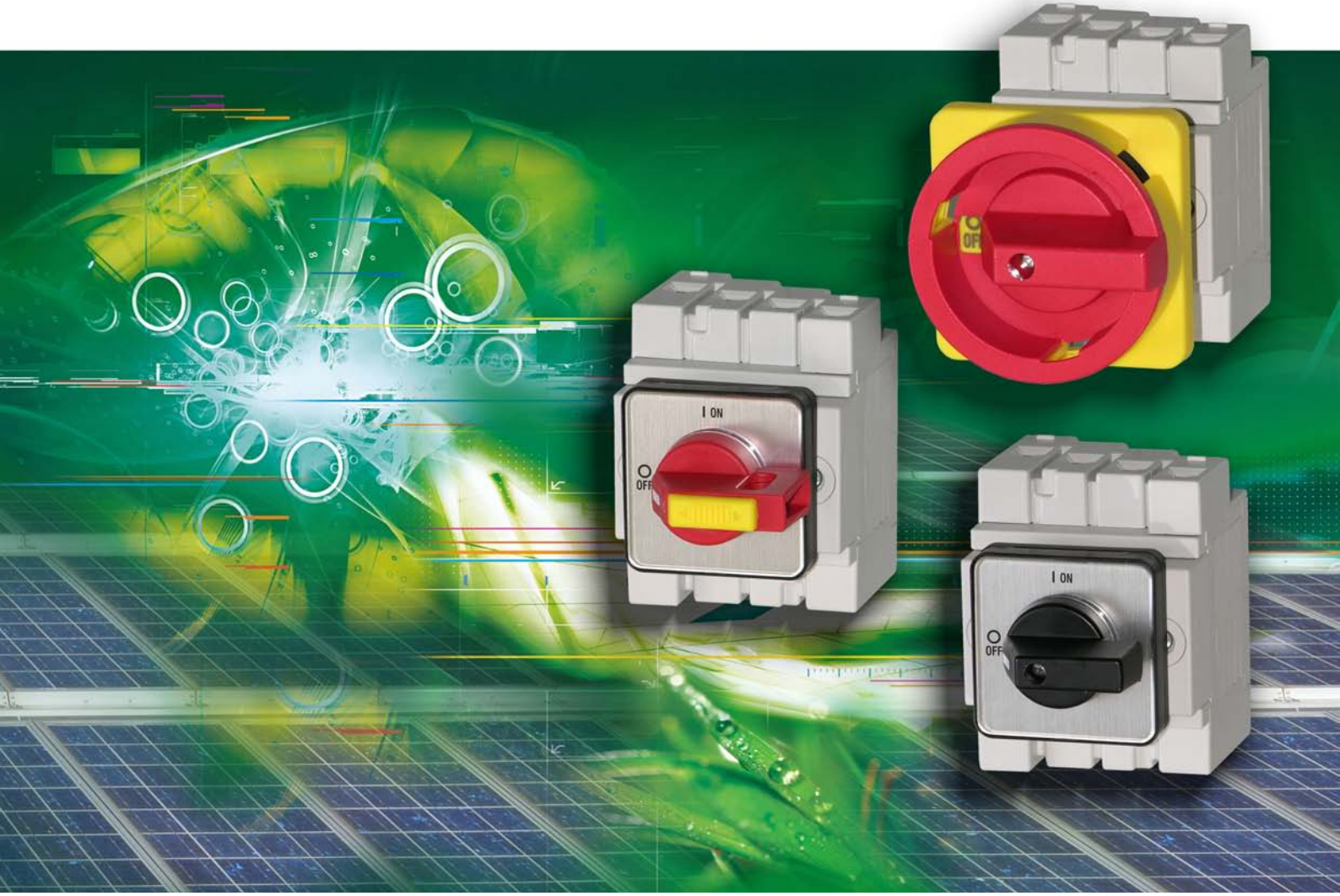
DC-Switch Disconnectors for Photovoltaic

acc. to IEC 60364-7-712



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- 1000V DC Rated operational voltage
- 32A Rated operational current
- 2- and 4-pole
- Oxydation proof contacts
- Cable cross sections up to 16mm²

DC-Switch Disconnectors

Design

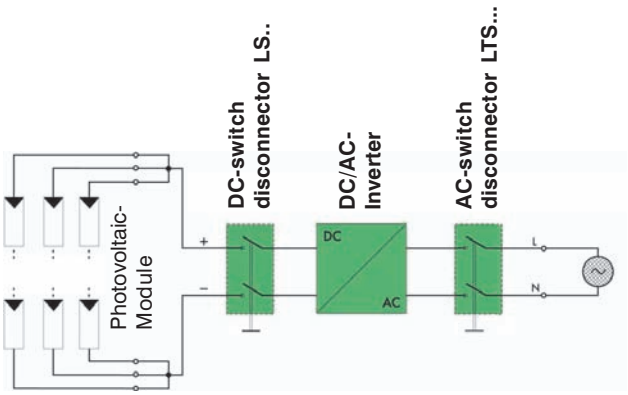
Type	I_{th} open A	DC21B 4 poles in series A	at U_e V	Panel mounting	Single hole mounting Ø22,5mm	Base mounting w. door coupling	Modular switch	Plastic enclosed
LS16	16	16	1000	.. E ..*)	.. Z ..	.. VZV ..	.. SMA ..	.. PF ..
LS25	25	25	1000	.. E ..	.. Z ..	.. VZV ..	.. SMA ..	.. PF ..
LS32	32	32	1000	.. E ..	.. Z ..	.. VZV ..	.. SMA ..	.. PF ..

*) Type-suffix for switch program: A 2 2-pole
A 4 4-pole

Wiring diagram see below

Switch Disconnectors for Photovoltaic

Switch disconnectors „LS..“ are switch gears for interupting 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.

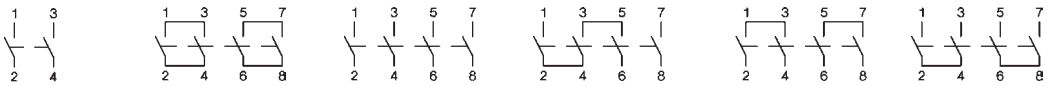
The switch disconnector has 2, 3 or 4 contacts, by serial wiring of the contacts the contact rating will be increased.

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

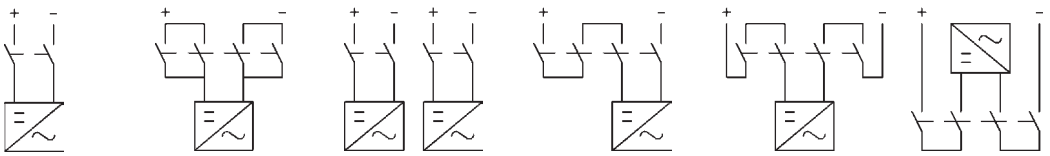
Switching programs

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

Contacts Wiring diagram



Switching example



Insulated Jumper

LSV-B1 for series and parallel switching of contacts

Type	Pack	Weigth
LSV-B1	1	

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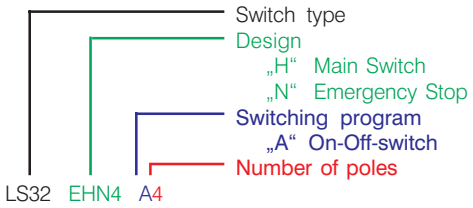
DC-Main Switch Emergency Stop					DC-Main Switch			
Panel mounting	Single hole mounting Ø22,5mm	Base mounting w. door coupling	Modular switch	Plastic enclosed	Panel mounting	Single hole mounting Ø22,5mm	Base mounting w. door coupling	Modular switch
								
.. EHN. ..	.. ZHN1 ..	.. VZVHN4 ..	.. SMAHN1 ..	.. PFHN4 ..	.. EH4 ..	.. ZH1 ..	.. VZVH4 ..	.. SMAH1 ..
.. EHN. ..	.. ZHN1 ..	.. VZVHN4 ..	.. SMAHN1 ..	.. PFHN4 ..	.. EH4 ..	.. ZH1 ..	.. VZVH4 ..	.. SMAH1 ..
.. EHN. ..	.. ZHN1 ..	.. VZVHN4 ..	.. SMAHN1 ..	.. PFHN4 ..	.. EH4 ..	.. ZH1 ..	.. VZVH4 ..	.. SMAH1 ..

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

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

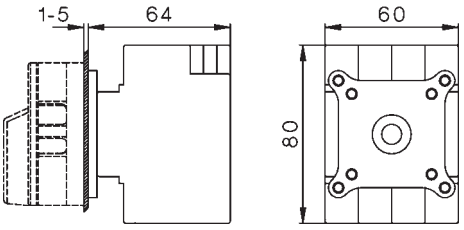
DC21B Switching of DC-resistive loads including moderate overloads, Time constant L/R≤1ms
DC22B Switching of DC-resistive and inducttive loads including moderate overloads, Time constant L/R≤2,5ms
(e. g: shunt-motors)

Ordering



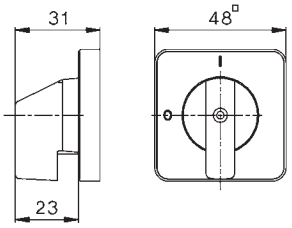
Dimensions:

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

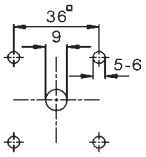


Escutcheon plate 48□

Handle

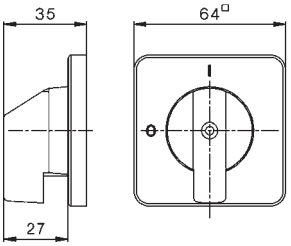


Mounting holes

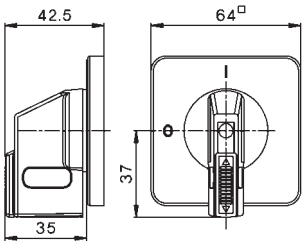


Escutcheon plate 64□

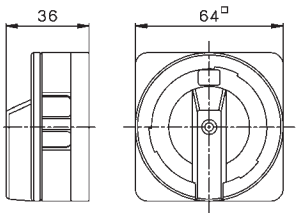
Handle



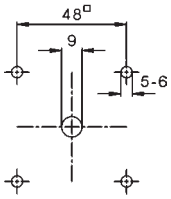
Padlock device SV1.



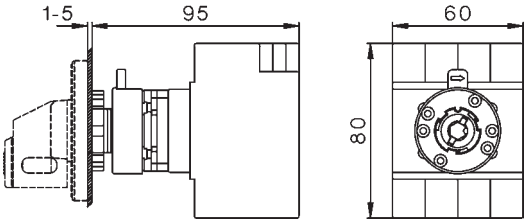
Padlock device SV4



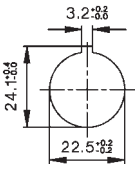
Mounting holes



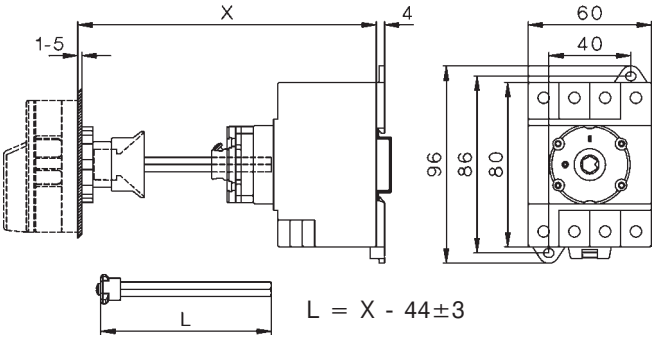
LS16 Z.., LS25 Z.., LS32 Z..,



Mounting hole

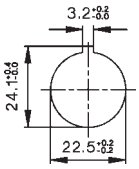


LS16 V.., LS25 V.., LS32 V..,



L = X - 44±3

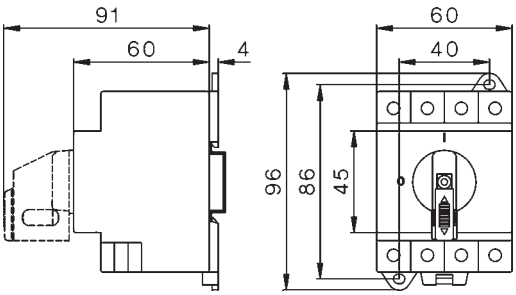
Mounting hole



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

greater X-Dimensions on request

LS16 SMA.., LS25 SMA.., LS32 SMA..,



LS16 PF.., LS25 PF.., LS32 PF..,