

Switch disconnectors

DS



Switches series DS have been developed to the latest achievements in the field of switching devices through the application of quality insulation materials and contacts made with silver alloys. Modular construction allows subsequent changes, so stocking costs can be lowered.

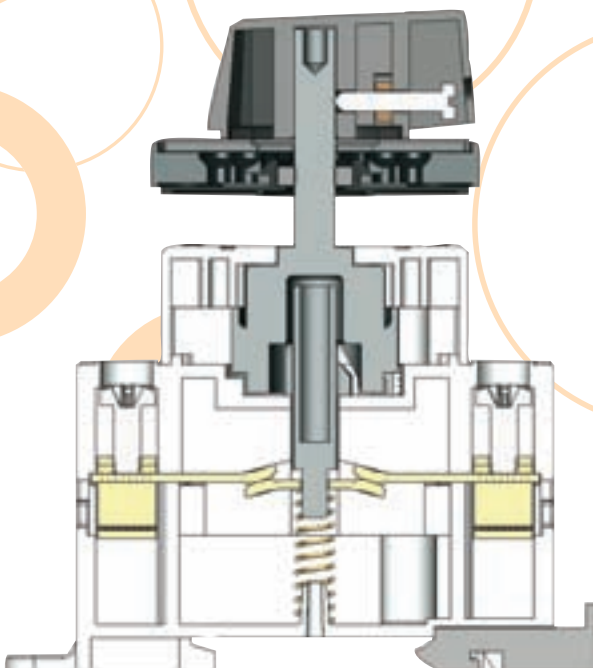
Elements that can be fixed to the left and/or right side of the switch:

- fourth pole (N-pole)
- auxiliary contacts 1n/o+1n/c
- auxiliary contacts 2 n/o
- PE terminal
- N terminal

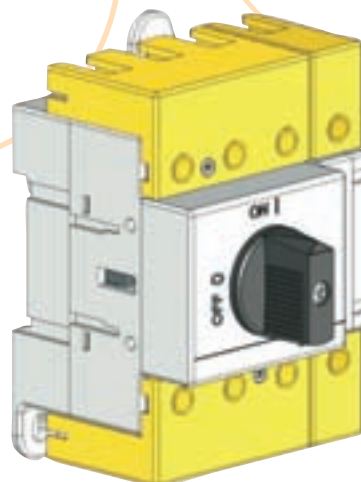
Because of the larger opening clearances the switches series DS are particularly suitable for main switches (switch disconnectors) and safety switches (emergency-off switches). Switches series DS are built in accordance with the following standards: IEC 60947-1,-3, IEC 60204, DIN EN 61058, UL 508,C22.2 No.14 etc.

General:

- Two modular frame sizes:
A0 size (16-25-32-40 A)
A1 size (40-63-80 A)
- Mechanical protection degree - front part IP65, connection terminals IP20 (for switches CS40,63,80 - option with protection cover is required)
- Positive contacts opening (IEC 60947-5-1 Annex K)
- Loosely screwed "self-lifting" clamps offer easier connection
- DIN-rail or screw mounting



Type	Type	I / U _{th i}
DS16	A0 (48)	16 A / 600 V
DS25	A0 (48)	25 A / 600 V
DS32	A0 (48)	32 A / 600 V
DS40R	A0 (48)	40 A / 600 V
DS40	A1 (65)	40 A / 600 V
DS63	A1 (65)	63 A / 600 V
DS80	A1 (65)	80 A / 600 V



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TECHNICAL DATA

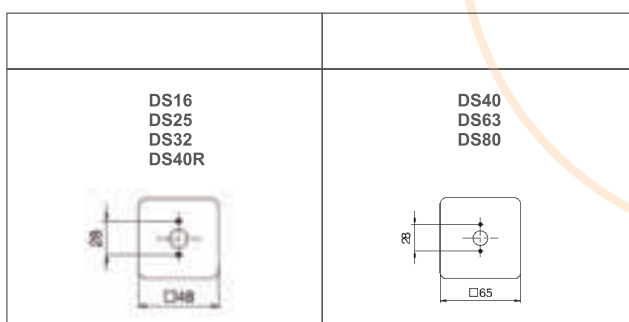
Switch type			DS16	DS25	DS32	DS40R	DS40	DS63	DS80	
Rated insulation voltage	U_i	V	690							
Rated impulse withstand voltage (III/3) ¹⁾	U_{imp}	kV	6							
Rated thermal current	I_{th}	A	16	25	32	40	40	63	80	
Rated short-time withstand current (1 s)	I_{cw}	A	400	500	600	600	1100	1300	1400	
Max. fuse size for short circuit protection	10 kA		35	35	35	40	80	80	80	
gG characteristic	25 kA	I_n	32	32	32	32	63	63	63	
	50 kA		32	32	32	32	63	63	63	
Rated operational current AC1/AC21A	I_e	A	16	25	32	40	40	63	80	
Motor switch in utilization category	3 phase AC3	220/240 V	kW	3.7	5.5	7.5	7.5	11	11	15
		380/440 V		3.5	7.5	11	11	15	22	25
		500 V		7.5	11	15	15	22	25	30
		690 V		7.5	11	15	15	22	25	25
	3 phase AC23	220/240 V		4	7.5	9	9	11	15	18.5
		380/440 V		7.5	11	15	15	18.5	25	30
		500 V		9	15	15	15	22	30	37
		690 V		9	15	15	15	22	30	30
Conductor size	rigid	mm ²	S	10	10	10	10	25	25	25
		AWG	8	8	8	8	4	4	4	
	flexible	mm ²	6	6	6	6	16	16	16	
		AWG	10	10	10	10	6	6	6	

¹⁾ valid for neutral earthed systems, overvoltage category III, pollution degree 3

AUXILIARY CONTACTS




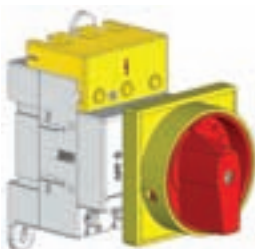

Type			DSX	
Rated insulation voltage	U_i	V	690	
Rated thermal current	I_{th}	A	10	
Rated operational current	110 V	I_e	A	8
	220-240 V			8
	380-400 V			3
	660-690 V			1
Conductor size	rigid	mm ²	S	1.5
		AWG	14	
	flexible	mm ²	1.5	
		AWG	14	

MOUNTING SIZES



Switch disconnectors

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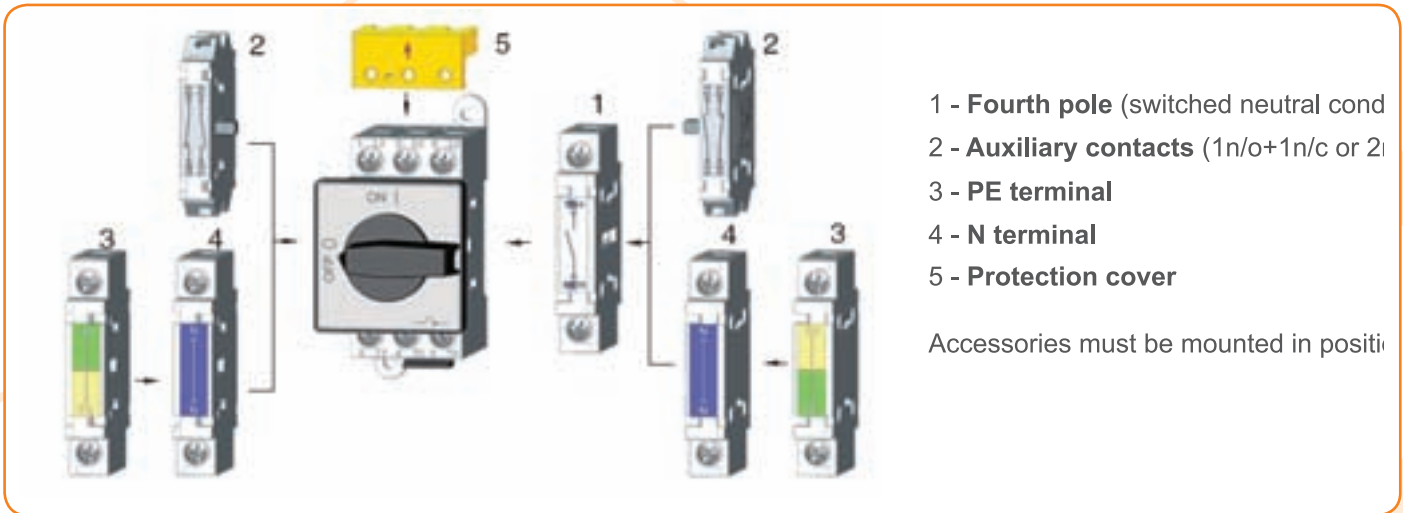
STANDARD DESIGNS AND OPTIONAL EXTRAS							
	Name	Form	Code				Description
			1	2	3	4	
STANDARD SWITCHES	N Front mounting		DS16 DS25 DS32 DS40R	- - - -	- - - -	D D D D	Standard front mounting - front assembly □48 Standard front mounting - front assembly □65
	N Rear mounting		DS16 DS25 DS32 DS40R	- - - -	- - - -	C C C C	Standard rear mounting - front assembly □48 Standard rear mounting - front assembly □65
	Service cover		DS16 DS25 DS32 DS40R DS40 DS63 DS80	- - - - - - -	- - - - - - -	C C C C C C C	48D 48D 48D 48D 48D 48D 48D Snap on base mounting for the rail 35 EN 50022 for 45 mm standard knock-out
	Switch with padlock		DS16 DS25 DS32 DS40R DS40 DS63 DS80	- - - - - - -	- - - - - - -	D/C D/C D/C D/C D/C D/C D/C	23 23 23 23 23 23 23 Main switch - black handle and front plate ¹⁾ DS16 DS25 DS32 DS40R DS40 DS63 DS80 D/C D/C D/C D/C D/C D/C D/C 25 25 25 25 25 25 25 Main switch with emergency - red handle, yellow front plate ¹⁾
DOOR COUPLING	N Door coupling and shaft extension		DS16 DS25 DS32 DS40R	- - - -	- - - -	D D D D	DS40 DS63 DS80 - - - D D D Door opening in position "0" Standard version with 100 mm shaft

"N" - possibility of front plate title

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ACCESSORIES



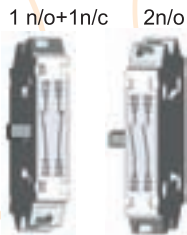
ORDERING CODES FOR ACCESSORIES

4 pole early make - late break



Mounting size A0	"C"	"D"
DSF16	786 120 118 000	786 120 112 000
DSF25	786 120 119 000	786 120 113 000
DSF32	786 120 120 000	786 120 114 000
DSF40R	786 120 122 000	786 120 123 000
Mounting size A1	"C"	"D"
DSF40	786 120 121 000	786 120 115 000
DSF63	786 120 124 000	786 120 116 000
DSF80	786 120 125 000	786 120 117 000

Auxiliary contacts n/o contact: late make - early break



Type of auxiliary contacts	"C"	"D"
DSX11	786 125 061 000	786 125 043 000
DSX20	786 125 044 000	786 125 062 000

PE terminal



Type of switch	"C"	"D"
DSPE (DS16 - DS40R)	786 125 055 000	786 125 057 000
DSPE M (DS40 - DS80)	786 125 056 000	786 125 058 000

"C" - Rear mounting
 "D" - Front mounting mounting

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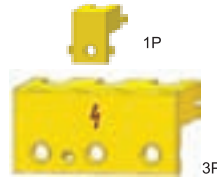
ORDERING CODES FOR ACCESSORIES

N terminal



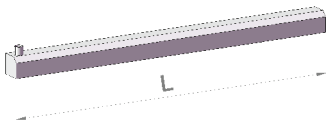
Type of switch	"C"	"D"
DSN (DS16 - DS40R)	786 125 049 000	786 125 051 000
DSN M (DS40 - DS80)	786 125 050 000	786 125 052 000

Protection cover



Number of poles	"C" or "D"
DSP1	786 125 053 000
DSP3	786 125 054 000

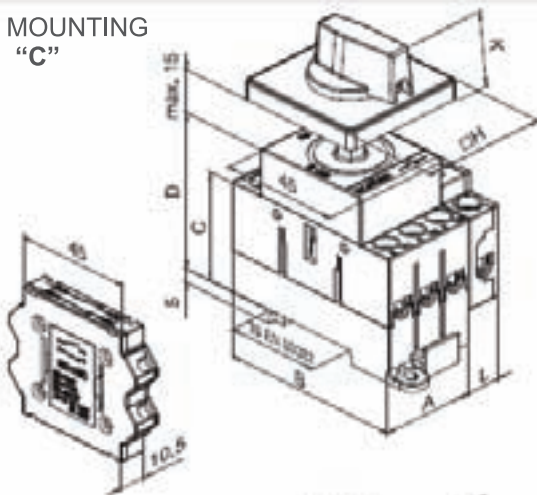
Shaft



X (mm)	
DSS70	786 125 045 000
DSS90	786 125 046 000
DSS100	786 125 059 000
DSS150	786 125 047 000
DSS200	786 125 060 000
DSS300	786 125 048 000

DIMENSIONS

REAR MOUNTING "C"



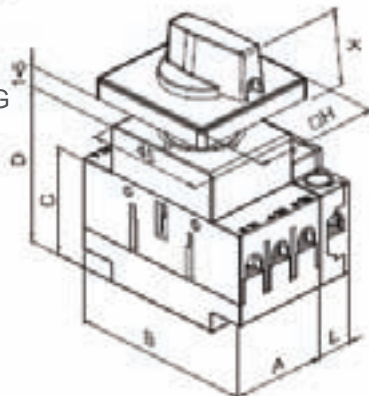
Front



Rear



FRONT MOUNTING "D"



Front



Type	A	B	C	D	E	F	ØG	H	K	L	M
DS16 DS25 DS32 DS40R	36	70	40	57	25	78	4.5	48	26.5	13.5	10.5
DS40 DS63 DS80	54	76	40	57	40	88	5.5	65	34.5	18	10.5

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DIMENSIONS

Protection cover for
main switch
DS40/63/80

Front

Type	E	G
DS16	34,2	5
DS25		
DS32		
DS40R		
DS40	38	6
DS63		
DS80		

Optional extra **06/23/25**

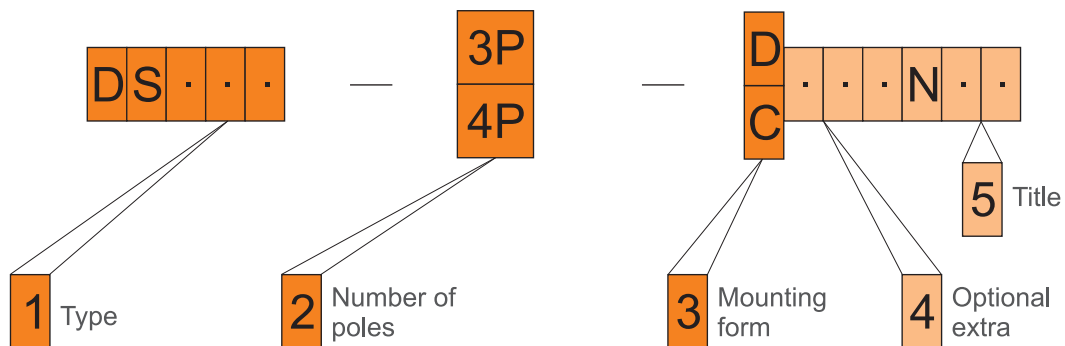
Optional extra **DSS100/200**

Code	X	Lmax
DSS100	100	175
DSS200	200	275

ORDERING CODE

When ordering please define:

- for **standard** switch 3 data types **123**
- for switch with an **optional extra** or with a **special request** max. 5 data types **123 45**



DESCRIPTION

- 1 Switch type.** To be chosen in accordance with the technical requests (see page 2)
- 2 Number of poles**
- 3 Standard mounting forms** (see page 3)
 - D – Front mounting
 - C – Rear mounting
- 4** To be marked when an optional extra is required (see page 3)
- 5** “N” is to be written when the front plate with a title is required. Possibility for N front plate (see pages 3)