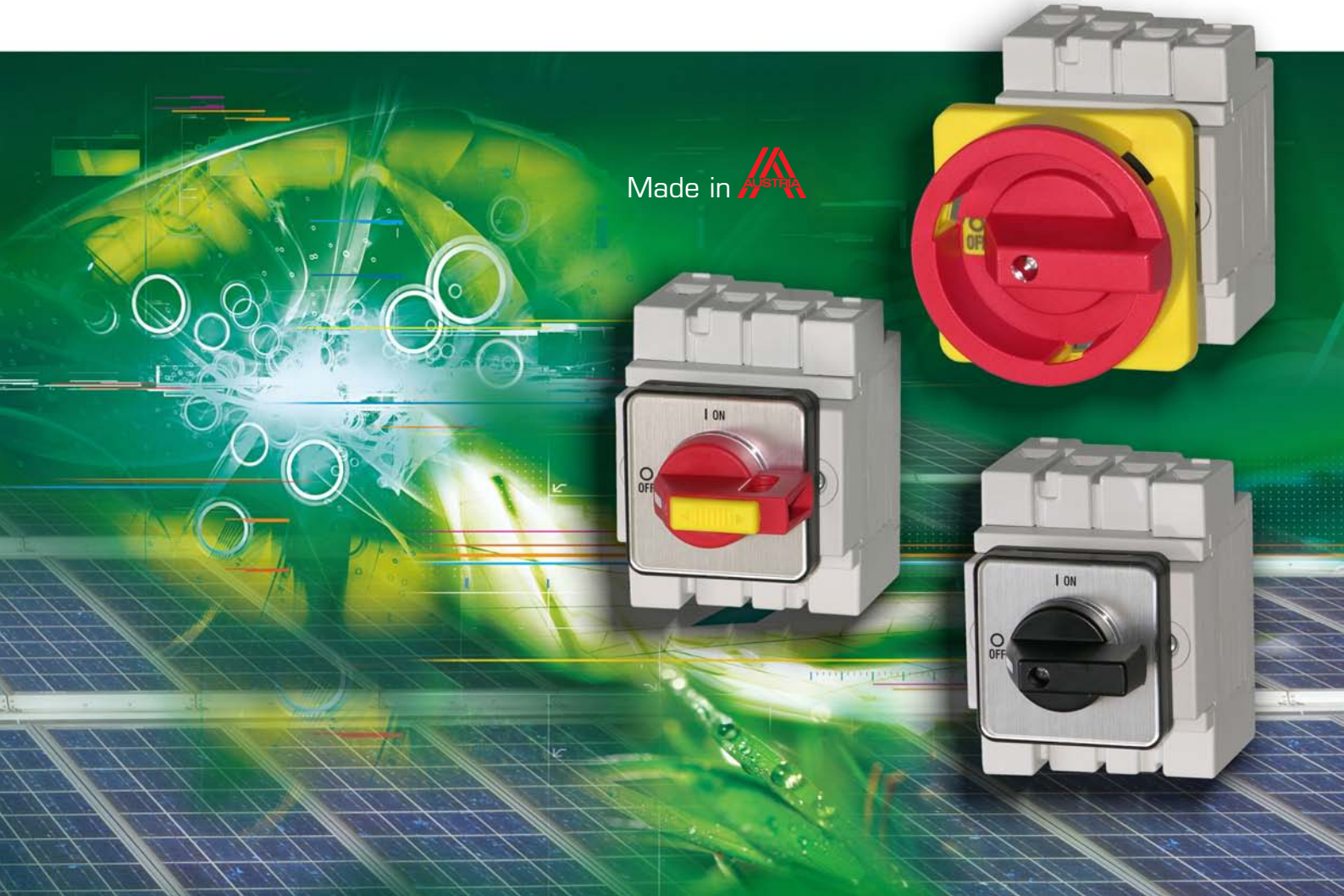


# DC-Switch Disconnectors for Photovoltaic

acc. to IEC 60364-7-712

Made in  AUSTRIA



D836E111

Technical catalogues and news under: [www.benedict.at](http://www.benedict.at)

**Contactors  
Motor-Starter**




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


 [www.benedict.at](http://www.benedict.at)

Catalogue **D677E..**

**Circuit  
Breakers**



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

 [www.benedict.at](http://www.benedict.at)

Catalogue **D795E..**

**Switches**




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


 [www.benedict.at](http://www.benedict.at)

Catalogue **D371E..**

**Main  
Switches**




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


 [www.benedict.at](http://www.benedict.at)

Catalogue **D656E..**

**Capacitor Switching  
Contactors**



Contactors  
for reactive  
and non reactive  
capacitor banks

 [www.benedict.at](http://www.benedict.at)

Catalogue **D385E..**

**Manual  
Motorstarter**




MU25A up to 25A

Auxiliary Contact Blocks  
Trip Alarm Auxiliary Switches  
Busbar Connectors  
Enclosure

 [www.benedict.at](http://www.benedict.at)

Catalogue **D509E..**

**Push Buttons**

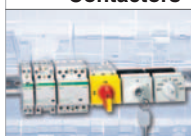


Push Buttons  
Emergency Stop  
Key Operated Rotary Switches  
Rotary Knobs  
Illuminated Push Buttons  
Assembled Stations


 [www.benedict.at](http://www.benedict.at)

Catalogue **D580E..**

**Modular-  
Contactors**



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

 [www.benedict.at](http://www.benedict.at)

Catalogue **D681E..**

**Low Voltage-  
Control Gear**




Contactors  
D.O.L. Starters  
Overload Relays  
Manual Motor Starters  
Main Switches  
Circuit Breakers  
Cam Switches  
Push Buttons


 [www.benedict.at](http://www.benedict.at)

Catalogue **D651E..**

**Switch Disconnectors  
for Photovoltaic**



Emergency Off  
Main Switches  
On-Off-Switches

 [www.benedict.at](http://www.benedict.at)

Catalogue **D836E..**

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Dimensions


22

- 1000V DC Rated operational voltage
- 32A Rated operational current
- 2- and 4-pole
- Oxydation proof contacts
- Cable cross sections up to 16mm<sup>2</sup>


Type	$I_{th}$ open	DC21B	at $U_e$
	A	4 poles in series	V
LS16	16	16	1000
LS25	25	25	1000
LS32	32	32	1000

**DC-Switch Disconnectors**


Panel mounting




Single hole mounting  
Ø22,5mm




Base mounting  
w. door coupling



Modular switch



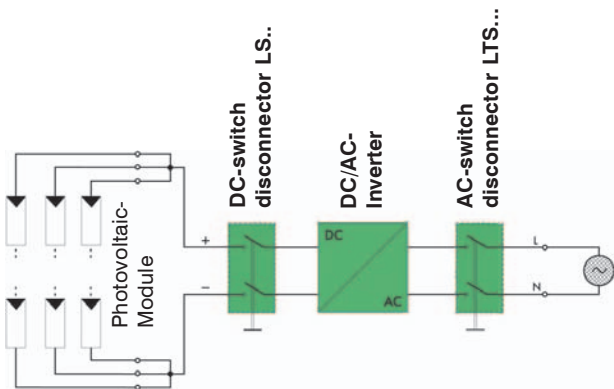
Plastic enclosed



.. E ..	.. Z ..	.. VZV ..	.. SMA ..	.. PF ..
.. E ..	.. Z ..	.. VZV ..	.. SMA ..	.. PF ..
.. E ..	.. Z ..	.. VZV ..	.. SMA ..	.. PF ..

### Switch Disconnectors for Photovoltaic

Switch disconnectors „LS..“ are switch gears for interrupting the DC/AC-Inverter from the solar-panels. Photovoltaic-installations have to be equipped with DC-isolators according to IEC 60364-7-712.



Switch disconnectors „LS..“ ensures a reliable switching up to 32A with 1000V in the category DC21B.

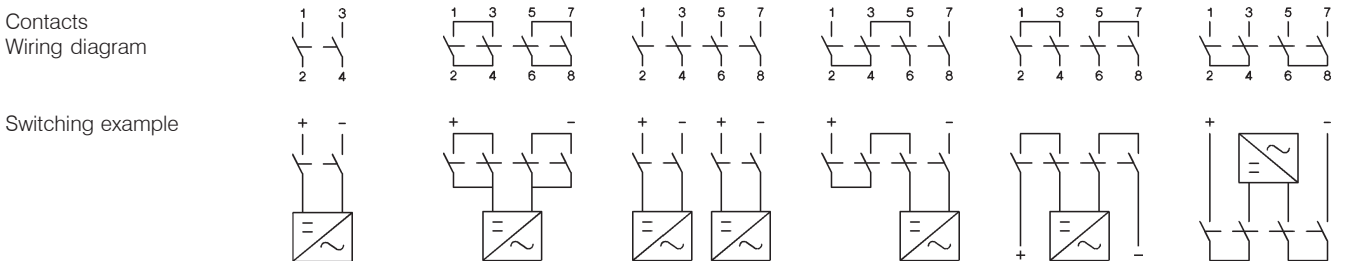
The construction of the contacts and the material selection guarantee that no oxidation (small switching frequency) develops, and is thus prevented inadmissible heating-up.

The switch disconnector has 2, 3 or 4 contacts, by serial wiring of the contacts the contact rating will be increased.

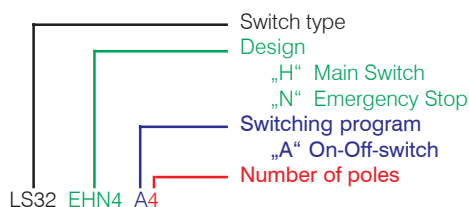
The switching speed at the manually operated handle does not have an effect on the switching attitude of the contacts.

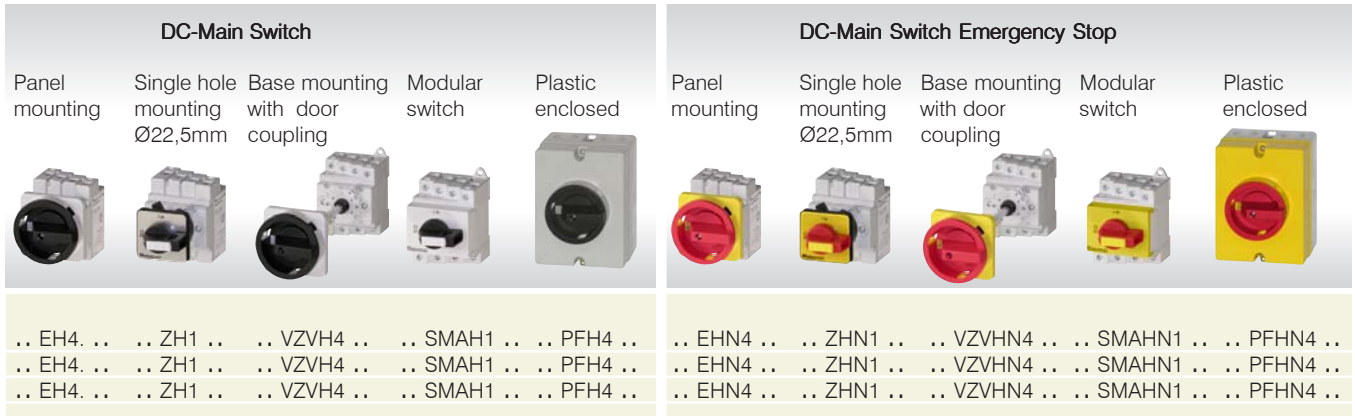
### Switching programs

Type	2-pole	2+2-pole 2 poles in series +2 poles parallel	4-pole	4-pole with jumpers Input on top Output bottom	4-pole with jumpers Input and Output bottom	4-pole with jumpers Input and Output on top
LS16	.. A2	.. A2+2	.. A4	.. A4B	.. A4O	.. A4U
LS25	.. A2	.. A2+2	.. A4	.. A4B	.. A4O	.. A4U
LS32	.. A2	.. A2+2	.. A4	.. A4B	.. A4O	.. A4U



### Ordering





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

Type	DC21B						DC22B					
	500V	600V	700V	800V	900V	1000V	500V	600V	800V	1000V		
LS16 ..		2 poles in series	16A	16A	16A	16A	13A	9A	7A	5,5A	2A	1A
		2 poles in series+2 parallel	29A	29A	16A	16A	13A	9A	-	-	-	-
		4 poles in series	16A	16A	16A	16A	16A	16A	16A	16A	11,5A	8A
		4 poles in series+2 parallel	29A	29A	29A	29A	29A	29A	-	-	-	-
LS25 ..		2 poles in series	25A	25A	23A	20A	16A	11A	8A	6A	2,5A	1,5A
		2 poles in series+2 parallel	45A	45A	23A	20A	16A	11A	-	-	-	-
		4 poles in series	25A	25A	25A	25A	25A	25A	25A	25A	12A	9A
		4 poles in series+2 parallel	45A	45A	45A	45A	45A	45A	-	-	-	-
LS32 ..		2 poles in series	32A	32A	27A	23A	20A	13A	9A	6,5A	3A	2A
		2 poles in series+2 parallel	58A	50A	27A	23A	20A	13A	-	-	-	-
		4 poles in series	32A	32A	32A	32A	32A	32A	32A	27,5A	12,5A	10A
		4 poles in series+2 parallel	58A	58A	58A	58A	58A	58A	-	-	-	-

DC21B Switching of DC-resistive loads including moderate overloads, Time constant L/R≤1ms

DC22B Switching of DC-resistive and inductive loads including moderate overloads, Time constant L/R≤2,5ms (e. g: shunt-motors)

### Schaltprogramme

Type	6-pole	3+2-pole 3 poles in series +2 poles parallel	8-pole	4+2-pole 4 poles in series +2 poles parallel
LS16	...A6	.. A3+2	...A8	.. A4+2
LS25	...A6	.. A3+2	...A8	.. A4+2
LS32	...A6	.. A3+2	...A8	.. A4+2
Contacts Wiring diagram				
Switching example				

Insulated Jumper LSV-B1 for series and parallel switching of contacts



Type	Pack	Weight
LSV-B1	100	6,6 g/pc.

# ON-OFF Switches for Panel Mounting, Escutcheon plate 64□, IP66, cULus Typ 3R<sup>1)</sup>



	DC21B 600V DC	1000V DC	Poles in series	Number of Strings	Type	Pack pcs	Weight kg/pcs.
	16A	9A	2	1	<b>LS16 E A2</b>	1	0,20
	25A	11A	2	1	<b>LS25 E A2</b>	1	0,20
	32A	13A	2	1	<b>LS32 E A2</b>	1	0,20
	29A	9A	2	1	<b>LS16 E A2+2</b>	1	0,25
	45A	11A	2	1	<b>LS25 E A2+2</b>	1	0,25
	50A	13A	2	1	<b>LS32 E A2+2</b>	1	0,25
	16A	9A	2	2	<b>LS16 E A4</b>	1	0,23
	25A	11A	2	2	<b>LS25 E A4</b>	1	0,23
	32A	13A	2	2	<b>LS32 E A4</b>	1	0,23
	16A	16A	4	1	<b>LS16 E A4B</b>	1	0,24
	25A	25A	4	1	<b>LS25 E A4B</b>	1	0,24
	32A	32A	4	1	<b>LS32 E A4B</b>	1	0,24
	16A	16A	4	1	<b>LS16 E A4O</b>	1	0,24
	25A	25A	4	1	<b>LS25 E A4O</b>	1	0,24
	32A	32A	4	1	<b>LS32 E A4O</b>	1	0,24
	16A	16A	4	1	<b>LS16 E A4U</b>	1	0,24
	25A	25A	4	1	<b>LS25 E A4U</b>	1	0,24
	32A	32A	4	1	<b>LS32 E A4U</b>	1	0,24
	16A	9A	2	3	<b>LS16 E A6</b>	1	0,36
	25A	11A	2	3	<b>LS25 E A6</b>	1	0,36
	32A	13A	2	3	<b>LS32 E A6</b>	1	0,36
	16A	16A	2	4	<b>LS16 E A8</b>	1	0,41
	25A	25A	2	4	<b>LS25 E A8</b>	1	0,41
	32A	32A	2	4	<b>LS32 E A8</b>	1	0,41
	29A	29A	4	1	<b>LS16 E A4+2</b>	1	0,46
	45A	45A	4	1	<b>LS25 E A4+2</b>	1	0,46
	58A	58A	4	1	<b>LS32 E A4+2</b>	1	0,46

## Extended Switch Shaft for all switches for panel mounting

type suffix **+VW"x"** x = panel thickness

1) UL-Approval for designs ..A6, ..A8, ..A4+2 in test.

# ON-OFF Switches for Single Hole Mounting Ø22mm, Escutcheon plate 48□, IP66, cULus Typ 3R<sup>1)</sup>




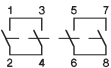
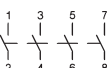
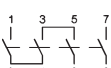
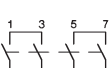
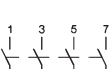
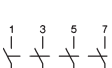
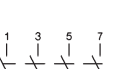

	DC21B 600V DC	1000V DC	Poles in series	Number of Strings	Type	Pack pcs	Weight kg/pcs.
	16A	9A	2	1	<b>LS16 Z A2</b>	1	0,21
	25A	11A	2	1	<b>LS25 Z A2</b>	1	0,21
	32A	13A	2	1	<b>LS32 Z A2</b>	1	0,21
	29A	9A	2	1	<b>LS16 Z A2+2</b>	1	0,26
	45A	11A	2	1	<b>LS25 Z A2+2</b>	1	0,26
	50A	13A	2	1	<b>LS32 Z A2+2</b>	1	0,26
	16A	9A	2	2	<b>LS16 Z A4</b>	1	0,23
	25A	11A	2	2	<b>LS25 Z A4</b>	1	0,23
	32A	13A	2	2	<b>LS32 Z A4</b>	1	0,23
	16A	16A	4	1	<b>LS16 Z A4B</b>	1	0,25
	25A	25A	4	1	<b>LS25 Z A4B</b>	1	0,25
	32A	32A	4	1	<b>LS32 Z A4B</b>	1	0,25
	16A	16A	4	1	<b>LS16 Z A4O</b>	1	0,25
	25A	25A	4	1	<b>LS25 Z A4O</b>	1	0,25
	32A	32A	4	1	<b>LS32 Z A4O</b>	1	0,25
	16A	16A	4	1	<b>LS16 Z A4U</b>	1	0,25
	25A	25A	4	1	<b>LS25 Z A4U</b>	1	0,25
	32A	32A	4	1	<b>LS32 Z A4U</b>	1	0,25
	16A	9A	2	3	<b>LS16 Z A6</b>	1	0,38
	25A	11A	2	3	<b>LS25 Z A6</b>	1	0,38
	32A	13A	2	3	<b>LS32 Z A6</b>	1	0,38
	16A	16A	2	4	<b>LS16 Z A8</b>	1	0,43
	25A	25A	2	4	<b>LS25 Z A8</b>	1	0,43
	32A	32A	2	4	<b>LS32 Z A8</b>	1	0,43
	29A	29A	4	1	<b>LS16 Z A4+2</b>	1	0,48
	45A	45A	4	1	<b>LS25 Z A4+2</b>	1	0,48
	58A	58A	4	1	<b>LS32 Z A4+2</b>	1	0,48

1) UL-Approval for designs ..A6, ..A8, ..A4+2 in test.

# ON-OFF Switches f. Base Mounting w. Door Clutch f. Single Hole, Plate 64<sup>□</sup>, IP66, c US Typ 1<sup>1)</sup>



Depth is adjustable  
see page 22, 23

	DC21B 600V DC	1000V DC	Poles in series	Number of Strings	Type	Pack pcs	Weight kg/pcs.
	16A	9A	2	1	<b>LS16 VZV A2</b>	1	0,22
	25A	11A	2	1	<b>LS25 VZV A2</b>	1	0,22
	32A	13A	2	1	<b>LS32 VZV A2</b>	1	0,22
	29A	9A	2	1	<b>LS16 VZV A2+2</b>	1	0,27
	45A	11A	2	1	<b>LS25 VZV A2+2</b>	1	0,27
	50A	13A	2	1	<b>LS32 VZV A2+2</b>	1	0,27
	16A	9A	2	2	<b>LS16 VZV A4</b>	1	0,25
	25A	11A	2	2	<b>LS25 VZV A4</b>	1	0,25
	32A	13A	2	2	<b>LS32 VZV A4</b>	1	0,25
	16A	16A	4	1	<b>LS16 VZV A4B</b>	1	0,26
	25A	25A	4	1	<b>LS25 VZV A4B</b>	1	0,26
	32A	32A	4	1	<b>LS32 VZV A4B</b>	1	0,26
	16A	16A	4	1	<b>LS16 VZV A4O</b>	1	0,26
	25A	25A	4	1	<b>LS25 VZV A4O</b>	1	0,26
	32A	32A	4	1	<b>LS32 VZV A4O</b>	1	0,26
	16A	16A	4	1	<b>LS16 VZV A4U</b>	1	0,26
	25A	25A	4	1	<b>LS25 VZV A4U</b>	1	0,26
	32A	32A	4	1	<b>LS32 VZV A4U</b>	1	0,26
	16A	9A	2	3	<b>LS16 VZV A6</b>	1	0,38
	25A	11A	2	3	<b>LS25 VZV A6</b>	1	0,38
	32A	13A	2	3	<b>LS32 VZV A6</b>	1	0,38
	16A	16A	2	4	<b>LS16 VZV A8</b>	1	0,43
	25A	25A	2	4	<b>LS25 VZV A8</b>	1	0,43
	32A	32A	2	4	<b>LS32 VZV A8</b>	1	0,43
	29A	29A	4	1	<b>LS16 VZV A4+2</b>	1	0,48
	45A	45A	4	1	<b>LS25 VZV A4+2</b>	1	0,48
	58A	58A	4	1	<b>LS32 VZV A4+2</b>	1	0,48

1) UL-Approval for designs ..A6, ..A8, ..A4+2 in test.

# ON-OFF Switches for Distribution Boards, IP40, cULus Typ 1<sup>1)</sup>



	DC21B 600V DC	1000V DC	Poles in series	Number of Strings	Type	Pack pcs	Weight kg/pcs.
	16A	9A	2	1	<b>LS16 SMA A2</b>	1	0,19
	25A	11A	2	1	<b>LS25 SMA A2</b>	1	0,19
	32A	13A	2	1	<b>LS32 SMA A2</b>	1	0,19
	29A	9A	2	1	<b>LS16 SMA A2+2</b>	1	0,24
	45A	11A	2	1	<b>LS25 SMA A2+2</b>	1	0,24
	50A	13A	2	1	<b>LS32 SMA A2+2</b>	1	0,24
	16A	9A	2	2	<b>LS16 SMA A4</b>	1	0,22
	25A	11A	2	2	<b>LS25 SMA A4</b>	1	0,22
	32A	13A	2	2	<b>LS32 SMA A4</b>	1	0,22
	16A	16A	4	1	<b>LS16 SMA A4B</b>	1	0,23
	25A	25A	4	1	<b>LS25 SMA A4B</b>	1	0,23
	32A	32A	4	1	<b>LS32 SMA A4B</b>	1	0,23
	16A	16A	4	1	<b>LS16 SMA A4O</b>	1	0,23
	25A	25A	4	1	<b>LS25 SMA A4O</b>	1	0,23
	32A	32A	4	1	<b>LS32 SMA A4O</b>	1	0,23
	16A	16A	4	1	<b>LS16 SMA A4U</b>	1	0,23
	25A	25A	4	1	<b>LS25 SMA A4U</b>	1	0,23
	32A	32A	4	1	<b>LS32 SMA A4U</b>	1	0,23
	16A	9A	2	3	<b>LS16 SMA A6</b>	1	0,35
	25A	11A	2	3	<b>LS25 SMA A6</b>	1	0,35
	32A	13A	2	3	<b>LS32 SMA A6</b>	1	0,35
	16A	16A	2	4	<b>LS16 SMA A8</b>	1	0,40
	25A	25A	2	4	<b>LS25 SMA A8</b>	1	0,40
	32A	32A	2	4	<b>LS32 SMA A8</b>	1	0,40
	29A	29A	4	1	<b>LS16 SMA A4+2</b>	1	0,43
	45A	45A	4	1	<b>LS25 SMA A4+2</b>	1	0,43
	58A	58A	4	1	<b>LS32 SMA A4+2</b>	1	0,43

1) UL-Approval for designs ..A6, ..A8, ..A4+2 in test.

# ON-OFF Switches in Plastic Enclosure, Escutcheon plate 64□, IP65, cULus Typ 1 1)



	DC21B 600V DC	1000V DC	Poles in series	Number of Strings	Type	Pack pcs	Weight kg/pcs.
	16A	9A	2	1	LS16 PF A2 *)	1	0,38
	25A	11A	2	1	LS25 PF A2 *)	1	0,38
	32A	13A	2	1	LS32 PF A2 *)	1	0,38
	29A	9A	2	1	LS16 PF A2+2 *)	1	0,44
	45A	11A	2	1	LS25 PF A2+2 *)	1	0,44
	50A	13A	2	1	LS32 PF A2+2 *)	1	0,44
	16A	9A	2	2	LS16 PF A4 *)	1	0,41
	25A	11A	2	2	LS25 PF A4 *)	1	0,41
	32A	13A	2	2	LS32 PF A4 *)	1	0,41
	16A	16A	4	1	LS16 PF A4B *)	1	0,42
	25A	25A	4	1	LS25 PF A4B *)	1	0,42
	32A	32A	4	1	LS32 PF A4B *)	1	0,42
	16A	16A	4	1	LS16 PF A4O *)	1	0,42
	25A	25A	4	1	LS25 PF A4O *)	1	0,42
	32A	32A	4	1	LS32 PF A4O *)	1	0,42
	16A	16A	4	1	LS16 PF A4U *)	1	0,42
	25A	25A	4	1	LS25 PF A4U *)	1	0,42
	32A	32A	4	1	LS32 PF A4U *)	1	0,42
	16A	9A	2	3	LS16 PF A6	1	1,52
	25A	11A	2	3	LS25 PF A6	1	1,52
	32A	13A	2	3	LS32 PF A6	1	1,52
	16A	16A	2	4	LS16 PF A8	1	1,57
	25A	25A	2	4	LS25 PF A8	1	1,57
	32A	32A	2	4	LS32 PF A8	1	1,57
	29A	29A	4	1	LS16 PF A4+2	1	1,62
	45A	45A	4	1	LS25 PF A4+2	1	1,62
	58A	58A	4	1	LS32 PF A4+2	1	1,62

\*) Version with **greater** enclosure PF2 possible

Ordering example: **standard** enclosure LS.. PF A..  
**greater** enclosure LS.. PF2 A..

1) UL-Approbation for designs ..A6, ..A8, ..A4+2 in test.

## Main Switches for Panel Mounting, Escutcheon plate 64□, IP66, cULus Typ 3R<sup>1)</sup>



padlock device SV4

	DC21B 600V DC	1000V DC	Poles in series	Number of Strings	Type	Pack pcs	Weight kg/pcs.
	16A	9A	2	1	<b>LS16 EH4 A2</b>	1	0,21
	25A	11A	2	1	<b>LS25 EH4 A2</b>	1	0,21
	32A	13A	2	1	<b>LS32 EH4 A2</b>	1	0,21
	29A	9A	2	1	<b>LS16 EH4 A2+2</b>	1	0,26
	45A	11A	2	1	<b>LS25 EH4 A2+2</b>	1	0,26
	50A	13A	2	1	<b>LS32 EH4 A2+2</b>	1	0,26
	16A	9A	2	2	<b>LS16 EH4 A4</b>	1	0,24
	25A	11A	2	2	<b>LS25 EH4 A4</b>	1	0,24
	32A	13A	2	2	<b>LS32 EH4 A4</b>	1	0,24
	16A	16A	4	1	<b>LS16 EH4 A4B</b>	1	0,25
	25A	25A	4	1	<b>LS25 EH4 A4B</b>	1	0,25
	32A	32A	4	1	<b>LS32 EH4 A4B</b>	1	0,25
	16A	16A	4	1	<b>LS16 EH4 A4O</b>	1	0,25
	25A	25A	4	1	<b>LS25 EH4 A4O</b>	1	0,25
	32A	32A	4	1	<b>LS32 EH4 A4O</b>	1	0,25
	16A	16A	4	1	<b>LS16 EH4 A4U</b>	1	0,25
	25A	25A	4	1	<b>LS25 EH4 A4U</b>	1	0,25
	32A	32A	4	1	<b>LS32 EH4 A4U</b>	1	0,25
	16A	9A	2	3	<b>LS16 EH4 A6</b>	1	0,37
	25A	11A	2	3	<b>LS25 EH4 A6</b>	1	0,37
	32A	13A	2	3	<b>LS32 EH4 A6</b>	1	0,37
	16A	16A	2	4	<b>LS16 EH4 A8</b>	1	0,42
	25A	25A	2	4	<b>LS25 EH4 A8</b>	1	0,42
	32A	32A	2	4	<b>LS32 EH4 A8</b>	1	0,42
	29A	29A	4	1	<b>LS16 EH4 A4+2</b>	1	0,47
	45A	45A	4	1	<b>LS25 EH4 A4+2</b>	1	0,47
	58A	58A	4	1	<b>LS32 EH4 A4+2</b>	1	0,47

## Extended Switch Shaft for all switches for panel mounting

type suffix **+VW"x** x = panel thickness

1) UL-Approval for designs ..A6, ..A8, ..A4+2 in test.

# Main Switches for Single Hole Mounting Ø22mm, Escutcheon plate 48<sup>2</sup>, IP66, cULus Typ 3R<sup>1)</sup>



padlock device SV1

	DC21B 600V DC	1000V DC	Poles in series	Number of Strings	Type	Pack pcs	Weight kg/pcs.
	16A	9A	2	1	<b>LS16 ZH1 A2</b>	1	0,21
	25A	11A	2	1	<b>LS25 ZH1 A2</b>	1	0,21
	32A	13A	2	1	<b>LS32 ZH1 A2</b>	1	0,21
	29A	9A	2	1	<b>LS16 ZH1 A2+2</b>	1	0,27
	45A	11A	2	1	<b>LS25 ZH1 A2+2</b>	1	0,27
	50A	13A	2	1	<b>LS32 ZH1 A2+2</b>	1	0,27
	16A	9A	2	2	<b>LS16 ZH1 A4</b>	1	0,24
	25A	11A	2	2	<b>LS25 ZH1 A4</b>	1	0,24
	32A	13A	2	2	<b>LS32 ZH1 A4</b>	1	0,24
	16A	16A	4	1	<b>LS16 ZH1 A4B</b>	1	0,25
	25A	25A	4	1	<b>LS25 ZH1 A4B</b>	1	0,25
	32A	32A	4	1	<b>LS32 ZH1 A4B</b>	1	0,25
	16A	16A	4	1	<b>LS16 ZH1 A4O</b>	1	0,25
	25A	25A	4	1	<b>LS25 ZH1 A4O</b>	1	0,25
	32A	32A	4	1	<b>LS32 ZH1 A4O</b>	1	0,25
	16A	16A	4	1	<b>LS16 ZH1 A4U</b>	1	0,25
	25A	25A	4	1	<b>LS25 ZH1 A4U</b>	1	0,25
	32A	32A	4	1	<b>LS32 ZH1 A4U</b>	1	0,25
	16A	9A	2	3	<b>LS16 ZH1 A6</b>	1	0,39
	25A	11A	2	3	<b>LS25 ZH1 A6</b>	1	0,39
	32A	13A	2	3	<b>LS32 ZH1 A6</b>	1	0,39
	16A	16A	2	4	<b>LS16 ZH1 A8</b>	1	0,44
	25A	25A	2	4	<b>LS25 ZH1 A8</b>	1	0,44
	32A	32A	2	4	<b>LS32 ZH1 A8</b>	1	0,44
	29A	29A	4	1	<b>LS16 ZH1 A4+2</b>	1	0,49
	45A	45A	4	1	<b>LS25 ZH1 A4+2</b>	1	0,49
	58A	58A	4	1	<b>LS32 ZH1 A4+2</b>	1	0,49

1) UL-Approval for designs ..A6, ..A8, ..A4+2 in test.

# Main Switches f. Base Mounting, Door Clutch f. Single Hole, Escutcheon plate 64□, IP66, cULus Typ 1<sup>1)</sup>



Depth is adjustable  
see page 22, 23  
padlock device SV4

	DC21B 600V DC	1000V DC	Poles in series	Number of Strings	Type	Pack pcs	Weight kg/pcs.
	16A	9A	2	1	<b>LS16 VZVH4 A2</b>	1	0,23
	25A	11A	2	1	<b>LS25 VZVH4 A2</b>	1	0,23
	32A	13A	2	1	<b>LS32 VZVH4 A2</b>	1	0,23
	29A	9A	2	1	<b>LS16 VZVH4 A2+2</b>	1	0,28
	45A	11A	2	1	<b>LS25 VZVH4 A2+2</b>	1	0,28
	50A	13A	2	1	<b>LS32 VZVH4 A2+2</b>	1	0,28
	16A	9A	2	2	<b>LS16 VZVH4 A4</b>	1	0,26
	25A	11A	2	2	<b>LS25 VZVH4 A4</b>	1	0,26
	32A	13A	2	2	<b>LS32 VZVH4 A4</b>	1	0,26
	16A	16A	4	1	<b>LS16 VZVH4 A4B</b>	1	0,27
	25A	25A	4	1	<b>LS25 VZVH4 A4B</b>	1	0,27
	32A	32A	4	1	<b>LS32 VZVH4 A4B</b>	1	0,27
	16A	16A	4	1	<b>LS16 VZVH4 A4O</b>	1	0,27
	25A	25A	4	1	<b>LS25 VZVH4 A4O</b>	1	0,27
	32A	32A	4	1	<b>LS32 VZVH4 A4O</b>	1	0,27
	16A	16A	4	1	<b>LS16 VZVH4 A4U</b>	1	0,27
	25A	25A	4	1	<b>LS25 VZVH4 A4U</b>	1	0,27
	32A	32A	4	1	<b>LS32 VZVH4 A4U</b>	1	0,27
	16A	9A	2	3	<b>LS16 VZVH4 A6</b>	1	0,39
	25A	11A	2	3	<b>LS25 VZVH4 A6</b>	1	0,39
	32A	13A	2	3	<b>LS32 VZVH4 A6</b>	1	0,39
	16A	16A	2	4	<b>LS16 VZVH4 A8</b>	1	0,44
	25A	25A	2	4	<b>LS25 VZVH4 A8</b>	1	0,44
	32A	32A	2	4	<b>LS32 VZVH4 A8</b>	1	0,44
	29A	29A	4	1	<b>LS16 VZVH4 A4+2</b>	1	0,49
	45A	45A	4	1	<b>LS25 VZVH4 A4+2</b>	1	0,49
	58A	58A	4	1	<b>LS32 VZVH4 A4+2</b>	1	0,49

1) UL-Approval for designs ..A6, ..A8, ..A4+2 in test.

# Main Switches for Distribution Boards, IP40, cULus Typ 1<sup>1)</sup>



padlock device SV1

		DC21B 600V DC	1000V DC	Poles in series	Number of Strings	Type	Pack pcs	Weight kg/pcs.
		16A	9A	2	1	<b>LS16 SMAH1 A2</b>	1	0,19
		25A	11A	2	1	<b>LS25 SMAH1 A2</b>	1	0,19
		32A	13A	2	1	<b>LS32 SMAH1 A2</b>	1	0,19
		29A	9A	2	1	<b>LS16 SMAH1 A2+2</b>	1	0,25
		45A	11A	2	1	<b>LS25 SMAH1 A2+2</b>	1	0,25
		50A	13A	2	1	<b>LS32 SMAH1 A2+2</b>	1	0,25
		16A	9A	2	2	<b>LS16 SMAH1 A4</b>	1	0,22
		25A	11A	2	2	<b>LS25 SMAH1 A4</b>	1	0,22
		32A	13A	2	2	<b>LS32 SMAH1 A4</b>	1	0,22
		16A	16A	4	1	<b>LS16 SMAH1 A4B</b>	1	0,23
		25A	25A	4	1	<b>LS25 SMAH1 A4B</b>	1	0,23
		32A	32A	4	1	<b>LS32 SMAH1 A4B</b>	1	0,23
		16A	16A	4	1	<b>LS16 SMAH1 A4O</b>	1	0,23
		25A	25A	4	1	<b>LS25 SMAH1 A4O</b>	1	0,23
		32A	32A	4	1	<b>LS32 SMAH1 A4O</b>	1	0,23
		16A	16A	4	1	<b>LS16 SMAH1 A4U</b>	1	0,23
		25A	25A	4	1	<b>LS25 SMAH1 A4U</b>	1	0,23
		32A	32A	4	1	<b>LS32 SMAH1 A4U</b>	1	0,23
		16A	9A	2	3	<b>LS16 SMAH1 A6</b>	1	0,36
		25A	11A	2	3	<b>LS25 SMAH1 A6</b>	1	0,36
		32A	13A	2	3	<b>LS32 SMAH1 A6</b>	1	0,36
		16A	16A	2	4	<b>LS16 SMAH1 A8</b>	1	0,41
		25A	25A	2	4	<b>LS25 SMAH1 A8</b>	1	0,41
		32A	32A	2	4	<b>LS32 SMAH1 A8</b>	1	0,41
		29A	29A	4	1	<b>LS16 SMAH1 A4+2</b>	1	0,46
		45A	45A	4	1	<b>LS25 SMAH1 A4+2</b>	1	0,46
		58A	58A	4	1	<b>LS32 SMAH1 A4+2</b>	1	0,46

1) UL-Approval for designs ..A6, ..A8, ..A4+2 in test.

# Main Switches in Plastic Enclosure Escutcheon plate 64□, IP65, cULus Typ 1<sup>1)</sup>



padlock device SV4

	DC21B 600V DC	1000V DC	Poles in series	Number of Strings	Type	Pack pcs	Weight kg/pcs.
	16A	9A	2	1	LS16 PFH4 A2 <sup>*)</sup>	1	0,39
	25A	11A	2	1	LS25 PFH4 A2 <sup>*)</sup>	1	0,39
	32A	13A	2	1	LS32 PFH4 A2 <sup>*)</sup>	1	0,39
	29A	9A	2	1	LS16 PFH4 A2+2 <sup>*)</sup>	1	0,45
	45A	11A	2	1	LS25 PFH4 A2+2 <sup>*)</sup>	1	0,45
	50A	13A	2	1	LS32 PFH4 A2+2 <sup>*)</sup>	1	0,45
	16A	9A	2	2	LS16 PFH4 A4 <sup>*)</sup>	1	0,42
	25A	11A	2	2	LS25 PFH4 A4 <sup>*)</sup>	1	0,42
	32A	13A	2	2	LS32 PFH4 A4 <sup>*)</sup>	1	0,42
	16A	16A	4	1	LS16 PFH4 A4B <sup>*)</sup>	1	0,43
	25A	25A	4	1	LS25 PFH4 A4B <sup>*)</sup>	1	0,43
	32A	32A	4	1	LS32 PFH4 A4B <sup>*)</sup>	1	0,43
	16A	16A	4	1	LS16 PFH4 A4O <sup>*)</sup>	1	0,43
	25A	25A	4	1	LS25 PFH4 A4O <sup>*)</sup>	1	0,43
	32A	32A	4	1	LS32 PFH4 A4O <sup>*)</sup>	1	0,43
	16A	16A	4	1	LS16 PFH4 A4U <sup>*)</sup>	1	0,43
	25A	25A	4	1	LS25 PFH4 A4U <sup>*)</sup>	1	0,43
	32A	32A	4	1	LS32 PFH4 A4U <sup>*)</sup>	1	0,43
	16A	9A	2	3	LS16 PFH4 A6	1	1,53
	25A	11A	2	3	LS25 PFH4 A6	1	1,53
	32A	13A	2	3	LS32 PFH4 A6	1	1,53
	16A	16A	2	4	LS16 PFH4 A8	1	1,58
	25A	25A	2	4	LS25 PFH4 A8	1	1,58
	32A	32A	2	4	LS32 PFH4 A8	1	1,58
	29A	29A	4	1	LS16 PFH4 A4+2	1	1,63
	45A	45A	4	1	LS25 PFH4 A4+2	1	1,63
	58A	58A	4	1	LS32 PFH4 A4+2	1	1,63

\*) Version with **greater** enclosure PF2 possible

Ordering example: **standard** enclosure LS.. PF A..  
**greater** enclosure LS.. PF2 A..

1) UL-Approval for designs ..A6, ..A8, ..A4+2 in test.

# Main Switches-Emergency-Stop for Panel Mounting, Escutcheon plate 64□, IP66, cULus Typ 3R<sup>1)</sup>



padlock device SV1R

	DC21B 600V DC	1000V DC	Poles in series	Number of Strings	Type	Pack pcs	Weight kg/pcs.
	16A	9A	2	1	<b>LS16 EHN1 A2</b>	1	0,20
	25A	11A	2	1	<b>LS25 EHN1 A2</b>	1	0,20
	32A	13A	2	1	<b>LS32 EHN1 A2</b>	1	0,20
	29A	9A	2	1	<b>LS16 EHN1 A2+2</b>	1	0,25
	45A	11A	2	1	<b>LS25 EHN1 A2+2</b>	1	0,25
	50A	13A	2	1	<b>LS32 EHN1 A2+2</b>	1	0,25
	16A	9A	2	2	<b>LS16 EHN1 A4</b>	1	0,23
	25A	11A	2	2	<b>LS25 EHN1 A4</b>	1	0,23
	32A	13A	2	2	<b>LS32 EHN1 A4</b>	1	0,23
	16A	16A	4	1	<b>LS16 EHN1 A4B</b>	1	0,24
	25A	25A	4	1	<b>LS25 EHN1 A4B</b>	1	0,24
	32A	32A	4	1	<b>LS32 EHN1 A4B</b>	1	0,24
	16A	16A	4	1	<b>LS16 EHN1 A4O</b>	1	0,24
	25A	25A	4	1	<b>LS25 EHN1 A4O</b>	1	0,24
	32A	32A	4	1	<b>LS32 EHN1 A4O</b>	1	0,24
	16A	16A	4	1	<b>LS16 EHN1 A4U</b>	1	0,24
	25A	25A	4	1	<b>LS25 EHN1 A4U</b>	1	0,24
	32A	32A	4	1	<b>LS32 EHN1 A4U</b>	1	0,24
	16A	9A	2	3	<b>LS16 EHN1 A6</b>	1	0,36
	25A	11A	2	3	<b>LS25 EHN1 A6</b>	1	0,36
	32A	13A	2	3	<b>LS32 EHN1 A6</b>	1	0,36
	16A	16A	2	4	<b>LS16 EHN1 A8</b>	1	0,41
	25A	25A	2	4	<b>LS25 EHN1 A8</b>	1	0,41
	32A	32A	2	4	<b>LS32 EHN1 A8</b>	1	0,41
	29A	29A	4	1	<b>LS16 EHN1 A4+2</b>	1	0,46
	45A	45A	4	1	<b>LS25 EHN1 A4+2</b>	1	0,46
	58A	58A	4	1	<b>LS32 EHN1 A4+2</b>	1	0,46

## Extended Switch Shaft for all switches for panel mounting

type suffix **+VW"x"** x = panel thickness

1) UL-Approval for designs ..A6, ..A8, ..A4+2 in test.

# Main Switches-Emergency-Stop for Panel Mounting, Escutcheon plate 64□, IP66, cULus Typ 3R<sup>1)</sup>



padlock device SV4R

	DC21B 600V DC	1000V DC	Poles in series	Number of Strings	Type	Pack pcs	Weight kg/pcs.
	16A	9A	2	1	<b>LS16 EHN4 A2</b>	1	0,21
	25A	11A	2	1	<b>LS25 EHN4 A2</b>	1	0,21
	32A	13A	2	1	<b>LS32 EHN4 A2</b>	1	0,21
	29A	9A	2	1	<b>LS16 EHN4 A2+2</b>	1	0,26
	45A	11A	2	1	<b>LS25 EHN4 A2+2</b>	1	0,26
	50A	13A	2	1	<b>LS32 EHN4 A2+2</b>	1	0,26
	16A	9A	2	2	<b>LS16 EHN4 A4</b>	1	0,24
	25A	11A	2	2	<b>LS25 EHN4 A4</b>	1	0,24
	32A	13A	2	2	<b>LS32 EHN4 A4</b>	1	0,24
	16A	16A	4	1	<b>LS16 EHN4 A4B</b>	1	0,25
	25A	25A	4	1	<b>LS25 EHN4 A4B</b>	1	0,25
	32A	32A	4	1	<b>LS32 EHN4 A4B</b>	1	0,25
	16A	16A	4	1	<b>LS16 EHN4 A4O</b>	1	0,25
	25A	25A	4	1	<b>LS25 EHN4 A4O</b>	1	0,25
	32A	32A	4	1	<b>LS32 EHN4 A4O</b>	1	0,25
	16A	16A	4	1	<b>LS16 EHN4 A4U</b>	1	0,25
	25A	25A	4	1	<b>LS25 EHN4 A4U</b>	1	0,25
	32A	32A	4	1	<b>LS32 EHN4 A4U</b>	1	0,25
	16A	9A	2	3	<b>LS16 EHN4 A6</b>	1	0,37
	25A	11A	2	3	<b>LS25 EHN4 A6</b>	1	0,37
	32A	13A	2	3	<b>LS32 EHN4 A6</b>	1	0,37
	16A	16A	2	4	<b>LS16 EHN4 A8</b>	1	0,42
	25A	25A	2	4	<b>LS25 EHN4 A8</b>	1	0,42
	32A	32A	2	4	<b>LS32 EHN4 A8</b>	1	0,42
	29A	29A	4	1	<b>LS16 EHN4 A4+2</b>	1	0,47
	45A	45A	4	1	<b>LS25 EHN4 A4+2</b>	1	0,47
	58A	58A	4	1	<b>LS32 EHN4 A4+2</b>	1	0,47

## Extended Switch Shaft for all switches for panel mounting

type suffix **+VW"x** x = panel thickness

1) UL-Approval for designs ..A6, ..A8, ..A4+2 in test.

# Main Switches-Emergency-Stop, Single Hole Mounting Ø22mm, Escutcheon plate 48□, IP66, cULus Typ 3R<sup>1)</sup>



padlock device SV1R

	DC21B 600V DC	1000V DC	Poles in series	Number of Strings	Type	Pack pcs	Weight kg/pcs.
	16A	9A	2	1	<b>LS16 ZHN1 A2</b>	1	0,21
	25A	11A	2	1	<b>LS25 ZHN1 A2</b>	1	0,21
	32A	13A	2	1	<b>LS32 ZHN1 A2</b>	1	0,21
	29A	9A	2	1	<b>LS16 ZHN1 A2+2</b>	1	0,27
	45A	11A	2	1	<b>LS25 ZHN1 A2+2</b>	1	0,27
	50A	13A	2	1	<b>LS32 ZHN1 A2+2</b>	1	0,27
	16A	9A	2	2	<b>LS16 ZHN1 A4</b>	1	0,24
	25A	11A	2	2	<b>LS25 ZHN1 A4</b>	1	0,24
	32A	13A	2	2	<b>LS32 ZHN1 A4</b>	1	0,24
	16A	16A	4	1	<b>LS16 ZHN1 A4B</b>	1	0,25
	25A	25A	4	1	<b>LS25 ZHN1 A4B</b>	1	0,25
	32A	32A	4	1	<b>LS32 ZHN1 A4B</b>	1	0,25
	16A	16A	4	1	<b>LS16 ZHN1 A4O</b>	1	0,25
	25A	25A	4	1	<b>LS25 ZHN1 A4O</b>	1	0,25
	32A	32A	4	1	<b>LS32 ZHN1 A4O</b>	1	0,25
	16A	16A	4	1	<b>LS16 ZHN1 A4U</b>	1	0,25
	25A	25A	4	1	<b>LS25 ZHN1 A4U</b>	1	0,25
	32A	32A	4	1	<b>LS32 ZHN1 A4U</b>	1	0,25
	16A	9A	2	3	<b>LS16 ZHN1 A6</b>	1	0,39
	25A	11A	2	3	<b>LS25 ZHN1 A6</b>	1	0,39
	32A	13A	2	3	<b>LS32 ZHN1 A6</b>	1	0,39
	16A	16A	2	4	<b>LS16 ZHN1 A8</b>	1	0,44
	25A	25A	2	4	<b>LS25 ZHN1 A8</b>	1	0,44
	32A	32A	2	4	<b>LS32 ZHN1 A8</b>	1	0,44
	29A	29A	4	1	<b>LS16 ZHN1 A4+2</b>	1	0,49
	45A	45A	4	1	<b>LS25 ZHN1 A4+2</b>	1	0,49
	58A	58A	4	1	<b>LS32 ZHN1 A4+2</b>	1	0,49

1) UL-Approbation for designs ..A6, ..A8, ..A4+2 in test.

# Main Switch-Emergency-Stop f. Base Mounting, Door Clutch f. Single Hole, Plate 64□, IP66, cULus Typ 1<sup>1)</sup>



Depth is adjustable  
see page 22, 23  
Sperrvorrichtung SV4R

	DC21B 600V DC	1000V DC	Poles in series	Number of Strings	Type	Pack pcs	Weight kg/pcs.
	16A	9A	2	1	<b>LS16 VZVHN4 A2</b>	1	0,23
	25A	11A	2	1	<b>LS25 VZVHN4 A2</b>	1	0,23
	32A	13A	2	1	<b>LS32 VZVHN4 A2</b>	1	0,23
	29A	9A	2	1	<b>LS16 VZVHN4 A2+2</b>	1	0,28
	45A	11A	2	1	<b>LS25 VZVHN4 A2+2</b>	1	0,28
	50A	13A	2	1	<b>LS32 VZVHN4 A2+2</b>	1	0,28
	16A	9A	2	2	<b>LS16 VZVHN4 A4</b>	1	0,26
	25A	11A	2	2	<b>LS25 VZVHN4 A4</b>	1	0,26
	32A	13A	2	2	<b>LS32 VZVHN4 A4</b>	1	0,26
	16A	16A	4	1	<b>LS16 VZVHN4 A4B</b>	1	0,27
	25A	25A	4	1	<b>LS25 VZVHN4 A4B</b>	1	0,27
	32A	32A	4	1	<b>LS32 VZVHN4 A4B</b>	1	0,27
	16A	16A	4	1	<b>LS16 VZVHN4 A4O</b>	1	0,27
	25A	25A	4	1	<b>LS25 VZVHN4 A4O</b>	1	0,27
	32A	32A	4	1	<b>LS32 VZVHN4 A4O</b>	1	0,27
	16A	16A	4	1	<b>LS16 VZVHN4 A4U</b>	1	0,27
	25A	25A	4	1	<b>LS25 VZVHN4 A4U</b>	1	0,27
	32A	32A	4	1	<b>LS32 VZVHN4 A4U</b>	1	0,27
	16A	9A	2	3	<b>LS16 VZVHN4 A6</b>	1	0,39
	25A	11A	2	3	<b>LS25 VZVHN4 A6</b>	1	0,39
	32A	13A	2	3	<b>LS32 VZVHN4 A6</b>	1	0,39
	16A	16A	2	4	<b>LS16 VZVHN4 A8</b>	1	0,44
	25A	25A	2	4	<b>LS25 VZVHN4 A8</b>	1	0,44
	32A	32A	2	4	<b>LS32 VZVHN4 A8</b>	1	0,44
	29A	29A	4	1	<b>LS16 VZVHN4 A4+2</b>	1	0,49
	45A	45A	4	1	<b>LS25 VZVHN4 A4+2</b>	1	0,49
	58A	58A	4	1	<b>LS32 VZVHN4 A4+2</b>	1	0,49

1) UL-Approval for designs ..A6, ..A8, ..A4+2 in test.

# Main Switches-Emergency-Stop for Distribution Boards, IP40, cULus Typ 1



padlock device SV1R

	DC21B 600V DC	1000V DC	Poles in series	Number of Strings	Type	Pack pcs	Weight kg/pcs.
	16A	9A	2	1	<b>LS16 SMAHN1 A2</b>	1	0,19
	25A	11A	2	1	<b>LS25 SMAHN1 A2</b>	1	0,19
	32A	13A	2	1	<b>LS32 SMAHN1 A2</b>	1	0,19
	29A	9A	2	1	<b>LS16 SMAHN1 A2+2</b>	1	0,25
	45A	11A	2	1	<b>LS25 SMAHN1 A2+2</b>	1	0,25
	50A	13A	2	1	<b>LS32 SMAHN1 A2+2</b>	1	0,25
	16A	9A	2	2	<b>LS16 SMAHN1 A4</b>	1	0,22
	25A	11A	2	2	<b>LS25 SMAHN1 A4</b>	1	0,22
	32A	13A	2	2	<b>LS32 SMAHN1 A4</b>	1	0,22
	16A	16A	4	1	<b>LS16 SMAHN1 A4B</b>	1	0,23
	25A	25A	4	1	<b>LS25 SMAHN1 A4B</b>	1	0,23
	32A	32A	4	1	<b>LS32 SMAHN1 A4B</b>	1	0,23
	16A	16A	4	1	<b>LS16 SMAHN1 A4O</b>	1	0,23
	25A	25A	4	1	<b>LS25 SMAHN1 A4O</b>	1	0,23
	32A	32A	4	1	<b>LS32 SMAHN1 A4O</b>	1	0,23
	16A	16A	4	1	<b>LS16 SMAHN1 A4U</b>	1	0,23
	25A	25A	4	1	<b>LS25 SMAHN1 A4U</b>	1	0,23
	32A	32A	4	1	<b>LS32 SMAHN1 A4U</b>	1	0,23
	16A	9A	2	3	<b>LS16 SMAHN1 A6</b>	1	0,36
	25A	11A	2	3	<b>LS25 SMAHN1 A6</b>	1	0,36
	32A	13A	2	3	<b>LS32 SMAHN1 A6</b>	1	0,36
	16A	16A	2	4	<b>LS16 SMAHN1 A8</b>	1	0,41
	25A	25A	2	4	<b>LS25 SMAHN1 A8</b>	1	0,41
	32A	32A	2	4	<b>LS32 SMAHN1 A8</b>	1	0,41
	29A	29A	4	1	<b>LS16 SMAHN1 A4+2</b>	1	0,46
	45A	45A	4	1	<b>LS25 SMAHN1 A4+2</b>	1	0,46
	58A	58A	4	1	<b>LS32 SMAHN1 A4+2</b>	1	0,46

1) UL-Approval for designs ..A6, ..A8, ..A4+2 in test.

# Main Switches-Emergency-Stop in Plastic Enclosure Escutcheon plate 64□, IP65, cULus Typ 1



padlock device SV4R

	DC21B 600V DC	1000V DC	Poles in series	Number of Strings	Type	Pack pcs	Weight kg/pcs.
	16A	9A	2	1	LS16 PFHN4 A2 *)	1	0,39
	25A	11A	2	1	LS25 PFHN4 A2 *)	1	0,39
	32A	13A	2	1	LS32 PFHN4 A2 *)	1	0,39
	29A	9A	2	1	LS16 PFHN4 A2+2 *)	1	0,45
	45A	11A	2	1	LS25 PFHN4 A2+2 *)	1	0,45
	50A	13A	2	1	LS32 PFHN4 A2+2 *)	1	0,45
	16A	9A	2	2	LS16 PFHN4 A4 *)	1	0,42
	25A	11A	2	2	LS25 PFHN4 A4 *)	1	0,42
	32A	13A	2	2	LS32 PFHN4 A4 *)	1	0,42
	16A	16A	4	1	LS16 PFHN4 A4B *)	1	0,43
	25A	25A	4	1	LS25 PFHN4 A4B *)	1	0,43
	32A	32A	4	1	LS32 PFHN4 A4B *)	1	0,43
	16A	16A	4	1	LS16 PFHN4 A4O *)	1	0,43
	25A	25A	4	1	LS25 PFHN4 A4O *)	1	0,43
	32A	32A	4	1	LS32 PFHN4 A4O *)	1	0,43
	16A	16A	4	1	LS16 PFHN4 A4U	1	0,43
	25A	25A	4	1	LS25 PFHN4 A4U	1	0,43
	32A	32A	4	1	LS32 PFHN4 A4U	1	0,43
	16A	9A	2	3	LS16 PFHN4 A6	1	1,53
	25A	11A	2	3	LS25 PFHN4 A6	1	1,53
	32A	13A	2	3	LS32 PFHN4 A6	1	1,53
	16A	16A	2	4	LS16 PFHN4 A8	1	1,58
	25A	25A	2	4	LS25 PFHN4 A8	1	1,58
	32A	32A	2	4	LS32 PFHN4 A8	1	1,58
	29A	29A	4	1	LS16 PFHN4 A4+2	1	1,63
	45A	45A	4	1	LS25 PFHN4 A4+2	1	1,63
	58A	58A	4	1	LS32 PFHN4 A4+2	1	1,63

\*) Version with **greater** enclosure PF2 possible

Ordering example: **standard** enclosure    LS.. PF A..  
**greater** enclosure                    LS.. PF2 A..

1) UL-Approval for designs ..A6, ..A8, ..A4+2 in test.

# Technical Datas

Data according to IEC 60947-3, VDE 0660


Main contacts		Type	LS16	LS25	LS32	
Rated thermal current $I_{the}$		A	16	25	32	
Rated insulation voltage $U_i$ <sup>1)</sup>		V	1000	1000	1000	
Disconnection property performed up to		V	1000V	1000V	1000V	
Distance of contacts (per pole)		mm	8	8	8	
<b>Rated operational current <math>I_e</math></b>						
<b>DC21..</b>	1 pole	500V A	9	11	13	
	600V	A	6	8	10	
L/R = 1ms	A1	800V A	3	4	5	
	1000V	A	1,5	2	2,5	
<b>DC21A and DC21B</b>	2 pole in series	500V A	16	25	32	
	A2	600V A	16	25	32	
<b>DC21B only</b>	700V	A	16	23	27	
	800V	A	16	20	23	
	900V	A	13	16	20	
	1000V	A	9	11	13	
	2 poles in series + 2 poles parallel	500V A	29	45	58	
A2+2	600V A	29	45	50		
	700V	A	16	23	27	
	800V	A	16	20	23	
	900V	A	13	16	20	
	1000V	A	9	11	13	
3 poles in series	500V	A	16	25	32	
	600V	A	16	25	32	
	700V	A	16	25	32	
	800V	A	16	25	32	
	900V	A	16	25	32	
	1000V	A	16	25	32	
3 poles in series + 2 poles parallel	500V	A	29	45	58	
	600V	A	29	45	50	
	700V	A	29	38	45	
	800V	A	29	38	45	
	900V	A	29	38	45	
	1000V	A	29	38	45	
4 poles in series	500V	A	16	25	32	
	600V	A	16	25	32	
	700V	A	16	25	32	
	800V	A	16	25	32	
	900V	A	16	25	32	
	1000V	A	16	25	32	
4 poles in series + 2 poles parallel	500V	A	29	45	58	
	600V	A	29	45	58	
	700V	A	29	45	58	
	800V	A	29	45	58	
	900V	A	29	45	58	
	1000V	A	29	45	58	
<b>Rated operational current <math>I_e</math></b>						
<b>DC22B</b>	1 pole	500V A	1	1,25	1,5	
	600V	A	0,5	0,75	1	
L/R = 2,5ms	A1	800V A	0,3	0,4	0,5	
	1000V	A	0,15	0,2	0,25	
2 poles in series	500V	A	7	8	9	
	600V	A	5,5	6	6,5	
	800V	A	2	2,5	3	
	1000V	A	1	1,5	2	
3 poles in series	500V	A	16	25	27	
	600V	A	16	23	25	
	800V	A	6,5	7	7,5	
	1000V	A	5,5	6	6,5	
4 poles in series	500V	A	16	25	32	
	600V	A	16	25	27,5	
	800V	A	11,5	12	12,5	
	1000V	A	8	9	10	
<b>Rated operational current <math>I_e</math></b>						
<b>AC21B</b>	A2, A4	$U_e$ max. 440V	A	16	25	32
	A2+2	$U_e$ max. 440V	A	29	45	58

1) Suitable at 1000V for: earthed-neutral systems, overvoltage category I to III, pollution degree 3 (standard-industry):  $U_{imp} = 8kV$ .  
Data for other conditions on request.

## Technical Datas

Data according to IEC 60947-3, VDE 0660

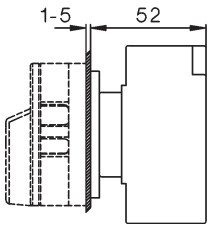
Main contacts	Type	LS16	LS25	LS32
<b>Rated conditional short-circuit current</b>	kA <sub>eff</sub>	5	5	5
Max. fuse size	gL (gG) A	40	63	80
Mechanical life	x10 <sup>3</sup>	10	10	10
Rated short-time withstand current (1s)	I <sub>cw</sub> A2, A4 / A2+2 A	800 / 1300	900 / 1500	1000 / 1700
Short circuit making capacity	I <sub>cm</sub> A2, A4 / A2+2 A	800 / 1300	900 / 1500	1000 / 1700
<b>Maximum cable cross sections</b> (incl. jumper LSV-B1)				
solid or stranded	mm <sup>2</sup>	4 - 16	4 - 16	4 - 16
flexible	mm <sup>2</sup>	4 - 10	4 - 10	4 - 10
flexible (+ multicore cable end)	mm <sup>2</sup>	4 - 10	4 - 10	4 - 10
Size of terminal screw		M4 Pz2	M4 Pz2	M4 Pz2
Tightening torque	Nm	1,2 - 1,8	1,2 - 1,8	1,2 - 1,8
<b>Maximum ambient temperature</b>				
Operation	open °C enclosed °C		-40 to +65 -40 to +45	
Storage	°C		-50 to +90	
<b>Power loss</b> per switch at I <sub>e max.</sub> DC21B				
A2	W	2	5	8
A2+2	W	3,5	8,5	14
A4	W	4	10	16

Data acc. to UL508 c  File E332938, Category no.: NRNT2, NRNT8

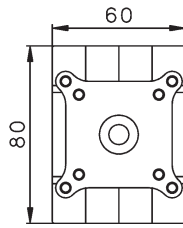
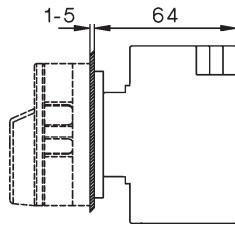
Type	LS16	LS25	LS32	
Ampere-Rating "General use"				
1 pole				
350V A	4	5	6	
500V A	4	5	6	
600V A	4	5	6	
2 poles in series				
350V A	16	20	25	
500V A	16	20	25	
600V A	16	20	25	
2 poles in series + 2 poles parallel				
350V A	29	45	58	
500V A	29	38	40	
600V A	21	23	25	
3 poles in series				
350V A	16	25	32	
500V A	16	25	32	
600V A	16	25	32	
4 poles in series				
350V A	16	25	32	
500V A	16	25	32	
600V A	16	25	32	
Fuse size (RK5) Industrial Control Switch				
5kA / 600V A	40	60	80	
<b>Maximum cable cross sections</b> (incl. jumper LSV-B1)				
solid or stranded	AWG	12 - 10	12 - 10	12 - 10
flexible	AWG	12 - 6	12 - 6	12 - 6
flexible (+ multicore cable end)	AWG	12 - 6	12 - 6	12 - 6
Size of terminal screw		M4 Pz2	M4 Pz2	M4 Pz2
Tightening torque	lb.inch	11 - 16	11 - 16	11 - 16

**Dimensions:**

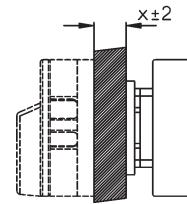
LS16 E., LS25 E., LS32 E.,  
..A2



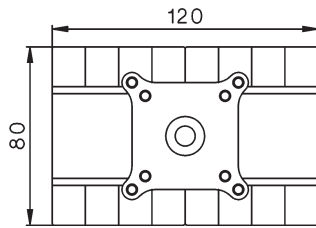
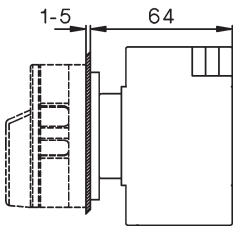
..A2+2, ..A4.



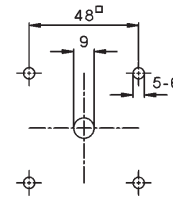
LS... +VW"x"  
Extended Switch Shaft



LS16 E., LS25 E., LS32 E.,  
..A6, ..A8, ..A3+2, ..A4+2

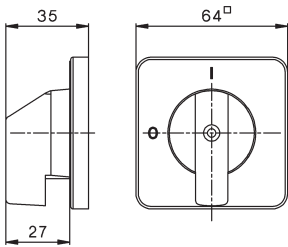


Mounting holes

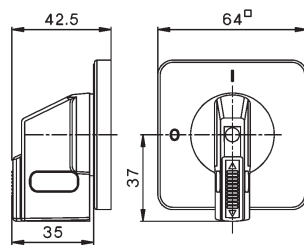


**Escutcheon plate 64<sup>□</sup>**

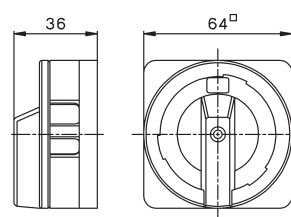
Handle



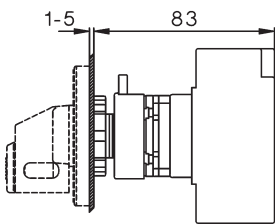
Padlock device SV1.



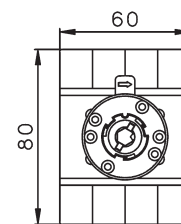
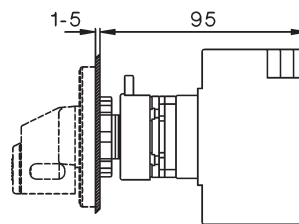
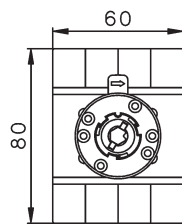
Padlock device SV4



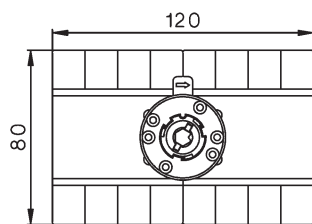
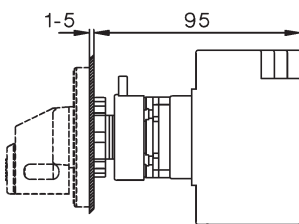
LS16 Z., LS25 Z., LS32 Z.,  
..A2



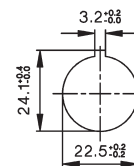
..A2+2, ..A4.



LS16 Z., LS25 Z., LS32 Z.,  
..A6, ..A8, ..A3+2, ..A4+2

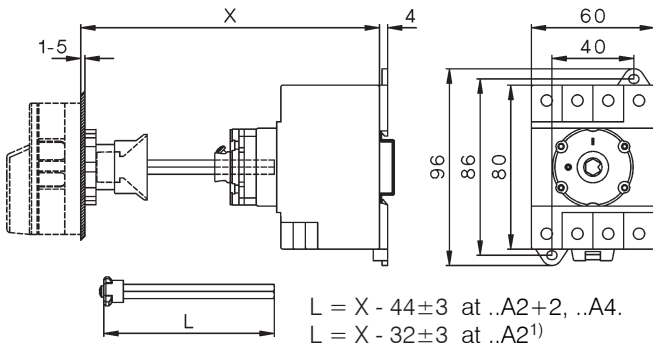


Mounting hole



**Dimensions:**

**LS16 V., LS25 V., LS32 V.,**

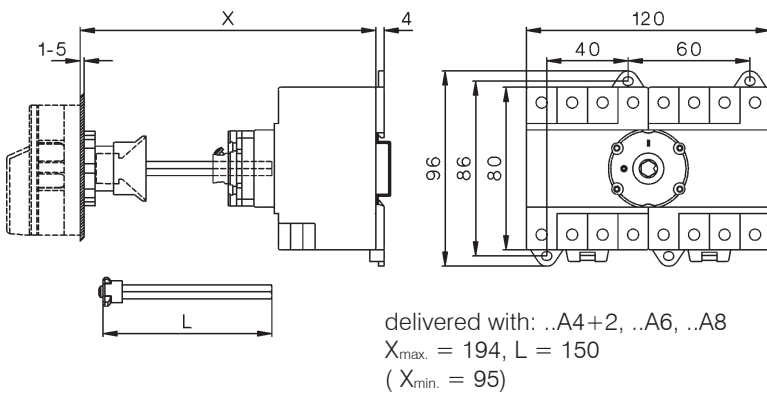


delivered with: ..A2+2, ..A4. :  
 $X_{max.} = 194, L = 150$   
 (  $X_{min.} = 95$  )

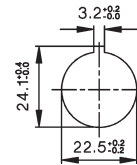
delivered with: ..A2  
 $X_{max.} = 182, L = 150$   
 (  $X_{min.} = 83$  )

greater X-Dimensions on request

**LS16 V., LS25 V., LS32 V.,  
 ..A6, ..A8, ..A3+2, ..A4+2**

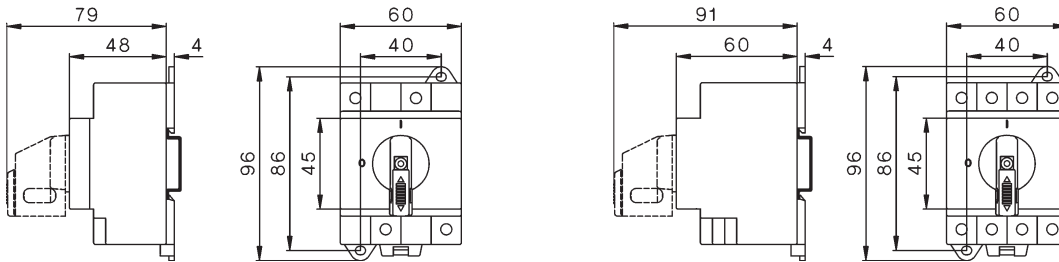


Mounting hole

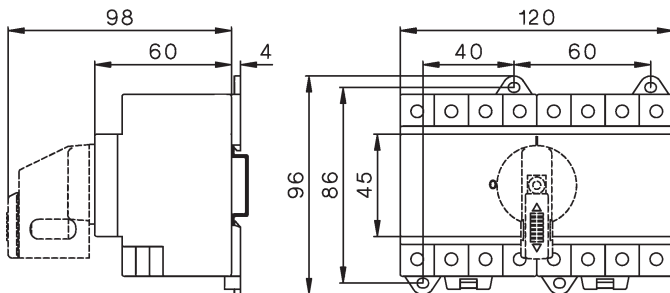


**LS16 SMA., LS25 SMA., LS32 SMA.,  
 ..A2 ..**

**A2+2, ..A4.**

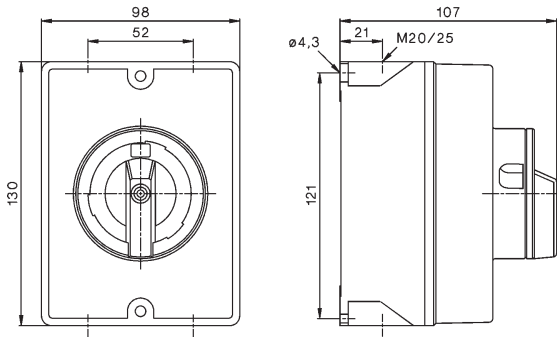


**LS16 SMA., LS25 SMA., LS32 SMA.,  
 ..A6, ..A8, ..A3+2, ..A4+2**

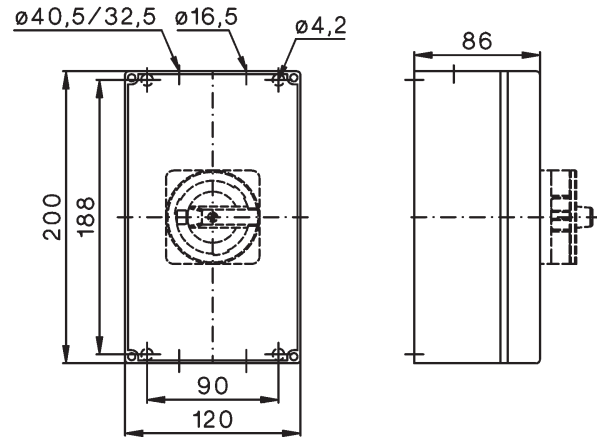


**Dimensions:**

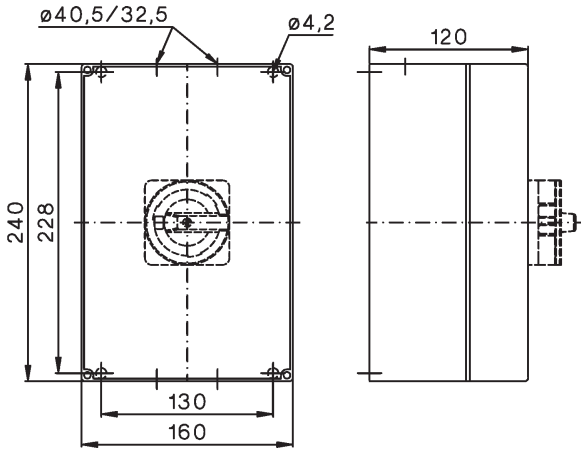
LS16 PF., LS25 PF., LS32 PF.,  
..A2, ..A2+2, ..A4.



LS16 PF2., LS25 PF2., LS32 PF2..  
..A2, ..A2+2, ..A4.



LS16 PF., LS25 PF., LS32 PF.,  
..A6, ..A8, ..A3+2, ..A4+2







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