



CST SERIES - CAM SWITCHES

- Complete range of cam switches for control, instrumentation and motor starting applications.
- Available for currents from 6 A to 200 A.
- Quick and easy installation.
- Compact size with many switching programs.
- Multi pole design.
- Long distance visibility.
- Touch-proof terminals with IP20 protection.

TYPES:

CST1 - CHANGEOVER

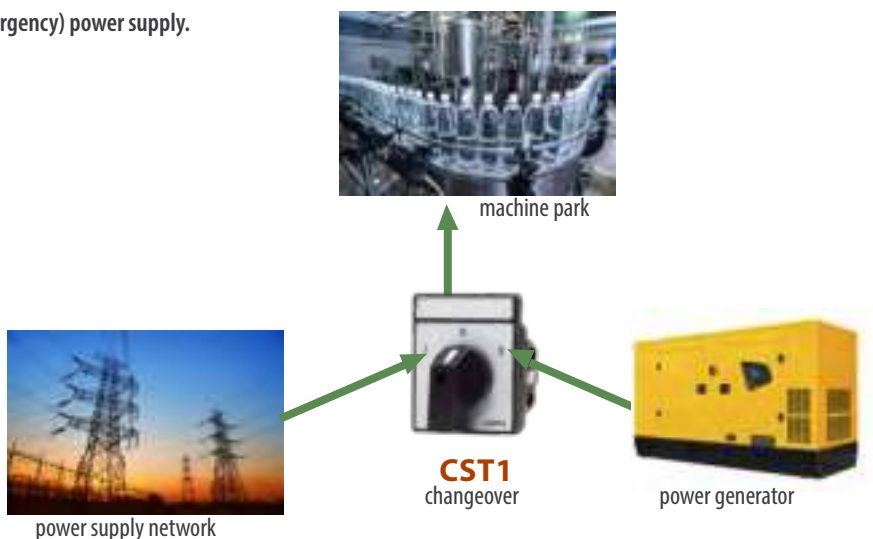
CST2 - MULTI-STEP

CST3 - ISOLATOR

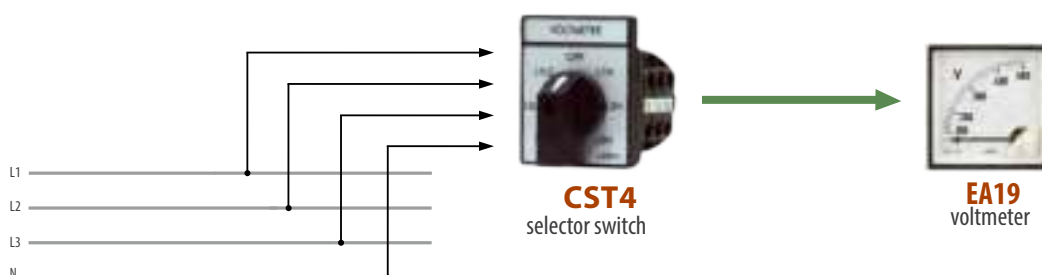
CST4 - SELECTOR

APPLICATION EXAMPLES

Switching on the (emergency) power supply.



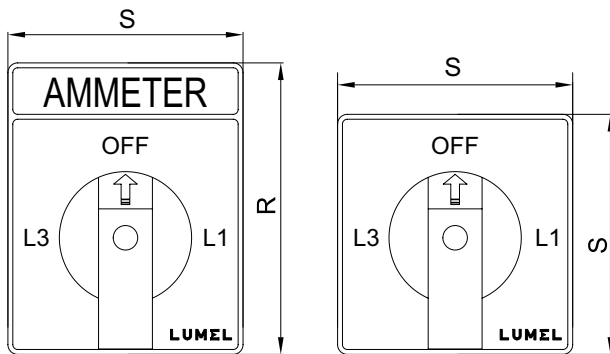
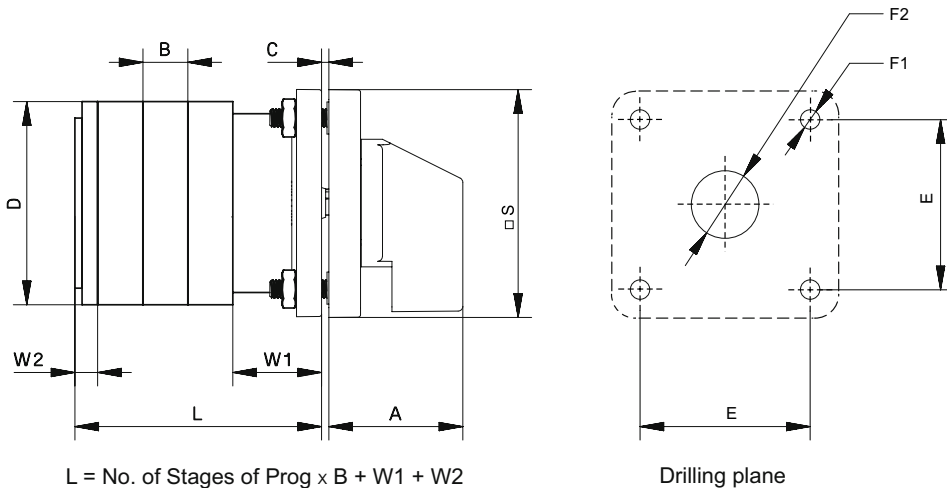
Measurement of phase and phase-to-phase voltage using only one voltmeter.



CST1/CST2/CST3/CST4

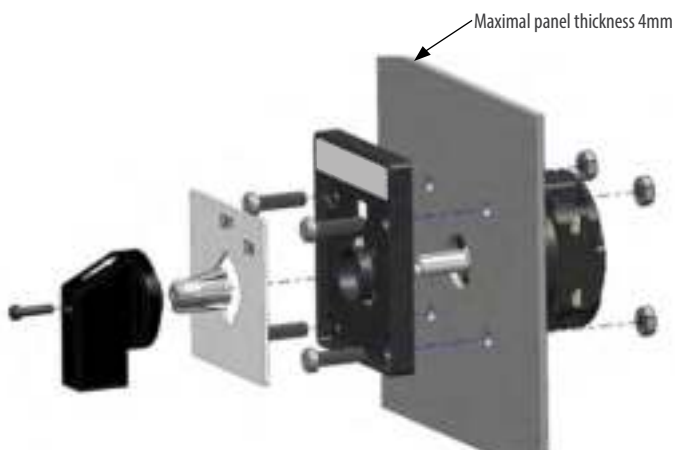
- CAM SWITCHES

EXTERNAL DIMENSIONS



Type	A	B	C _(max)	D	E	F1	F2	R	S	W1	W2
6 A	29 mm	9.7 mm	4 mm	32 mm	36 mm	4 mm	8 mm	48 mm	48 mm	13 mm	7 mm
10 A	29 mm	9.5 mm	4 mm	43 mm	36 mm	4 mm	7 mm	60 mm	48 mm	19 mm	5 mm
16 A	29 mm	9.5 mm	4 mm	43 mm	36 mm	4 mm	7 mm	60 mm	48 mm	19 mm	5 mm
20 A	29 mm	9.5 mm	4 mm	43 mm	36 mm	4 mm	7 mm	60 mm	48 mm	19 mm	5 mm
25 A	34 mm	14.3 mm	4 mm	53 mm	48 mm	4 mm	12 mm	64 mm	64 mm	24 mm	6.2 mm
32 A	34 mm	14.3 mm	4 mm	53 mm	48 mm	4 mm	12 mm	64 mm	64 mm	24 mm	6.2 mm
40 A	34 mm	14.3 mm	4 mm	53 mm	48 mm	4 mm	12 mm	64 mm	64 mm	24 mm	6.2 mm
63 A	34 mm	14.3 mm	4 mm	53 mm	48 mm	4 mm	12 mm	64 mm	64 mm	24 mm	6.2 mm
100 A	49 mm	29 mm	4 mm	88 mm	68 mm	5.5 mm	18 mm	88 mm	88 mm	27 mm	7 mm
200 A	49 mm	29 mm	4 mm	88 mm	68 mm	5.5 mm	18 mm	88 mm	88 mm	27 mm	7 mm

INSTALLATION



AC DUTY RATINGS

Class	Application
AC-1	Non-Inductive or slightly inductive loads ($\cos\phi \geq 0,95$); Resistance furnaces
AC-3	Squirrel-cage motors: starting switching off motors during running
AC-15	Control of AC electromagnetic loads
AC-21-A	Switching of resistive loads, including moderate overloads (frequent switching)
AC-23-A	Switching of motor loads or other highly inductive loads (frequent switching)

CST1/CST2/CST3/CST4 - CAM SWITCHES

TECHNICAL DATA

PARAMETERS		UNIT	6 A	10 A	16 A	20 A	25 A	32 A	40 A	63 A	100 A	200 A
Rated operational voltage (Ue)		V	440	440	690	690	690	690	690	690	690	690
Rated Insulation voltage (Ui)		V	440	440	690	690	690	690	690	690	690	690
Rated uninterupted current (Ith)		A	8	12	20	25	25	32	40	63	100	200
Rated short time withstand current (Icw)		A	72	120	192*	240*	300	384	480	756	1200	2400
Rated Impulse withstand voltage (Uimp)		kV	4	4	4	4	6	6	6	6	6	6
Rated Fuse short circuit current		kA	3	3	5	5	10	10	10	10	15	25
Fuse size (Type gG/ gM)		A	6	10	16	20	25	32	50	63	100	200
The power of the receiver in terms of use												
AC23A 3 phase	220-240 V	kW	1.1	1.8	3	3.7	4.7	5.5	7.5	11	22	22
	380-440V	kW	1.8	3	5.5	7.5	7.5	11	15	18.5	37	37
	500V	kW	-	-	5.5	7.5	11	15	18.5	22	45	45
	660-690V	kW	-	-	5.5	7.5	11	15	18.5	22	45	45
AC23A 1 phase	110V	kW	0.25	0.37	0.55	0.75	1.5	2.2	2.2	3	-	-
	220-240V	kW	0.5	0.75	1.5	2.2	3	3.7	5.5	7.5	-	-
	380-440V	kW	0.75	1.1	2.2	3.7	5.5	7.5	7.5	11	-	-
AC3 3 phase	220-240V	kW	1.1	1.5	3	3	4.7	5.5	7.5	11	22	22
	380-440V	kW	1.8	2.2	5.5	5.5	7.5	11	15	18.5	37	37
	500V	kW	-	-	5.5	5.5	11	15	18.5	22	45	45
	600-690V	kW	-	-	5.5	5.5	11	15	18.5	22	45	45
AC3 1 phase	110V	kW	0.25	0.3	0.55	0.6	1.5	2.2	2.2	3	-	-
	220-240V	kW	0.5	0.55	1.5	2.2	3	3.7	5.5	7.5	-	-
	380-440V	kW	0.75	0.75	2.5	3	5.5	7.5	7.5	11	-	-
AC21A/AC1		A	6	10	16	20	25	32	40	63	100	200
AC15	220-240V	A	2	2.5	5	5	8	14	16	16	20	-
	380-440V	A	1	1.5	4	4	5	6	7	7	10	-
Terminal cross-section												
Single / Multiple	Min	mm ²	0.7	0.7	1.5	1.5	2.5	2.5	4	4	10	10
	Max	mm ²	1.5	1.5	4	4	4	6	10	16	35	70
Fine strand with sleeve	Min	mm ²	0.7	0.7	1	1	1.5	1.5	2.5	2.5	10	10
	Max	mm ²	1.5	1.5	2.5	2.5	4	4	6	16	35	50
Terminal screw		metric	M3	M3	M3	M3	M4	M4	M4	M4	M10	M10
Terminal tightening torque		Nm	0.8	0.8	0.8	0.8	1.2	1.2	1.2	1.2	2.5	2.5

* Rated short time withstand current (0.5s- current)

RATED OPERATING CONDITIONS

Frequency	50/60 Hz	
Operating temperature	-25°C...60°C	
Storage temperature	-40°C...80°C	
Installation category	III	
Altitude a.s.l.	2000 m	
Protection grade	IP50 from frontal side	IP20 from terminal side
Standards	IEC 60947-1, IEC 60947-3, IEC 60947-5	

SWITCH LIFE

Mechanical Life	100 000 operations at 300 cycles/hr	
Electrical Life	10 000 operations at 100% rated duty at 120 cycles/hr	
Contacts	double break	type AgNi
	double break	type AgCdO

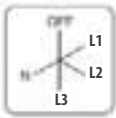
CST4 SERIES

- SELECTOR SWITCHES

WIRING DIAGRAMS AND CODING

SELECTOR SWITCHES CST4

Ordering code CST4-69LXXXOF__00

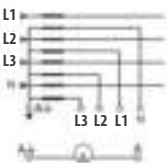
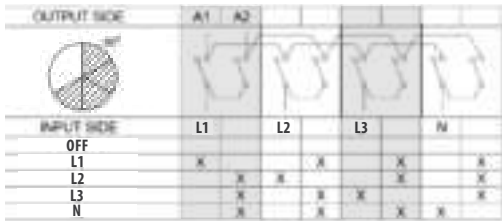


Selector switch CST4-	69LXXXOF	-	-	00
Rated current:				
6 A	1			
10 A	B			
16 A	C			
20 A	J			
Front plate colour:				
silver background and black knob		A		
yellow background and red knob		Y		
Acceptance tests:				
without additional quality requirements			0	
with an extra quality inspection certificate			1	

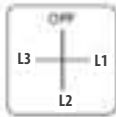
ITEMS AVAILABLE FROM OUR STOCK:

- CST4-C69LXXXOFA000**
 - Selector switch 16A, for ammeter, 5-way L123/N/OFF, rotation angle <360°, with OFF, rectangular knob, silver background, black knob
- CST4-C69LXXXOFY000**
 - Selector switch 16A, for ammeter, 5-way L123/N/OFF, rotation angle <360°, with OFF, rectangular knob, yellow background, red knob

Description			
	6A	10A	16A
	Stage number		
5-way for the ammeter	4	4	4



Ordering code CST4-97TXXXOF__00

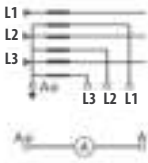
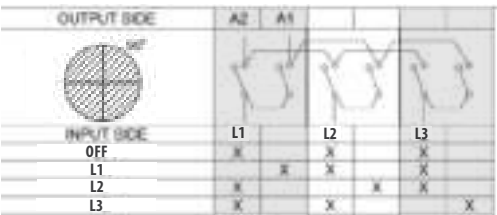


Selector switch CST4-	97TXXXOF	-	-	00
Rated current:				
6 A	1			
10 A	B			
16 A	C			
20 A	J			
Front plate colour:				
silver background and black knob		A		
yellow background and red knob		Y		
Acceptance tests:				
without additional quality requirements			0	
with an extra quality inspection certificate			1	

ITEMS AVAILABLE FROM OUR STOCK:

- CST4-C97TXXXOFA000**
 - Selector switch 16A, for ammeter, 4-way L123/OFF, rotation angle 360°, with OFF, rectangular knob, silver background, black knob
- CST4-C97TXXXOFY000**
 - Selector switch 16A, for ammeter, 4-way L123/OFF, rotation angle 360°, with OFF, rectangular knob, yellow background, red knob

Description			
	6A	10A	16A
	Stage number		
4-way for the ammeter	3	3	3



CST4 SERIES- SELECTOR SWITCHES

WIRING DIAGRAMS AND CODING

SELECTOR SWITCHES CST4

Ordering code CST4-4HLXXXOF__00



Selector switch CST4-		4HLXXXOF	-	-	00
Rated current:					
6 A	1				
10 A	B				
16 A	C				
20 A	J				
Front plate colour:					
silver background and black knob		A			
yellow background and red knob		Y			
Acceptance tests:					
without additional quality requirements			0		
with an extra quality inspection certificate			1		

ITEMS AVAILABLE FROM OUR STOCK:

CST4-C4HLXXXOFA000

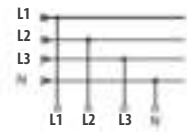
- Selector switch 16A, do woltomierza, 7-way L-L/L-N/OFF, rotation angle <360°, with OFF, rectangular knob, silver background, black knob

CST4-C4HLXXXOFY000

- Selector switch 16A, do woltomierza, 7-way L-L/L-N/OFF, rotation angle <360°, with OFF, rectangular knob, yellow background, red knob

Description			
	6A	10A	16A
	Stage number		
Phase and phase-to-phase voltages	3	3	3

OUTPUT SIDE		V2	V1		
INPUT SIDE		L3	L2	L1	N
L3L1		X			
L2L2			X		
L1L2				X	
OFF					X
L1N				X	X
L2N			X		X
L3N		X			X



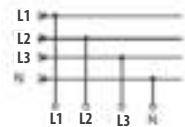
Ordering code CST4-9BTXXXOF__00



Selector switch CST4-		9BTXXXOF	-	-	00
Rated current:					
6 A	1				
10 A	B				
16 A	C				
20 A	J				
Front plate colour:					
silver background and black knob		A			
yellow background and red knob		Y			
Acceptance tests:					
without additional quality requirements			0		
with an extra quality inspection certificate			1		

Description			
	6A	10A	16A
	Stage number		
Phase voltages	3	3	3

OUTPUT SIDE													
INPUT SIDE		N		L1		N		L2		N		L3	
OFF		X		X									
L1L2													
L2L3						X		X					
L3L1										X		X	



CST4 SERIES

- SELECTOR SWITCHES

WIRING DIAGRAMS AND CODING

SELECTOR SWITCHES

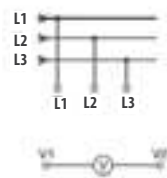
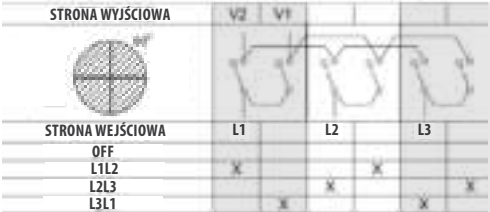
CST4

Ordering code CST4-98TXXOF__00



Selector switch CST4-	98TXXOF	-	-	00
Rated current:				
6 A	1			
10 A	B			
16 A	C			
20 A	J			
Front plate colour:				
silver background and black knob		A		
yellow background and red knob		Y		
Acceptance tests:				
without additional quality requirements			0	
with an extra quality inspection certificate			1	

Description	6A	10A	16A
	Stage number		
Phase-to-phase voltages	3	3	3



CODING OF CST4

Selector switch CST4-	-	-	-	X	XX	O	F	-	-	00
Rated current:										
6 A	1									
10 A	B									
16 A	C									
20 A	J									
Meter type:										
ammeter L123/OFF/90°	97									
ammeter L123/N/OFF/60°	69									
voltmeter L-L/L-N/OFF/45°	4H									
voltmeter L-L/OFF/90°	98									
voltmeter L-N/OFF/90°	9B									
Rotation angle:										
360° *	T									
less than 360° **	L									
				X						
					XX					
						O				
							F			
Front plate colour:										
silver background and black knob								A		
yellow background and red knob								Y		
Acceptance tests:										
without additional quality requirements									0	
with an extra quality inspection certificate									1	
Version:										
standard										00
custom-made***										XX

* - only for rotation angle 90°
 ** - only for rotation angle 45° i 60°
 *** - only after agreeing with the manufacturer

CST1/CST2/CST3/CST4 SERIES

- CAM SWITCHES

ACCESSORIES - ORDERING

Ordering code	Description	View	Cam switch type
20-042-06-00007	CAM SWITCH KNOB (Black)		CST1,CST2,CST3,CST4
20-042-06-00008	CAM SWITCH KNOB (Red)		CST1,CST2,CST3,CST4
20-042-06-00009	FRONT PLATE CAM SWITCH (Yellow)		CST1,CST2,CST3,CST4
20-042-06-00010	Yellow BLANK PAPER FOR MARKING PLATE		CST1,CST2,CST3,CST4
20-042-06-00011	Yellow BLANK PAPER FOR NAME PLATE		CST1,CST2,CST3,CST4
20-042-06-00012	BLANK NAME PLATE		CST1,CST2,CST3,CST4
20-042-06-00013	BLANK MARKING PLATE		CST1,CST2,CST3,CST4
20-042-06-00016	SCREWS AND NUTS		CST1,CST2,CST3,CST4