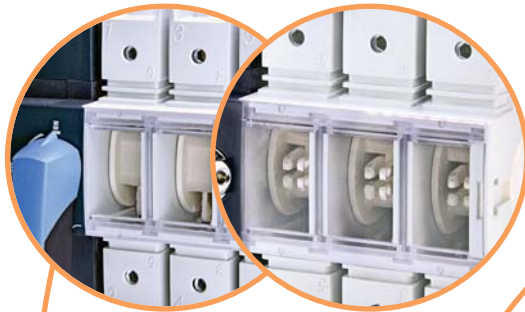


Compact Load Break Switch with Visible break - CLBSV



→ Possibility to connect additional contacts with pre-break function



→ Double-visible chain break ensures safe maintenance



→ Special type of mounting on the TH 35 rail (does not require special tools)



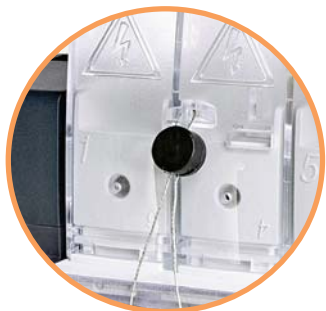
→ The position of the handle indicates the status of the contact group



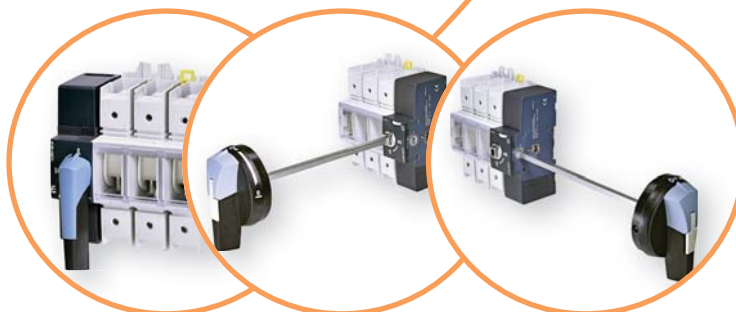
→ Terminal covers provide protection against accidental contact and phase separation of the switch, and Perforated holes allow for contact temperature monitoring without removing the covers



→ Handle can be locked with a padlock



→ Ability to seal terminal covers



→ Possibility of direct, external front and side control



→ Universal mounting system allows mounting on the TH-35 bus and mounting plate

ETISWITCH

Compact Load Break Switch with Visible break - CLBSV (0-1)

Applications - CLBSV are manually operated multi-pole devices for switching low voltage electrical circuits with currents up to 160A. The CLBSV line of load switches has been designed and tested in full compliance with the criteria defined in IEC 60947-3.

Features:

- double circuit break;
- mounting option: bar TH35, mounting or modular panel with 45 mm frontal cut-out;
- IP20 degree of protection of the switch and accessories;
- visible double tear based on sliding contact system;
- contact position indication.

Applications:

- main power switch;
- distribution switch;
- equipment control;
- local safe load shedding

Technical specifications (according to IEC 60947-3)

Type			CLBSV 100	CLBSV 125	CLBSV 160
Rated current	(In)	(A)	100	125	160
Rated insulation voltage	(Ui)	(V)	800		
Rated insulation voltage pulsed	(U imp)	(kV)	8		
Rated current at 40°C	(Ith)	(A)	100	125	160
Rated current (Ie)	AC-20 A/B ⁽¹⁾	415V AC (A)	100	125	160
	AC-21 A/B ⁽¹⁾	415V AC (A)	100	125	160
	AC-22 A/B ⁽¹⁾	415V AC (A)	100	125	160
	AC-23 A/B ⁽¹⁾	415V AC (A)	100	125	125/160
	AC-20 A/B ⁽¹⁾	500V AC (A)	100	125	160
	AC-21 A/B ⁽¹⁾	500V AC (A)	100	125	160
	AC-22 A/B ⁽¹⁾	500V AC (A)	100	125	125/160
	AC-23 A/B ⁽¹⁾	500V AC (A)	80	100	100
	AC-20 A/B ⁽¹⁾	690V AC (A)	100	125	160
	AC-21 A/B ⁽¹⁾	690V AC (A)	100	125	160
	AC-22 A/B ⁽¹⁾	690V AC (A)	63/80	80/100	100/125
	AC-23 A/B ⁽¹⁾	690V AC (A)	63	80	80
	DC-20 A/B ⁽¹⁾	110V DC (A)	100	125	160
	DC-21 A/B ⁽¹⁾	110V DC (A)	100/100 ⁽²⁾	125/125 ⁽²⁾	160/160 ⁽²⁾
	DC-20 A/B ⁽¹⁾	250V DC (A)	100	125	160
	DC-21 A/B ⁽¹⁾	250V DC (A)	100/100 ⁽³⁾	125/125 ⁽³⁾	160/160 ⁽³⁾
DC-20 A/B ⁽¹⁾	400V DC (A)	100	125	160	
DC-21 A/B ⁽¹⁾	400V DC (A)	100/100 ⁽⁴⁾	125/125 ⁽⁴⁾	160/160 ⁽⁴⁾	
Maximum operating power at AC load 23	400V AC	(kW)	45	55	75
	500V AC	(kW)	45	55	75
	690V AC	(kW)	45	75	75
Short-circuit current Icw	1 s	(kA)	4		
	0,25 s	(kA)	7		
Characteristics of fuse-protected switch at Ue=415V AC					
Nominal current of the fuse	(A)		100	65	50
Expected short-circuit current	(kA)		100	125	160
Overload capacity					
Rated short-time current Icw	0,3 s	(kA)	7		
Connecting					
Minimum cross-section of connectable conductors, Cu	mm ²		10		
Maximum cross-section of connectable conductors, Cu	mm ²		70		
Torque applied min/max	Nm		4/4,4		
Mechanical life	cycle		50 000		
Operating force - 3-pole device	Nm		4		
Operating force - 4-pole device	Nm		4,2		

(1) Category with index A - frequent use, Category with index B - infrequent use

(2) Single pole, according to polarity.

(3) 2-pole in series for "+" and 1-pole for "-"

(4) 2-pole in series, according to polarity.



Compact Load Break Switch with Visible break - CLBSV (0-1)



CLBSV 100 3P

0-1 load switch with visible break CLBSV 100 - 160 A

Type	Code No.	Description	I_n (A)	Number of poles	Weight (kg)	Packaging (pcs.)
CLBSV 100 3P	004661880	Load switch 0-1	100	3	0,84	1/28
CLBSV 125 3P	004661881	Load switch 0-1	125	3	0,82	1/28
CLBSV 160 3P	004661882	Load switch 0-1	160	3	0,82	1/28

Front (direct or remote) and side (remote) control. The handle is not included.

Accessories



CLBSV-DH160/BL



CLBSV-EH160/B

CLBSV-EH160/YR



CLBSV-S200



CLBS-PS11



CLBS-TS125 3P

CLBS-TS125 1P

Direct control knobs for mounting on switches CLBSV

Type	Code No.	Description	For use with	Weight (kg)	Packaging (pcs.)
CLBSV-DH160/BL	004661883	Handle on switch body, blue	CLBSV 100-160A 3P	0,02	1/25

Direct frontal control

Door interlocked front handle IP65 (shaft not included).

Type	Code No.	Description	For use with	Weight (kg)	Packaging (pcs.)
CLBSV-EH160/B	004661884	Remote handle, black	CLBSV 100-160A 3P	0,09	1/45
CLBSV-EH160/YR	004661885	Remote handle, red	CLBSV 100-160A 3P	0,09	1/45

Remote front control. The stem is not included in the delivery. With the possibility of opening the door when the door is on.

External control shaft

Type	Code No.	Description	For use with	Weight (kg)	Packaging (pcs.)
CLBSV-S200	004661886	Shaft, 200mm	CLBSV-EH160/B,	0,05	1/100
CLBSV-S320	004661887	Shaft, 320mm	CLBSV-EH160/YR	0,09	1/240

The stem is used for external front and side control.

Contact block

Type	Code No.	Description	I_n (A)	For use with	Weight (kg)	Packaging (pcs.)
CLBS-PS11	004661425	Auxilliary contact 1NO+1NC	10	CLBS 16-125A	0,044	1/52

Application: Pre-opening and signaling of position 0 and I by additional NO+NO contacts. Up to two additional contact blocks can be installed

Terminal cover for CLBSV

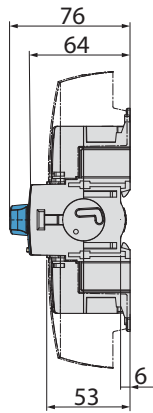
Type	Code No.	Description	For use with	Weight (kg)	Packaging (pcs.)
CLBS-TS125 3P	004661428	Terminal cover 3P	CLBSV 100-160A	0,063	1/22
CLBS-TS125 1P	004661431	Terminal cover1P		0,022	1/120

Note: One set must be ordered for protection of upper and lower terminals.

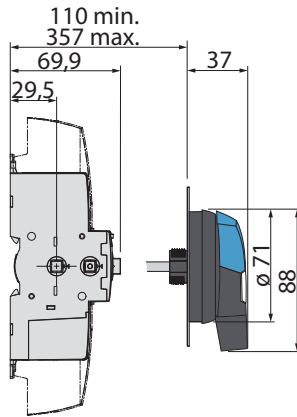
Application - Protection against direct contact with upper and lower terminals. Openings are provided on the cover for the installation of temperature sensors.

Overall dimensions (mm)

Direct control, frontal

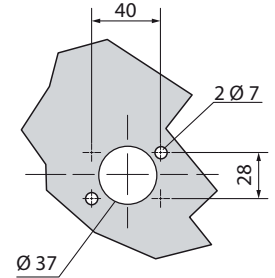


External control, frontal

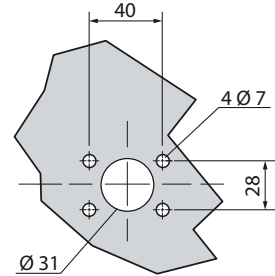


Mounting hole

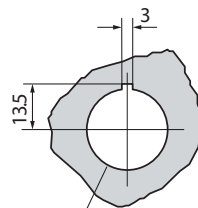
IP55 with two mounting clips



IP65 with 4 fixing screws

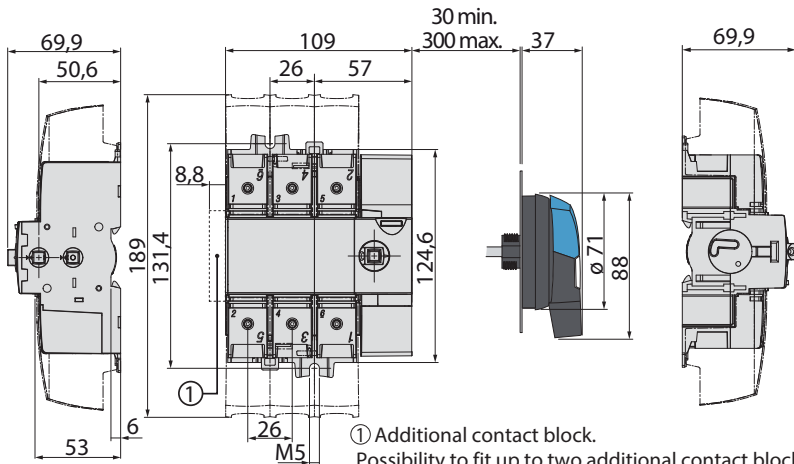


With fastening nut



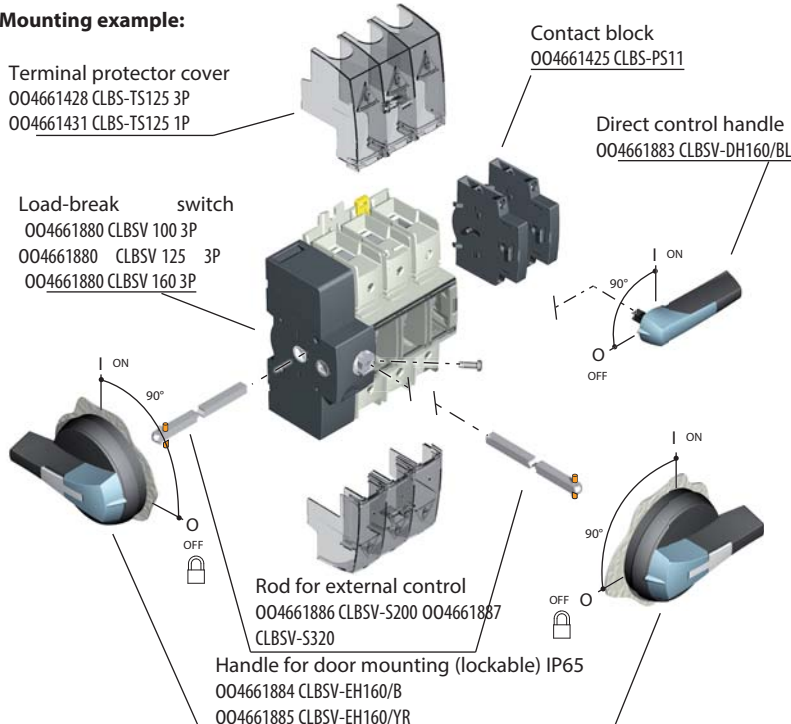
① Additional contact block.
Possibility to fit up to two additional contact blocks

External control, lateral



① Additional contact block.
Possibility to fit up to two additional contact blocks

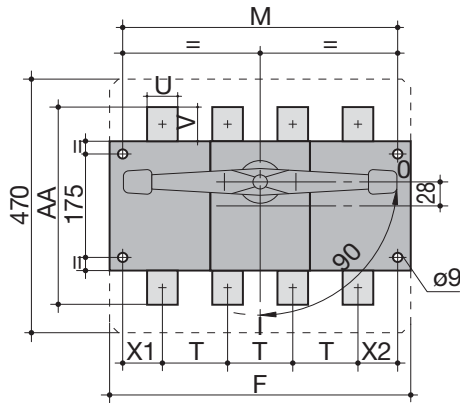
Mounting example:



LBS 800 - LBS 1600

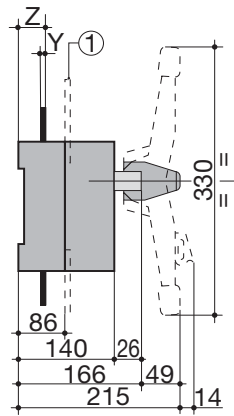
Direct frontal control

Front view

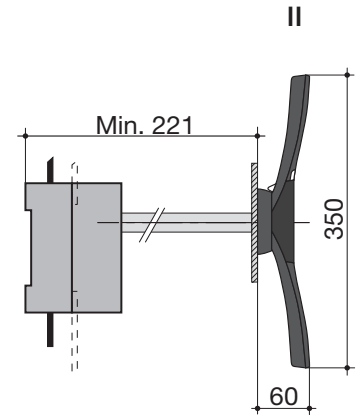


Remote front control

Side view



① Protective screen



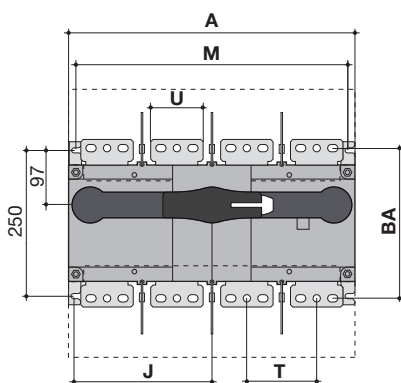
II. Handle type LBS-EH1600

Current (A)	Switch body (mm)		Switch mounting (mm)		Connection, (mm)							
	F (3p)	F (4p)	M (3p)	M (4p)	T	U	V	Y	X1	X2	Z	AA
800 - 1000	280	360	255	335	80	50	60.5	7	47.5	47.5	46.5	321
1250						60	65					
1600	372	492	492	467	120	90	44	8	53.5	53.5	47.5	288

LBS 2000 - LBS 3200

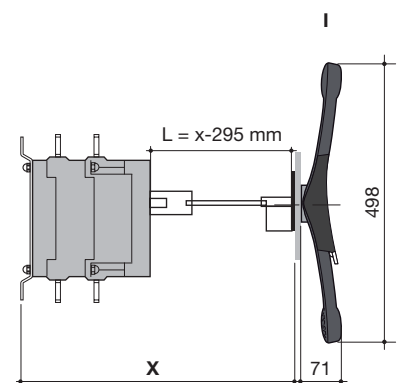
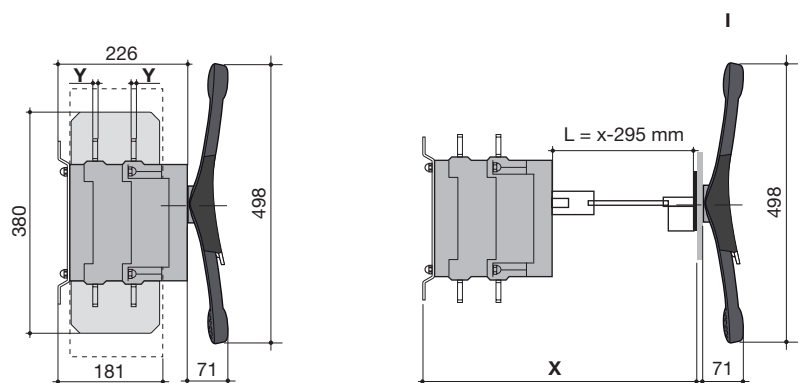
Direct frontal control

Front view



Remote front control

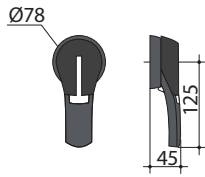
Side view



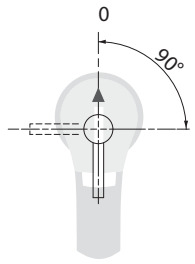
I. Handle type LBS-EH3200

Current (A)	Switch body (mm)		Device housing, (mm)		Device mounting, (mm)		Connection, (mm)			
	A (3p)	A (4p)	J (3p)	J (4p)	M (3p)	M (4p)	T	U	Y	BA
2000 - 3200	372	492	173.5	233.5	347	367	120	90	8	258

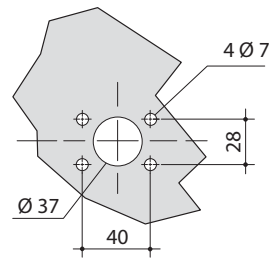
Handle type LBS-EH630



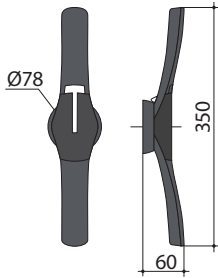
Direct frontal control



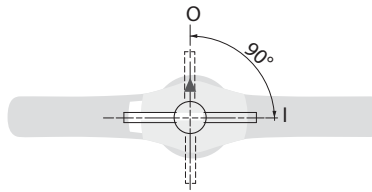
Mounting hole



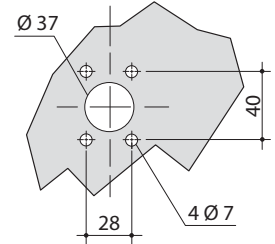
Handle type LBS-EH1600



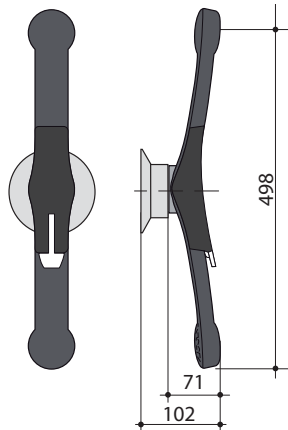
Direct frontal control



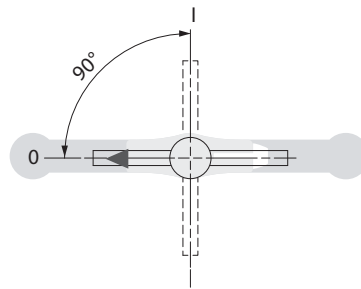
Mounting hole



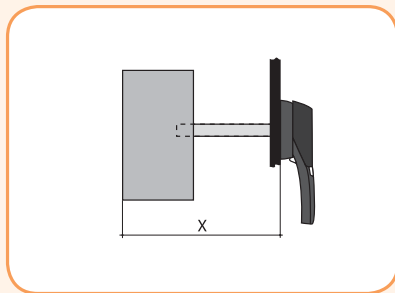
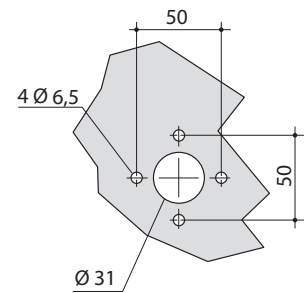
Handle type LBS-EH3200



Direct frontal control

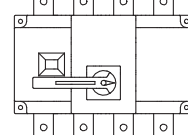
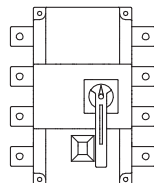
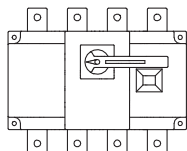
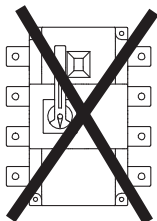


Mounting hole



Type	LBS 160			LBS 250			LBS 400-630			LBS 800-1600			LBS 2000-3200		
Size X (mm) Min.-Max.	125 - 250	125 - 370	125 - 550	135 - 265	135 - 385	135 - 565	165 - 295	165 - 415	165 - 595	221 - 343	221 - 463	221 - 543	415 - 570	415 - 690	415 - 820
Stem length (mm)	200	320	500	200	320	500	200	320	500	200	320	400	200	320	450

Mounting position



Compact Load Break Switch with Visible break CO - CLBSV..CO

ETISWITCH



→ The clamping terminal screws are locked in the housing (when fully unscrewed, they remain in the terminal)



→ Universal mounting system allows mounting on the TH-35 busbar and mounting plate



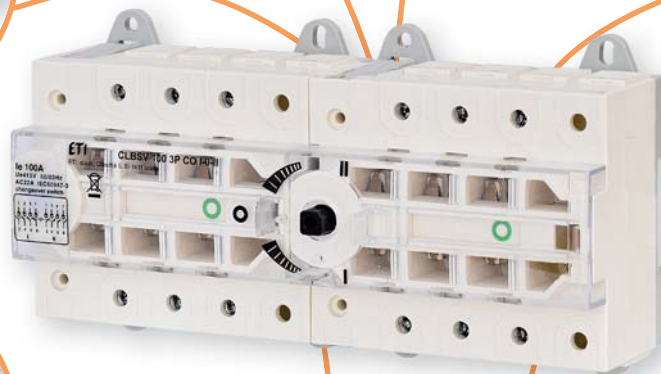
→ Special type of mounting on the TH 35 busbar (no special tools required)



→ Possibility to connect me auxiliary contacts with pre-break function



→ Double visible chain break ensures safe maintenance



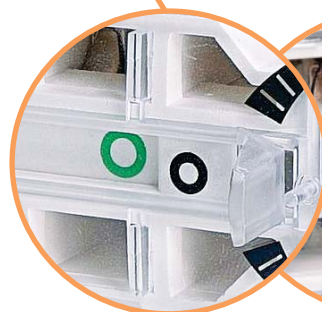
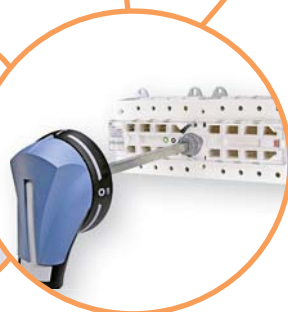
→ Possibility to lock the handle with a padlock



→ The connection bar allows the switch outputs to be interconnected



→ Possibility of direct and remote frontal control



→ Position indicator for circuit breaker power contacts

Compact Load Break Switch with Visible break CO - CLBSV..CO

Application - CLBSV..CO are manually operated multi-pole devices used in switchgear and electrical enclosures for switching low voltage circuits with a rated operating current of 63 to 125 A. They can also be used as manual changeover switches.

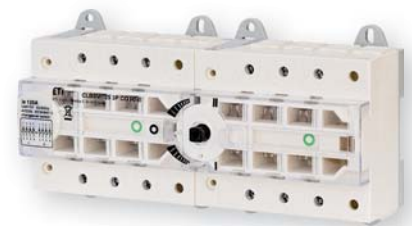
Special features:

- double circuit break;
- Mounting options: TH35 busbar, mounting or modular panel;
- protection class IP20 for switch and accessories;
- visible double tear based on sliding contact system;
- contact position indication.

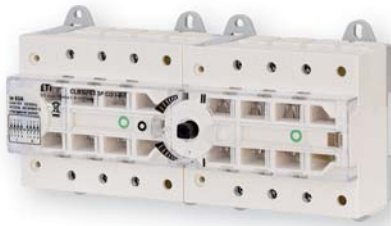
Characteristic according to IEC 60947-3					
Type			CLBSV 63 CO	CLBSV 100 CO	CLBSV 125 CO
Rated current	(In)	(A)	63	100	125
Rated insulation voltage	(Ui)	(V)	800		
Rated impulse withstand voltage	(U imp)	(kV)	8		
Thermal current at 40°C	(Ith)	(A)	63	100	125
Rated operational current (Ie)	AC-20 A/B ⁽¹⁾	415V AC (A)	63	100	125
	AC-21 A/B ⁽¹⁾	415V AC (A)	63	100	125
	AC-22 A/B ⁽¹⁾	415V AC (A)	63	100	125
	AC-23 A/B ⁽¹⁾	415V AC (A)	63	63	63
	AC-20 A/B ⁽¹⁾	690V AC ⁽²⁾ (A)	63	100	125
	AC-21 A/B ⁽¹⁾	690V AC ⁽²⁾ (A)	63	80	80
	AC-22 A/B ⁽¹⁾	690V AC ⁽²⁾ (A)	40	40	40
	AC-23 A/B ⁽¹⁾	690V AC ⁽²⁾ (A)	25	25	25
Maximum operating power at load AC 23	400V AC	(kW)	30	30	30
	690V AC	(kW)	22	22	22
Reactive power	400V AC	(kVAr)	28	45	55
Short-circuit current Icw	1 s	(kA)	2,5		
	0,25 s	(kA)	3,55		
Characteristics of fuse-protected switch at Ue=400V AC					
Rated fuse current		(A)	100	100	50
Expected short-circuit current		(kA)	63	100	125
Overload capacity					
Rated short-time permissible current Icw	0,3 s	(kA)	4,5		
Connecting					
Minimum cross-section of connectable conductors, Cu		mm ²	4		
Maximum cross-section of connectable conductors, Cu		mm ²	50		
Tightening torque min/max		Nm	6		
Durability (numbers of operating cycles)		cycles	10 000		
Operating force - 3-pole device		Nm	1,2		

⁽¹⁾ Category with index A - frequent use, Category with index B - infrequent use.

⁽²⁾ With terminal covers or inter-phase dividers.



Compact Load Break Switch with Visible break CO - CLBSV..CO



CLBSV 63 3P CO I-0-II



CLBSV 125 3P CO I-I+II-II

Load disconnectors 1-0-2 with visible break CLBSV..CO 63 - 125 A

Type	Code No	Description	In (A)	Number of poles	Weight (kg)	Packaging (pcs.)
CLBSV 63 3P CO I-0-II	004661890	Load-break switch 1-0-2	63	3	1,25	1
CLBSV 100 3P CO I-0-II	004661891	Load-break switch 1-0-2	100	3	1,36	1
CLBSV 125 3P CO I-0-II	004661892	Load-break switch 1-0-2	125	3	1,36	1

Front (direct or remote) control. The handle is not included in the scope of delivery.

Load disconnectors 1-1+2-2 with visible break CLBSV..CO 63 - 125 A

Type	Code No	Description	In (A)	Number of poles	Weight (kg)	Packaging (pcs.)
CLBSV 63 3P CO I-I+II-II	004661893	Load switch 1-1+2-2	63	3	1,36	1
CLBSV 100 3P CO I-I+II-II	004661894	Load switch 1-1+2-2	100	3	1,36	1
CLBSV 125 3P CO I-I+II-II	004661895	Load switch 1-1+2-2	125	3	1,36	1

Front (direct or remote) control. The handle is not included in the scope of delivery.

Accessories



CLBSV-DH125/B I-0-II



CLBSV-EH125/B I-0-II



CLBSV-S200 I-0-II



CLBSV-BR 3P



CLBSV-PS11

Direct handle for direct operation

Type	Code No	Description	For use with	Weight (kg)	Packaging (pcs.)
CLBSV-DH125/B I-0-II	004661896	Handle on switch housing I-0-II, black	CLBSV..CO I-0-II	0,03	1/50
CLBSV-DH125/B I-I+II-II	004661897	Handle on switch housing I-I+II-II, black	CLBSV..CO I-I+II-II	0,04	1/50

Direct frontal control

Door interlocked front and gight side handle IP65 (shaft not included)

Type	Code No	Description	For use with	Weight (kg)	Packaging (pcs.)
CLBSV-EH125/B I-0-II	004661898	Handle remote I-0-II, black	CLBSV..CO I-0-II	0,22	1/20
CLBSV-EH125/B I-I+II-II	004661899	Handle remote I-I+II-II, black	CLBSV..CO I-I+II-II	0,22	1/20

Remote front control. The stem is not included in the scope of delivery. With possibility of opening the door when switched on.

Shaft for external control

Type	Code No	Description	For use with	Weight (kg)	Packaging (pcs.)
CLBSV-S200 I-0-II	004661900	Shaft, 200mm	CLBSV..CO I-0-II	0,19	1/30
CLBSV-S320 I-0-II	004661901	Shaft, 320mm		0,25	1/25
CLBSV-S200 I-I+II-II	004661902	Shaft, 200mm	CLBSV..CO I-I+II-II	0,191	1/25
CLBSV-S320 I-I+II-II	004661903	Shaft, 320mm		0,214	1

The stem is used for external frontal control.

Connecting busbar IP20

Type	Code No	Description	For use with	Weight (kg)	Packaging (pcs.)
CLBSV-BR 3P	004661904	Connection busbar IP20, 3p	CLBSV..CO	0,03	1/100

Application: To create a common connection between devices I and II at the top or bottom of the switch.

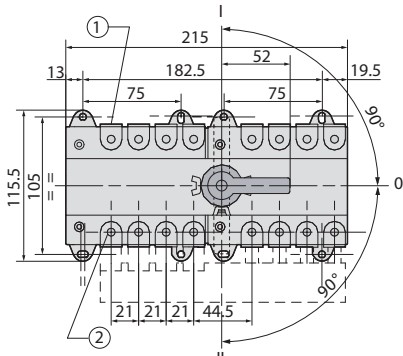
Contact block (flip-flop)

Type	Code No	Description	For use with	Weight (kg)	Packaging (pcs.)
CLBSV-PS11	004661905	Contact block, 1NO/NC (change-over)	CLBSV I-0-II	0,03	1/25

Application: Pre-opening and signalling of positions I and II, 1NO/NC additional contact per position.

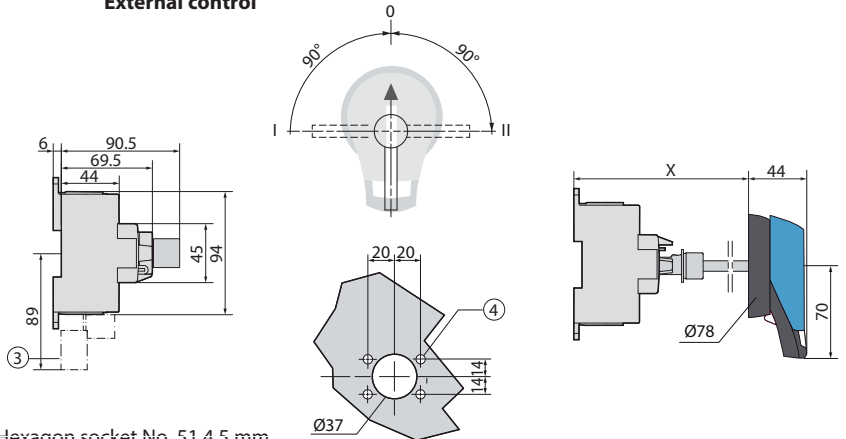
Dimensions (mm)

Direct control



1. Max. connection
 - solid conductor: 50 mm²;
 - Stranded conductor: 35 mm²

External control



2. Hexagon socket No. 51 4.5 mm.
 3. Connecting busbar
 4. Mounting with 2 or 4 7 mm screws.
- for 200mm stem - X = Min. 128mm, Max. 290mm
for 320mm rod - X = Min. 128mm, Max. 410mm

Mounting example: Conact block

(flip)
004661905 CLBSV-PS11

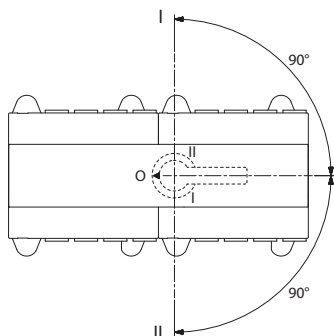
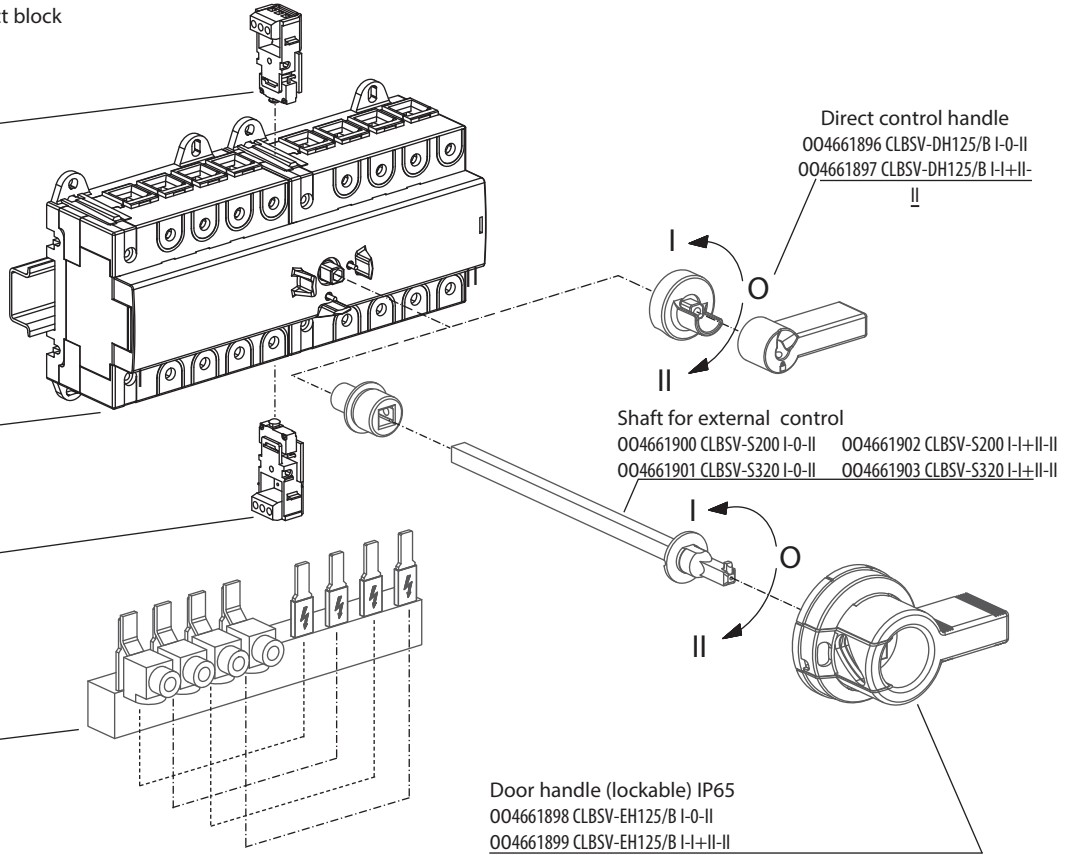
change-over switch

- 004661890 CLBSV 63 3P CO I-0-II
- 004661891 CLBSV 100 3P CO I-0-II
- 004661892 CLBSV 125 3P CO I-0-II
- 004661893 CLBSV 63 3P CO I-I+II-II
- 004661894 CLBSV 100 3P CO I-I+II-II
- 004661895 CLBSV 125 3P CO I-I+II-II

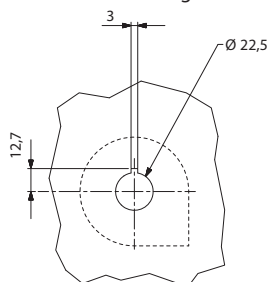
Contact block (flip-flop)

004661905 CLBSV-PS11

Connecting busbar IP20
004661904 CLBSV-BR 3P



With fastening nut



Mounting hole

With fastening screws

