

Main Switches



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Ratings

Main Switch Emergency Stop

Panel mounting

Single hole mount.

Base mounting
with door coupling
adjust. installation depth
IP66

Protection degree from front
in mounted position

IP66

Ø22,5mm
IP66

Rated current

Therm.

Motor

AC3

AC23

Plate

Switch

disconnect or
mm



Type

I_{th} open
A

AC21
A

at U_e
V

3~400V
kW

3~400V
A kW

Type	I _{th} open A	AC21 A	at U _e V	Motor AC3 3~400V kW	Motor AC23 3~400V A kW	Plate Switch disconnect or mm		LTS20 EHN1 .. LTS20 EHN4 ..	LTS20 ZHN1 ..	LTS20 VZVHN4 .. LTS20 VHN4 ..
LTS20	20	20	690	5,5	16	7,5	48□	LTS20 EHN1 .. LTS20 EHN4 ..	LTS20 ZHN1 ..	LTS20 VZVHN4 .. LTS20 VHN4 ..
LTS25	25	25	690	7,5	20	10	48□	LTS25 EHN1 .. LTS25 EHN4 ..	LTS25 ZHN1 ..	LTS25 VZVHN4 .. LTS25 VHN4 ..
LTS32	32	32	690	11	25	12,5	48□	LTS32 EHN1 .. LTS32 EHN4 ..	LTS32 ZHN1 ..	LTS32 VZVHN4 .. LTS32 VHN4 ..
LTS40	40	40	690	15	32	16	48□	LTS40 EHN1 .. LTS40 EHN4 ..	LTS40 ZHN1 ..	LTS40 VZVHN4 .. LTS40 VHN4 ..
LTS63	63	63	690	18,5	45	22	48□	LTS63 EHN1 .. LTS63 EHN4 ..	-	LTS63 VZVHN4 .. LTS63 VHN4 ..
LTS80	80	80	690	18,5	45	22	48□	LTS80 EHN1 .. LTS80 EHN4 ..	-	LTS80 VZVHN4 .. LTS80 VHN4 ..
LTS85	85	85	690	22	60	30	64□	LTS85 EHN4 ..	-	LTS85 VZVHN4 .. LTS85 VHN4 ..
LTS100	100	100	690	30	72	37	64□	LTS100 EHN4 ..	-	LTS100 VZVHN4 .. LTS100 VHN4 ..
LTS125	125	125	690	37	85	45	64□	LTS125 EHN4 ..	-	LTS125 VZVHN4 .. LTS125 VHN4 ..
LT160	160	160	690	45	110	55	88□	LT160 EHN34 ..	-	LT160 VHN34 ..

Switch disconnecter LT.. 20 - 160A

Switch disconnectors are to be used as an ON-OFF-switch where a high breaking capacity with high contact pressure and in fact better short circuit behavior is necessary. These applications are:

Main switches according to IEC/EN 60204 respectively VDE0113 with interlocking device, terminal protection and restrictive contacts.

Switch disconnectors according to IEC/EN 60947-3 and VDE 0660 part 107 with break distance for 690V.

Motor switches 3-pole or 4-pole; according to IEC/EN 60947-3 respectively VDE 0660 part 107, motor switches series LT are dimensioned for switching high rated current AC3 and AC23A.

Switch program

On-Off Switch 3-pole	● ● ● ● ● ●	A3
On-Off Switch 4-pole	● ● ● ● ● ●	A4
On-Off Switch 6-pole	● ● ● ● ● ●	A6
On-Off Switch 8-pole	● ● ● ● ● ●	A8
Changeover Switches 3-pole	● ● ● ● ● ●	U3
Changeover Switches 4-pole	● ● ● ● ● ●	U4
On-Off Switch 3-pole	● ● ● ● ● ●	T300 (for LT160)
On-Off Switch 4-pole	● ● ● ● ● ●	T400 (for LT160)

Main switches and Main switches with Emergency-Stop function

According to standards IEC/EN60204 or VDE0113, all electrical equipment of industrial machines must be equipped with a main switch. This must permit disconnection of all the electrical equipment during cleaning, maintenance and repair work, and other extended periods when it is stationary.

In case of two or more main switches, an interlock system must be used. It is recommended to use a multiple-pole main switch (cam switch).

Main switches have to correspond to:

- Switch disconnecter according to IEC/EN 60947-3 and VDE 0660 part 107 for utilization category AC23-B or DC-23B.
- Disconnectors are selected according to thermal rated current. They must possess a contact that ensures load switching via the contactors (see switching program A3-10). This contact must have a sufficient AC15 switching capacity.
- The interruption capacity of the switch must equal or exceed the locked rotor current of the largest motor plus the total current of all other electrical equipment in the circuit.

Requirements:

Interruption of the electrical equipment, with only on and off positions clearly marked with O and I.

It must be lockable in the off setting.

The line terminals of the main switch must be protected according to utilization category IP2X.

Colour of handle black or grey.

Main switches with Emergency-Off function are additional supplied with red handles and contrasting yellow escutcheon plates.



Main Switch Emergency Stop			Main Switch		Switch Disconnectors	
Base mounting w. door coupling depth not adjustable IP66	Modular switch IP40	Plastic enclosed IP66	Panel mounting IP66	Base mounting with door coupling IP66	Panel mounting IP66	Modular switch IP40
LTS20 VZHN1 .. LTS20 VZHN4 ..	LTS20 SMAHN1 ..	LTS20 PFHN4 ..	LTS20 EH1 .. LTS20 EH4 ..	LTS20 VZVH4 .. LTS20 VH4 ..	LTS20 E ..	LTS20 SMA ..
LTS25 VZHN1 .. LTS25 VZHN4 ..	LTS25 SMAHN1 ..	LTS25 PFHN4 ..	LTS25 EH1 .. LTS25 EH4 ..	LTS25 VZVH4 .. LTS25 VH4 ..	LTS25 E ..	LTS25 SMA ..
LTS32 VZHN1 .. LTS32 VZHN4 ..	LTS32 SMAHN1 ..	LTS32 PFHN4 ..	LTS32 EH1 .. LTS32 EH4 ..	LTS32 VZVH4 .. LTS32 VH4 ..	LTS32 E ..	LTS32 SMA ..
LTS40 VZHN1 .. LTS40 VZHN4 ..	LTS40 SMAHN1 ..	LTS40 PFHN4 ..	LTS40 EH1 .. LTS40 EH4 ..	LTS40 VZVH4 .. LTS40 VH4 ..	LTS40 E ..	LTS40 SMA ..
LTS63 VZHN1 .. LTS63 VZHN4 ..	LTS63 SMAHN1 ..	LTS63 PFHN4 ..	LTS63 EH1 .. LTS63 EH4 ..	LTS63 VZVH4 .. LTS63 VH4 ..	LTS63 E ..	LTS63 SMA ..
LTS80 VZHN1 .. LTS80 VZHN4 ..	LTS80 SMAHN1 ..	LTS80 PFHN4 ..	LTS80 EH1 .. LTS80 EH4 ..	LTS80 VZVH4 .. LTS80 VH4 ..	LTS80 E ..	LTS80 SMA ..
LTS85 VZHN4 ..	LTS85 SMAHN1 ..	LTS85 PFHN4 ..	LTS85 EH4 ..	LTS85 VZVH4 .. LTS85 VH4 ..	LTS85 E ..	LTS85 SMA ..
LTS100 VZHN4 ..	LTS100 SMAHN1 ..	LTS100 PFHN4 ..	LTS100 EH4 ..	LTS100 VZVH4 .. LTS100 VH4 ..	LTS100 E ..	LTS100 SMA ..
LTS125 VZHN4 ..	LTS125 SMAHN1 ..	LTS125 PFHN4 ..	LTS125 EH4 ..	LTS125 VZVH4 .. LTS125 VH4 ..	LTS125 E ..	LTS125 SMA ..
-	-	LT160 PFHN34 ..	LT160 EH34 ..	LT160 VH34 ..	LT160 E ..	-

Approvals

Area	USA, Canada / UL	Europe	Russia / GOST	CB/CCA-Certificates
Typ				

Switch disconnectors (UL-Listed as MANUAL MOTOR CONTROLLER and suitable as MOTOR DISCONNECT)

Model	USA, Canada / UL	Europe	Russia / GOST	CB/CCA-Certificates
LTS20	o	o	o	o
LTS25	o	o	o	o
LTS32	o	o	o	o
LTS40	o	o	o	o
LTS63	o	o	o	o
LTS80	o	o	o	o
LTS85	o	o	-	-
LTS100	o	o	-	-
LTS125	o	o	-	-
LT160	o	o	-	o

o in standard version approved / No testing required CE
x in test
- Not provided for test til now




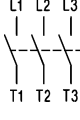

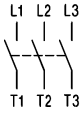

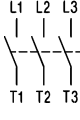
Terminal screws

Devices	Kind of connection					Tightening torque	
Typ	Screw with washer	Screw with clamp box	2 Screws	Screw with w. nut	Screwdriver	Nm	lb. inch

Switch Disconnectors

LTS20, LTS25	-	M3,5	-	-		Pz2	0,8 - 1,4	7 - 12
LTS32, LTS40	-	M5	-	-		Pz2	2,5 - 3	22 - 26
LTS63, LTS80	-	M6	-	-		Pz3	3,5 - 4,5	31 - 40
LTS85, LTS100, LTS125	-	M6	-	-				
LT160	-	M10	-	-			14	124

Emergency-Stop-Main Switches for Panel Mounting, lockable IP66

	max. padlocks	AC21 690V	AC23 3x400V	Plate	Type	Pack pcs.	Weight kg/pcs
3-pole, padlock device SV1 							
		20A	7,5kW	48 □ ¹⁾	LTS20 EHN1 A3	1	0,15
		25A	10kW	48 □ ¹⁾	LTS25 EHN1 A3	1	0,15
		32A	12,5kW	48 □ ¹⁾	LTS32 EHN1 A3	1	0,15
		40A	16kW	48 □ ¹⁾	LTS40 EHN1 A3	1	0,15
		63A	22kW	48 □ ¹⁾	LTS63 EHN1 A3	1	0,17
		80A	22kW	48 □ ¹⁾	LTS80 EHN1 A3	1	0,17
4-pole, padlock device SV1 							
		20A	7,5kW	48 □ ¹⁾	LTS20 EHN1 A4	1	0,19
		25A	10kW	48 □ ¹⁾	LTS25 EHN1 A4	1	0,19
		32A	12,5kW	48 □ ¹⁾	LTS32 EHN1 A4	1	0,19
		40A	16kW	48 □ ¹⁾	LTS40 EHN1 A4	1	0,19
		63A	22kW	48 □ ¹⁾	LTS63 EHN1 A4	1	0,21
		80A	22kW	48 □ ¹⁾	LTS80 EHN1 A4	1	0,21
6-pole, 8-pole					on request		
3-pole, padlock device SV4(34) 							
		20A	7,5kW	64 □ ²⁾	LTS20 EHN4 A3	1	0,17
		25A	10kW	64 □ ²⁾	LTS25 EHN4 A3	1	0,17
		32A	12,5kW	64 □ ²⁾	LTS32 EHN4 A3	1	0,17
		40A	16kW	64 □ ²⁾	LTS40 EHN4 A3	1	0,17
		63A	22kW	64 □ ²⁾	LTS63 EHN4 A3	1	0,19
		80A	22kW	64 □ ²⁾	LTS80 EHN4 A3	1	0,19
		85A	30kW	64 □ ²⁾	LTS85 EHN4 A3	1	0,39
		100A	37kW	64 □ ²⁾	LTS100 EHN4 A3	1	0,39
		125A	45kW	64 □ ²⁾	LTS125 EHN4 A3	1	0,39
		160A	55kW	88 □	LT160 EHN34 T300	1	1,16
4-pole, padlock device SV4(34) 							
		20A	7,5kW	64 □ ²⁾	LTS20 EHN4 A4	1	0,20
		25A	10kW	64 □ ²⁾	LTS25 EHN4 A4	1	0,20
		32A	12,5kW	64 □ ²⁾	LTS32 EHN4 A4	1	0,20
		40A	16kW	64 □ ²⁾	LTS40 EHN4 A4	1	0,20
		63A	22kW	64 □ ²⁾	LTS63 EHN4 A4	1	0,23
		80A	22kW	64 □ ²⁾	LTS80 EHN4 A4	1	0,23
		85A	30kW	64 □ ²⁾	LTS85 EHN4 A4	1	0,44
		100A	37kW	64 □ ²⁾	LTS100 EHN4 A4	1	0,44
		125A	45kW	64 □ ²⁾	LTS125 EHN4 A4	1	0,44
		160A	55kW	88 □	LT160 EHN34 T400	1	1,55




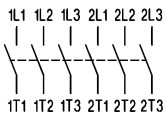



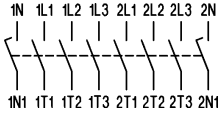
Add-on modules see page 276

Extended Switch Shaft for switches for panel mounting type suffix **+VW"x"** x = panel thickness

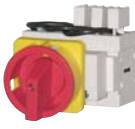

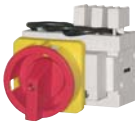
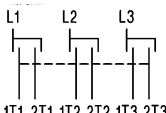



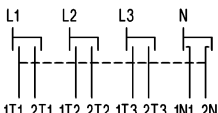
1) Types with padlock device 64 □ type suffix **64**, ordering example: LTS32 EHN**164** A3, on request

2) Types with padlock device 88 □ type suffix **88**, ordering example: LTS32 EHN**488** A3, on request








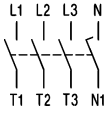
Emergency-Stop-Main Switches for Panel Mounting, lockable IP66

		max. padlocks	AC21 690V	AC23 3x400V	Plate	Type	Pack pcs.	Weight kg/pcs
6-pole, padlock device SV4 								
			20A	7,5kW	64 □	LTS20 EHN4 A6	1	0,30
			25A	10kW	64 □	LTS25 EHN4 A6	1	0,30
			32A	12,5kW	64 □	LTS32 EHN4 A6	1	0,30
			40A	16kW	64 □	LTS40 EHN4 A6	1	0,30
			63A	22kW	64 □	LTS63 EHN4 A6	1	0,34
			80A	22kW	64 □	LTS80 EHN4 A6	1	0,34
8-pole, padlock device SV4 								
			20A	7,5kW	64 □	LTS20 EHN4 A8	1	0,38
			25A	10kW	64 □	LTS25 EHN4 A8	1	0,38
			32A	12,5kW	64 □	LTS32 EHN4 A8	1	0,38
			40A	16kW	64 □	LTS40 EHN4 A8	1	0,38
			63A	22kW	64 □	LTS63 EHN4 A8	1	0,42
			80A	22kW	64 □	LTS80 EHN4 A8	1	0,42

Changeover Switch with Padlock Device for Panel Mounting, lockable IP66




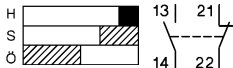










		max. padlocks	AC21 690V	AC23 3x400V	Plate	Type	Pack pcs.	Weight kg/pcs
3-pole, padlock device SV4 								
			20A	7,5kW	64 □	LTS20 EHN4 U3	1	0,30
			25A	10kW	64 □	LTS25 EHN4 U3	1	0,30
			32A	12,5kW	64 □	LTS32 EHN4 U3	1	0,30
			40A	16kW	64 □	LTS40 EHN4 U3	1	0,30
			63A	22kW	64 □	LTS63 EHN4 U3	1	0,34
4-pole, padlock device SV4 								
			20A	7,5kW	64 □	LTS20 EHN4 U4	1	0,38
			25A	10kW	64 □	LTS25 EHN4 U4	1	0,38
			32A	12,5kW	64 □	LTS32 EHN4 U4	1	0,38
			40A	16kW	64 □	LTS40 EHN4 U4	1	0,38
			63A	22kW	64 □	LTS63 EHN4 U4	1	0,42

Main Switches Emergency-Stop for Single Hole Mounting, lockable IP66



		max. padlocks	AC21 690V	AC23 3x400V	Plate	Type	Pack pcs.	Weight kg/pcs
3-pole, padlock device SV1 								
			20A	7,5kW	48 □	LTS20 ZHN1 A3	1	0,16
			25A	10kW	48 □	LTS25 ZHN1 A3	1	0,16
			32A	12,5kW	48 □	LTS32 ZHN1 A3	1	0,16
			40A	16kW	48 □	LTS40 ZHN1 A3	1	0,16
4-pole, padlock device SV1 								
			20A	7,5kW	48 □	LTS20 ZHN1 A4	1	0,20
			25A	10kW	48 □	LTS25 ZHN1 A4	1	0,20
			32A	12,5kW	48 □	LTS32 ZHN1 A4	1	0,20
			40A	16kW	48 □	LTS40 ZHN1 A4	1	0,20

Add-on modules see page 276

















Add-on Modules for Main Switches, Panel Mounting and Single Hole Mounting

	for switch	Type	Pack pcs.	Weight kg/pcs	
	4th Add-on Neutral Switching Pole				
		LTS20 ... to LTS40 ... LTS63 ... , LTS80 ...	N40E N80E	1 1	0,035 0,042
	Aux. Contact Block 1NO + 1NC				
		LTS20 ... to LTS125 ...	LH11	1	0,02
	Aux. Contact Block 1NO + 1NC Overlapping				
		LTS20 ... to LTS125 ...	LH11X	1	0,02
	Aux. Contact Block 2NC				
		LTS20 ... to LTS125 ...	LH20V/02E	1	0,02
	PE-Terminal				
		LTS20 ... to LTS80 ... LT125 E.. to LT160 E..	PE80E LTXX-E/E	1 1	0,04 0,2
	N-Terminal				
		LTS20 ... to LTS80 ... LT125 E.. to LT160 E..	PEN80E LTXX-N/E	1 1	0,04 0,2
	Terminal Cover 3-pole				
		LTS20 ... to LTS80 ... LTS85.. to LTS125. LT125.. to LT160..	KLAD70 KLAD125 XX-KLAD3	1 1 1	0,005 0,01 0,02
	Terminal Cover for 4th pole				
	Mains Load circuit	LTS20 ... to LTS80.. LTS20 ... to LTS80..	KLAD70N KLAD70NI	1 1	0,002 0,002
	Terminal Cover 4-pole				
		LTS85.. to LTS125. LT125.. to LT160..	KLAD125 XX-KLAD4	1 1	0,01 0,02

Accessories for Main Switches, Panel Mounting, Single Hole and Base Mounting



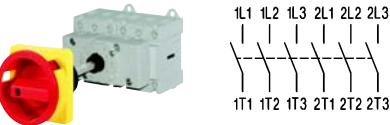
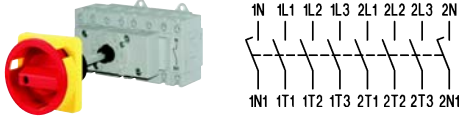
	for switch	Type	Pack pcs.	Weight kg/pcs
	Additional Escutcheon Plate Yellow, Marked with: HAUPTSCHALTER			
	for plate 48□ for plate 64□	LTS.. .HN1.. LTS.. .HN4..	A91501 E91501	1 1
	Additional Escutcheon Plate Yellow, Marked with: MAIN SWITCH			
	for plate 48□ for plate 64□	LTS.. .HN1.. LTS.. .HN4..	A91524 E91524	1 1

Add-on Modules for Main Switches, Base and Rail Mounting

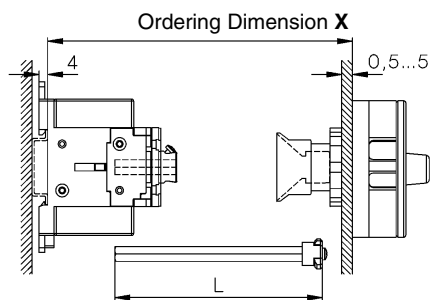
	for switch	Type	Pack pcs.	Weight kg/pcs
	 N N1	LTS20 ... , LTS40 ...	N40V	1 0,035
		LTS63 ... , LTS80 ...	N80V	1 0,042
	 13 21 14 22	LTS20 ... to LTS125 ...	LH11	1 0,02
	 47 35 48 36	LTS20 ... to LTS125 ...	LH11X	1 0,02
	 13 23 14 24	LTS20 ... to LTS125 ...	LH20V/02E	1 0,02
	 PE PE	LTS20 ... to LTS80 ...	PE80V	1 0,04
		LT125 .. to LT160 ..	LTXE-E/V	1 0,2
	 N N	LTS20 ... to LTS80 ...	PEN80V	1 0,04
		LT125 .. to LT160 ..	LTXE-N/V	1 0,2
		LTS20 ... to LTS40 ...	KLAD40	1 0,005
		LTS63 ... to LTS80 ...	KLAD70	1 0,005
		LTS85.. to LTS125.	KLAD125	1 0,01
		LT125.. to LT160..	XX-KLAD3	1 0,02
		Mains	KLAD70N	1 0,002
		Load circuit	KLAD70NI	1 0,002
		LTS20 ... to LTS40 ...	KLAD40	1 0,005
		LTS85.. to LTS125.	KLAD125	1 0,01
		LT125.. to LT160..	XX-KLAD4	1 0,02
		LTS20 ... to LTS40 ...	LG11073	10 0,001
		Additional Cover SMA for	LG8628	1 0,047
		4.Pole	N40V, N80V	
		Aux. Contacts	LH..	
		PE and N-Terminal	PE80V, PEN80V	

Emergency-Stop-Main Switches, Base Mounting with Door Clutch for Single-Hole Mounting

Depth X is adjustable (delivered with X_{max} see below), IP66

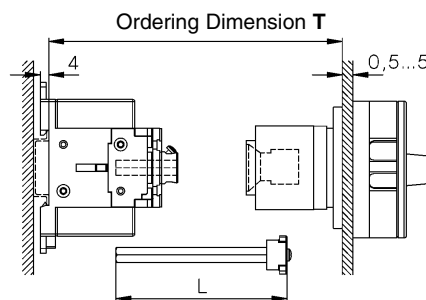
	max. padlocks	AC21 690V	AC23 3x400V	Plate	Type	Pack pcs.	Weight kg/pcs
3-pole, padlock device SV4							
	3	20A	7,5kW	64 □	LTS20 VZVHN4 A3	1	0,19
	3	25A	10kW	64 □	LTS25 VZVHN4 A3	1	0,19
	3	32A	12,5kW	64 □	LTS32 VZVHN4 A3	1	0,19
	3	40A	16kW	64 □	LTS40 VZVHN4 A3	1	0,19
	3	63A	22kW	64 □	LTS63 VZVHN4 A3	1	0,22
	3	80A	22kW	64 □	LTS80 VZVHN4 A3	1	0,22
	3	85A	30kW	64 □	LTS85 VZVHN4 A3	1	0,40
	3	100A	37kW	64 □	LTS100 VZVHN4 A3	1	0,40
	3	125A	45kW	64 □	LTS125 VZVHN4 A3	1	0,40
	4-pole, padlock device SV4						
	3	20A	7,5kW	64 □	LTS20 VZVHN4 A4	1	0,20
	3	25A	10kW	64 □	LTS25 VZVHN4 A4	1	0,20
	3	32A	12,5kW	64 □	LTS32 VZVHN4 A4	1	0,20
	3	40A	16kW	64 □	LTS40 VZVHN4 A4	1	0,20
	3	63A	22kW	64 □	LTS63 VZVHN4 A4	1	0,26
	3	80A	22kW	64 □	LTS80 VZVHN4 A4	1	0,26
	3	85A	30kW	64 □	LTS85 VZVHN4 A4	1	0,45
	3	100A	37kW	64 □	LTS100 VZVHN4 A4	1	0,45
	3	125A	45kW	64 □	LTS125 VZVHN4 A4	1	0,45
	6-pole, padlock device SV4						
	3	20A	7,5kW	64 □	LTS20 VZVHN4 A6	1	0,32
	3	25A	10kW	64 □	LTS25 VZVHN4 A6	1	0,32
	3	32A	12,5kW	64 □	LTS32 VZVHN4 A6	1	0,32
	3	40A	16kW	64 □	LTS40 VZVHN4 A6	1	0,32
	3	63A	22kW	64 □	LTS63 VZVHN4 A6	1	0,37
	3	80A	22kW	64 □	LTS80 VZVHN4 A6	1	0,37
	8-pole, padlock device SV4						
	3	20A	7,5kW	64 □	LTS20 VZVHN4 A8	1	0,34
	3	25A	10kW	64 □	LTS25 VZVHN4 A8	1	0,34
	3	32A	12,5kW	64 □	LTS32 VZVHN4 A8	1	0,34
	3	40A	16kW	64 □	LTS40 VZVHN4 A8	1	0,34
	3	63A	22kW	64 □	LTS63 VZVHN4 A8	1	0,45
	3	80A	22kW	64 □	LTS80 VZVHN4 A8	1	0,45

Depth Single Hole Mounting Ø22mm LTS.. VZV..



Type	X min	X max	L
LTS20-80 VZV.. 3, 4-pole	91 -	190	X - 40±3
LTS20-80 VZV.. 6, 8-pole	111 -	190	X - 60±3
LTS85-125 VZV.. 3, 4-pole	95-	190	X - 44±3

4-Hole Mounting LTS.. V(HN).. (3, 4-pole)


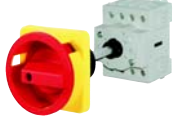


Type	T min	T max	L	Type	T min	T max
LTS20-80 VH..	111 -	190	T - 60±3	LT160 VH..	120 -	450
LTS85-125 VH..	115 -	190	T - 64±3			

greater X- and T-Dimensions (max. 380mm for LTS..) on request


Emergency-Stop-Main Switches, Base Mounting with Door Clutch, Padlock Device for Four-Hole Mounting

Depth T is adjustable (delivered with T_{max} see page 278), IP66

	max. padlocks	AC21 690V	AC23 3x400V	Plate	Type	Pack pcs.	Weight kg/pcs
3-pole, padlock device SV4(34) 							
		20A	7,5kW	64 □ 1)	LTS20 VHN4 A3	1	0,20
		25A	10kW	64 □ 1)	LTS25 VHN4 A3	1	0,20
		32A	12,5kW	64 □ 1)	LTS32 VHN4 A3	1	0,20
		40A	16kW	64 □ 1)	LTS40 VHN4 A3	1	0,20
		63A	22kW	64 □ 1)	LTS63 VHN4 A3	1	0,24
		80A	22kW	64 □ 1)	LTS80 VHN4 A3	1	0,24
		85A	30kW	64 □ 1)	LTS85 VHN4 A3	1	0,40
		100A	37kW	64 □ 1)	LTS100 VHN4 A3	1	0,40
		125A	45kW	64 □ 1)	LTS125 VHN4 A3	1	0,40
		160A	55kW	88 □	LT160 VHN34 T300	1	1,38
4-pole, padlock device SV4(34) 							
		20A	7,5kW	64 □ 1)	LTS20 VHN4 A4	1	0,21
		25A	10kW	64 □ 1)	LTS25 VHN4 A4	1	0,21
		32A	12,5kW	64 □ 1)	LTS32 VHN4 A4	1	0,21
		40A	16kW	64 □ 1)	LTS40 VHN4 A4	1	0,21
		63A	22kW	64 □ 1)	LTS63 VHN4 A4	1	0,28
		80A	22kW	64 □ 1)	LTS80 VHN4 A4	1	0,28
		85A	30kW	64 □ 1)	LTS85 VHN4 A4	1	0,45
		100A	37kW	64 □ 1)	LTS100 VHN4 A4	1	0,45
		125A	45kW	64 □ 1)	LTS125 VHN4 A4	1	0,45
		160A	55kW	88 □	LT160 VHN34 T400	1	1,77
6-pole, 8-pole Changeover Switch with Padlock Device for Base Mounting					on request on request		

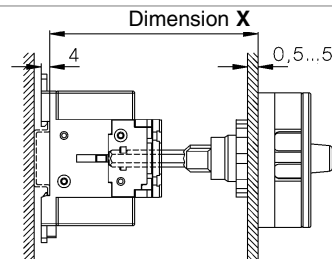
Emergency-Stop-Main Switches, Base Mounting with Door Clutch for Single-Hole Mounting

Depth X is not adjustable, declare depth X when ordering, IP66

4-pole, padlock device SV4 							
		20A	7,5kW	64 □	LTS20 VZHN4 A4 X..	1	0,18
		25A	10kW	64 □	LTS25 VZHN4 A4 X..	1	0,18
		32A	12,5kW	64 □	LTS32 VZHN4 A4 X..	1	0,18
		40A	16kW	64 □	LTS40 VZHN4 A4 X..	1	0,18
		63A	22kW	64 □	LTS63 VZHN4 A4 X..	1	0,25
		80A	22kW	64 □	LTS80 VZHN4 A4 X..	1	0,25
3-pole, 6-pole, 8-pole					on request		

Declare depth X when ordering


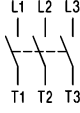

Type	Preference values for X
LTS.. VZH..	80, 85, 104, 129 (tolerance -3, +1,5)


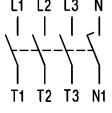




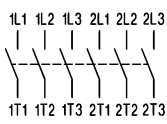

Add-on modules see page 277


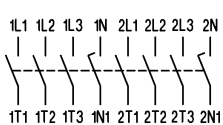

1) Types with padlock device 88 □ type suffix **88**, ordering example: LTS32 VHN4**88** A3, on request

Emergency-Stop-Main Switches for Distribution Boards, lockable IP40

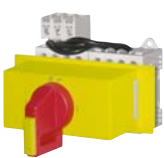
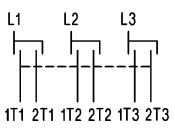

	max. padlocks	AC21 690V	AC23 3x400V	Plate	Type	Pack pcs.	Weight kg/pcs
3-pole, padlock device SV1  		20A	7,5kW	52x45	LTS20 SMAHN1 A3 ²⁾	1	0,15
		25A	10kW	52x45	LTS25 SMAHN1 A3 ²⁾	1	0,15
		32A	12,5kW	52x45	LTS32 SMAHN1 A3 ²⁾	1	0,15
		40A	16kW	52x45	LTS40 SMAHN1 A3 ²⁾	1	0,15
		63A	22kW	52x45	LTS63 SMAHN1 A3 ²⁾	1	0,18
		80A	22kW	52x45	LTS80 SMAHN1 A3 ²⁾	1	0,18
		85A	30kW	78x45	LTS85 SMAHN1 A3	1	0,37
		100A	37kW	78x45	LTS100 SMAHN1 A3	1	0,37
125A	45kW	78x45	LTS125 SMAHN1 A3	1	0,37		


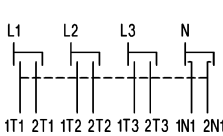

4-pole, padlock device SV1  		20A	7,5kW	52x45	LTS20 SMAHN1 A4 ²⁾	1	0,16
		25A	10kW	52x45	LTS25 SMAHN1 A4 ²⁾	1	0,16
		32A	12,5kW	52x45	LTS32 SMAHN1 A4 ²⁾	1	0,16
		40A	16kW	52x45	LTS40 SMAHN1 A4 ²⁾	1	0,16
		63A	22kW	52x45	LTS63 SMAHN1 A4 ²⁾	1	0,21
		80A	22kW	52x45	LTS80 SMAHN1 A4 ²⁾	1	0,21
		85A	30kW	78x45	LTS85 SMAHN1 A4	1	0,42
		100A	37kW	78x45	LTS100 SMAHN1 A4	1	0,42
125A	45kW	78x45	LTS125 SMAHN1 A4	1	0,42		

6-pole, padlock device SV1(64)  		20A	7,5kW	52x45	LTS20 SMAHN1 A6	1	0,29
		25A	10kW	52x45	LTS25 SMAHN1 A6	1	0,29
		32A	12,5kW	52x45	LTS32 SMAHN1 A6	1	0,29
		40A	16kW	52x45	LTS40 SMAHN1 A6	1	0,29
		63A	22kW	97x45	LTS63 SMAHN1 A6 ¹⁾	1	0,34
		80A	22kW	97x45	LTS80 SMAHN1 A6 ¹⁾	1	0,34

8-pole, padlock device SV164  		20A	7,5kW	97x45	LTS20 SMAHN1 A8	1	0,31
		25A	10kW	97x45	LTS25 SMAHN1 A8	1	0,31
		32A	12,5kW	97x45	LTS32 SMAHN1 A8	1	0,31
		40A	16kW	97x45	LTS40 SMAHN1 A8	1	0,31
		63A	22kW	126x45	LTS63 SMAHN1 A8	1	0,42
		80A	22kW	126x45	LTS80 SMAHN1 A8	1	0,42

Changeover Switch with Padlock Device for Distribution Boards, lockable



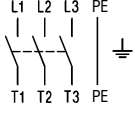


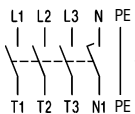


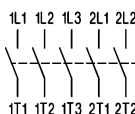


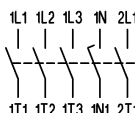


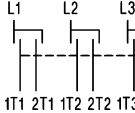


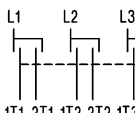
3-pole, padlock device SV164  		20A	7,5kW	97x45	LTS20 SMAHN1 U3	1	0,29
		25A	10kW	97x45	LTS25 SMAHN1 U3	1	0,29
		32A	12,5kW	97x45	LTS32 SMAHN1 U3	1	0,29
		40A	16kW	97x45	LTS40 SMAHN1 U3	1	0,29
		63A	22kW	97x45	LTS63 SMAHN1 U3	1	0,34

4-pole, padlock device SV164  		20A	7,5kW	97x45	LTS20 SMAHN1 U4	1	0,31
		25A	10kW	97x45	LTS25 SMAHN1 U4	1	0,31
		32A	12,5kW	97x45	LTS32 SMAHN1 U4	1	0,31
		40A	16kW	97x45	LTS40 SMAHN1 U4	1	0,31
		63A	22kW	126x45	LTS63 SMAHN1 U4	1	0,42





¹⁾ With padlock device SV164

²⁾ Emergency-Stop-Main Switches for Distribution Boards, lockable with low height handle, IP40
Type with Type-suffix „+SV1N“ e.g.: **LTS40 SMAHN1 A3 +SV1N**

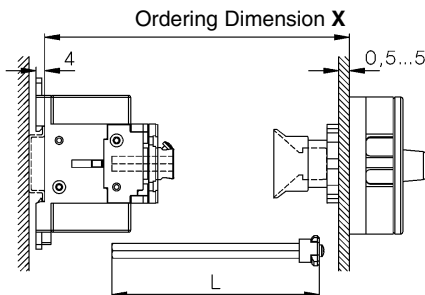
Maintenance and Safety Switches, in Plastic Enclosure, lockable IP66

	max. padlocks	AC21 690V	AC23 3x400V	Plate	Type	Pack pcs.	Weight kg/pcs
3-pole, padlock device SV4(34) 							
		20A	7,5kW	64 <input type="checkbox"/>	LTS20 PFHN4 A3	1	0,32
		25A	10kW	64 <input type="checkbox"/>	LTS25 PFHN4 A3	1	0,32
		32A	12,5kW	64 <input type="checkbox"/>	LTS32 PFHN4 A3	1	0,32
		40A	16kW	64 <input type="checkbox"/>	LTS40 PFHN4 A3	1	0,32
		63A	22kW	64 <input type="checkbox"/>	LTS63 PFHN4 A3	1	0,60
		80A	22kW	64 <input type="checkbox"/>	LTS80 PFHN4 A3	1	0,60
		85A	30kW	64 <input type="checkbox"/>	LTS85 PFHN4 A3	1	0,78
		100A	37kW	64 <input type="checkbox"/>	LTS100 PFHN4 A3	1	0,78
Larger enclosure		125A	45kW	64 <input type="checkbox"/>	LTS125 PFHN4 A3	1	0,78
Type: ..PFL..	on request	160A	55kW	88 <input type="checkbox"/>	LT160 PFHN34 T300	1	2,09
							
4-pole, padlock device SV4(34) 							
		20A	7,5kW	64 <input type="checkbox"/>	LTS20 PFHN4 A4	1	0,33
		25A	10kW	64 <input type="checkbox"/>	LTS25 PFHN4 A4	1	0,33
		32A	12,5kW	64 <input type="checkbox"/>	LTS32 PFHN4 A4	1	0,33
		40A	16kW	64 <input type="checkbox"/>	LTS40 PFHN4 A4	1	0,33
		63A	22kW	64 <input type="checkbox"/>	LTS63 PFHN4 A4	1	0,64
		80A	22kW	64 <input type="checkbox"/>	LTS80 PFHN4 A4	1	0,64
		85A	30kW	64 <input type="checkbox"/>	LTS85 PFHN4 A4	1	0,83
		100A	37kW	64 <input type="checkbox"/>	LTS100 PFHN4 A4	1	0,83
Larger enclosure		125A	45kW	64 <input type="checkbox"/>	LTS125 PFHN4 A4	1	0,83
Type appendix +PF3	on request	160A	55kW	88 <input type="checkbox"/>	LT160 PFHN34 T400	1	2,47
							
6-pole, padlock device SV4 							
		20A	7,5kW	64 <input type="checkbox"/>	LTS20 PFHN4 A6	1	1,39
		25A	10kW	64 <input type="checkbox"/>	LTS25 PFHN4 A6	1	1,39
		32A	12,5kW	64 <input type="checkbox"/>	LTS32 PFHN4 A6	1	1,39
		40A	16kW	64 <input type="checkbox"/>	LTS40 PFHN4 A6	1	1,39
		63A	22kW	64 <input type="checkbox"/>	LTS63 PFHN4 A6	1	1,42
		80A	22kW	64 <input type="checkbox"/>	LTS80 PFHN4 A6	1	1,42
knockoutlets M50/40							
Type appendix +PF3/M50	on request						
							
8-pole, padlock device SV4 							
		20A	7,5kW	64 <input type="checkbox"/>	LTS20 PFHN4 A8	1	1,44
		25A	10kW	64 <input type="checkbox"/>	LTS25 PFHN4 A8	1	1,44
		32A	12,5kW	64 <input type="checkbox"/>	LTS32 PFHN4 A8	1	1,44
		40A	16kW	64 <input type="checkbox"/>	LTS40 PFHN4 A8	1	1,44
		63A	22kW	64 <input type="checkbox"/>	LTS63 PFHN4 A8	1	1,50
		80A	22kW	64 <input type="checkbox"/>	LTS80 PFHN4 A8	1	1,50
knockoutlets M50/40							
Type appendix +PF3/M50	on request						
							
Changeover Switch with Padlock Device, lockable							
3-pole, padlock device SV4 							
		20A	7,5kW	64 <input type="checkbox"/>	LTS20 PFHN4 U3	1	1,39
		25A	10kW	64 <input type="checkbox"/>	LTS25 PFHN4 U3	1	1,39
		32A	12,5kW	64 <input type="checkbox"/>	LTS32 PFHN4 U3	1	1,39
		40A	16kW	64 <input type="checkbox"/>	LTS40 PFHN4 U3	1	1,39
		63A	22kW	64 <input type="checkbox"/>	LTS63 PFHN4 U3	1	1,42
		80A	22kW	64 <input type="checkbox"/>	LTS80 PFHN4 U3	1	1,42
							
4-pole, padlock device SV4 							
		20A	7,5kW	64 <input type="checkbox"/>	LTS20 PFHN4 U4	1	1,44
		25A	10kW	64 <input type="checkbox"/>	LTS25 PFHN4 U4	1	1,44
		32A	12,5kW	64 <input type="checkbox"/>	LTS32 PFHN4 U4	1	1,44
		40A	16kW	64 <input type="checkbox"/>	LTS40 PFHN4 U4	1	1,44
		63A	22kW	64 <input type="checkbox"/>	LTS63 PFHN4 U4	1	1,50
		80A	22kW	64 <input type="checkbox"/>	LTS80 PFHN4 U4	1	1,50
							

Main Switches, Base Mounting with Door Clutch, Padlock Device for Single-Hole Mounting Depth X is adjustable (delivered with X_{max} see below), IP66

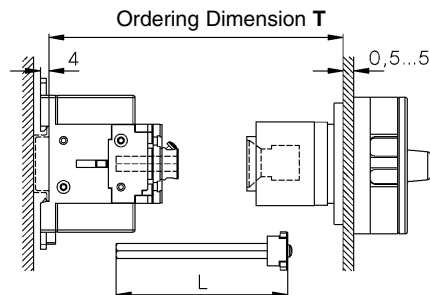
	max. padlocks	AC21 690V	AC23 3x400V	Plate	Type	Pack pcs.	Weight kg/pcs
3-pole, padlock device SV4 							
		20A	7,5kW	64 □	LTS20 VZVH4 A3	1	0,19
		25A	10kW	64 □	LTS25 VZVH4 A3	1	0,19
		32A	12,5kW	64 □	LTS32 VZVH4 A3	1	0,19
		40A	16kW	64 □	LTS40 VZVH4 A3	1	0,19
		63A	22kW	64 □	LTS63 VZVH4 A3	1	0,22
		80A	22kW	64 □	LTS80 VZVH4 A3	1	0,22
		85A	30kW	64 □	LTS85 VZVH4 A3	1	0,40
		100A	37kW	64 □	LTS100 VZVH4 A3	1	0,40
		125A	45kW	64 □	LTS125 VZVH4 A3	1	0,40
4-pole, padlock device SV4 							
		20A	7,5kW	64 □	LTS20 VZVH4 A4	1	0,20
		25A	10kW	64 □	LTS25 VZVH4 A4	1	0,20
		32A	12,5kW	64 □	LTS32 VZVH4 A4	1	0,20
		40A	16kW	64 □	LTS40 VZVH4 A4	1	0,20
		63A	22kW	64 □	LTS63 VZVH4 A4	1	0,26
		80A	22kW	64 □	LTS80 VZVH4 A4	1	0,26
		85A	30kW	64 □	LTS85 VZVH4 A4	1	0,45
		100A	37kW	64 □	LTS100 VZVH4 A4	1	0,45
		125A	45kW	64 □	LTS125 VZVH4 A4	1	0,45
6-pole, padlock device SV4 							
		20A	7,5kW	64 □	LTS20 VZVH4 A6	1	0,32
		25A	10kW	64 □	LTS25 VZVH4 A6	1	0,32
		32A	12,5kW	64 □	LTS32 VZVH4 A6	1	0,32
		40A	16kW	64 □	LTS40 VZVH4 A6	1	0,32
		63A	22kW	64 □	LTS63 VZVH4 A6	1	0,37
		80A	22kW	64 □	LTS80 VZVH4 A6	1	0,37
8-pole, padlock device SV4 							
		20A	7,5kW	64 □	LTS20 VZVH4 A8	1	0,34
		25A	10kW	64 □	LTS25 VZVH4 A8	1	0,34
		32A	12,5kW	64 □	LTS32 VZVH4 A8	1	0,34
		40A	16kW	64 □	LTS40 VZVH4 A8	1	0,34
		63A	22kW	64 □	LTS63 VZVH4 A8	1	0,45
		80A	22kW	64 □	LTS80 VZVH4 A8	1	0,45

Depth
Single Hole Mounting Ø22mm
LTS.. VZV..



Type	X min	X max	L
LTS20-80 VZV.. 3, 4-pole	91 -	190	X - 40±3
LTS20-80 VZV.. 6, 8-pole	111 -	190	X - 60±3
LTS85-125 VZV.. 3, 4-pole	95-	190	X - 44±3

4-Hole Mounting
LTS.. V(H).. (3, 4-pole)


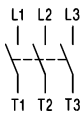

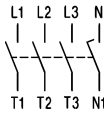


Type	T min	T max	L	Type	T min	T max
LTS20-80 VH..	111 -	190	T - 60±3	LT160 VH..	120 -	450
LTS85-125 VH..	115 -	190	T - 64±3			

greater X- and T-Dimensions (max. 380mm for LTS..) on request


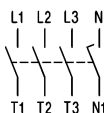
Main Switches, Base Mounting with Door Clutch, Padlock Device for Four-Hole Mounting

Depth T is adjustable (delivered with T_{max} see page 283), IP66

	max. padlocks	AC21 690V	AC23 3x400V	Plate	Type	Pack pcs.	Weight kg/pcs
3-pole, padlock device SV4(34)  							
		20A	7,5kW	64 □ 1)	LTS20 VH4 A3	1	0,20
		25A	10kW	64 □ 1)	LTS25 VH4 A3	1	0,20
		32A	12,5kW	64 □ 1)	LTS32 VH4 A3	1	0,20
		40A	16kW	64 □ 1)	LTS40 VH4 A3	1	0,20
		63A	22kW	64 □ 1)	LTS63 VH4 A3	1	0,24
		80A	22kW	64 □ 1)	LTS80 VH4 A3	1	0,24
		85A	30kW	64 □ 1)	LTS85 VH4 A3	1	0,40
		100A	37kW	64 □ 1)	LTS100 VH4 A3	1	0,40
		125A	45kW	64 □ 1)	LTS125 VH4 A3	1	0,40
		160A	55kW	88 □	LT160 VH34 T300	1	1,38
4-pole, padlock device SV4(34)  							
		20A	7,5kW	64 □ 1)	LTS20 VH4 A4	1	0,21
		25A	10kW	64 □ 1)	LTS25 VH4 A4	1	0,21
		32A	12,5kW	64 □ 1)	LTS32 VH4 A4	1	0,21
		40A	16kW	64 □ 1)	LTS40 VH4 A4	1	0,21
		63A	22kW	64 □ 1)	LTS63 VH4 A4	1	0,28
		80A	22kW	64 □ 1)	LTS80 VH4 A4	1	0,28
		85A	30kW	64 □ 1)	LTS85 VH4 A4	1	0,45
		100A	37kW	64 □ 1)	LTS100 VH4 A4	1	0,45
		125A	45kW	64 □ 1)	LTS125 VH4 A4	1	0,45
		160A	55kW	88 □	LT160 VH34 T400	1	1,77
6-pole, 8-pole	on request						

Emergency-Stop-Main Switches, Base Mounting with Door Clutch for Single-Hole Mounting

Depth X is not adjustable, declare depth X when ordering, IP66

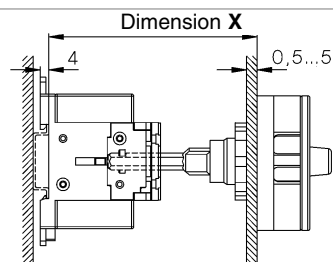
4-pole, padlock device SV4  							
		20A	7,5kW	64 □	LTS20 VZHN4 A4 X..	1	0,18
		25A	10kW	64 □	LTS25 VZHN4 A4 X..	1	0,18
		32A	12,5kW	64 □	LTS32 VZHN4 A4 X..	1	0,18
		40A	16kW	64 □	LTS40 VZHN4 A4 X..	1	0,18
		63A	22kW	64 □	LTS63 VZHN4 A4 X..	1	0,25
		80A	22kW	64 □	LTS80 VZHN4 A4 X..	1	0,25

3-pole, 6-pole, 8-pole

on request

Declare depth X when ordering




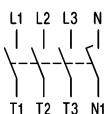

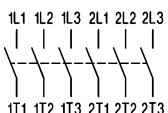

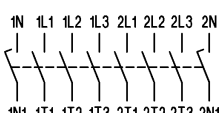

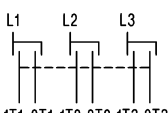

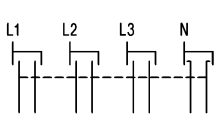
Type	Preference values for X
LTS.. VZH..	80, 85, 104, 129 (tolerance -3, +1,5)



Add-on modules see page 277



1) Types with padlock device 88 □ type suffix **88**, ordering example: LTS32 VH4**88** A3, on request

Switch Disconnectors for Panel Mounting, IP66







	AC21 690V	AC23 3x400V	Plate	Type	Pack pcs.	Weight kg/pcs
On-Off Switches 3-pole						
 	20A	7,5kW	48 □	LTS20 E A3	1	0,15
	25A	10kW	48 □	LTS25 E A3	1	0,15
	32A	12,5kW	48 □	LTS32 E A3	1	0,15
	40A	16kW	48 □	LTS40 E A3	1	0,15
	63A	22kW	48 □	LTS63 E A3	1	0,17
	80A	22kW	48 □	LTS80 E A3	1	0,17
	85A	30kW	64 □	LTS85 E A3	1	0,39
	100A	37kW	64 □	LTS100 E A3	1	0,39
	125A	45kW	64 □	LTS125 E A3	1	0,39
	160A	55kW	88 □	LT160 E T300	1	1,10
On-Off Switches 4-pole						
 	20A	7,5kW	48 □	LTS20 E A4	1	0,18
	25A	10kW	48 □	LTS25 E A4	1	0,18
	32A	12,5kW	48 □	LTS32 E A4	1	0,18
	40A	16kW	48 □	LTS40 E A4	1	0,18
	63A	22kW	48 □	LTS63 E A4	1	0,21
	80A	22kW	48 □	LTS80 E A4	1	0,21
	85A	30kW	64 □	LTS85 E A4	1	0,44
	100A	37kW	64 □	LTS100 E A4	1	0,44
	125A	45kW	64 □	LTS125 E A4	1	0,44
	160A	55kW	88 □	LT160 E T400	1	1,50
On-Off Switches 6-pole						
 	20A	7,5kW	64 □	LTS20 E A6	1	0,30
	25A	10kW	64 □	LTS25 E A6	1	0,30
	32A	12,5kW	64 □	LTS32 E A6	1	0,30
	40A	16kW	64 □	LTS40 E A6	1	0,30
	63A	22kW	64 □	LTS63 E A6	1	0,36
	80A	22kW	64 □	LTS80 E A6	1	0,36
On-Off Switches 8-pole						
 	20A	7,5kW	64 □	LTS20 E A8	1	0,32
	25A	10kW	64 □	LTS25 E A8	1	0,32
	32A	12,5kW	64 □	LTS32 E A8	1	0,32
	40A	16kW	64 □	LTS40 E A8	1	0,32
	63A	22kW	64 □	LTS63 E A8	1	0,43
	80A	22kW	64 □	LTS80 E A8	1	0,43
Changeover Switches 3-pole						
 	20A	7,5kW	64 □	LTS20 E U3	1	0,31
	25A	10kW	64 □	LTS25 E U3	1	0,31
	32A	12,5kW	64 □	LTS32 E U3	1	0,31
	40A	16kW	64 □	LTS40 E U3	1	0,31
	63A	22kW	64 □	LTS63 E U3	1	0,37
Changeover Switches 4-pole						
 	20A	7,5kW	64 □	LTS20 E U4	1	0,33
	25A	10kW	64 □	LTS25 E U4	1	0,33
	32A	12,5kW	64 □	LTS32 E U4	1	0,33
	40A	16kW	64 □	LTS40 E U4	1	0,33
	63A	22kW	64 □	LTS63 E U4	1	0,44

Switch Disconnectors for Base Mounting on request

Switch Disconnectors in Plastic Enclosure, IP66

	AC21 690V	AC23 3x400V	Plate	Type	Pack pcs.	Weight kg/pcs
On-Off Switches 3-pole 	20A	7,5kW	64 □	LTS20 PF A3	1	0,30
	25A	10kW	64 □	LTS25 PF A3	1	0,30
	32A	12,5kW	64 □	LTS32 PF A3	1	0,30
	40A	16kW	64 □	LTS40 PF A3	1	0,30
	63A	22kW	64 □	LTS63 PF A3	1	0,58
	80A	22kW	64 □	LTS80 PF A3	1	0,58
On-Off Switches 4-pole 	20A	7,5kW	64 □	LTS20 PF A4	1	0,31
	25A	10kW	64 □	LTS25 PF A4	1	0,31
	32A	12,5kW	64 □	LTS32 PF A4	1	0,31
	40A	16kW	64 □	LTS40 PF A4	1	0,31
	63A	22kW	64 □	LTS63 PF A4	1	0,62
	80A	22kW	64 □	LTS80 PF A4	1	0,62

Switch Disconnectors for Distribution Boards, IP40

On-Off Switches 3-pole 	20A	7,5kW	52x45	LTS20 SMA A3	1	0,15
	25A	10kW	52x45	LTS25 SMA A3	1	0,15
	32A	12,5kW	52x45	LTS32 SMA A3	1	0,15
	40A	16kW	52x45	LTS40 SMA A3	1	0,15
	63A	22kW	52x45	LTS63 SMA A3	1	0,17
	80A	22kW	52x45	LTS80 SMA A3	1	0,17
On-Off Switches 4-pole 	20A	7,5kW	52x45	LTS20 SMA A4	1	0,16
	25A	10kW	52x45	LTS25 SMA A4	1	0,16
	32A	12,5kW	52x45	LTS32 SMA A4	1	0,16
	40A	16kW	52x45	LTS40 SMA A4	1	0,16
	63A	22kW	52x45	LTS63 SMA A4	1	0,21
	80A	22kW	52x45	LTS80 SMA A4	1	0,21
On-Off Switches 6-pole 	20A	7,5kW	52x45	LTS20 SMA A6	1	0,29
	25A	10kW	52x45	LTS25 SMA A6	1	0,29
	32A	12,5kW	52x45	LTS32 SMA A6	1	0,29
	40A	16kW	52x45	LTS40 SMA A6	1	0,29
	63A	22kW	97x45	LTS63 SMA A6	1	0,34
	80A	22kW	97x45	LTS80 SMA A6	1	0,34
On-Off Switches 8-pole 	20A	7,5kW	97x45	LTS20 SMA A8	1	0,31
	25A	10kW	97x45	LTS25 SMA A8	1	0,31
	32A	12,5kW	97x45	LTS32 SMA A8	1	0,31
	40A	16kW	97x45	LTS40 SMA A8	1	0,31
	63A	22kW	126x45	LTS63 SMA A8	1	0,42
	80A	22kW	126x45	LTS80 SMA A8	1	0,42
Changeover Switches 3-pole 	20A	7,5kW	97x45	LTS20 SMA U3	1	0,30
	25A	10kW	97x45	LTS25 SMA U3	1	0,30
	32A	12,5kW	97x45	LTS32 SMA U3	1	0,30
	40A	16kW	97x45	LTS40 SMA U3	1	0,30
	63A	22kW	97x45	LTS63 SMA U3	1	0,35
Changeover Switches 4-pole 	20A	7,5kW	97x45	LTS20 SMA U4	1	0,32
	25A	10kW	97x45	LTS25 SMA U4	1	0,32
	32A	12,5kW	97x45	LTS32 SMA U4	1	0,32
	40A	16kW	97x45	LTS40 SMA U4	1	0,32
	63A	22kW	126x45	LTS63 SMA U4	1	0,43

Technical Data

Data according to IEC 947-3, IEC 947-5-1, VDE 0660, EN 60947-3, EN 60947-5-1

Type	LTS20	LTS25	LTS32	LTS40	LTS63	LTS80	LTS85	LTS100	LTS125	LT160	
Main contacts											
Rated thermal current I_{th} open	A	20	25	32	40	63	80	85	100	125	160
Rated thermal current I_{the} enclosed	A	20	25	32	40	63	80	85	100	110	160
Rated insulation voltage U_i ¹⁾	V	690	690	690	690	690	690	1000 ⁵⁾	1000 ⁵⁾	1000 ⁵⁾	1000 ³⁾
Rated operational current I_e AC21A	A	20	25	32	40	63	80	85	100	125	160
Making capacity I_{eff} 3x380-440V	A	160	190	220	300	370	440	600	725	850	1050
Breaking capacity 3x220-240V	A	160	180	200	250	330	380	480	580	680	900
	A	160	180	200	250	330	380	480	580	680	850
	A	80	110	140	170	190	220	250	330	420	340
Disconnection property performed up to	V	690	690	690	690	690	690	1000	1000	1000	1000 ³⁾
Motor Switch AC3 3x400V	A	12	16	23	30	37	37	45	60	72	85
Motor Switch AC3 3x220-240V	kW	3	4	5,5	7,5	11	11	15	18,5	22	30
Direct switching of single motors 3x380-440V	kW	5,5	7,5	11	15	18,5	18,5	22	30	37	45
	kW	5,5	7,5	11	15	18,5	18,5	18,5	22	30	37
Main Switch AC23 3x400V	A	16	20	25	32	45	45	60	72	85	110
Motor Switch, AC23A, 3x220-240V	kW	4	5,5	7,5	9	15	15	18,5	22	30	30
Main Switch, AC23B 3x380-440V	kW	7,5	10	12,5	16	22	22	30	37	45	55
Safety Switch 3x660-690V	kW	5,5	7,5	11	15	18,5	18,5	22	30	37	37
Rated conditional short-circuit current	kA _{eff}	10	10	10	10	10	10	10	10	5	30
Max. fuse size gL (gG)	A	25	35	40	40	63	80	100	100	125	160
Mechanical life	x10 ³	200	200	200	200	100	100	100	100	100	100
Rated short-time withstand current (1sec. current)	A	250	300	400	500	600	850	1000	1200	1500	3000
Power loss per pole AC21 = I_{th}											
P/pole [W]	E, Z	0,322	0,503	0,824	1,288	2,739	4,416	3,851	5,330	8,328	
	V, SMA, PF	0,364	0,569	0,933	1,458	2,739	4,416	3,851	5,330	8,328	
R/pole [mOhm]	E, Z	0,805	0,805	0,805	0,805	0,690	0,690	0,533	0,533	0,533	
	V, SMA, PF	0,911	0,911	0,911	0,911	0,690	0,690	0,533	0,533	0,533	
Cable cross sections											
solid or stranded	mm ²	0,5 - 10			1-25 ⁶⁾			4-50			max.95
	AWG	20 - 8 (10)			16 - 4 (10)			10 - 0 (10)			max.3/0
flexible	mm ²	0,5 - 6			4 - 16 ⁶⁾			10 - 35			max.70
	AWG	20 - 10			16 - 6			8 - 2			max.2/0
flexible (+ multicore cable end)	mm ²	0,5 - 6			0,75 - 16 ⁶⁾			6 - 35			max.50
	AWG	20 - 10			16 - 6			8 - 2			max.1/0
Size of terminal screw		M3,5			M5			M6			M10
Tightening torque	Nm	0,8-1,7			2-4			3,5-4,5			14
Auxiliary contacts											
Rated insulation voltage U_i ¹⁾	V	690			690			690			690
Rated thermal current I_{th} , I_{the}	A	10			10			10			16
Switching capacity AC15 220-240V	A	2,5			2,5			2,5			6
	A	1,5			1,5			1,5			4
Rated conditional short-circuit current	kA _{eff}	3			3			3			3
Max. short circuit protection gL (gG)	A	10			10			10			16
Cable cross sections											
solid or stranded	mm ²	0,75 - 2,5			0,75 - 2,5			0,75 - 2,5			max.4
	AWG	14 - 12			14 - 12			14 - 12			max.12
flexible (+ multicore cable end)	mm ²	0,75 - 2,5 (1,5)			0,75 - 2,5 (1,5)			0,75 - 2,5 (1,5)			max.2,5
	AWG	18 - 14			18 - 14			18 - 14			max.14

Data according to UL und cUL

Type	LTS20	LTS25	LTS32	LTS40	LTS63	LTS80	LTS85	LTS100	LTS125	LT160	
Rated voltage	V	600	600	600	600	600	600	600	600	600	
Ampere-Rating "General use"	A	20	25	32	40	63	80	85	100	200	
DOL-Rating 3-phase	110-120V	HP	1	1,5	2	3	5	7,5	10	15	20
	220-240V	HP	3	5	5	5	10	10	20	30	40
	440-480V	HP	7,5	10	10	10	20	20	40	60	60
	550-600V	HP	10	10	15	15	25	25	50	60	60
DOL-Rating 1-phase	110-120V	HP	1	1	1	2	2	3	5	7,5	-
	200-208V	HP	1	2	2	2	3	3	7,5	10	-
	220-240V	HP	2	2	3	3	5	5	10	15	-
Fuse size (RK5) Manual Motor Controller	A	40	50	50	70	90	110	125	125	125	400 ⁴⁾
5kA / 600V Motor Disconnect	A	40	50	50	50	70	70	125	125	125	400 ⁴⁾
Tightening torque	Nm	1,2-2,3	1,2-2,3	1,2-2,3	1,2-2,3	2,8-4	2,8-4	1,7-4,5	1,7-4,5	1,7-4,5	14
	lb.inch	11-20	11-20	11-20	11-20	24-35	24-35	15-40	15-40	15-40	124

1) suitable for: earthed-neutral systems, overvoltage category I to III, pollution degree 3 (standard-industry); $U_{imp} = 6kV$. Data for other conditions on request

2) the values after the slash are valid for switches 6-pole or more

3) Suitable for no load applications(AC20A) above 690V

5) $U_{imp} = 8kV$

4) Fuse RK1 / 10kA / 600V

6) LTS63..U. stranded 16mm², flexible 10mm²

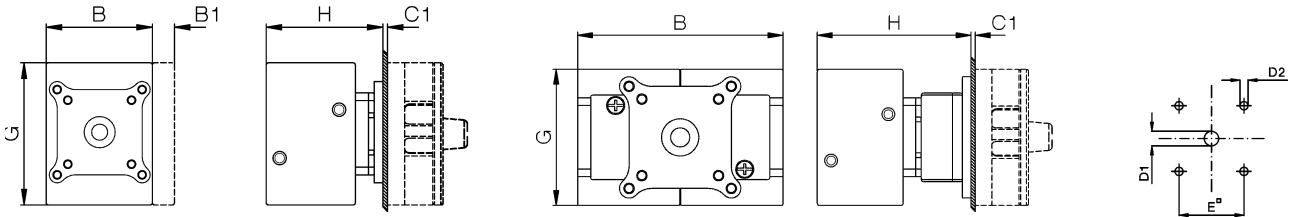
Dimensions (mm)

Main Switches, Switch Disconnectors LT(S)..

Panel mounting LT(S).. E(HN)..
ON-OFF Switches 3-pole, 4-pole

ON-OFF Switches 6-pole, 8-pole
Changeover Switches 3-pole, 4-pole

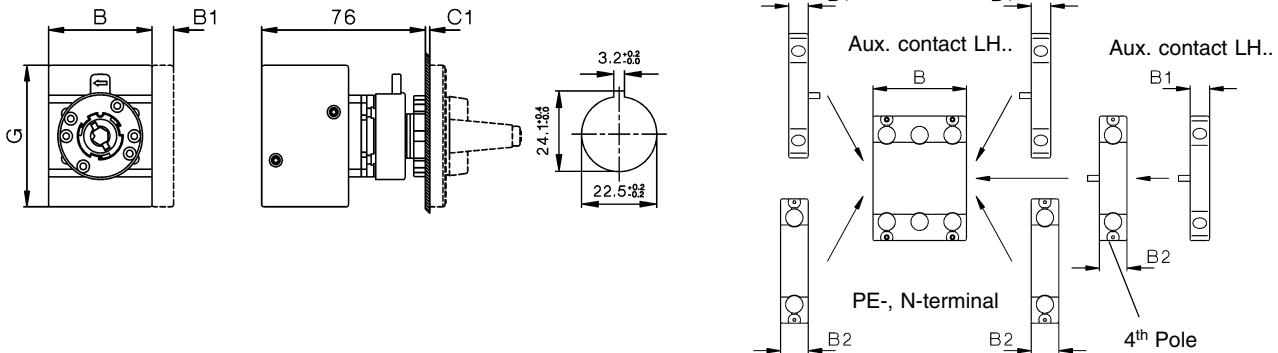
Mounting holes



Single hole mounting LTS.. Z(HN)..
ON-OFF Switches 3-pole, 4-pole

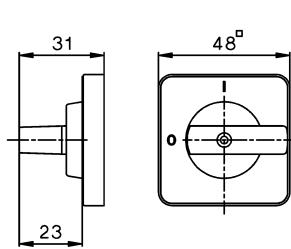
Mounting holes

Mounting of add-on modules LTS20 - LTS80
Panel mounting, Single hole mounting

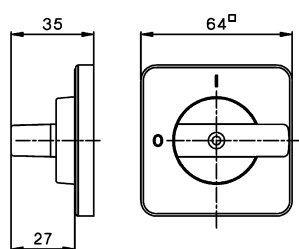


Type	Changeover ON-OFF Escutch. plate or padlock device	3-pole		4-pole		aux. contact B1	4 Pole PE			3,4-pole			3-pole 4-pole		6-pole 8-pole	
		A	B	B	B		B	B2	C1	D1	D2	E	F	G	H	H
LTS..	48 □, SV1	48	48	62,5	-	-	10	14,5	1-5	9	5	36	-	64	54	-
LTS..	64 □, SV4, SV164	64	48	62,5	97	126	10	14,5	1-5	9	5	48	-	64	54	74
LTS85-125..	64 □, SV4	64	78	78	-	-	10	-	1-5	9	5	48	-	85	60	-
LTS85-125..	88 □, SV488	88	78	78	-	-	10	-	1-5	9	6	68	-	85	60	-
LT125/160	88 □, SV34	88	112	150	224	-	-	-	1-4	13-17	6	68	49,3	108	96	98

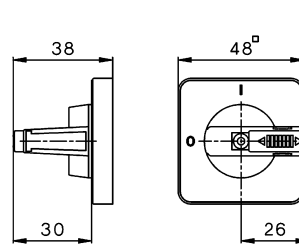
Escutcheon plate
48 □



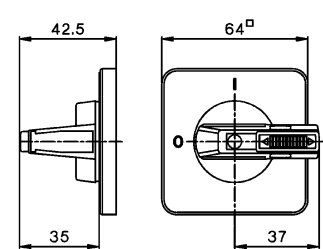
64 □



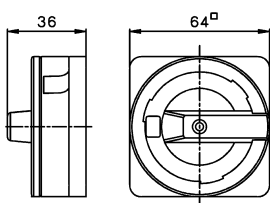
Padlock devices
SV1



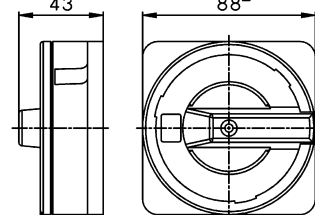
SV164



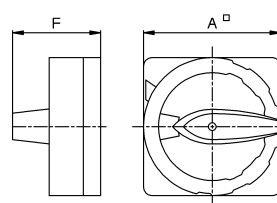
Padlock devices
SV4



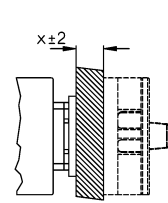
SV488



SV34



Extended Switch Shaft +VW"x"

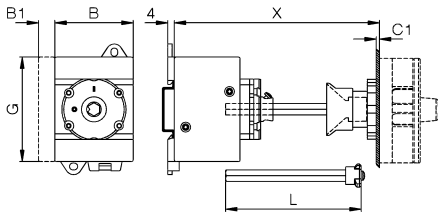


Dimensions (mm)

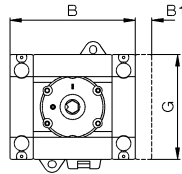
Main Switches, Switch Disconnectors LT(S)..

Base mounting LTS.. VZV(HN)..
ON-OFF Switches 3-pole, 4-pole

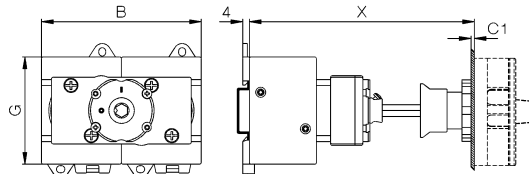
L = X - 40±3 for LTS20 - 80
L = X - 44±3 for LTS85 - 125



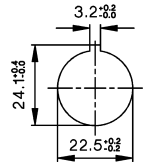
6-pole
for LTS20 - 40 only
L = X - 40±3



ON-OFF Switches 6-pole, 8-pole
Changeover Switches 3-pole, 4-pole
L = X - 60±3

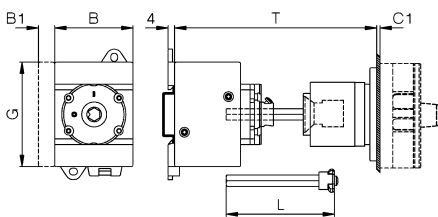


Mounting holes

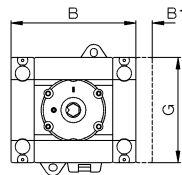


Base mounting LT(S).. V(HN)..
ON-OFF Switches 3-pole, 4-pole

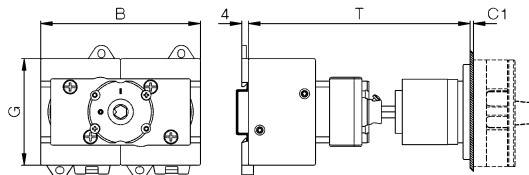
L = T - 60±3 for LTS20 - 80
L = T - 64±3 for LTS85 - 125



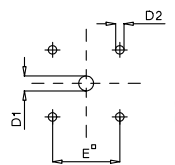
6-pole
for LTS20 - 40 only
L = T - 60±3



ON-OFF Switches 6-pole, 8-pole
Changeover Switches 3-pole, 4-pole
L = T - 80±3 for LTS20 - 80 only



Mounting holes

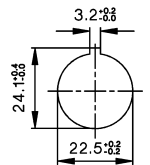
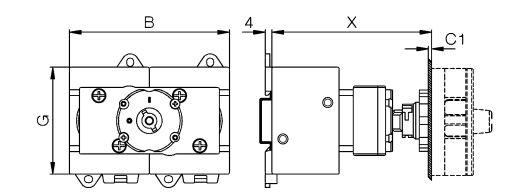
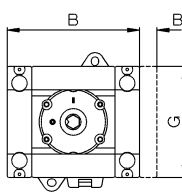
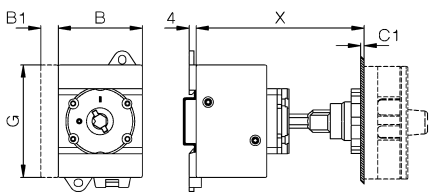


Base mounting LTS.. VZ(HN)..
ON-OFF Switches 3-pole, 4-pole
Preference values for X: 80, 85, 104, 129

6-pole
for LTS20 - 40 only

ON-OFF Switches 6-pole, 8-pole
Changeover Switches 3-pole, 4-pole

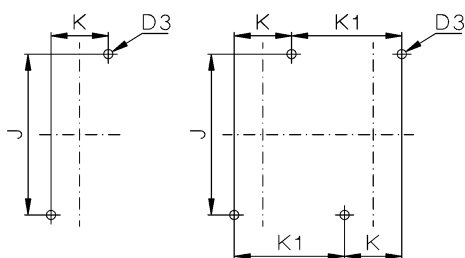
Mounting holes



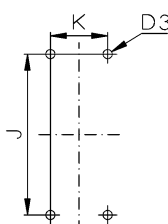
Type	Changeover ON-OFF Escutch. plate or padlock device	3-pole		4-pole	6-pole	3,4-pole 8-pole	aux. contact B1	4.Pole PE B2									
		A	B	B	B	B	C1	D1	D2	D3	E	G	K	K1	J		
LTS20 -40	64 □, SV4, SV164	64	48	48	77	97	10	14,5	1-5	9	5	M4	48	64	25	48	70
LTS63, 80	64 □, SV4, SV164	64	48	62,5	97	126	10	14,5	1-5	9	5	M4	48	64	25	48	70
LTS85-125..	64 □, SV4	64	78	78	-	-	10	-	1-5	9	5	M4	48	85	38	-	90
LT125/160	88 □, SV34	88	112	150	224	-	-	-	1-4	13/27 ²⁾	6	M6	68	108	36	-	120

Base mounting
ON-OFF Switches **LTS20 - LTS80**
3-pole, 4-pole
6-pole LTS20 -40

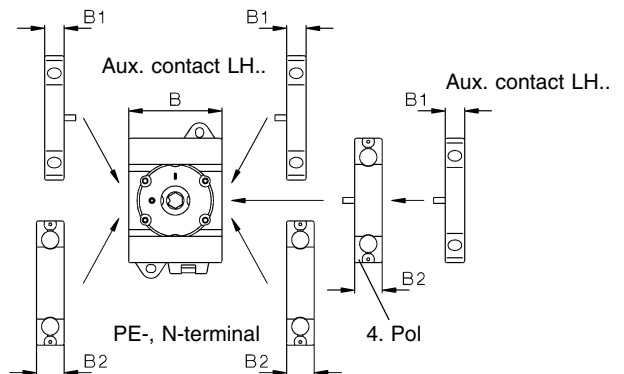
6-pole, 8-pole
Changeover Switches



LTS85-125, LT160
3-pole, 4-pole



Mounting of Accessories LTS20 - LTS80
Base mounting, for distribution boards



1) Ø 22-25 for LT80(100) VH(N)34 .. only
2) Ø 26-30 for LT125(160) VH(N)34 .. only

Dimensions (mm)

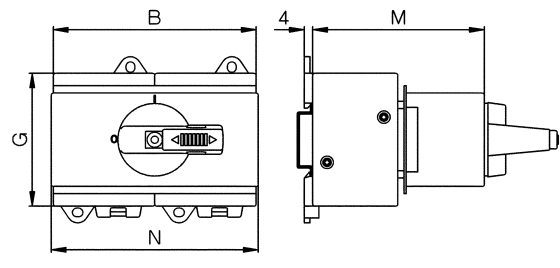
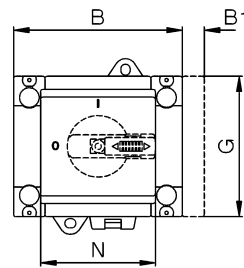
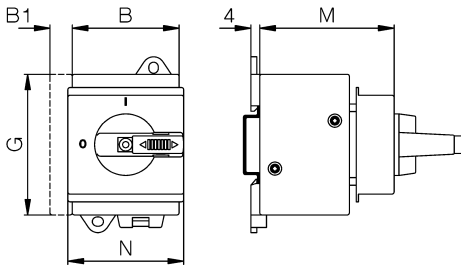
Main Switches, Switch Disconnectors LT(S)..

Installation cover LT(S).. SMA(HN)..

ON-OFF Switches 3-pole, 4-pole

ON-OFF Switches 6-pole
for LTS20 - 40 only

ON-OFF Switches 6-pole, 8-pole
Changeover Switches 3-pole, 4-pole



Type	Changeover ON-OFF padlock device	3,4-pole						G	3,4-pole			3,4-pole		
		3-pole	4-pole	6-pole	8-pole	aux. contact	4.pole PE		3-pole 4-pole	6-pole	8-pole	3-pole 4-pole	6-pole	8-pole
		B	B	B	B	B1	B2		M	M	M	N	N	N
LTS20 - 40	SV1, SV164	48	48	77	96	10	14,5	64	60	60	74	52	52	97 ⁴⁾
LTS63, 80	SV1, SV164	48	62,5	96	125	10	14,5	64	60	74	74	52	97 ⁴⁾	126
LTS85-125..	SV164	78	78	-	-	10	-	85	60	-	-	78	-	-

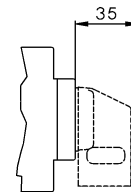
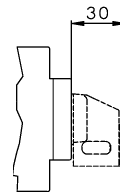
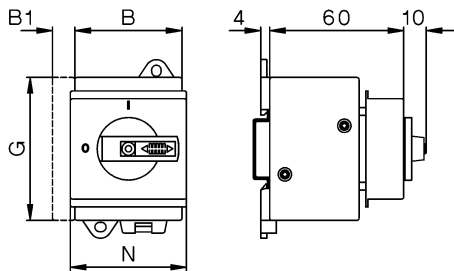
Installation cover with low height handle LTS SMAHN1.. +SV1N

Main switch 3-pole, 4-pole

LTS20 - LTS80

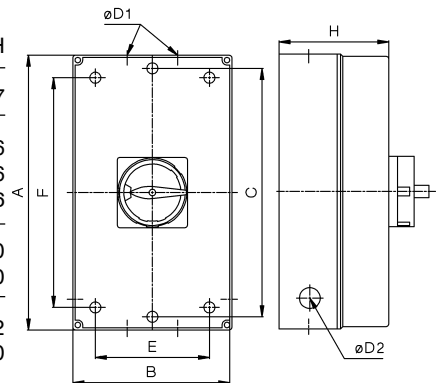
Padlock device SV1

Padlock device SV164



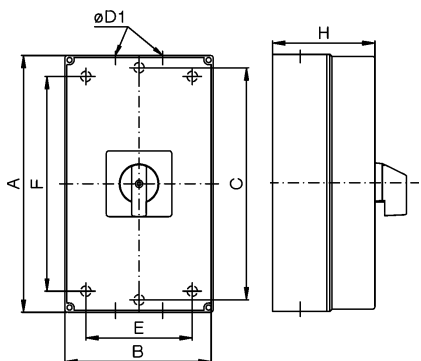
Maintenance and Safety Switches LT(S)..PF..

Type	pole	A	B	C	D1	D2	E	F	H
LTS20 PFH.. A. - LTS40 PFH.. A. ¹⁾	3, 4	130	98	121	2x25,5/20,5	-	75	100	77
LTS63 PFH.. - LTS125 PFH.. A. ²⁾	3, 4	200	120	-	40,5/32,5 +16,5	-	95	165	86
LTS20 PFH.. A. - LTS40 PFH.. A. ²⁾	6	200	120	-	40,5/32,5 +16,5	-	95	165	86
LTS85 PFH.. A. - LTS125 PFH..A. ²⁾	6	200	120	-	40,5/32,5 +16,5	-	95	165	86
LTS20 PFH.. A. - LTS40 PFH.. A. ³⁾	8	240	160	-	40,5/32,5	-	130	228	120
LTS63 PFH.. A., LTS80 PFH.. A. ³⁾	6, 8	240	160	-	40,5/32,5	-	130	228	120
LT160 PF..	3	300	200	-	2x50,5	25,5	172	272	172
LT160 PF..	4	300	280	-	2x50,5	-	254	254	180



Switch Disconnectors in Plastic Enclosure LTS..PF..

Type	pole	A	B	C	D1	E	F	H
LTS20 PF A., LTS40 PF A. ¹⁾	3, 4	130	98	121	2x25,5/20,5 / 16,5/12,5	75	100	77
LTS20 PFL A., LTS40 PFL A.	3, 4	180	98	170	2x25,5/20,5 / 16,5/12,5	75	150	77
LTS63 PF A., LTS80 PF A. ²⁾	3, 4	200	120	-	40,5/32,5 +16,5	95	165	86
+ PF3	3, 4	240	160	-	2 x 40,5/32,5	130	228	120
+ PF3/M50	3, 4	240	160	-	1 x 50,5/40,5	130	228	120



Maximum switch in this enclosure

- LTS40 PF.. A5 + LH11
 - LTS40 PF.. A6, LTS80 PF.. A5 + LH11, LTS125 PF.. A4
 - LTS40 PF.. A10, LTS40 PF.. U4 + LH11,
LTS80 PF.. A8, LTS80 PF.. A6 + LH11, LTS80 PF.. U4, LTS40 PF.. U3 + LH11
- 1) inclusiv removable cover parts 126mm