

CATALOGUE

Technical data and prices for rotary cam switches,
main-, emergency/off- and maintenance switches



SONTHEIMER



24!

**HOURS DELIVERY
SERVICE - ALSO
FOR CUSTOMMADE
SWITCHES**

SONTHEIMER

SINCE 1946

ABOUT US

Digitalization, automation and short product cycles lead to increasing requirements to flexibility, efficiency and safety of humans, equipment and processes. Sontheimer Elektroschaltgeraete supports customers from all different sectors as a reliable partner with solution-oriented action, promptitude as well as excellent price-performance ratio- and that since 1946.

WHAT CHARACTERIZES US

FLEXIBLE, FAST AND SOLUTION-ORIENTED

Sontheimer Rotary-, Maintenance-, Main-, and Emergency/Off-switches are being installed worldwide in machine- and plant construction, ship building, the solar-industry, in elevators or power stations.

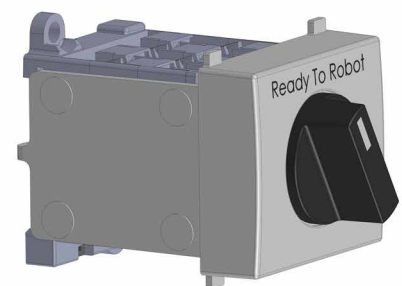
All production processes like inventor, construction, plastic injection molding and assembling are performed by Sontheimer itself.

Our Know-How and innovative production-locations allow us to realize your individual requirements concerning the pin assignment and model of the switches. Custom-made productions can also be realized within a short time. Of course we make no compromises regarding the quality and safety: Every single switch gets checked electrical and optical before we send it out.

NEWS

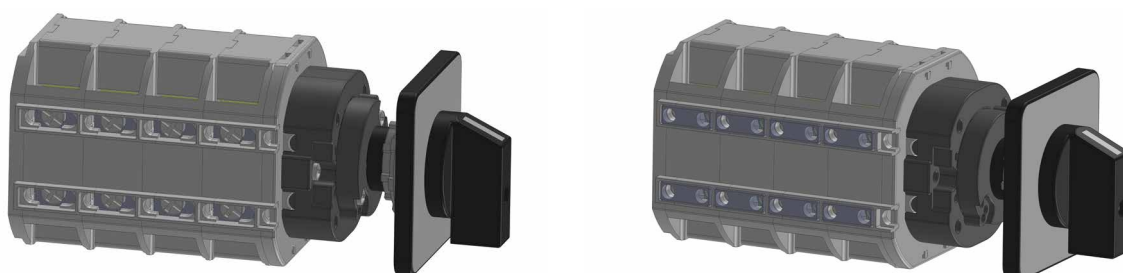
READY-TO-ROBOT SWITCH D0/8 25 A

The automation of single production processes does not only affect global concerns. Also medium sized companies count on robots. With the new developed Ready-to-Robot cover X74R it is possible to mount and wire the switch size D0/8 with 25 A automated. This enables e.g. the fully automated assembly of switch cabinets. Furthermore you can store the Ready-to-Robot switch space saving, because it can be stacked on each other.



NEW CAM SWITCH D1/40 UP TO 63 A AND D1/55 UP TO 100 A

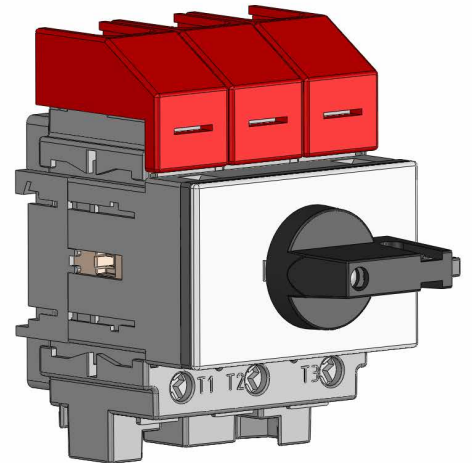
The cam switch D1/40 was overhauled and is now shock proof according IP20 and also licensed after cULus. The switch size D1/55 has the same switch body as the switch D1/40. Due to the heavy duty contact system the 100A switch can be installed at very high AC3- and AC23 values. Therefore the cam switch D1/55 is the most compact switch on the market by far. Also size D1/55 is approved by cULus.



NEWS

LX-SWITCH RANGE BY UL489 UP TO 150 A

With the LX-switch range we have customer oriented solutions for the North-American market. The main switches were designed for energy supply and – distribution. They are approved by UL489 and are the most compact solution for energy distribution according UL489 on the market. Thereby construction space, storage- and transport costs will be reduced. For all versions of the switches we also have the accessories conformable to UL508A available, therefore switching off is possible at any time when the door of the switch cabinet is opened.



STAINLESS STEEL ENCLOSURE V2A

In 2019 it is possible for the first time to purchase switches from Sontheimer inside stainless steel enclosures. Our product range will include the stainless steel enclosures in all sizes besides the already known cast metal-, sheet metal and plastic housings. This kind is very light, but also very robust and weather-resistant. After extensive and successful quality tests we will add the stainless steel enclosures on 01.05.2019 to our product range.

NEW PRODUCT SERIES IN CCC PORTFOLIO

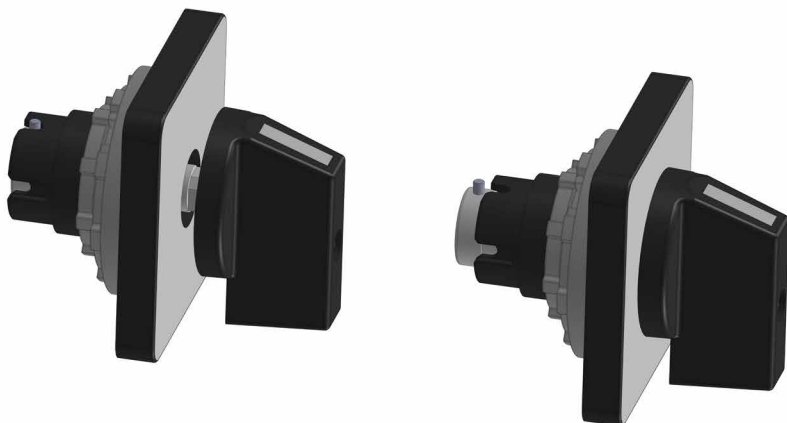
The LO-switch series is also approved by CCC now. More switch types will follow.

MORE ENGRAVING POSSIBILITIES

For some time we already use most modern laser technology to engrave our products. Besides the wide range of standard engravings, we also can fulfill special customer requirements. Logos, special engravings and clamp markings can be applied to all sizes. Compared to the common printed version, products that were engraved by the laser show a way longer resistiveness of the lettering. In addition, frontplates can be lasered in Chinese and Cyrillic script.

PUSH-TO-TURN Z105

With the new developed system Push-to-turn Z105 turning or switching is only possible after conscious pushing of the handle. Through this intent act the safety of this switch will be highly increased. Incidents due to unconscious switching can be prevented effectively. The Push-to-turn system can be applied on all central mountings and is intermateable with all handles and padlocks of DO-size, on-load-switches and cam switches as well.

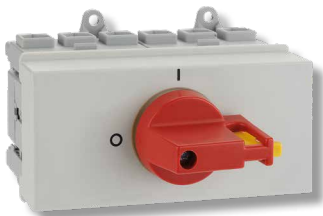
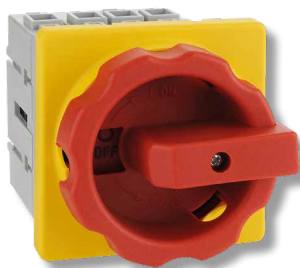


SONTHEIMER

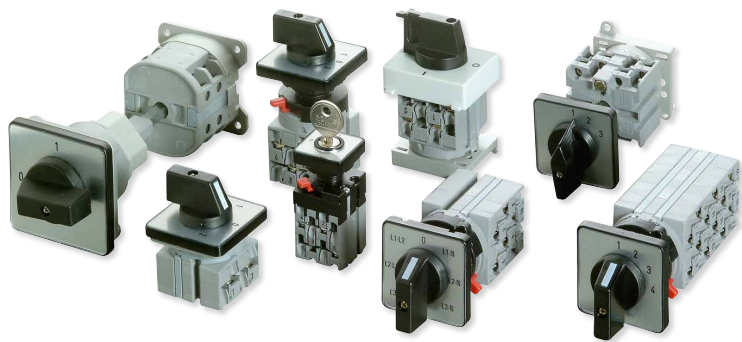
SINCE 1946



PRODUCTS

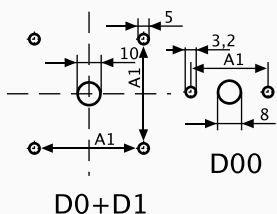
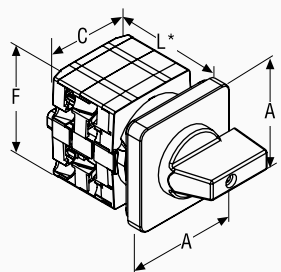


ROTARY CAM SWITCHES DATA

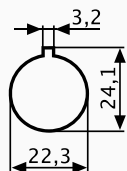
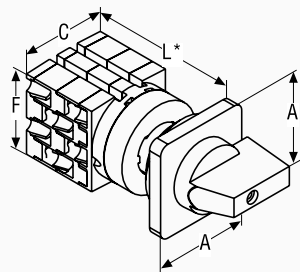


Other configurations and sizes on request

	I _{th} A	AC23 kW (3x400V)	AC3 kW	U V	connection cross mm ²
D00	10	3,0	2,2	500	1,5
D0	25	7,5	5,5	690	4
D1-16	25	9,0	7,5	690	6
D1-20	32	10,5	9,0	690	6
D1-32	45	15,0	11,0	690	6
D1-40	80	22,0	19,0	690	2x16
D1-55	100	37,0	30,0	690	35
D2-63	100	26,5	22,0	690	70
D2-100	125	32,5	27,0	690	70
D2-160	160	40,0	37,0	690	70
D2-126	200	45,5	40,0	690	70
D3-250	315	76,0	64,0	690	185

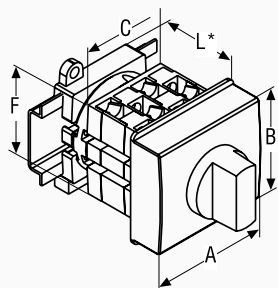


E	TYPE	A	A1	C	F	L1	L2	L3	L4	L5	L6	L7	L8
	D00-4	30	20	28	30	29	37	45	53	61	69	77	85
	D00-6	30	20	30	28	33	45	57	69	81	93	105	117
	D0-7	48	36	40	39	34	46	58	70	82	94	106	118
	D0-8	48	36	40	39	34	46	58	70	82	94	106	118
	D0-13	48	36	43	43	32	41	51	60	70	79	89	98
	D1-16	66	48	54	56	40	53	66	79	92	105	118	131
	D1-20	66	48	54	56	40	53	66	79	92	105	118	131
	D1-32	66	48	54	56	40	53	66	79	92	105	118	131
	D1-40	66	48	68	64	50	71	92	113	134	155	176	197



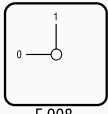

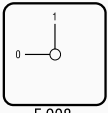

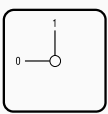

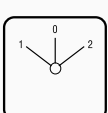
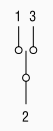
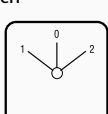

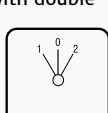
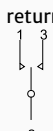
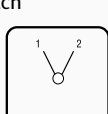

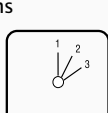
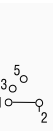
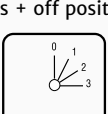
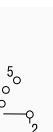
IP65

ZM	TYPE	A	C	F	L1	L2	L3	L4	L5	L6	L7	L8
	D00-4	30	28	30	43	51	59	67	75	83	91	99
	D00-6	30	30	28	46	58	70	82	94	106	118	130
	D0-7	48	40	43	58	70	82	94	106	118	130	142
	D0-8	48	40	39	58	70	82	94	106	118	130	142
	D0-13	48	43	43	56	65	75	84	94	103	113	122
	D1-16	66	54	56	60	73	86	99	112	125	138	151
	D1-20	66	54	56	60	73	86	99	112	125	138	151
	D1-32	66	54	56	60	73	86	99	112	125	138	151
	D1-40	66	68	64	70	91	112	133	154	175	196	217



T	TYPE	A	B	C	F	L1	L2	L3				
	D00-6	35	45	28	30	45	45	45				
	D0-8	52,5	45	40	39	45	45	45				
	D1-16	52,5	45	54	56	45	45	56				
	D1-20	52,5	45	54	56	45	45	56				
	D1-32	52,5	45	54	56	45	45	56				

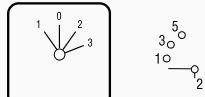
ROTARY CAM SWITCHES

Connection diagram	Thermal rated current I_{th} (in A)	Rated perf. at 3x400V (in kW)	4-Hole mounting			Central mounting			DIN-Railmounting		
			Type	Type	Type	Type	Type				
90° Off/On switch  F 908  1-pole	10	2,2	A1/ 4	E	A1/ 4	ZM					
	10	2,2	A1/ 6	E	A1/ 6	ZM	A1/ 6	T			
	25	5,5	A1/ 7	E	A1/ 7	ZM					
	25	5,5	A1/ 8	E	A1/ 8	ZM	A1/ 8	T			
	25	7,5	A1/ 16	E	A1/ 16	ZM	A1/ 16	T			
	32	9,0	A1/ 20	E	A1/ 20	ZM	A1/ 20	T			
45	11,0	A1/ 32	E	A1/ 32	ZM	A1/ 32	T				
90° Off/On switch  F 908  3-pole	10	2,2	A3/ 4	E	A3/ 4	ZM					
	10	2,2	A3/ 6	E	A3/ 6	ZM	A3/ 6	T			
	25	5,5	A3/ 7	E	A3/ 7	ZM					
	25	5,5	A3/ 8	E	A3/ 8	ZM	A3/ 8	T			
	25	7,5	A3/ 16	E	A3/ 16	ZM	A3/ 16	T			
	32	9,0	A3/ 20	E	A3/ 20	ZM	A3/ 20	T			
45	11,0	A3/ 32	E	A3/ 32	ZM	A3/ 32	T				
90° Off/On switch  F 908  4-pole	10	2,2	A4/ 4	E	A4/ 4	ZM					
	10	2,2	A4/ 6	E	A4/ 6	ZM	A4/ 6	T			
	25	5,5	A4/ 7	E	A4/ 7	ZM					
	25	5,5	A4/ 8	E	A4/ 8	ZM	A4/ 8	T			
	25	7,5	A4/ 16	E	A4/ 16	ZM	A4/ 16	T			
	32	9,0	A4/ 20	E	A4/ 20	ZM	A4/ 20	T			
45	11,0	A4/ 32	E	A4/ 32	ZM	A4/ 32	T				
60° Change-over switch  F 604  1-pole	10	2,2	U1/ 4	E	U1/ 4	ZM					
	10	2,2	U1/ 6	E	U1/ 6	ZM	U1/ 6	T			
	25	5,5	U1/ 7	E	U1/ 7	ZM					
	25	5,5	U1/ 8	E	U1/ 8	ZM	U1/ 8	T			
	25	7,5	U1/ 16	E	U1/ 16	ZM	U1/ 16	T			
	32	9,0	U1/ 20	E	U1/ 20	ZM	U1/ 20	T			
45	11,0	U1/ 32	E	U1/ 32	ZM	U1/ 32	T				
60° Change-over switch  F 604  2-pole	10	2,2	U2/ 4	E	U2/ 4	ZM					
	10	2,2	U2/ 6	E	U2/ 6	ZM	U2/ 6	T			
	25	5,5	U2/ 7	E	U2/ 7	ZM					
	25	5,5	U2/ 8	E	U2/ 8	ZM	U2/ 8	T			
	25	7,5	U2/ 16	E	U2/ 16	ZM	U2/ 16	T			
	32	9,0	U2/ 20	E	U2/ 20	ZM	U2/ 20	T			
45	11,0	U2/ 32	E	U2/ 32	ZM	U2/ 32	T				
Change-over switch with double-sided return  F 312  1-pole	10	2,2	URR1/ 4	E	URR1/ 4	ZM					
	10	2,2	URR1/ 6	E	URR1/ 6	ZM	URR1/ 6	T			
	25	5,5	URR1/ 7	E	URR1/ 7	ZM					
	25	5,5	URR1/ 8	E	URR1/ 8	ZM	URR1/ 8	T			
	25	7,5	URR1/ 16	E	URR1/ 16	ZM	URR1/ 16	T			
	32	9,0	URR1/ 20	E	URR1/ 20	ZM	URR1/ 20	T			
45	11,0	URR1/ 32	E	URR1/ 32	ZM	URR1/ 32	T				
60° Change-over switch  F 614  1-pole	10	2,2	WS1/ 4	E	WS1/ 4	ZM					
	10	2,2	WS1/ 6	E	WS1/ 6	ZM	WS1/ 6	T			
	25	5,5	WS1/ 7	E	WS1/ 7	ZM					
	25	5,5	WS1/ 8	E	WS1/ 8	ZM	WS1/ 8	T			
	25	7,5	WS1/ 16	E	WS1/ 16	ZM	WS1/ 16	T			
	32	9,0	WS1/ 20	E	WS1/ 20	ZM	WS1/ 20	T			
45	11,0	WS1/ 32	E	WS1/ 32	ZM	WS1/ 32	T				
Step switch, 3 positions  F 302  1-pole	10	2,2	ST31/ 4	E	ST31/ 4	ZM					
	10	2,2	ST31/ 6	E	ST31/ 6	ZM	ST31/ 6	T			
	25	5,5	ST31/ 7	E	ST31/ 7	ZM					
	25	5,5	ST31/ 8	E	ST31/ 8	ZM	ST31/ 8	T			
	25	7,5	ST31/ 16	E	ST31/ 16	ZM	ST31/ 16	T			
	32	9,0	ST31/ 20	E	ST31/ 20	ZM	ST31/ 20	T			
45	11,0	ST31/ 32	E	ST31/ 32	ZM	ST31/ 32	T				
Step switch, 3 positions + off position  F 315  1-pole	10	2,2	ST031/ 4	E	ST031/ 4	ZM					
	10	2,2	ST031/ 6	E	ST031/ 6	ZM	ST031/ 6	T			
	25	5,5	ST031/ 7	E	ST031/ 7	ZM					
	25	5,5	ST031/ 8	E	ST031/ 8	ZM	ST031/ 8	T			
	25	7,5	ST031/ 16	E	ST031/ 16	ZM	ST031/ 16	T			
	32	9,0	ST031/ 20	E	ST031/ 20	ZM	ST031/ 20	T			
45	11,0	ST031/ 32	E	ST031/ 32	ZM	ST031/ 32	T				

ROTARY CAM SWITCHES

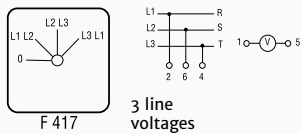
Connection diagram

Step switch, 3 positions + Off position



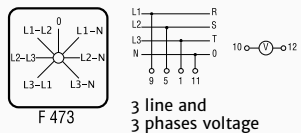
2Ka-A1142a F 375 1-pole

Voltmeter change-over switch



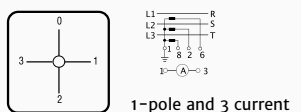
2Ka-A1086 F 417 3 line voltages

Voltmeter change-over switch



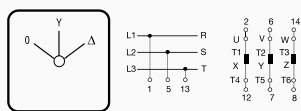
3Ka-A1088 F 473 3 line and 3 phases voltage

Ammeter change-over switch



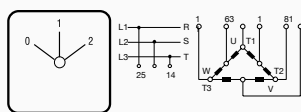
3Ka-A1092 F 904 1-pole and 3 current changer circuits

Star delta switch, 1 direction



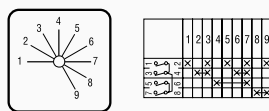
4Ka-A1031 F 607

Pole change switch



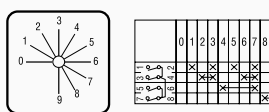
4Ka-A1044 F 603 1-pole

Binary code switch



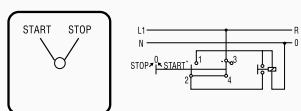
2Ka-A1410 F 308 1-pole

Binary code switch



2Ka-A1413 F 321 1-pole

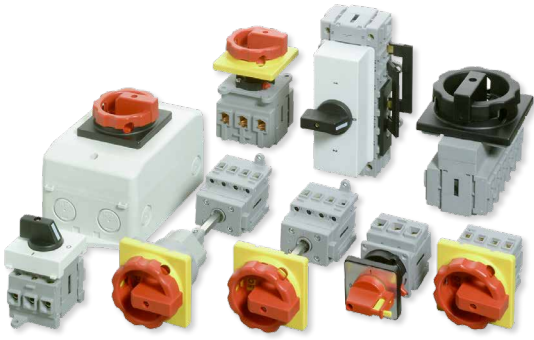
Stop/Start switch



2Ka-A1103 F 330 1-pole

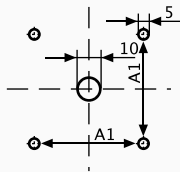
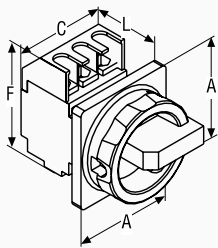
Thermal rated current I_{th} (in A)	Rated perf. at 3x400V (in KW)	4-Hole mounting		Central mounting		DIN-Railmounting	
		Type	Type	Type	Type		
10	2,2	ST031/ 4	E/F375	ST031/ 4	ZM/F375		
10	2,2	ST031/ 6	E/F375	ST031/ 6	ZM/F375	ST031/ 6	T/F375
25	5,5	ST031/ 7	E/F375	ST031/ 7	ZM/F375		
25	5,5	ST031/ 8	E/F375	ST031/ 8	ZM/F375	ST031/ 8	T/F375
25	7,5	ST031/ 16	E/F375	ST031/ 16	ZM/F375	ST031/ 16	T/F375
32	9,0	ST031/ 20	E/F375	ST031/ 20	ZM/F375	ST031/ 20	T/F375
45	11,0	ST031/ 32	E/F375	ST031/ 32	ZM/F375	ST031/ 32	T/F375
10	2,2	V3/ 4	E	V3/ 4	ZM		
10	2,2	V3/ 6	E	V3/ 6	ZM	V3/ 6	T
25	5,5	V3/ 7	E	V3/ 7	ZM		
25	5,5	V3/ 8	E	V3/ 8	ZM	V3/ 8	T
25	7,5	V3/ 16	E	V3/ 16	ZM		
10	2,2	V30/ 4	E	V30/ 4	ZM		
10	2,2	V30/ 6	E	V30/ 6	ZM	V30/ 6	T
25	5,5	V30/ 7	E	V30/ 7	ZM		
25	5,5	V30/ 8	E	V30/ 8	ZM	V30/ 8	T
25	7,5	V30/ 16	E	V30/ 16	ZM		
10	2,2	AU31/ 4	E	AU31/ 4	ZM		
10	2,2	AU31/ 6	E	AU31/ 6	ZM	AU31/ 6	T
25	5,5	AU31/ 7	E	AU31/ 7	ZM		
25	5,5	AU31/ 8	E	AU31/ 8	ZM	AU31/ 8	T
25	7,5	AU31/ 16	E	AU31/ 16	ZM		
10	2,2	SD/ 4	E	SD/ 4	ZM		
10	2,2	SD/ 6	E	SD/ 6	ZM		
25	5,5	SD/ 7	E	SD/ 7	ZM		
25	5,5	SD/ 8	E	SD/ 8	ZM		
25	7,5	SD/ 16	E	SD/ 16	ZM		
32	9,0	SD/ 20	E	SD/ 20	ZM		
45	11,0	SD/ 32	E	SD/ 32	ZM		
10	2,2	P12/ 4	E	P12/ 4	ZM		
10	2,2	P12/ 6	E	P12/ 6	ZM		
25	5,5	P12/ 7	E	P12/ 7	ZM		
25	5,5	P12/ 8	E	P12/ 8	ZM		
25	7,5	P12/ 16	E	P12/ 16	ZM		
32	9,0	P12/ 20	E	P12/ 20	ZM		
45	11,0	P12/ 32	E	P12/ 32	ZM		
10	2,2	BC9/ 4	E	BC9/ 4	ZM		
10	2,2	BC9/ 6	E	BC9/ 6	ZM	BC9/ 6	T
25	5,5	BC9/ 7	E	BC9/ 7	ZM		
25	5,5	BC9/ 8	E	BC9/ 8	ZM	BC9/ 8	T
10	2,2	BC09/ 4	E	BC09/ 4	ZM		
10	2,2	BC09/ 6	E	BC09/ 6	ZM	BC09/ 6	T
25	5,5	BC09/ 7	E	BC09/ 7	ZM		
25	5,5	BC09/ 8	E	BC09/ 8	ZM	BC09/ 8	T
10	2,2	SEA1/ 4	E	SEA1/ 4	ZM		
10	2,2	SEA1/ 6	E	SEA1/ 6	ZM	SEA1/ 6	T
25	5,5	SEA1/ 7	E	SEA1/ 7	ZM		
25	5,5	SEA1/ 8	E	SEA1/ 8	ZM	SEA1/ 8	T

ON LOAD SWITCHES LT DATA



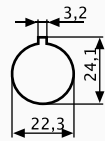
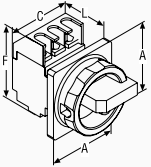
Other configurations and sizes on request

	I_{th} A	AC23 kW (3x400V)	AC3 kW	U V	connection cross mm ²
LT16	16	7,5	5,5	690	6
LT25A	25	9,5	7,5	690	6
LT32	32	11,5	9,5	690	16
LT40	40	20,0	11,0	690	16
LT63	63	22,0	18,5	690	35
LT80	80	30,0	22,0	690	35
LT100	100	37,0	30,0	690	50
LT125	125	45,0	37,0	690	50
LT180	180	90,0	75,0	690	185
LT250	250	132,0	110,0	690	185
H11	10			240	4



E

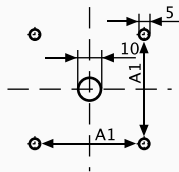
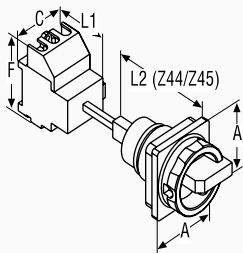
TYPE	A	A1	C 3pol	C 4pol	C 6pol	C 8pol	F	L
LT16-LT25A	66	48	48	48	/	/	62	50
LT32-LT40	66	48	45	61	91	122	72	50
ULT25-ULT40	64	48	91	122	/	/	72	64
LT63-LT80	66	48	60	80	121	161	83	59
ULT63-ULT80	64	48	121	161	/	/	83	74
LT100-LT125	66	48	70	93	141	187	96	75
ULT100-ULT125	64	48	141	187	/	/	96	90
LT180-LT250	94	68	112	150	224	300	169	93
ULT180-ULT250	94	68	224	300	/	/	169	110



ZM

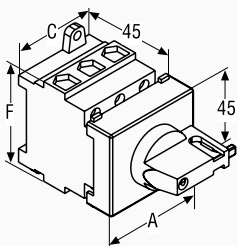
IP65

TYPE	A	C 3pol	C 4pol	F	L
LT16-LT25A	66	48	48	62	73
LT32-LT40	66	45	61	72	73
LT63-LT80	66	60	80	83	84



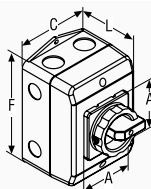
V

TYPE	A	A1	C 3pol	C 4pol	C 6pol	C 8pol	F	L1	L2 Z44/Z45
LT16-LT25A	66	48	48	48	/	/	62	50	80
LT32-LT40	66	48	45	61	91	122	72	50	80
ULT25-ULT40	64	48	91	122	/	/	72	64	80
LT63-LT80	66	48	60	80	121	161	83	59	80
ULT63-ULT80	64	48	121	161	/	/	83	74	80
LT100-LT125	66	48	70	93	141	187	96	75	80
ULT100-ULT125	64	48	141	187	/	/	96	90	80
LT180-LT250	94	68	112	150	224	300	169	93	47
ULT180-ULT250	94	68	224	300	/	/	148	110	47



T

TYPE	A 3pol	A 4pol	A 6pol	A 8pol	F	C 3pol	C 4pol	C 6pol	C 8pol
LT16-LT25A	52,5	52,5	52,5	/	50	48	48	/	/
LT32-LT40	52,5	65	98	98	55	45	61	91	122
ULT25-ULT40	98	98	/	/	55	91	122	/	/
LT63-LT80	63	83	125	125	64	60	80	121	161
ULT63-ULT80	125	125	/	/	64	121	161	/	/
LT100-LT125	70	93	140	140	83	70	93	141	187
ULT100-ULT125	140	140	/	/	83	141	187	/	/



Sheet metal enclosures and EMC-accessories

Enclosures

IP65

TYPE	A	C	F	L	Knockouts
PM-D1/Z33	66	100	140	81	4 x M25, 4 x M20
PM-D2/Z33	66	146	176	104	4 x M32/40, 4 x M20
PM-D3/Z33	90	302	212	137	4 x M50/63, 6 x M20
K4/Z33	90	373	373	230	2 x M40/63, 2 x M32/50, 4 x M25/40

ON LOAD SWITCHES LT

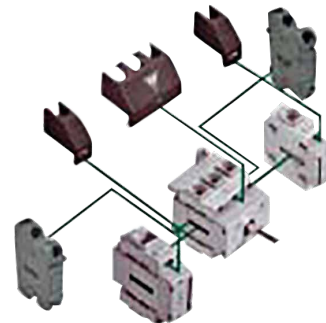
Connection diagram	Thermal rated current I_{th} (in A)	Rated perf. at 3x400V (in kW)	Rated perf. at 3x400V (in kW)	4-Hole mounting		Central mounting		Base mounting	
	I_{th}	AC3	AC23	Type		Type		Type	
	16	5,5	7,5	E	NLT 16/ 3E/ Z33 HLT 16/ 3E/ Z33	ZM	NLT 16/ 3ZM/ Z33 HLT 16/ 3ZM/ Z33	V	NLT 16/ 3V/ Z33/ 45 HLT 16/ 3V/ Z33/ 45
	25	7,5	9,5		NLT 25/ 3E/ Z33 HLT 25/ 3E/ Z33		NLT 25/ 3ZM/ Z33 HLT 25/ 3ZM/ Z33		NLT 25/ 3V/ Z33/ 45 HLT 25/ 3V/ Z33/ 45
	32	9,5	11,5		NLT 32/ 3E/ Z33 HLT 32/ 3E/ Z33		NLT 32/ 3ZM/ Z33 HLT 32/ 3ZM/ Z33		NLT 32/ 3V/ Z33/ 45 HLT 32/ 3V/ Z33/ 45
	40	11,0	20,0		NLT 40/ 3E/ Z33 HLT 40/ 3E/ Z33		NLT 40/ 3ZM/ Z33 HLT 40/ 3ZM/ Z33		NLT 40/ 3V/ Z33/ 45 HLT 40/ 3V/ Z33/ 45
	63	18,5	22,5		NLT 63/ 3E/ Z33 HLT 63/ 3E/ Z33		NLT 63/ 3ZM/ Z33 HLT 63/ 3ZM/ Z33		NLT 63/ 3V/ Z33/ 45 HLT 63/ 3V/ Z33/ 45
	80	22,0	30,0		NLT 80/ 3E/ Z33 HLT 80/ 3E/ Z33		NLT 80/ 3ZM/ Z33 HLT 80/ 3ZM/ Z33		NLT 80/ 3V/ Z33/ 45 HLT 80/ 3V/ Z33/ 45
	100	30,0	37,0		NLT 100/ 3E/ Z33 HLT 100/ 3E/ Z33				NLT 100/ 3V/ Z33/ 45 HLT 100/ 3V/ Z33/ 45
	125	37,0	45,0		NLT 125/ 3E/ Z33 HLT 125/ 3E/ Z33				NLT 125/ 3V/ Z33/ 45 HLT 125/ 3V/ Z33/ 45
	180	75,0	90,5		NLT 180/ 3E/ Z20 HLT 180/ 3E/ Z20				NLT 180/ 3V/ Z20/ 65 HLT 180/ 3V/ Z20/ 65
	250	110,0	132,0		NLT 250/ 3E/ Z20 HLT 250/ 3E/ Z20				NLT 250/ 3V/ Z20/ 65 HLT 250/ 3V/ Z20/ 65
	16	5,5	7,5	E	NLT 16/ 4E/ Z33 HLT 16/ 4E/ Z33	ZM	NLT 16/ 4ZM/ Z33 HLT 16/ 4ZM/ Z33	V	NLT 16/ 4V/ Z33/ 45 HLT 16/ 4V/ Z33/ 45
	25	7,5	9,5		NLT 25/ 4E/ Z33 HLT 25/ 4E/ Z33		NLT 25/ 4ZM/ Z33 HLT 25/ 4ZM/ Z33		NLT 25/ 4V/ Z33/ 45 HLT 25/ 4V/ Z33/ 45
	32	9,5	11,5		NLT 32/ 4E/ Z33 HLT 32/ 4E/ Z33		NLT 32/ 4ZM/ Z33 HLT 32/ 4ZM/ Z33		NLT 32/ 4V/ Z33/ 45 HLT 32/ 4V/ Z33/ 45
	40	11,0	20,0		NLT 40/ 4E/ Z33 HLT 40/ 4E/ Z33		NLT 40/ 4ZM/ Z33 HLT 40/ 4ZM/ Z33		NLT 40/ 4V/ Z33/ 45 HLT 40/ 4V/ Z33/ 45
	63	18,5	22,5		NLT 63/ 4E/ Z33 HLT 63/ 4E/ Z33		NLT 63/ 4ZM/ Z33 HLT 63/ 4ZM/ Z33		NLT 63/ 4V/ Z33/ 45 HLT 63/ 4V/ Z33/ 45
	80	22,0	30,0		NLT 80/ 4E/ Z33 HLT 80/ 4E/ Z33		NLT 80/ 4ZM/ Z33 HLT 80/ 4ZM/ Z33		NLT 80/ 4V/ Z33/ 45 HLT 80/ 4V/ Z33/ 45
	100	30,0	37,0		NLT 100/ 4E/ Z33 HLT 100/ 4E/ Z33				NLT 100/ 4V/ Z33/ 45 HLT 100/ 4V/ Z33/ 45
	125	37,0	45,0		NLT 125/ 4E/ Z33 HLT 125/ 4E/ Z33				NLT 125/ 4V/ Z33/ 45 HLT 125/ 4V/ Z33/ 45
	180	75,0	90,5		NLT 180/ 4E/ Z20 HLT 180/ 4E/ Z20				NLT 180/ 4V/ Z20/ 65 HLT 180/ 4V/ Z20/ 65
	250	110,0	132,0		NLT 250/ 4E/ Z20 HLT 250/ 4E/ Z20				NLT 250/ 4V/ Z20/ 65 HLT 250/ 4V/ Z20/ 65
	16	5,5	7,5	E	NLT 20/ 6E/ Z33 HLT 20/ 6E/ Z33			V	NLT 20/ 6V/ Z33/ 45 HLT 20/ 6V/ Z33/ 45
	25	7,5	9,5		NLT 25/ 6E/ Z33 HLT 25/ 6E/ Z33				NLT 25/ 6V/ Z33/ 45 HLT 25/ 6V/ Z33/ 45
	32	9,5	11,5		NLT 32/ 6E/ Z33 HLT 32/ 6E/ Z33				NLT 32/ 6V/ Z33/ 45 HLT 32/ 6V/ Z33/ 45
	40	11,0	20,0		NLT 40/ 6E/ Z33 HLT 40/ 6E/ Z33				NLT 40/ 6V/ Z33/ 45 HLT 40/ 6V/ Z33/ 45
	63	18,5	22,5		NLT 63/ 6E/ Z33 HLT 63/ 6E/ Z33				NLT 63/ 6V/ Z33/ 45 HLT 63/ 6V/ Z33/ 45
	80	22,0	30,0		NLT 80/ 6E/ Z33 HLT 80/ 6E/ Z33				NLT 80/ 6V/ Z33/ 45 HLT 80/ 6V/ Z33/ 45
	100	30,0	37,0		NLT 100/ 6E/ Z33 HLT 100/ 6E/ Z33				NLT 100/ 6V/ Z33/ 45 HLT 100/ 6V/ Z33/ 45
	125	37,0	45,0		NLT 125/ 6E/ Z33 HLT 125/ 6E/ Z33				NLT 125/ 6V/ Z33/ 45 HLT 125/ 6V/ Z33/ 45
	180	75,0	90,5		NLT 180/ 6E/ Z20 HLT 180/ 6E/ Z20				NLT 180/ 6V/ Z20/ 65 HLT 180/ 6V/ Z20/ 65
	250	110,0	132,0		NLT 250/ 6E/ Z20 HLT 250/ 6E/ Z20				NLT 250/ 6V/ Z20/ 65 HLT 250/ 6V/ Z20/ 65

ON LOAD CHANGE-OVER-SWITCHES

DIN-Railmounting		Maintenance switch, plastic enclosed		Connection diagram	Thermal rated current I_{th} (in A)	Rated perf. at 3x400V (in KW)	Rated perf. at 3x400V (in KW)	4-Hole mounting		DIN-Railmounting	
Type	Type	Type	Type								
T NLT 16/ 3T/ Z20 HLT 16/ 3T/ Z20	RLT 16/ 3PM-D1/ Z33	3-pole		25	7,5	9,5	E	ULT 25/ 3E	T	ULT 25/ 3T	
NLT 25/ 3T/ Z20 HLT 25/ 3T/ Z20	RLT 25/ 3PM-D1/ Z33			32	9,5	11,5	E	ULT 32/ 3E	T	ULT 32/ 3T	
NLT 32/ 3T/ Z20 HLT 32/ 3T/ Z20	RLT 32/ 3PM-D1/ Z33	40	11,0	20,0	E	ULT 40/ 3E	T	ULT 40/ 3T			
NLT 40/ 3T/ Z20 HLT 40/ 3T/ Z20	RLT 40/ 3PM-D1/ Z33	63	18,5	22,5	E	ULT 63/ 3E	T	ULT 63/ 3T			
NLT 63/ 3T/ Z20 HLT 63/ 3T/ Z20	RLT 63/ 3PM-D2/ Z33	80	22,0	30,0	E	ULT 80/ 3E	T	ULT 80/ 3T			
NLT 80/ 3T/ Z20 HLT 80/ 3T/ Z20	RLT 80/ 3PM-D2/ Z33	100	30,0	37,0	E	ULT 100/ 3E	T	ULT 100/ 3T			
NLT 100/ 3T/ Z20 HLT 100/ 3T/ Z20	RLT 100/ 3PM-D3/ Z33	125	37,0	45,0	E	ULT 125/ 3E	T	ULT 125/ 3T			
NLT 125/ 3T/ Z20 HLT 125/ 3T/ Z20	RLT 125/ 3PM-D3/ Z33	180	75,0	90,5	E	ULT 180/ 3E	T				
	RLT 180/ 3K4/ Z20	250	110,0	132,0	E	ULT 250/ 3E	T				
	RLT 250/ 3K4/ Z20										

T NLT 16/ 4T/ Z20 HLT 16/ 4T/ Z20	RLT 16/ 4PM-D1/ Z33
NLT 25/ 4T/ Z20 HLT 25/ 4T/ Z20	RLT 25/ 4PM-D1/ Z33
NLT 32/ 4T/ Z20 HLT 32/ 4T/ Z20	RLT 32/ 4PM-D1/ Z33
NLT 40/ 4T/ Z20 HLT 40/ 4T/ Z20	RLT 40/ 4PM-D1/ Z33
NLT 63/ 4T/ Z20 HLT 63/ 4T/ Z20	RLT 63/ 4PM-D2/ Z33
NLT 80/ 4T/ Z20 HLT 80/ 4T/ Z20	RLT 80/ 4PM-D2/ Z33
NLT 100/ 4T/ Z20 HLT 100/ 4T/ Z20	RLT 100/ 4PM-D3/ Z33
NLT 125/ 4T/ Z20 HLT 125/ 4T/ Z20	RLT 125/ 4PM-D3/ Z33
	RLT 180/ 4K4/ Z20
	RLT 250/ 4K4/ Z20

ADDITIONAL- AND AUXILIARY CONTACTS



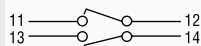
T NLT 20/ 6T/ Z20 HLT 20/ 6T/ Z20	RLT 20/ 6PM-D1/ Z33	Neutral Pole (early make)	
NLT 25/ 6T/ Z20 HLT 25/ 6T/ Z20	RLT 25/ 6PM-D2/ Z33		
NLT 32/ 6T/ Z20 HLT 32/ 6T/ Z20	RLT 32/ 6PM-D2/ Z33	Neutral Pole (simultaneous make)	
NLT 40/ 6T/ Z20 HLT 40/ 6T/ Z20	RLT 40/ 6PM-D2/ Z33		
NLT 63/ 6T/ Z20 HLT 63/ 6T/ Z20	RLT 63/ 6PM-D3/ Z33	Neutral Pole (solid neutral)	
NLT 80/ 6T/ Z20 HLT 80/ 6T/ Z20	RLT 80/ 6PM-D3/ Z33		
NLT 100/ 6T/ Z20 HLT 100/ 6T/ Z20	RLT 100/ 6PM-D3/ Z33		
NLT 125/ 6T/ Z20 HLT 125/ 6T/ Z20	RLT 125/ 6PM-D3/ Z33		
	RLT 180/ 6K4/ Z20		
	RLT 250/ 6K4/ Z20		

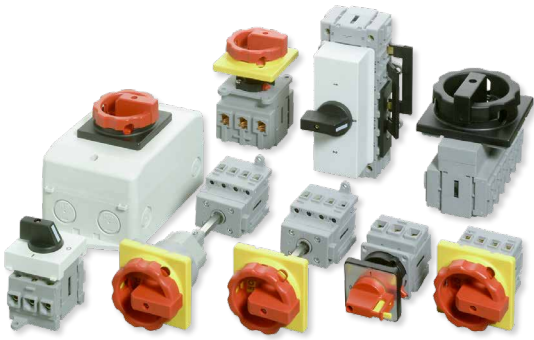
ADDITIONAL CONTACTS

Switch size	Constr. form E+ZM	Constr. form V+T
LT 16, 20A, 25A	NVG 20AE	NVG 20AV
LT 25-40	NVG 40E	NVG 40V
LT 63-80	NVG 80E	NVG 80V
LT 100-125	NVG 125E	NVG 125V
LT 180-250	NVG 250E	NVG 250V
LT 16, 20A, 25A	NGG 20AE	NGG 20AV
LT 25-40	NGG 40E	NGG 40V
LT 63-80	NGG 80E	NGG 80V
LT 100-125	NGG 125E	NGG 125V
LT 180-250	NGG 250E	NGG 250V
LT 16, 20A, 25A	N / PE 20AE	N / PE 20AV
LT 25-40	N / PE 40E	N / PE 40V
LT 63-80	N / PE 80E	N / PE 80V
LT 100-125	N / PE 125E	N / PE 125V
LT 180-250	N / PE 250E	N / PE 250V

AUXILIARY CONTACTS (1NO + 1NC)

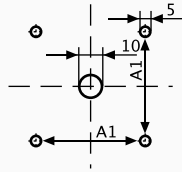
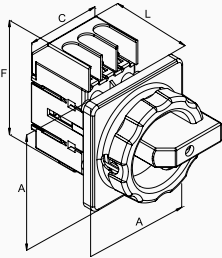
LT 16-250	HE11	HV11
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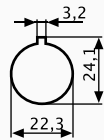
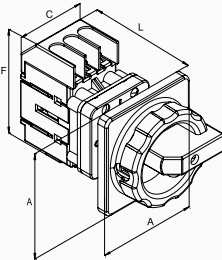
	I_{th} A	AC23 kW (3x400V)	AC3 kW	U V	connection cross mm ²
LO16	16	7,5	5,5	690	25
LO25	25	9,5	7,5	690	25
LO32	32	11,5	9,5	690	25
LO40	40	20,0	11,0	690	25
LO63	63	22,0	18,5	690	25
H11	10			240	4

Other configurations and sizes on request



E

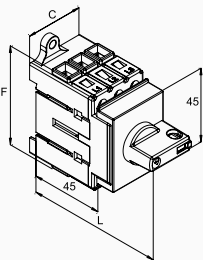
TYPE	A	A1	C 3pol	C 4pol	C 6pol	F	L
LO16	66	48	36	49	72	73	54
LO25	66	48	36	49	72	73	54
LO32	66	48	36	49	72	73	54
LO40	66	48	36	49	72	73	54
LO63	66	48	36	49	72	73	54



ZM

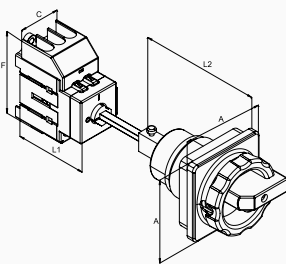
TYPE	A	A1	C 3pol	C 4pol	C 6pol	F	L
LO16	66	-	36	49	-	73	77
LO25	66	-	36	49	-	73	77
LO32	66	-	36	49	-	73	77
LO40	66	-	36	49	-	73	77
LO63	66	-	36	49	-	73	77

IP65

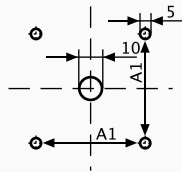


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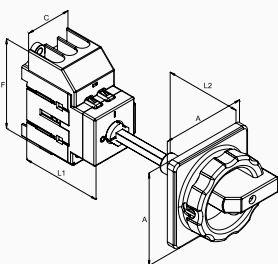
TYPE	A	A1	C 3pol	C 4pol	C 6pol	F	L
LO16	66	-	36	49	72	73	77
LO25	66	-	36	49	72	73	77
LO32	66	-	36	49	72	73	77
LO40	66	-	36	49	72	73	77
LO63	66	-	36	49	72	73	77



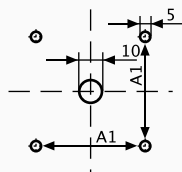
V/Z33/Z45



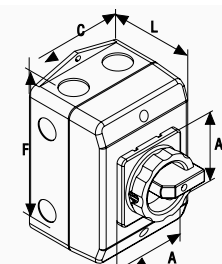
TYPE	A	A1	C 3pol	C 4pol	C 6pol	F	L1	L2
LO16	66	48	36	49	72	73	66	77
LO25	66	48	36	49	72	73	66	77
LO32	66	48	36	49	72	73	66	77
LO40	66	48	36	49	72	73	66	77
LO63	66	48	36	49	72	73	66	77



V/Z33/Z71



TYPE	A	A1	C 3pol	C 4pol	C 6pol	F	L1	L2
LO16	66	48	36	49	72	73	66	28
LO25	66	48	36	49	72	73	66	28
LO32	66	48	36	49	72	73	66	28
LO40	66	48	36	49	72	73	66	28
LO63	66	48	36	49	72	73	66	28



Sheet metal enclosures and EMC-accessories

Enclosures

IP65

TYPE	A	C	F	L	Knockouts
PM-D1/Z33	66	100	140	81	4 x M25, 4 x M20
PM-D2/Z33	66	146	176	104	4 x M32/40, 4 x M20

ON LOAD SWITCHES LO

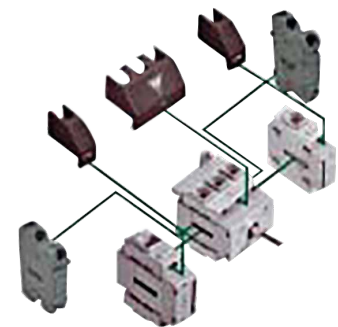
Connection diagram

Connection diagram	Thermal rated current I_{th} (in A)	Rated perf. at 3x400V (in kW)	Rated perf. at 3x400V (in kW)	4-Hole mounting		Central mounting		Base mounting	
				Type	Type	Type	Type		
<p>3-pole</p>	16	5,5	7,5	E	NLO 16 / 3E/ Z33 HLO 16 / 3E/ Z33	ZM	NLO 16/ 3ZM/ Z33 HLO 16/ 3ZM/ Z33	V	NLO 16/ 3V/ Z33/ 71 HLO 16/ 3V/ Z33/ 71
	25	7,5	9,5		NLO 25/ 3E/ Z33 HLO 25/ 3E/ Z33		NLO 25/ 3ZM/ Z33 HLO 25/ 3ZM/ Z33		NLO 25/ 3V/ Z33/ 71 HLO 25/ 3V/ Z33/ 71
	32	9,5	11,5		NLO 32/ 3E/ Z33 HLO 32/ 3E/ Z33		NLO 32/ 3ZM/ Z33 HLO 32/ 3ZM/ Z33		NLO 32/ 3V/ Z33/ 71 HLO 32/ 3V/ Z33/ 71
	40	11,0	20,0		NLO 40/ 3E/ Z33 HLO 40/ 3E/ Z33		NLO 40/ 3ZM/ Z33 HLO 40/ 3ZM/ Z33		NLO 40/ 3V/ Z33/ 71 HLO 40/ 3V/ Z33/ 71
	63	18,5	22,5		NLO 63/ 3E/ Z33 HLO 63/ 3E/ Z33		NLO 63/ 3ZM/ Z33 HLO 63/ 3ZM/ Z33		NLO 63/ 3V/ Z33/ 71 HLO 63/ 3V/ Z33/ 71
<p>4-pole</p>	16	5,5	7,5	E	NLO 16/ 4E/ Z33 HLO 16/ 4E/ Z33	ZM	NLO 16/ 4ZM/ Z33 HLO 16/ 4ZM/ Z33	V	NLO 16/ 4V/ Z33/ 71 HLO 16/ 4V/ Z33/ 71
	25	7,5	9,5		NLO 25/ 4E/ Z33 HLO 25/ 4E/ Z33		NLO 25/ 4ZM/ Z33 HLO 25/ 4ZM/ Z33		NLO 25/ 4V/ Z33/ 71 HLO 25/ 4V/ Z33/ 71
	32	9,5	11,5		NLO 32/ 4E/ Z33 HLO 32/ 4E/ Z33		NLO 32/ 4ZM/ Z33 HLO 32/ 4ZM/ Z33		NLO 32/ 4V/ Z33/ 71 HLO 32/ 4V/ Z33/ 71
	40	11,0	20,0		NLO 40/ 4E/ Z33 HLO 40/ 4E/ Z33		NLO 40/ 4ZM/ Z33 HLO 40/ 4ZM/ Z33		NLO 40/ 4V/ Z33/ 71 HLO 40/ 4V/ Z33/ 71
	63	18,5	22,5		NLO 63/ 4E/ Z33 HLO 63/ 4E/ Z33		NLO 63/ 4ZM/ Z33 HLO 63/ 4ZM/ Z33		NLO 63/ 4V/ Z33/ 71 HLO 63/ 4V/ Z33/ 71
<p>6-pole</p>	16	5,5	7,5	E	NLO 16/ 6E/ Z33 HLO 16/ 6E/ Z33		V	NLO 16/ 6V/ Z33/ 71 HLO 16/ 6V/ Z33/ 71	
	25	7,5	9,5		NLO 25/ 6E/ Z33 HLO 25/ 6E/ Z33				NLO 25/ 6V/ Z33/ 71 HLO 25/ 6V/ Z33/ 71
	32	9,5	11,5		NLO 32/ 6E/ Z33 HLO 32/ 6E/ Z33				NLO 32/ 6V/ Z33/ 71 HLO 32/ 6V/ Z33/ 71
	40	11,0	20,0		NLO 40/ 6E/ Z33 HLO 40/ 6E/ Z33				NLO 40/ 6V/ Z33/ 71 HLO 40/ 6V/ Z33/ 71
	63	18,5	22,5		NLO 63/ 6E/ Z33 HLO 63/ 6E/ Z33				NLO 63/ 6V/ Z33/ 71 HLO 63/ 6V/ Z33/ 71

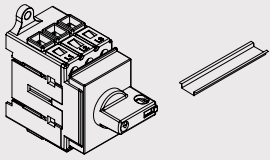
ON LOAD CHANGE-OVER-SWITCHES

Connection diagram

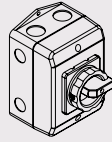
Connection diagram	Thermal rated current I_{th} (in A)	Rated perf. at 3x400V (in kW)	Rated perf. at 3x400V (in kW)	4-Hole mounting		DIN-Railmounting	
				Type	Type	Type	Type
<p>3-pole</p>	25	7,5	9,5	E	ULO 25/ 3E	T	ULO 25/ 3T
	32	9,5	11,5		ULO 32/ 3E		ULO 32/ 3T
	40	11,0	20,0		ULO 40/ 3E		ULO 40/ 3T
	63	18,5	22,5		ULO 63/ 3E		ULO 63/ 3T
<p>4-pole</p>	25	7,5	9,5	E	ULO 25/ 4E	T	ULO 25/ 4T
	32	9,5	11,5		ULO 32/ 4E		ULO 32/ 4T
	40	11,0	20,0		ULO 40/ 4E		ULO 40/ 4T
	63	18,5	22,5		ULO 63/ 4E		ULO 63/ 4T



DIN-Railmounting



Maintenance switch, plastic enclosed



IP65

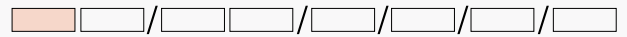
Type

Type

T	NLO 16/ 3T/ Z20C HLO 16/ 3T/ Z20C	RLO 16/ 3PM-D1/ Z33
	NLO 25/ 3T/ Z20C HLO 25/ 3T/ Z20C	RLO 25/ 3PM-D1/ Z33
	NLO 32/ 3T/ Z20C HLO 32/ 3T/ Z20C	RLO 32/ 3PM-D1/ Z33
	NLO 40/ 3T/ Z20C HLO 40/ 3T/ Z20C	RLO 40/ 3PM-D1/ Z33
	NLO 63/ 3T/ Z20C HLO 63/ 3T/ Z20C	RLO 63/ 3PM-D2/ Z33

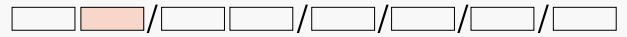
T	NLO 16/ 4T/ Z20C HLO 16/ 4T/ Z20C	RLO 16/ 4PM-D1 /Z33
	NLO 25/ 4T/ Z20C HLO 25/ 4T/ Z20C	RLO 25/ 4PM-D1 /Z33
	NLO 32/ 4T/ Z20C HLO 32/ 4T/ Z20C	RLO 32/ 4PM-D1/ Z33
	NLO 40/ 4T/ Z20C HLO 40/ 4T/ Z20C	RLO 40/ 4PM-D1 /Z33
	NLO 63/ 4T/ Z20C HLO 63/ 4T/ Z20C	RLO 63/ 4PM-D2 /Z33

T	NLO 16/ 6T/ Z20 HLO 16/ 6T/ Z20	RLO 16/ 6PM-D2/ Z33
	NLO 25/ 6T/ Z20 HLO 25/ 6T/ Z20	RLO 25/ 6PM-D2/ Z33
	NLO 32/ 6T/ Z20 HLO 32/ 6T/ Z20	RLO 32/ 6PM-D2/ Z33
	NLO 40/ 6T/ Z20 HLO 40/ 6T/ Z20	RLO 40/ 6PM-D2/ Z33
	NLO 63/ 6T/ Z20 HLO 63/ 6T/ Z20	RLO 63/ 6PM-D2/ Z33



Switch type

NLT/O = Emergency stop switches, colour red/yellow
 HLT/O = Main switches, colour black/black
 ALT/O = DIN-Railmounting with installation cover
 RLTO/O = Maintenance switches, enclosed



Switch size

LO/LT

LT

16	= 16A	7.5 kW	80	= 80A	30.0 kW
25	= 25A	9.5 kW	100	= 100A	37.0 kW
32	= 32A	11.5 kW	125	= 125A	45.0 kW
40	= 40A	11.5 kW	180	= 180A	90.5 kW
63	= 63A	22.5 kW	250	= 250A	132.0 kW



Number of contacts

3, 4, 6 or 8



Construction form

E = 4-Hole mounting

ZM = Central mounting with nut (1 hole)

V = Base mounting

T = DIN-Railmounting with installation cover

PM = Plastic enclosure



Accessories

Z33 = Round padlock device

Z20C = Padlock handle

Z1 = Shaft packing IP65 (ZM/PM standard)

Z44 = Door coupling (construction form V)

Z71 = Door coupling (construction form V)

Z45 = Door coupling with door interlock (construction form V)

Z75 = Door coupling with door interlock and funnel (construction form V)

X83 = Switch shaft with special dimension (Standard shaft 300 mm)

EMV = EMC compatible sheet metal (for enclosures)



Auxiliary contacts

H11 = 1NO + 1NC (1Normally open/1Normally closed)

ADDITIONAL- AND AUXILIARY CONTACTS

	Switch size	Constr. form E+ZM	Constr. form V+T
Neutral pole (early make) 	LO 16	NVGO 16E	NVGO 16V
	LO 25	NVGO 25E	NVGO 25V
	LO 32	NVGO 32E	NVGO 32V
	LO 40	NVGO 40E	NVGO 40V
	LO 63	NVGO 63E	NVGO 63V
Neutral pole (simultaneous make) 	LO 16	NGGO 16E	NGGO 16V
	LO 25	NGGO 25E	NGGO 25V
	LO 32	NGGO 32E	NGGO 32V
	LO 40	NGGO 40E	NGGO 40V
	LO 63	NGGO 63E	NGGO 63V
Neutral pole (solid neutral) 	LO 16	N/PEO 16E	N/PEO 16V
	LO 25	N/PEO 25E	N/PEO 25V
	LO 32	N/PEO 32E	N/PEO 32V
	LO 40	N/PEO 40E	N/PEO 40V
	LO 63	N/PEO 63E	N/PEO 63V
AUXILIARY CONTACTS (1NO + 1NC) 	LO 16-63	HE11	HV11

Example LT

Emergency/stop switch 7,5 kW (AC-23), 3 poles, base mounting, round padlock and door interlock. The complete order details read:

NLT16/3V/Z33/Z45

Example LO

Emergency/stop switch 7,5 kW (AC-23), 3 poles, base mounting, round padlock and door interlock. The complete order details read:

NLO16/3V/Z33/Z71

ACCESSORIES



OWN DEVELOPMENT 90%

OWN PRODUCTION 99%

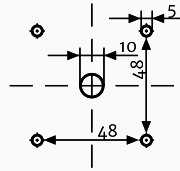
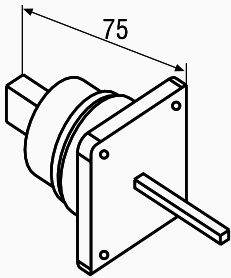
SERVICE 100%



Door couplings for base mounted cam- and onload switches

Defeatable door coupling Z39

The coupling interlocks the door in position ON, but it is easily possible to unlock, if wanted, by pushing a small bar. The padlockable handle is included.

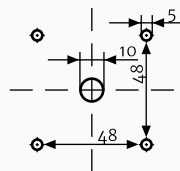
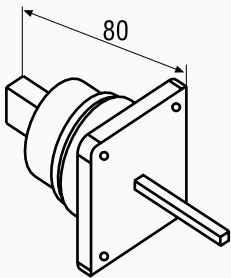


available for group, design

D00	D0	D1	D2	D3
-	V	V	-	-
	LT16- LT25A	LT25- LT40	LT63- LT80	LT100- LT125
	V	V	V	V
		LO		
		V		

Door coupling with compensation, without interlock

This door coupling has a compensation. No interlock in any position.

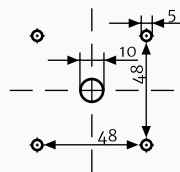
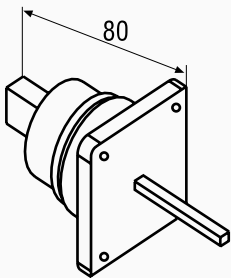


available for group, design

D00	D0	D1	D2	D3
-	V	V	V	-
	LT16- LT25A	LT25- LT40	LT63- LT80	LT100- LT125
	V	V	V	V
		LO		
		V		

Door coupling with compensation, with interlock

This door coupling has a compensation. Interlock in every position except Off-position.

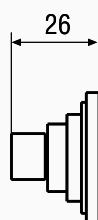


available for group, design

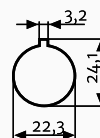
D00	D0	D1	D2	D3
-	V	V	V	-
	LT16- LT25A	LT25- LT40	LT63- LT80	LT100- LT125
	V	V	V	V
		LO		
		V		

Short door coupling with interlock

This short door coupling fits best for very limited mounting depth. IP65!



inside panel



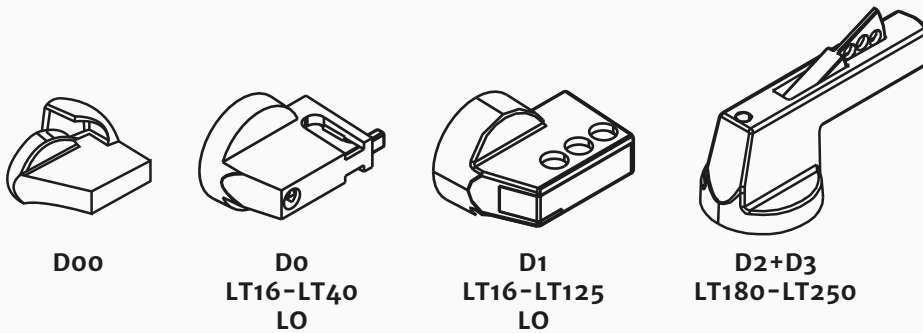
available for group, design

D00	D0	D1	D2	D3
-	V	V	-	-
	div. Gehäuse LT16- LT25A	LT25- LT40	LT63- LT80	LT100- LT125
	V	V	V	V
		LO		
		V		

Possibilities for locking switches

Padlockable handle Z20

For locking with one padlock (D00) with 5 mm thickness or max. two padlocks (D0) or three (D1+D2+D3), hasp thickness 6 mm.

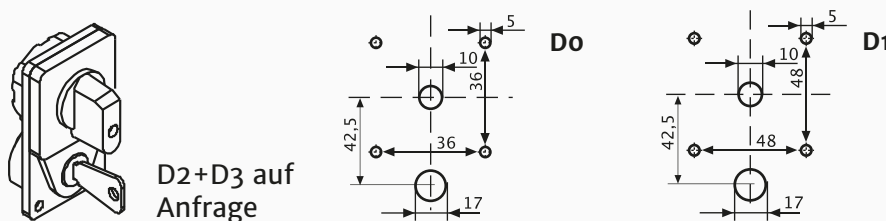


available for group, design

D00	D0	D1	D2	D3
E	E		E	E
ZM	ZM	ZM	V	V
	V	V	V	V
	T	T		
various enclosures				
	LT16-LT40	LT16-LT125	LT180-LT250	
	E	E	E	
	ZM	ZM		
	V	V	V	
	T	T		
	LO	LO		

Cylinder lock Z31

A cylinder lock allows locking certain or all positions.

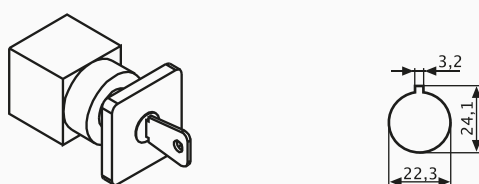


available for group, design

D00	D0	D1	D2	D3
-	E	E	E	E

Key operator device Z32

A key operates the switch. You can choose where the key is removable.

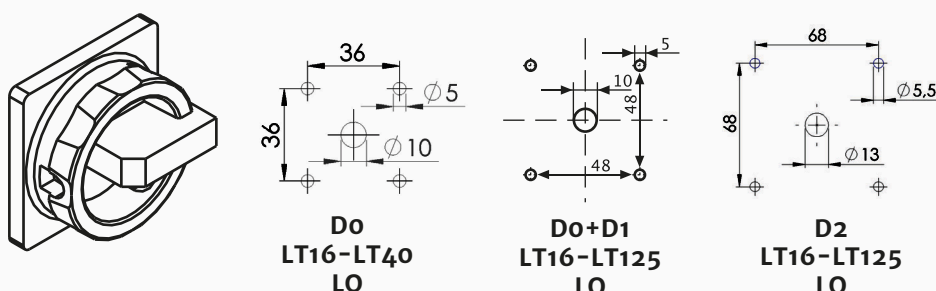


available for group, design

D00	D0	D1	D2	D3
ZM	ZM	ZM	-	-

Round padlockable device Z33

For locking with max. three padlocks, hasp thickness 6 mm (D1) or 8 mm (D2)



available for group, design

D00	D0	D1	D2	D3
-	E	E		-
	V	ZM	ZM	
	V	V	V	
various enclosures				
	LT16-LT40	LT16-LT125	LT16-LT125	
	E	E	E	
	V	ZM	ZM	
	LO	V	V	
		LO	LO	

Various accessories

Ingress protection IP65 seal systems Z1

Adding /Z1 makes the device IP65 protected. IP65 protection is for construction forms ZM, PLM and PM standard.

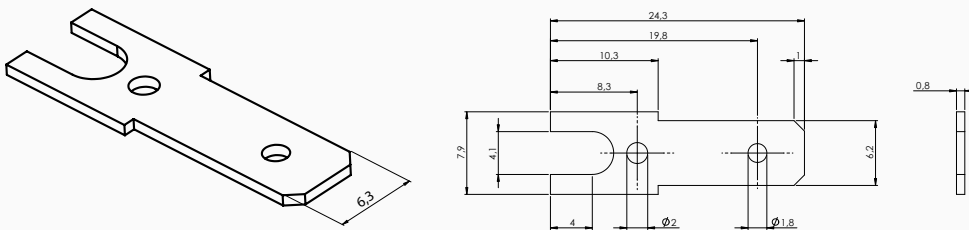
IP65 higher protection classes and other construction forms on request.

available for group, design

Doo	Do	D1	D2	D3
E	E	E	E	E
ZM	ZM	ZM	V	V
	V	V	V	V
various enclosures				
LT16- LT25A	LT25- LT40	LT63- LT80	LT100- LT125	LT180- LT250
E	E	E	E	E
ZM	ZM	ZM	V	V
V	V	V	V	V
		LO		

Flat connection Z6

For connection with sockets according to DIN 46247.

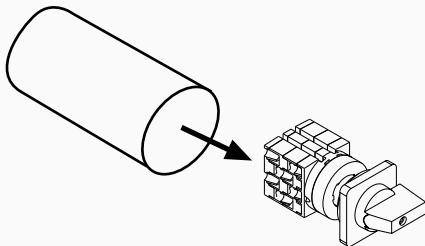


available for group, design

Doo	Do	D1	D2	D3
-	E	E	-	-
	ZM	ZM		
	V	V		
	T	T		

Full terminal shroud Z10

This cover reaches IP42 for the whole switch body from behind.

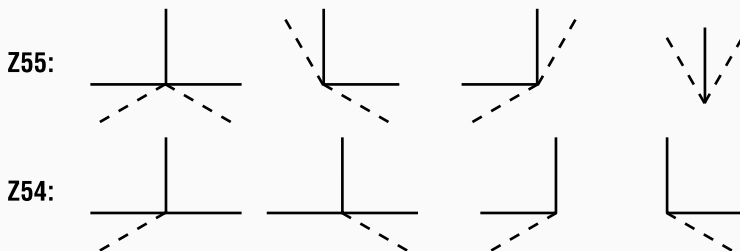


available for group, design

Doo	Do	D1	D2	D3
-	E	E	E	-
	ZM			

Both sided spring return Z55, single sided spring return

The returning positions are 30° angle, the fixed ones are 90°.

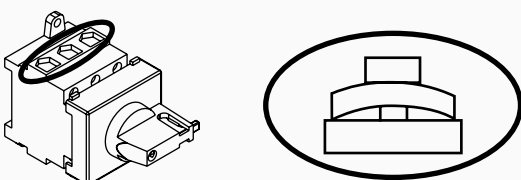


available for group, design

Doo	Do	D1	D2	D3
-	E	E	E	E
	ZM	ZM	V	V
	V	V	V	V
	T	T		

Terminal for control circuits Z58

This item allows connecting a 4 mm wire for a control circuits to a load circuits.



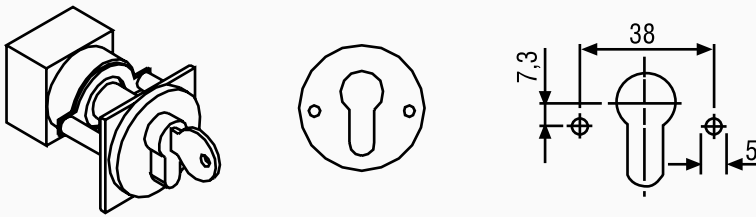
available for group, design

Doo	Do	D1	D2	D3
-	-	-	-	-
	LT25- LT40	LT63- LT80	LT100- LT125	LT180- LT250

Various accessories

Key operator device for DIN standard cylinder lock Z70

Allows integration into locking system. Cylinder not supplied.

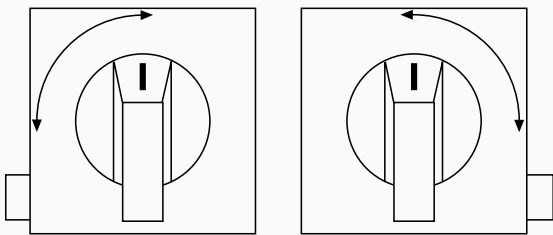


available for group, design

D00	D0/8	D1	D2	D3
-	E	-	-	-

Interlock Z80

Prevents reversing by mistake.



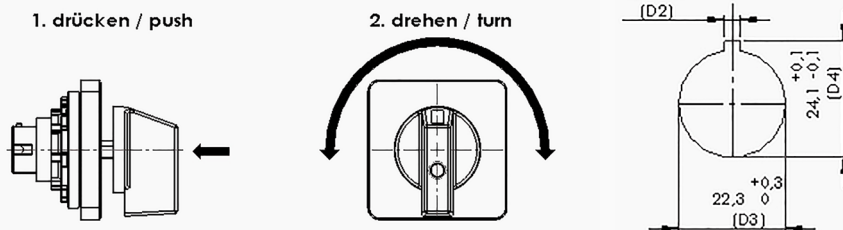
different handles,
padlockable devices fit

available for group, design

D00	D0	D1	D2	D3
-	-	E	-	-

Protection against accidentally operation Z105

Operation of the switch is only possible by pushing and switching afterwards.

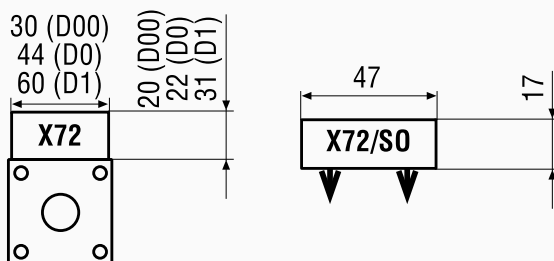


available for group, design

D00	D0	D1	D2	D3
-	ZM	ZM	-	-

Additional frontplates X72 and X72/S0

Additional frontplates allow to mark more.



available for group, design

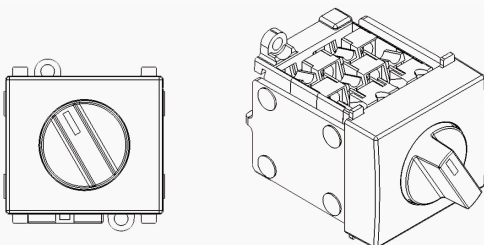
X72				
D00	D0	D1	D2	D3
-	E	E	E	E
	ZM	ZM		
	V	V	V	V
	T	T		

X72/S0

D00	D0	D1	D2	D3
-	-	Z33	Z33	-

Ready-to-Robot X74/R

With this cover the switch can be stored and mounted on the DIN-rail with a robot.



available for group, design

D00	D0	D1	D2	D3
-	T	-	-	-

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SONTHEIMER

RELIABLE & FAST

**24
HOURS**

DELIVERY – ALSO FOR CUSTOMMADE SWITCHES



General: For the business relationships to our customers, only the following terms of sale and delivery are valid. Collateral agreements are valid only if they have been confirmed in writing.

Offers are nonbinding. Collateral agreements are valid only if they have been confirmed in writing.

Delivery: For type and extent of delivery our written order confirmation, if there is one, applies; otherwise our delivery note applies. We determine delivery times with best discretion; they refer to the time of delivery ex works and are nonbinding. The delivery deadline will be extended by a reasonable period of time if the buyer does not meet his duties, or if any unforeseeable or exceptional events occur in our plant or at our supplier's plant, especially in cases of measures taken by governmental authorities, or cases of difficulties with procuring raw materials that delay processing of the order. No claims can be asserted if a delivery deadline is not met.

Complaints can be recognized only if they are asserted in writing within 3 days after receipt of the goods. If the complaint proves to be justified, we will deliver a replacement free of charge, but, in cases of defective goods, only when the faulty devices or parts have been returned. All further claims are excluded.

Prices and payment conditions: Our prices are strictly net, packaging excluded and ex works. The price is the list price on the day of delivery plus precious metals surcharges, as applicable. The surcharge tables are part of these terms of sale and delivery and are available on request. The costs charged for packaging and dispatch are just the costs that we incur. Our prices are not binding for subsequent orders. Our invoices are due in 30 days net. When a due date for payment is missed, the buyer has to pay customary bank debit interest on the purchase price, but least 5% above the discount rate of the German Central Bank. The same applies to late acceptance. Bills of exchange are accepted only on the basis of explicit agreement and then only on account of payment, with all discount charges and other exchange costs to be borne by the buyer. All costs due to late payment such as reminder fees, debt collection expenses and the like are borne by the buyer. Our retention of ownership also covers new things which are produced by handling and processing. Such new things are deemed to have been produced for us. We acquire ownership or co-ownership in such new things in accordance with the proportion of the value of the conditional goods in such new goods at the time of processing, without a separate legal act being required for this and without our becoming subject to any obligations because of this.

Retention of Ownership: Delivered goods continue to be our property until full payment of all receivables of our business relationship, also future receivables including secondary receivables. When a portion is paid, the retention of ownership serves as security for the remaining receivables. The Buyer herewith assigns to us irrevocably now, in advance, all receivables which accrue to the Buyer due to resale or other legal grounds as well as the Buyer's right to surrender of goods because of retention of ownership. We accept this assignment. We agree with the buyer about the acquisition of ownership as security, also that the customer keeps for us the new goods, produced through transformation, until further notice, and at no expense to us. Insofar as new things arise through processing or combination and the Buyer acquires sole ownership, then the Buyer and we agree that we shall be the owners of these new things until we have received full payment for all claims against the Buyer which have arisen or arise in future from our business relationship. Actual transfer to us shall be replaced by the agreement that the Buyer shall keep these things for us at the Buyer's expense until such time as we revoke this agreement. The Buyer herewith assigns to us, the Seller, in advance, its ownership or co-ownership or its cash receivables in the new things as well as its claims to compensation from its own customers that arise from processing the delivered goods, in accordance with the pro rata value of the processed goods. The Buyer is obligated to insure sufficiently the conditional goods in our favour and at the Buyer's own expense against fire, breakage, water damages and theft. Security claims that arise in a damages incident are to be assigned to us. We agree to release securities to which we are entitled in accordance with the foregoing provisions to the extent that their total value exceeds the receivables being secured by 15%, in which case it is we who decide which securities are released, however, with the proviso that this shall be done with the exclusion of deliveries for which payment has been received in full. If conditional goods are seized or confiscated, the Buyer shall notify us of this in writing and without delay.

Right of withdrawal: If we ascertain after conclusion of the contract or after delivery that the buyer is not creditworthy or if the credit worthiness decreases during the business relationship, we are entitled to withdraw from the contract or to demand immediate payment of the delivered goods and also to require payment in advance for goods to be delivered in future.

Place of fulfillment and legal venue for all disputes arising in connection with the business relationship is the seat of our company for both parties.

Dimensions, weights and illustrations are up to date as of time of publication. We reserve the right to make changes without prior announcement, in accordance with ongoing development.

Guarantee: We offer a guarantee for all delivered devices for one year from date of invoice. The guarantee covers material- and manufacturing faults that have constructional causes and is limited to replacement of the parts affected free of charge. However, we reserve the right to check for ourselves whether the faults occurred due to improper use. Damage claims that go beyond this cannot be accepted.

Errors and technical changes excepted. Special models are excluded from exchange. Errors and changes excepted.



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