>LSMO38 Z16H448 A8</b>	1	0,53

## Mini DC-Isolators for Base Mounting, w. Door Clutch, Single Hole, Plate 64, IP66, Type 4X



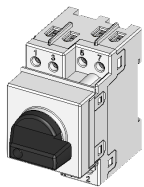
16A	10A	2	1	<b>LSM16 VZV A2</b>	1	0,20
25A	11,5A	2	1	<b>LSM25 VZV A2</b>	1	0,20
32A	13A	2	1	<b>LSM32 VZV A2</b>	1	0,20
45A	20A	2	1	<b>LSM38 VZV A2</b>	1	0,20
29A	10A	2	1	<b>LSM16 VZV A2+2</b>	1	0,26
36A	11,5A	2	1	<b>LSM25 VZV A2+2</b>	1	0,26
50A	13A	2	1	<b>LSM32 VZV A2+2</b>	1	0,26
50A	20A	2	1	<b>LSM38 VZV A2+2</b>	1	0,26
16A	16A	2	2	<b>LSM16 VZV A4</b>	1	0,24
25A	25A	2	2	<b>LSM25 VZV A4</b>	1	0,24
32A	32A	2	2	<b>LSM32 VZV A4</b>	1	0,24
45A	38A	2	2	<b>LSM38 VZV A4</b>	1	0,24
16A	16A	2	1	<b>LSM16 VZV A4O</b>	1	0,26
25A	25A	2	1	<b>LSM25 VZV A4O</b>	1	0,26
32A	32A	2	1	<b>LSM32 VZV A4O</b>	1	0,26
45A	38A	2	1	<b>LSM38 VZV A4O</b>	1	0,26
16A	16A	2	1	<b>LSM16 VZV A4U</b>	1	0,26
25A	25A	2	1	<b>LSM25 VZV A4U</b>	1	0,26
32A	32A	2	1	<b>LSM32 VZV A4U</b>	1	0,26
45A	38A	2	1	<b>LSM38 VZV A4U</b>	1	0,26

## Lockable Mini DC-Isolators for Base Mounting, w. Door Clutch, Single Hole, Plate 64, IP66, Type 4X



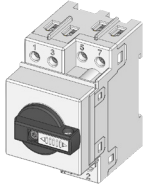
DC-PV1 (=DC21B)		Poles in Series	Number of Strings	Type	Pack pcs.	weight kg/pce.
600V	1000V					
16A	10A	2	1	<b>LSM16 VZVH4 A2</b>	1	0,21
25A	11,5A	2	1	<b>LSM25 VZVH4 A2</b>	1	0,21
32A	13A	2	1	<b>LSM32 VZVH4 A2</b>	1	0,21
45A	20A	2	1	<b>LSM38 VZVH4 A2</b>	1	0,21
29A	10A	2	1	<b>LSM16 VZVH4 A2+2</b>	1	0,27
36A	11,5A	2	1	<b>LSM25 VZVH4 A2+2</b>	1	0,27
50A	13A	2	1	<b>LSM32 VZVH4 A2+2</b>	1	0,27
50A	20A	2	1	<b>LSM38 VZVH4 A2+2</b>	1	0,27
16A	16A	2	2	<b>LSM16 VZVH4 A4</b>	1	0,25
25A	25A	2	2	<b>LSM25 VZVH4 A4</b>	1	0,25
32A	32A	2	2	<b>LSM32 VZVH4 A4</b>	1	0,25
45A	38A	2	2	<b>LSM38 VZVH4 A4</b>	1	0,25
16A	16A	4	1	<b>LSM16 VZVH4 A4O</b>	1	0,27
25A	25A	4	1	<b>LSM25 VZVH4 A4O</b>	1	0,27
32A	32A	4	1	<b>LSM32 VZVH4 A4O</b>	1	0,27
45A	38A	4	1	<b>LSM38 VZVH4 A4O</b>	1	0,27
16A	16A	4	1	<b>LSM16 VZVH4 A4U</b>	1	0,27
25A	25A	4	1	<b>LSM25 VZVH4 A4U</b>	1	0,27
32A	32A	4	1	<b>LSM32 VZVH4 A4U</b>	1	0,27
45A	38A	4	1	<b>LSM38 VZVH4 A4U</b>	1	0,27

## Mini DC-Isolators for Distribution Boards, IP40, Open Type



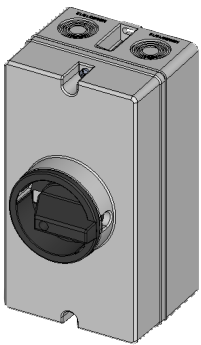
16A	10A	2	1	<b>LSM16 SMA A2</b>	1	0,18
25A	11,5A	2	1	<b>LSM25 SMA A2</b>	1	0,18
32A	13A	2	1	<b>LSM32 SMA A2</b>	1	0,18
45A	20A	2	1	<b>LSM38 SMA A2</b>	1	0,18
29A	10A	2	1	<b>LSM16 SMA A2+2</b>	1	0,22
36A	11,5A	2	1	<b>LSM25 SMA A2+2</b>	1	0,22
50A	13A	2	1	<b>LSM32 SMA A2+2</b>	1	0,22
50A	20A	2	1	<b>LSM38 SMA A2+2</b>	1	0,22
16A	16A	2	2	<b>LSM16 SMA A4</b>	1	0,20
25A	25A	2	2	<b>LSM25 SMA A4</b>	1	0,20
32A	32A	2	2	<b>LSM32 SMA A4</b>	1	0,20
45A	38A	2	2	<b>LSM38 SMA A4</b>	1	0,20
16A	16A	4	1	<b>LSM16 SMA A4O</b>	1	0,22
25A	25A	4	1	<b>LSM25 SMA A4O</b>	1	0,22
32A	32A	4	1	<b>LSM32 SMA A4O</b>	1	0,22
45A	38A	4	1	<b>LSM38 SMA A4O</b>	1	0,22
16A	16A	4	1	<b>LSM16 SMA A4U</b>	1	0,22
25A	25A	4	1	<b>LSM25 SMA A4U</b>	1	0,22
32A	32A	4	1	<b>LSM32 SMA A4U</b>	1	0,22
45A	38A	4	1	<b>LSM38 SMA A4U</b>	1	0,22

## Lockable Mini DC-Isolators for Distribution Boards, IP40, Open Type



DC-PV1 (=DC21B)		Poles in Series	Number of Strings	Type	Pack pcs.	Weight kg/pce.
600V	1000V					
16A	10A	2	1	<b>LSM16 SMAH1N A2</b>	1	0,18
25A	11,5A	2	1	<b>LSM25 SMAH1N A2</b>	1	0,18
32A	13A	2	1	<b>LSM32 SMAH1N A2</b>	1	0,18
45A	20A	2	1	<b>LSM38 SMAH1N A2</b>	1	0,18
29A	10A	2	1	<b>LSM16 SMAH1N A2+2</b>	1	0,22
36A	11,5A	2	1	<b>LSM25 SMAH1N A2+2</b>	1	0,22
50A	13A	2	1	<b>LSM32 SMAH1N A2+2</b>	1	0,22
50A	20A	2	1	<b>LSM38 SMAH1N A2+2</b>	1	0,22
16A	16A	2	2	<b>LSM16 SMAH1N A4</b>	1	0,20
25A	25A	2	2	<b>LSM25 SMAH1N A4</b>	1	0,20
32A	32A	2	2	<b>LSM32 SMAH1N A4</b>	1	0,20
45A	38A	2	2	<b>LSM38 SMAH1N A4</b>	1	0,20
16A	16A	4	1	<b>LSM16 SMAH1N A4O</b>	1	0,22
25A	25A	4	1	<b>LSM25 SMAH1N A4O</b>	1	0,22
32A	32A	4	1	<b>LSM32 SMAH1N A4O</b>	1	0,22
45A	38A	4	1	<b>LSM38 SMAH1N A4O</b>	1	0,22
16A	16A	4	1	<b>LSM16 SMAH1N A4U</b>	1	0,22
25A	25A	4	1	<b>LSM25 SMAH1N A4U</b>	1	0,22
32A	32A	4	1	<b>LSM32 SMAH1N A4U</b>	1	0,22
45A	38A	4	1	<b>LSM38 SMAH1N A4U</b>	1	0,22

## Mini DC-Isolators in Plastic Enclosure, IP67, Type 4X




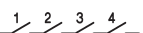


16A	10A	2	1	<b>LSM16 PFLH4 A2</b>	1	0,42
25A	11,5A	2	1	<b>LSM25 PFLH4 A2</b>	1	0,42
32A	13A	2	1	<b>LSM32 PFLH4 A2</b>	1	0,42
45A	20A	2	1	<b>LSM38 PFLH4 A2</b>	1	0,42
29A	10A	2	1	<b>LSM16 PFLH4 A2+2</b>	1	0,50
36A	11,5A	2	1	<b>LSM25 PFLH4 A2+2</b>	1	0,50
50A	13A	2	1	<b>LSM32 PFLH4 A2+2</b>	1	0,50
50A	20A	2	1	<b>LSM38 PFLH4 A2+2</b>	1	0,50
16A	16A	2	2	<b>LSM16 PFLH4 A4</b>	1	0,49
25A	25A	2	2	<b>LSM25 PFLH4 A4</b>	1	0,49
32A	32A	2	2	<b>LSM32 PFLH4 A4</b>	1	0,49
45A	38A	2	2	<b>LSM38 PFLH4 A4</b>	1	0,49
16A	16A	4	1	<b>LSM16 PFLH4 A4O</b>	1	0,51
25A	25A	4	1	<b>LSM25 PFLH4 A4O</b>	1	0,51
32A	32A	4	1	<b>LSM32 PFLH4 A4O</b>	1	0,51
45A	38A	4	1	<b>LSM38 PFLH4 A4O</b>	1	0,51
16A	16A	4	1	<b>LSM16 PFLH4 A4U</b>	1	0,51
25A	25A	4	1	<b>LSM25 PFLH4 A4U</b>	1	0,51
32A	32A	4	1	<b>LSM32 PFLH4 A4U</b>	1	0,51
45A	38A	4	1	<b>LSM38 PFLH4 A4U</b>	1	0,51

# Technical Data

Kind of current	Category		Typical applications	Test conditions for the number of on-load operating cycles (normal service)						Test conditions for making and breaking capacities (operation in fault case)					
				Make			Break			Make			Break		
				I/I <sub>e</sub>	U/U <sub>e</sub>	L/R	I <sub>c</sub> /I <sub>e</sub>	U <sub>r</sub> /U <sub>e</sub>	L/R	I/I <sub>e</sub>	U/U <sub>e</sub>	L/R	I <sub>c</sub> /I <sub>e</sub>	U <sub>r</sub> /U <sub>e</sub>	L/R
Direct current	<b>DC21A</b> frequent operation	<b>DC21B</b> infrequent operation	Switching of resistive loads including moderate overloads	1	1	1ms	1	1	1ms	1,5	1,05	1ms	1,5	1,05	1ms
	<b>DC22A</b> frequent operation	<b>DC22B</b> infrequent operation	Switching of mixed resistive a.induct. loads incl. moderate overloads (shunt motors)	1	1	2ms	1	1	2ms	4	1,05	2,5ms	4	1,05	2,5ms
	<b>DC-PV1</b>		Switching of single PV string(s) without reverse- and overcurrents.	1	1	1ms	1	1	1ms	1,5	1,05	1ms	1,5	1,05	1ms
	<b>DC-PV2</b>		Switching of several PV strings with reverse- and overcurrents.	1	1	1ms	1	1	1ms	4	1,05	1ms	4	1,05	1ms

## Data according to IEC 60947-3, VDE 0660, GB14048.3 (CCC China)




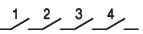
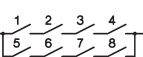
Main contacts		Type	LSM(O)16	LSM(O)25	LSM(O)32	LSM(O)38	
Rated thermal current I <sub>th</sub>		A	16	25	32	38	
Rated insulation voltage U <sub>i</sub> <sup>1)</sup>		V	1000	1000	1000	1000	
Rated insulation voltage U <sub>i</sub> <sup>2)</sup>		V	1500	1500	1500	1500	
Distance of contacts (per pole)		mm	8	8	8	8	
<b>Rated operational current I<sub>e</sub></b>	<b>300V</b>	<b>A</b>	-	-	-	-	
<b>DC21B</b>	<b>400V</b>	<b>A</b>	-	-	-	-	
1 pole							
A1	500V	A	-	-	-	-	
	600V	A	-	-	-	-	
	700V	A	-	-	-	-	
	800V	A	-	-	-	-	
	900V	A	-	-	-	-	
	1000V	A	-	-	-	-	
2 poles in series	500V	A	16	25	32	45	
A2	600V	A	16	25	32	45	
	700V	A	16	25	32	36	
	800V	A	16	20	23	30	
	900V	A	16	17	20	25	
	1000V	A	10	11,5	13	20	
	1200V	A	7	8,5	10	10	
	1500V	A	3	5	6	6	
2 poles in series + 2 poles parallel	500V	A	29	45	50	50	
A2 + 2	600V	A	29	45	50	50	
	700V	A	22	27	32	36	
	800V	A	17	20	23	30	
	900V	A	16	17	20	25	
	1000V	A	10	11,5	13	20	
	1200V	A	7	8,5	10	10	
	1500V	A	3	5	6	6	
4 poles in series	500V	A	16	25	32	45	
A4	600V	A	16	25	32	45	
	700V	A	16	25	32	45	
	800V	A	16	25	32	45	
	900V	A	16	25	32	45	
	1000V	A	16	25	32	38	
	1200V	A	16	25	32	32	
	1500V	A	16	20	32	32	
<b>Rated operational current I<sub>e</sub></b>	<b>A2, A4</b>	<b>U<sub>e</sub> max. 440V</b>	<b>A</b>	<b>16</b>	<b>25</b>	<b>32</b>	<b>45</b>
<b>AC21B</b>	<b>A2 + 2</b>	<b>U<sub>e</sub> max. 440V</b>	<b>A</b>	<b>29</b>	<b>45</b>	<b>50</b>	<b>50</b>

1) Suitable at overvoltage category I to III, pollution degree 3 (standard-industry): U<sub>imp</sub> = 8kV.

2) Suitable at overvoltage category I to III, pollution degree 2 (min. IP55): U<sub>imp</sub> = 8kV.




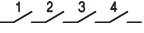
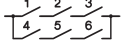
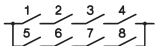
# Technical Data

Data acc. to IEC 60947-3, VDE 0660

Main Contacts		Type	LSM(O)16	LSM(O)25	LSM(O)32	LSM(O)38	
<b>Rated operational current I<sub>e</sub></b> <b>DC-PV1</b>	1 pole	300V	A	16	23	27	-
		400V	A	14	22	25	-
	A1 	500V	A	10	17	20	-
		600V	A	7	12	15	-
		700V	A	5	6	7,5	-
		800V	A	3	4	5	-
		900V	A	3	3	4	-
		1000V	A	2	2	3	-
		2 poles in series A2 	500V	A	16	25	32
	600V		A	16	25	32	45
	700V		A	16	25	32	36
	800V		A	16	20	23	30
	900V		A	16	17	20	25
	1000V		A	10	11,5	13	20
	1100V		A	8	10	-	-
	1200V		A	7	8,5	10	10
	1300V		A	6	7	-	-
	1400V		A	5	6	-	-
	1500V		A	3	5	6	6
	2 poles in series + 2 poles parallel A2+2 		500V	A	29	45	50
600V			A	29	36	50	50
700V		A	22	27	32	36	
800V		A	17	20	23	30	
900V		A	16	17	20	25	
1000V		A	10	11,5	13	20	
1100V		A	8	10	-	-	
1200V		A	7	8,5	10	10	
1300V		A	6	7	-	-	
1400V		A	5	6	-	-	
1500V		A	3	5	6	6	
4 poles in series A4 		500V	A	16	25	32	45
		600V	A	16	25	32	45
	700V	A	16	25	32	45	
	800V	A	16	25	32	45	
	900V	A	16	25	32	45	
	1000V	A	16	25	32	38	
	1100V	A	16	25	-	-	
	1200V	A	16	25	32	32	
	1300V	A	16	25	-	-	
	1400V	A	16	25	-	-	
	1500V	A	16	25	32	32	
	4 poles in series + 2 poles parallel A4+2 	500V	A	29	45	50	50
		600V	A	29	45	50	50
700V		A	29	45	50	50	
800V		A	29	45	50	50	
900V		A	29	45	50	50	
1000V		A	29	45	50	50	
1100V		A	29	-	-	-	
1200V		A	29	33	50	50	
1300V		A	29	-	-	-	
1400V		A	29	-	-	-	
1500V		A	20	26	32	32	

# Technical Data

Data acc. to IEC 60947-3, VDE 0660

Main Contacts		Type	LSM(O)16	LSM(O)25	LSM(O)32	LSM(O)38	
<b>Rated operational current I<sub>e</sub></b> <b>DC-PV2</b>	300V	A	16	23	27	27	
	400V	A	15	18	20	20	
1 pole A1 	500V	A	10	12	14	14	
	600V	A	5	6	8	8	
	700V	A	1,5	2	3	3	
	800V	A	1,5	2	3	3	
	900V	A	1	1,5	2	2	
	1000V	A	1	1,5	2	2	
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	2 poles in series A2 	500V	A	16	25	32	38
600V		A	14	21	27	31	
700V		A	13	19	22	25	
800V		A	12	15	17	19	
900V		A	8	10	12	14	
1000V		A	4	5	6	7	
1100V		A	3	4	-	-	
1200V		A	2	3	4	4	
1300V		A	1,5	2	-	-	
1400V		A	1	2	-	-	
1500V		A	1	1,5	2	2	
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2 poles in series + 2 poles parallel A2+2 	500V	A	25	39	50	50	
	600V	A	20	32	35	38	
	700V	A	13	19	22	25	
	800V	A	12	15	17	19	
	900V	A	8	10	12	14	
	1000V	A	4	5	6	7	
	1100V	A	3	4	-	-	
	1200V	A	2	3	4	4	
	1300V	A	1,5	2	-	-	
	1400V	A	1	2	-	-	
	1500V	A	1	1,5	2	2	
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4 poles in series A4 	500V	A	16	25	32	45	
	600V	A	16	25	32	45	
	700V	A	16	25	32	45	
	800V	A	16	25	32	38	
	900V	A	16	25	32	38	
	1000V	A	16	25	32	38	
	1100V	A	16	25	-	-	
	1200V	A	13,5	21	27	27	
	1300V	A	12	19	-	-	
	1400V	A	10,5	16	-	-	
	1500V	A	9	14	18	18	
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	3 poles in series + 2 poles parallel A3+2 	500V	A	28	45	50	50
		600V	A	22	38	44	48
700V		A	20	30	34	35	
800V		A	18	26	29	31	
900V		A	16	22	24	24	
1000V		A	15	18	20	20	
1100V		A	-	-	-	-	
1200V		A	11	13,5	15	15	
1300V		A	-	-	-	-	
1400V		A	-	-	-	-	
1500V		A	4	6,5	8	8	
<hr/>							
4 poles in series + 2 poles parallel A4+2 		500V	A	29	45	50	50
		600V	A	29	45	50	50
	700V	A	25	40	50	50	
	800V	A	21	35	45	50	
	900V	A	18	30	37	50	
	1000V	A	16	25	32	50	
	1100V	A	-	-	-	-	
	1200V	A	13,5	21	27	27	
	1300V	A	-	-	-	-	
	1400V	A	-	-	-	-	
	1500V	A	9	14	18	18	


## Technical Data





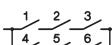
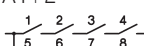
Data according to IEC 60947-3, VDE 0660

Main contacts			Type	LSM(O)16	LSM(O)25	LSM(O)32	LSM(O)38
<b>Rated conditional short-circuit current</b>			kA <sub>eff</sub>	5	5	5	5
Max. fuse size			A	40	63	80	80
Mechanical life			x10 <sup>3</sup>	10	10	10	10
Rated short-time withstand current (1s)	I <sub>cw</sub>	A2, A4	A	800	900	1000	1000
		A2+2	A	1300	1500	1700	1700
Short circuit making capacity	I <sub>cm</sub>	A2, A4	A	800	900	1000	1000
		A2+2	A	1300	1500	1700	1700
<b>Maximum cable cross sections</b> (incl. jumper LSMV-B1)							
solid or stranded			mm <sup>2</sup>	1,5 - 10	1,5 - 10	1,5 - 10	1,5 - 10
flexible			mm <sup>2</sup>	1,5 - 6	1,5 - 6	1,5 - 6	1,5 - 6
flexible (+ multicore cable end)			mm <sup>2</sup>	1,5 - 6	1,5 - 6	1,5 - 6	1,5 - 6
Size of terminal screw				M4 Pz1	M4 Pz1	M4 Pz1	M4 Pz1
Tightening torque			Nm	1,4	1,4	1,4	1,4
2 cables per clamp without jumper LSMV-B1							
solid or stranded			mm <sup>2</sup>	10+(1,5-2,5) / 6+(1,5-6) / 4+(1,5-4)			
flexible			mm <sup>2</sup>	(0,5-6)+(0,5-6)			
stranded			AWG	6+(20-14) / 8+(20-12) / 10+(20-10) 12+(20-12)			
solid			AWG	10+(16-10) / 12+(16-12) 14+(16-14)			
<b>Maximum ambient temperature</b>							
Operation		open	°C	-40 to +65			
		enclosed	°C	-40 to +45			
Storage			°C	-50 to +90			
<b>Power loss</b> per switch at I <sub>e</sub> max.							
A2			(A)/W	(16)/1	(25)/2,3	(32)/3,7	(45)/7,1
A4			(A)/W	(16)/2	(25)/4,6	(32)/7,4	(45)/14,2
A2+2			(A)/W	(29)/1,5	(45)/3,7	(50)/4,4	(50)/4,4
<b>Contact resistance</b> per pole			mΩ	1,75	1,75	1,75	1,75








# Technical Data

Data according to UL508I  File E359344, Category no.: NMSJ, and UL508 c  File E332938, Category no.: NRNT2, NRNT8

Main contacts			Type	LSM(O)16	LSM(O)25	LSM(O)32	LSM(O)38
Ampere-Rating	"General use"	DC					
1 pole	350V		A	4	5	6	6
	500V		A	4	5	6	6
	600V		A	4	5	6	6
2 poles in series	350V		A	16	25	32	38
A2	500V		A	16	25	32	38
	600V		A	16	25	32	38
2 poles in series + 2 poles parallel	350V		A	29	45	50	50
500V		A	29	38	43	45	
A2+2	600V		A	21	27	33	36
							
4 poles in series	350V		A	16	25	32	38
A4	500V		A	16	25	32	38
	600V		A	16	25	32	36
3 poles in series + 2 poles parallel	350V		A	16	25	50	50
500V		A	16	25	50	50	
A3+2	600V		A	16	25	45	45
							
4 poles in series + 2 poles parallel	350V		A	16	25	50	50
500V		A	16	25	50	50	
A4+2	600V		A	16	25	50	50
							
Fuse size (RK5) Industrial Control Switch	5kA / 600V		A	40	60	80	80
<b>Maximum cable cross sections</b> (incl. jumper LSMV-B1)							
solid or stranded		AWG		16 - 10	16 - 10	16 - 10	16 - 10
flexible		AWG		20 - 6	20 - 6	20 - 6	20 - 6
flexible (+ multicore cable end)		AWG		20 - 6	20 - 6	20 - 6	20 - 6
Size of terminal screw				M4 Pz1	M4 Pz1	M4 Pz1	M4 Pz1
Tightening torque		lb.inch		12,4	12,4	12,4	12,4
Protection class of terminals <sup>1)</sup>				IP20	IP20	IP20	IP20

## Approvals

Country	USA, UL508I 	US, Canada UL508 	Europe 	China CCC 	CB- certificates	EAC 
Type						
LSM16	o	o	/	o	x	o
LSM25	o	o	/	o	x	o
LSM32	o	o	/	o	x	o
LSM38	o	o	/	o	x	o

o In standard version approved

/ No testing required CE

x pending

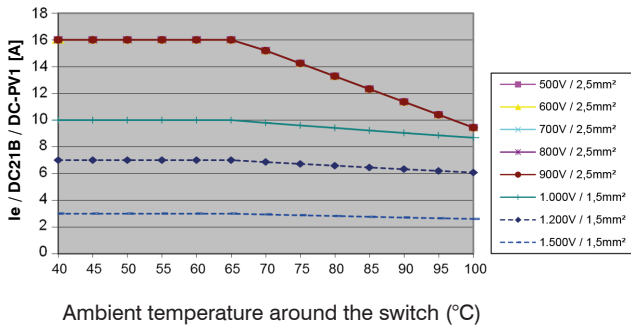
- not provided for testing till now

1) Protection degree of the terminals with connected insulated conductor.

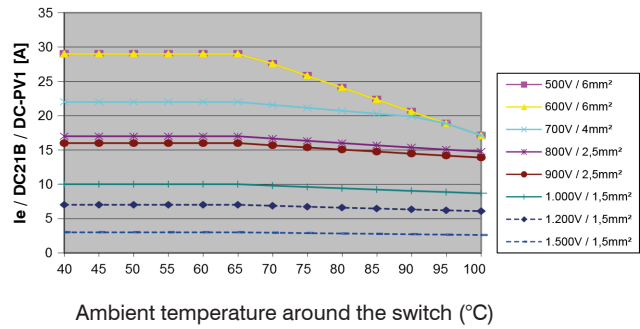
# Technical Data

## Maximum current according to ambient temperature and cable cross section

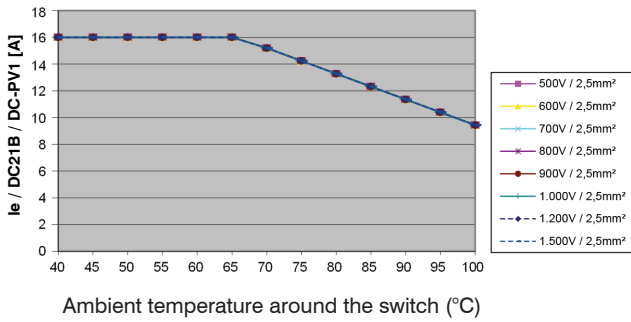
Switch open LSM16..., 2 contacts in series (A2)



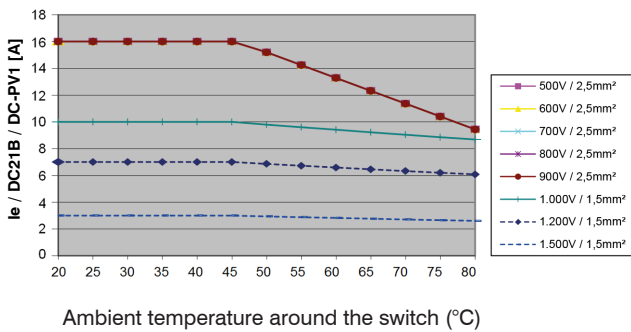
Switch open LSM16 ..., 2 contacts in series + 2 parallel (A2+2)



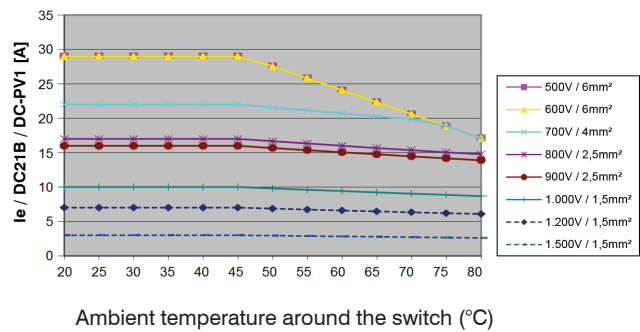
Switch open LSM16..., 4 contacts in series (A4x)



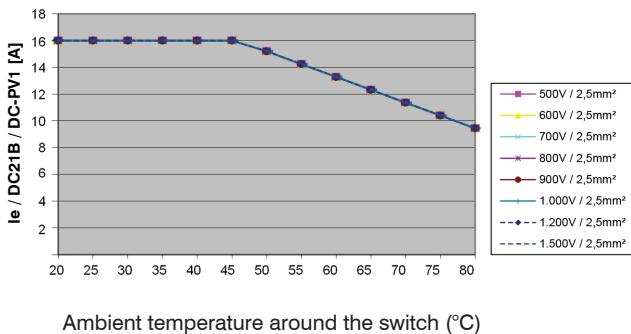
Switch enclosed LSM16 PFL..., 2 contacts in series (A2)



Switch enclosed LSM16 PFL..., 2 contacts in series + 2 parallel (A2+2)



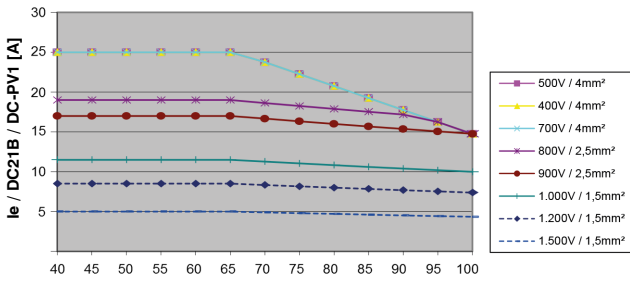
Switch enclosed LSM16 PFL..., 4 contacts in series (A4x)



# Technical Data

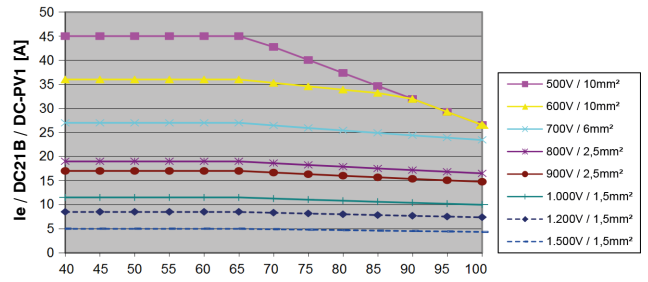
## Maximum current according to ambient temperature and cable cross section

Switch open LSM25..., 2 contacts in series (A2)



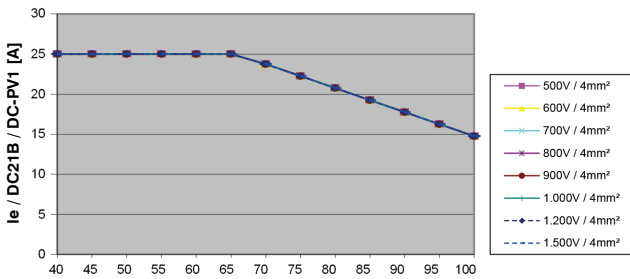
Ambient temperature around the switch (°C)

Switch open LSM25 ..., 2 contacts in series + 2 parallel (A2+2)



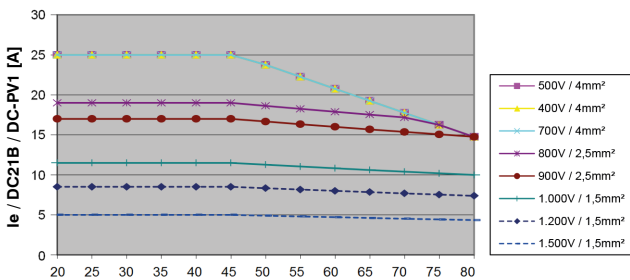
Ambient temperature around the switch (°C)

Switch open LSM25..., 4 contacts in series (A4x)



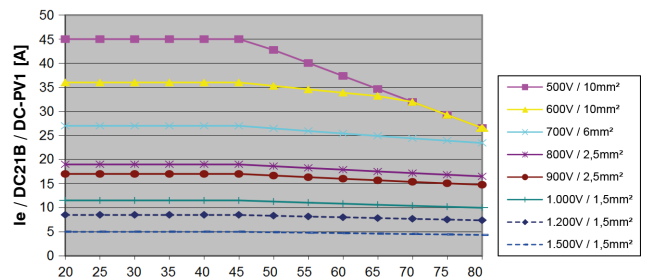
Ambient temperature around the switch (°C)

Switch enclosed LSM25 PFL..., 2 contacts in series (A2)



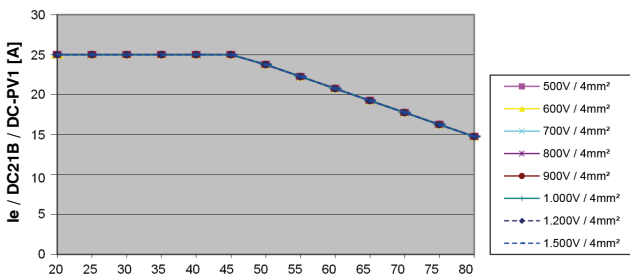
Ambient temperature around the switch (°C)

Switch enclosed LSM25 PFL..., 2 contacts in series + 2 parallel (A2+2)



Ambient temperature around the switch (°C)

Switch enclosed LSM25 PFL..., 4 contacts in series (A4x)

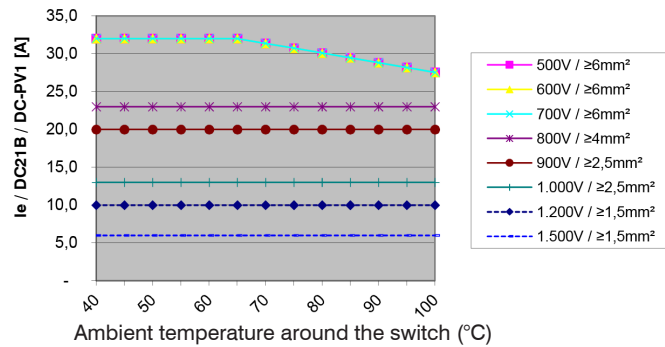


Ambient temperature around the switch (°C)

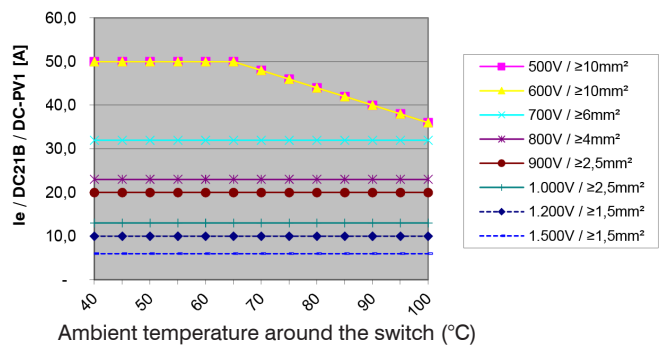
# Technical Data

## Maximum current according to ambient temperature and cable cross section

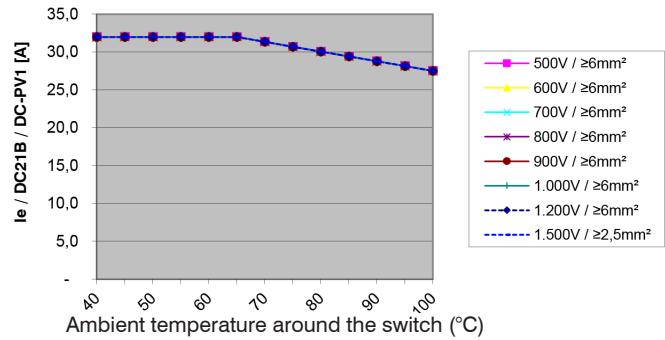
Switch open LSM32..., 2 contacts in series (A2)



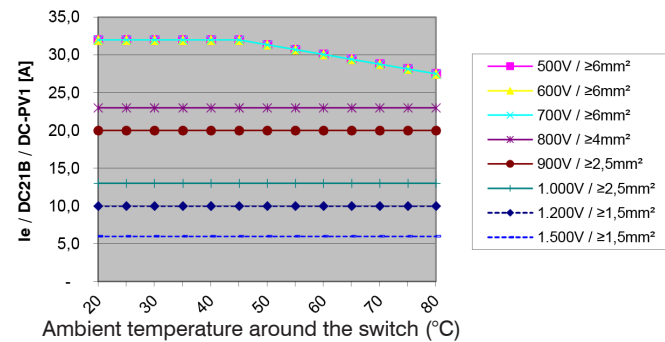
Switch open LSM32 ..., 2 contacts in series + 2 parallel (A2+2)



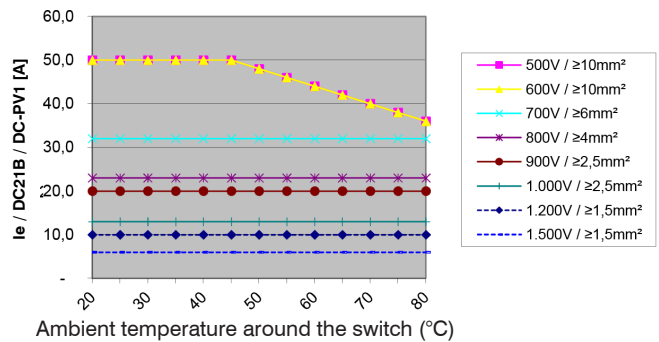
Switch open LSM32..., 4 contacts in series (A4x)



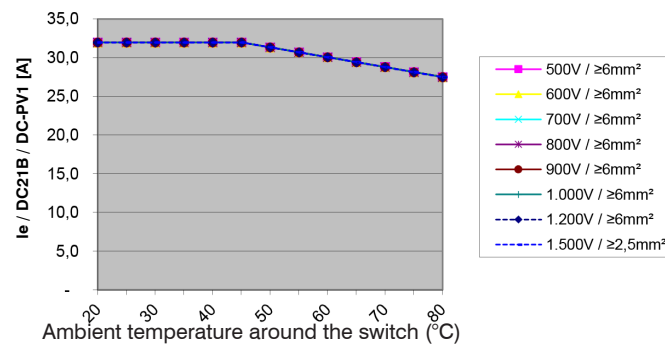
Switch enclosed LSM32 PFL..., 2 contacts in series (A2)



Switch enclosed LSM32 PFL..., 2 contacts in series + 2 parallel (A2+2)



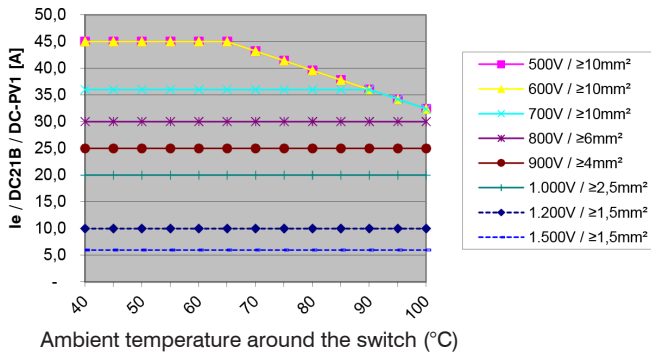
Switch enclosed LSM32 PFL..., 4 contacts in series (A4x)



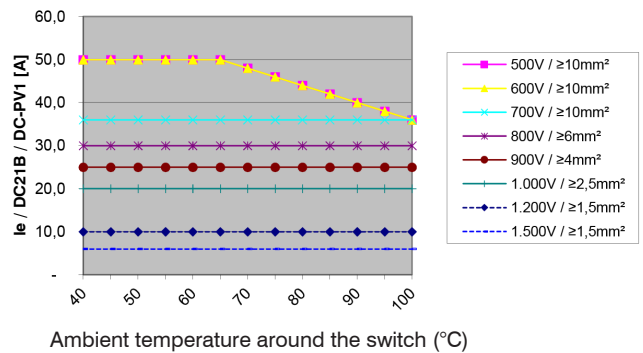
# Technical Data

## Maximum current according to ambient temperature and cable cross section

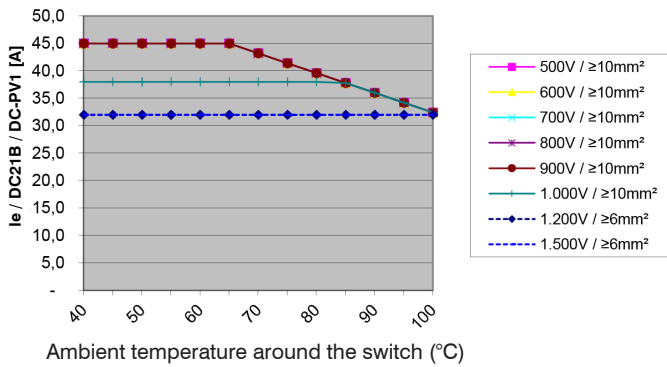
Switch open LSM38..., 2 contacts in series (A2)



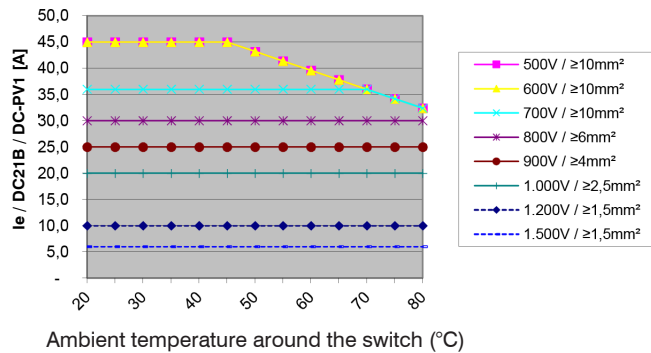
Switch open LSM38 ..., 2 contacts in series + 2 parallel (A2+2)



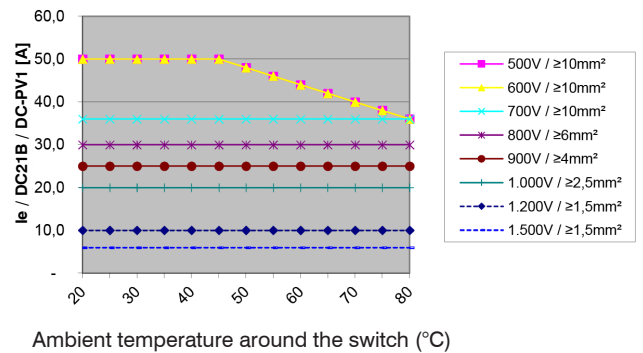
Switch open LSM38..., 4 contacts in series (A4x)



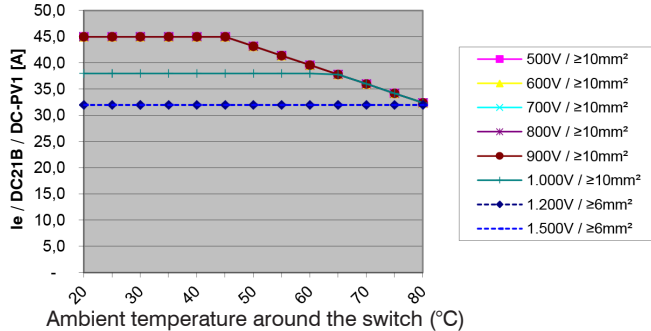
Switch enclosed LSM38 PFL..., 2 contacts in series (A2)



Switch enclosed LSM38 PFL..., 2 contacts in series + 2 parallel (A2+2)



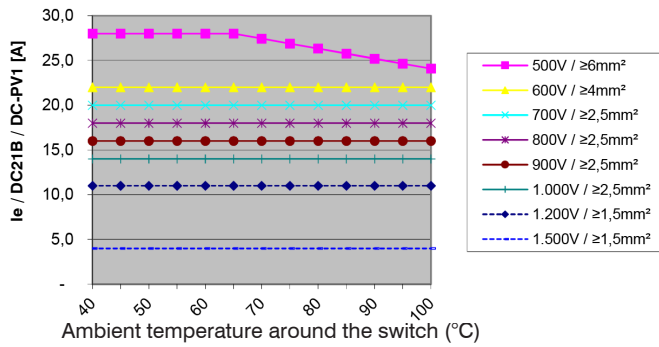
Switch enclosed LSM38 PFL..., 4 contacts in series (A4x)



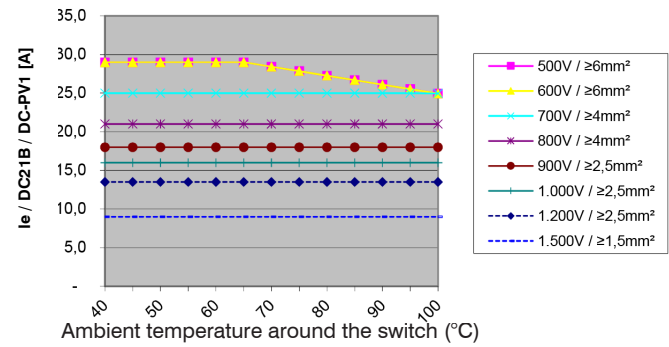
# Technical Data

## Maximum current according to ambient temperature and cable cross section

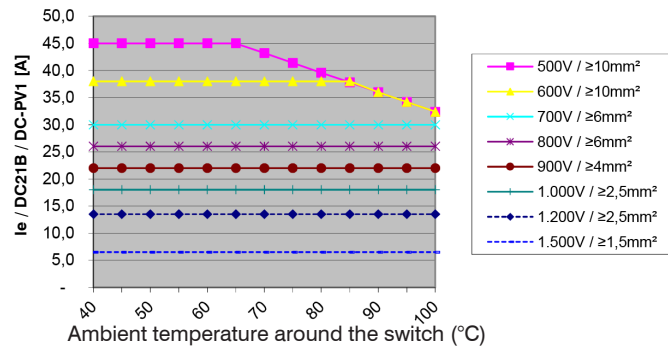
Switch open LSMO16..., 3 contacts in series + 2 parallel (A3+2)



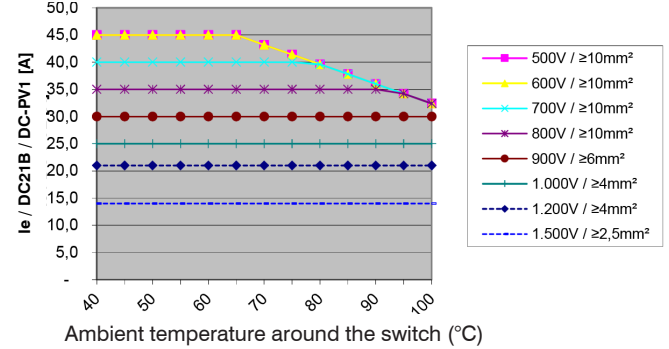
Switch open LSMO16 ..., 4 contacts in series + 2 parallel (A4+2)



Switch open LSMO25..., 3 contacts in series + 2 parallel (A3+2)



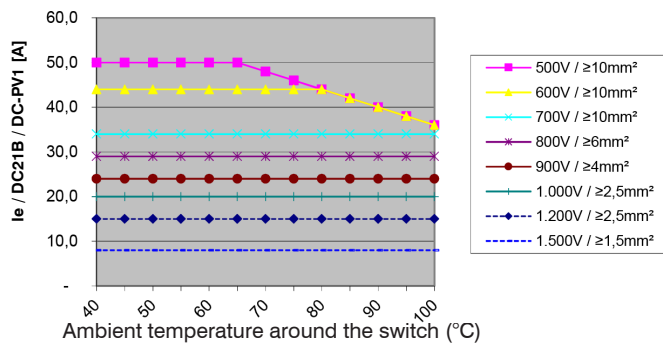
Switch open LSMO25 ..., 4 contacts in series + 2 parallel (A4+2)



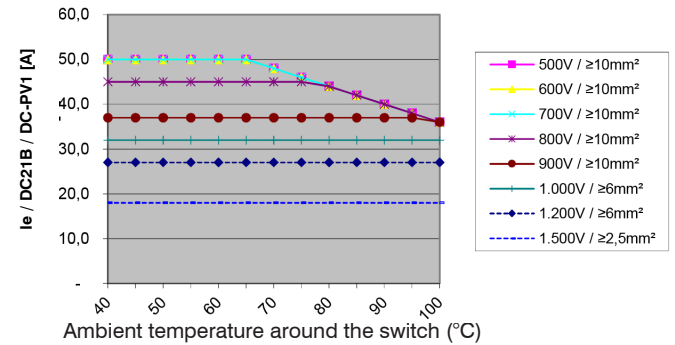
# Technical Data

## Maximum current according to ambient temperature and cable cross section

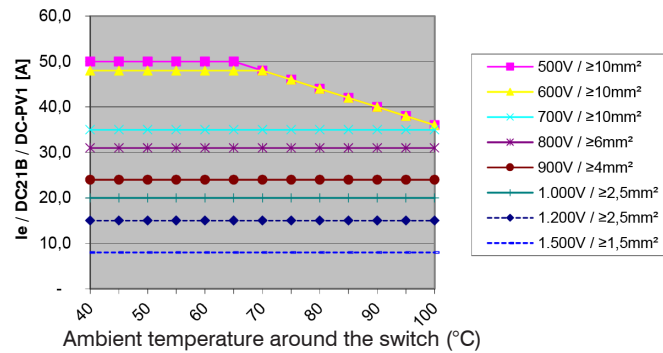
Switch open LSMO32..., 3 contacts in series + 2 parallel (A3+2)



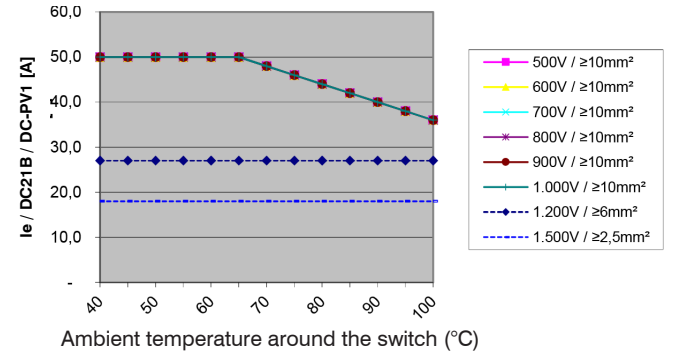
Switch open LSMO32 ..., 4 contacts in series + 2 parallel (A4+2)



Switch open LSMO38..., 3 contacts in series + 2 parallel (A3+2)

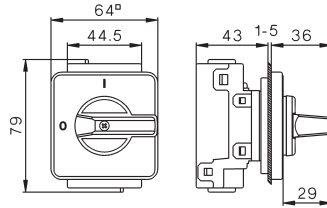


Switch open LSMO38 ..., 4 contacts in series + 2 parallel (A4+2)

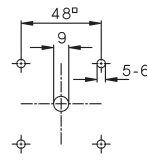


**Dimensions:**

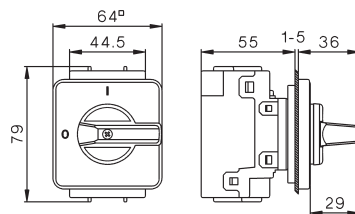
**LSM16 E.. up to LSM38 E..  
..A2**



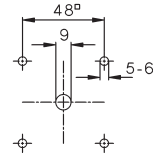
**Mounting hole**



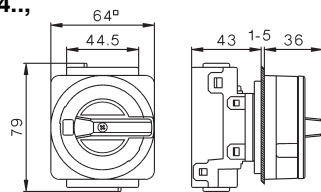
**LSM16 E.. up to LSM38 E..  
..A2+2, ..A4**



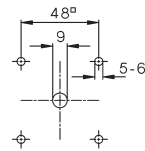
**Mounting hole**



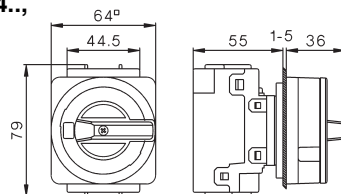
**LSM16 EH4.. up to LSM38 EH4..  
..A2**



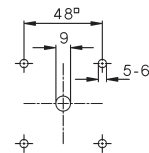
**Mounting hole**



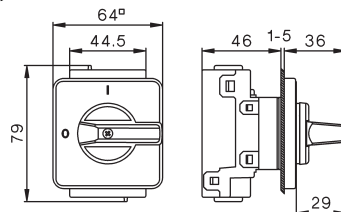
**LSM16 EH4.. up to LSM38 EH4..  
..A2+2, ..A4**



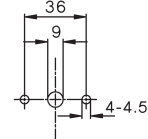
**Mounting hole**



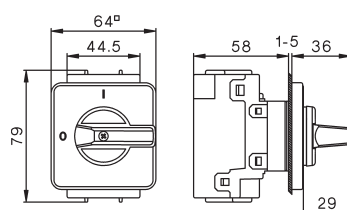
**LSM16 E2.. up to LSM38 E2..  
..A2**



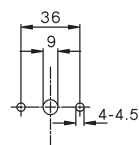
**Mounting hole**



**LSM16 E2.. up to LSM38 E2..  
..A2+2, ..A4**



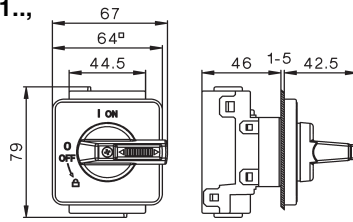
**Mounting hole**



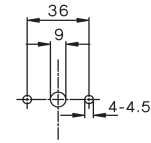


**Dimensions:**

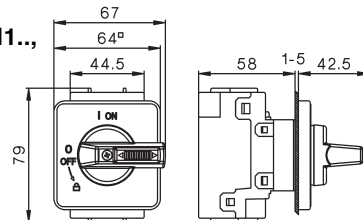
**LSM16 E2H1.. up to LSM38 E2H1..  
..A2**



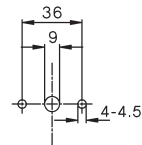
Mounting hole



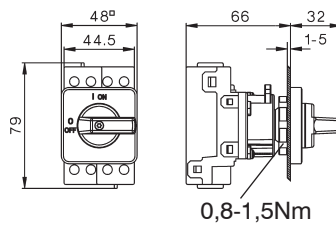
**LSM16 E2H1.. up to LSM38 E2H1..  
..A2+2, ..A4**



Mounting hole

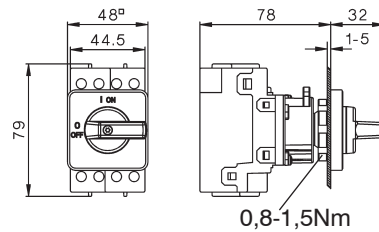


**LSM16 Z.. up to LSM38 Z..  
..A2**



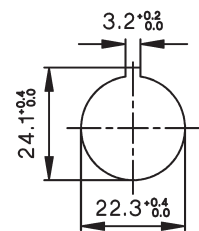
0,8-1,5Nm

**LSM16 Z.. up to LSM38 Z..  
..A2+2, ..A4**

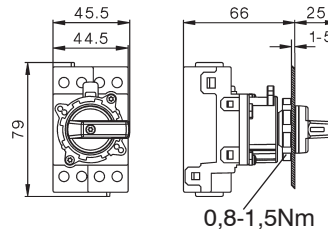


0,8-1,5Nm

Detailed view - Mounting hole for LSM16 Z(O).. up to LSM38 Z(O)..

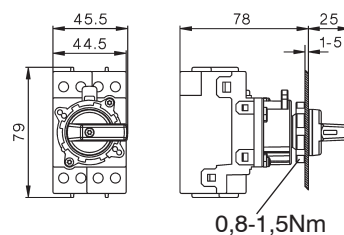


**LSM16 ZO.. up to LSM38 ZO..  
..A2**



0,8-1,5Nm

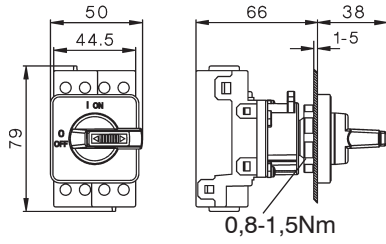
**LSM16 ZO.. up to LSM38 ZO..  
..A2+2, ..A4**



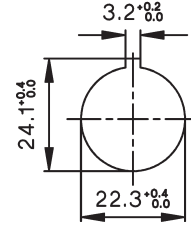
0,8-1,5Nm

**Dimensions:**

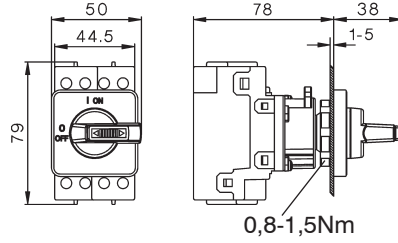
**LSM16 ZH1.. up to LSM38 ZH1..,  
..A2**



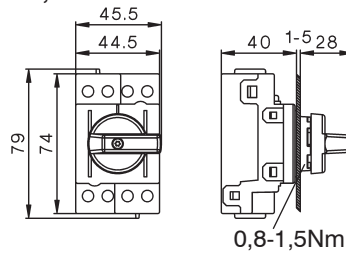
Detailed view - Mounting hole for LSM16 ZH1.. up to LSM38 ZH1..



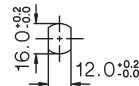
**LSM16 ZH1.. up to LSM38 ZH1..,  
..A2+2, ..A4**



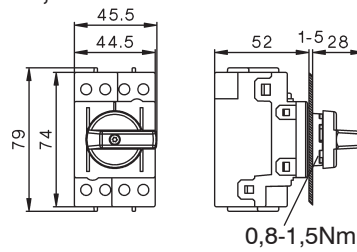
**LSM16 Z16.. up to LSM38 Z16..,  
..A2**



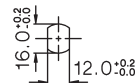
Mounting hole



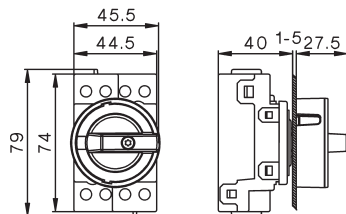
**LSM16 Z16.. up to LSM38 Z16..,  
..A2+2, ..A4**



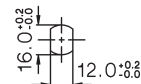
Mounting hole



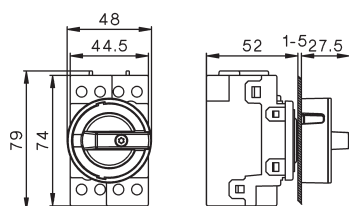
**LSM16 ZH448.. up to LSM38 Z16H448..,  
..A2**



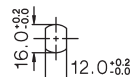
Mounting hole



**LSM16 ZH448.. up to LSM38 ZH448..,  
..A2+2, ..A4**

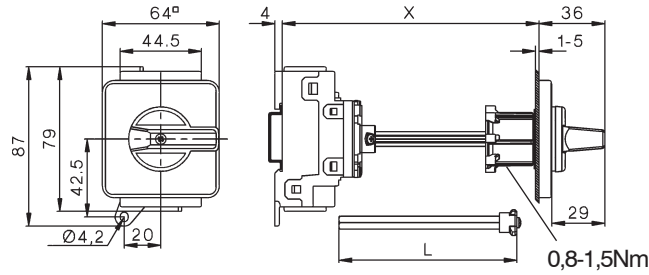


Mounting hole



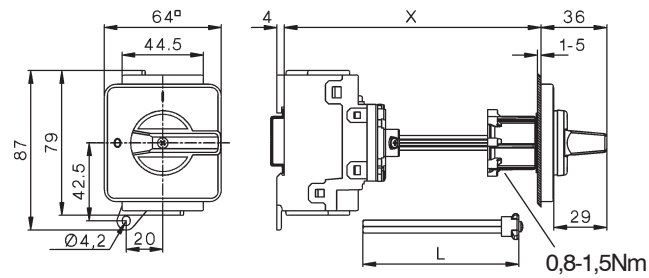
**Dimensions:**

**LSM16 VZV.. up to LSM38 VZV..  
..A2**



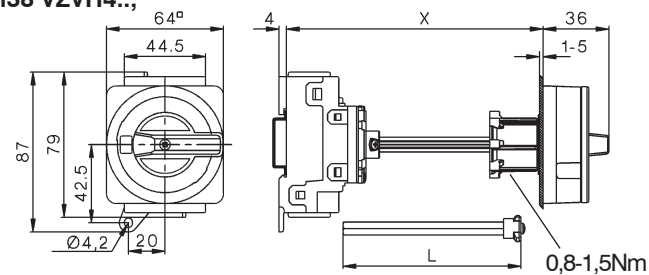
$X_{max} = 182, L = 155,5$   
 $(X_{min} = 59,5)$   
 $L = X - 26,5 \pm 3$

**LSM16 VZV.. up to LSM38 VZV..  
..A2+2, ..A4**



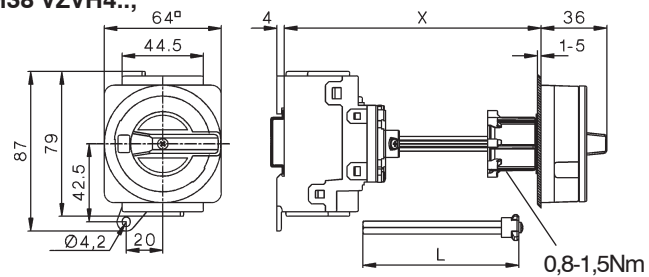
$X_{max} = 194, L = 155,5$   
 $(X_{min} = 71,5)$   
 $L = X - 38,5 \pm 3$

**LSM16 VZVH4.. up to LSM38 VZVH4..  
..A2**



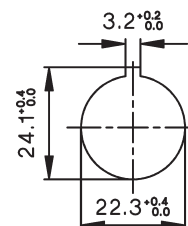
$X_{max} = 182, L = 155,5$   
 $(X_{min} = 59,5)$   
 $L = X - 26,5 \pm 3$

**LSM16 VZVH4.. up to LSM38 VZVH4..  
..A2+2, ..A4**



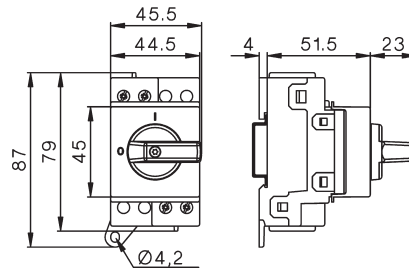
$X_{max} = 194, L = 155,5$   
 $(X_{min} = 71,5)$   
 $L = X - 38,5 \pm 3$

Detailed view - Mounting hole for LSM16 VZV(H).. up to LSM38 VZV(H)..

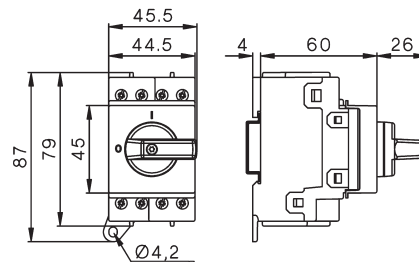


## Dimensions:

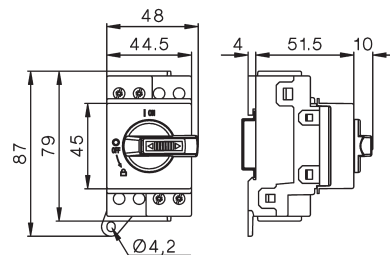
LSM16 SMA.. up to LSM38 SMA..  
..A2



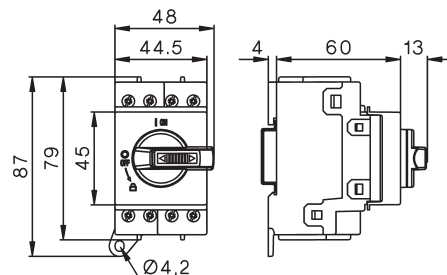
LSM16 SMA.. up to LSM38 SMA..  
..A2+2, ..A4



LSM16 SMAH1N.. up to LSM38 SMAH1N..  
..A2

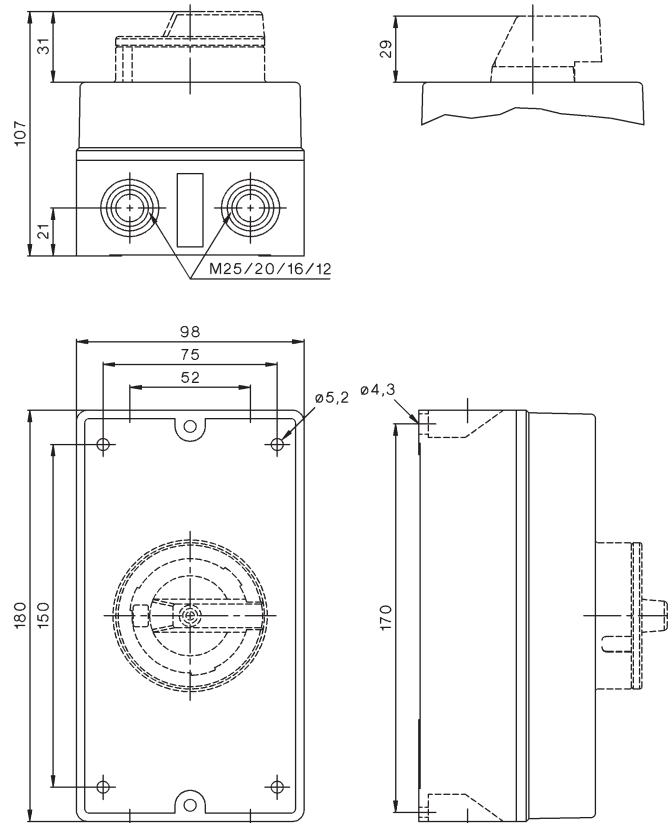


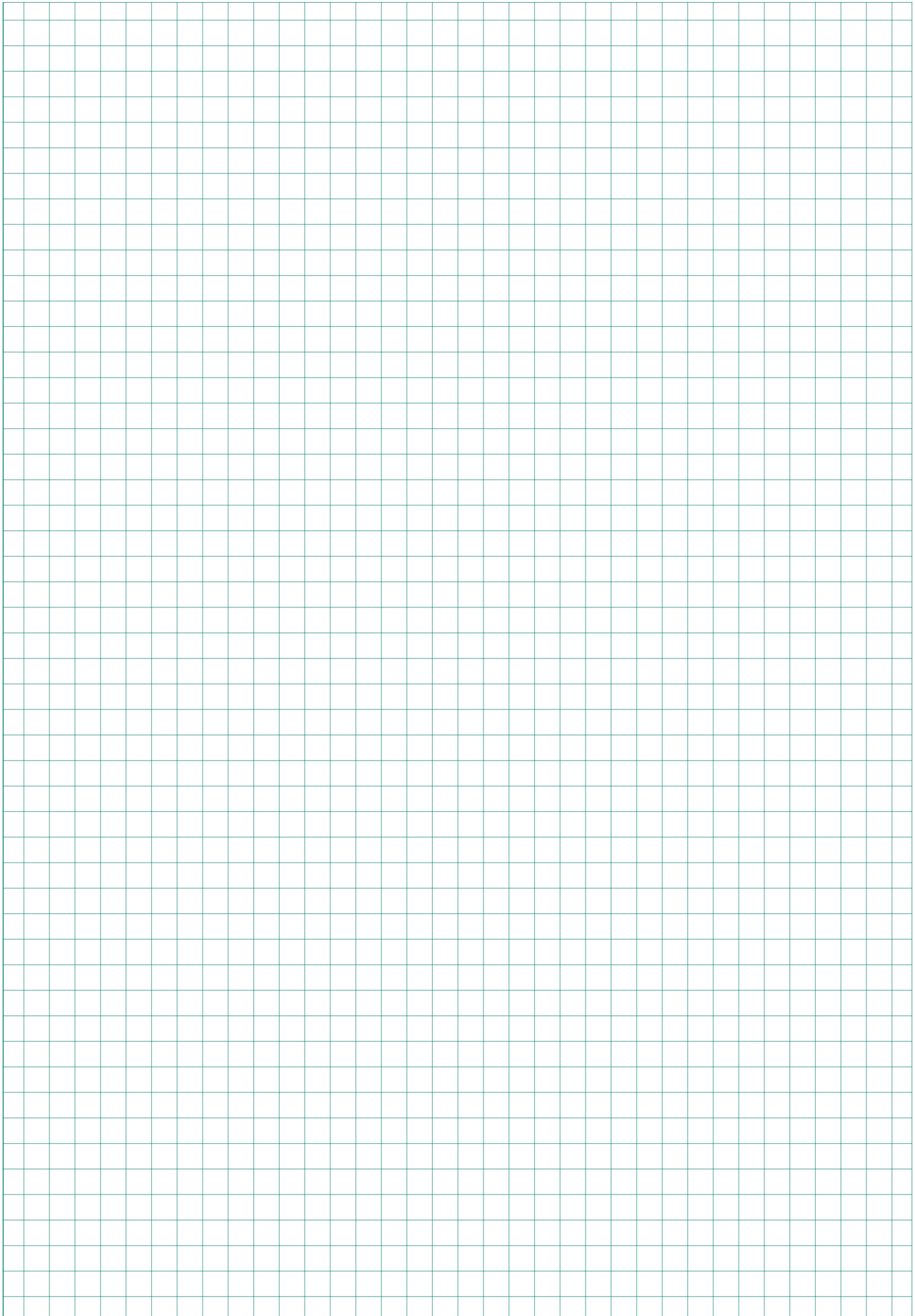
LSM16 SMAH1N.. up to LSM38 SMAH1N..  
..A2+2, ..A4

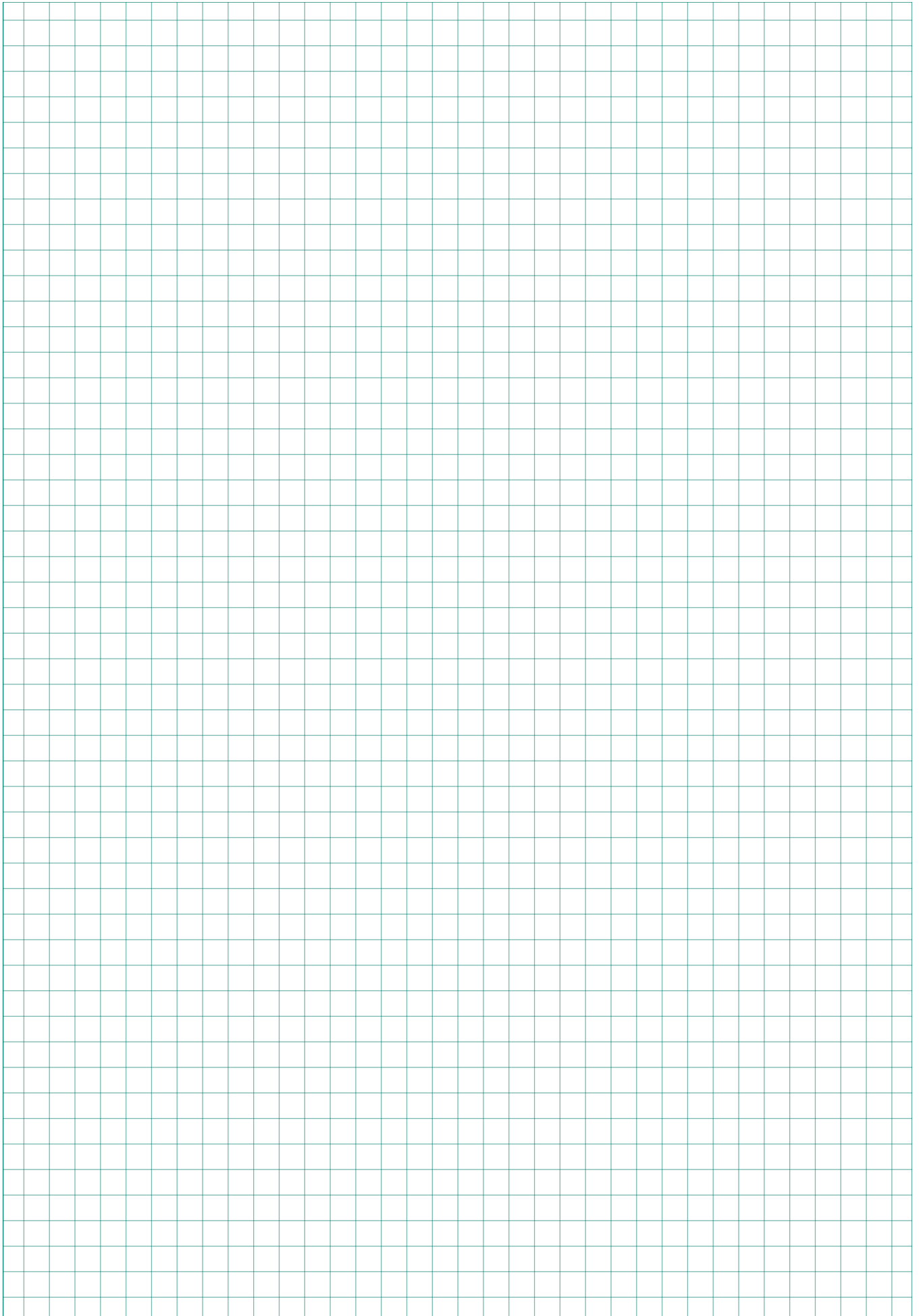


**Dimensions:**

**LSM16 PFLH4.. up to LSM38 PFLH4...  
..A2, ..A2+2, ..A4**









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