

CATALOGUE | 2017

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



SONTHEIMER



24

HOURS DELIVERY
SERVICE - ALSO
FOR CUSTOMMADE
SWITCHES

SO
NT
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IM
ER



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.

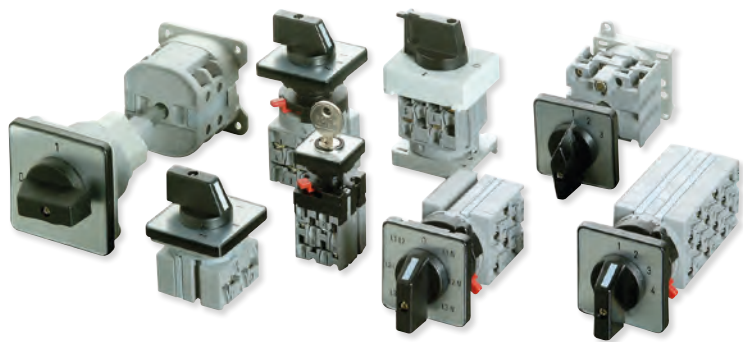
Our Know-How and innovative production-locations allow us to realize your individual requirements concerning the pin assignment and model of the switches. Custom-made productions can also be realized within a short time. Of course we make no compromises regarding the quality and safety: Every single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

PR OD UC TS



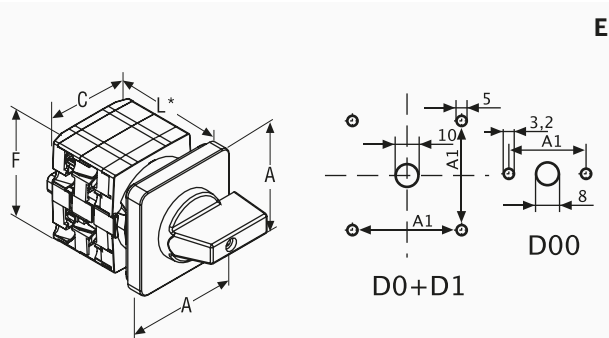


ROTARY CAM SWITCHES DATA

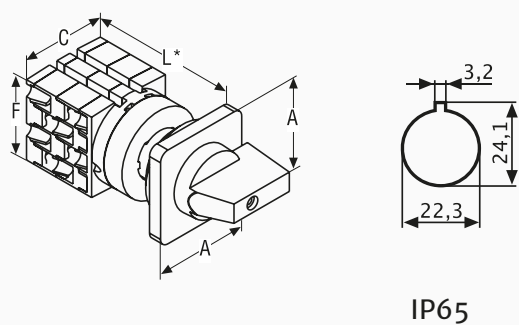


Other configurations and sizes on request

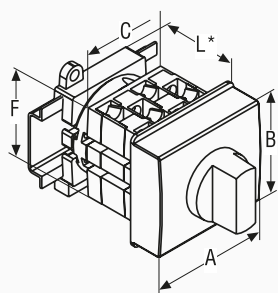
	I _{th} A	AC23 kW (3x400V)	AC3 kW	U V	connection cross mm ²
D00	10	3,0	2,2	500	1,5
D0	25	7,5	5,5	690	4
D1-16	25	9,0	7,5	690	6
D1-20	32	10,5	9,0	690	6
D1-32	45	15,0	11,0	690	6
D1-40	80	18,0	15,0	690	16
D2-63	100	26,5	22,0	690	70
D2-100	125	32,5	27,0	690	70
D2-160	160	40,0	37,0	690	70
D2-126	200	45,5	40,0	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

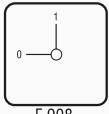
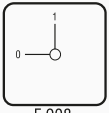
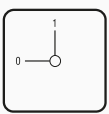
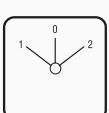
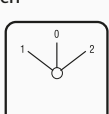
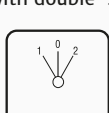
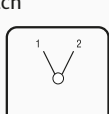
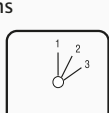
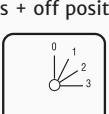


ZM	TYPE	A	C	F	L1	L2	L3	L4	L5	L6	L7	L8
	D00-4	30	28	30	43	51	59	67	75	83	91	99
	D00-6	30	30	28	46	58	70	82	94	106	118	130
	D0-7	48	40	43	58	70	82	94	106	118	130	142
	D0-8	48	40	39	58	70	82	94	106	118	130	142
	D0-13	48	43	43	56	65	75	84	94	103	113	122
	D1-16	66	54	56	60	73	86	99	112	125	138	151
	D1-20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

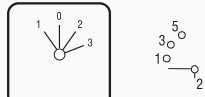
ROTARY CAM SWITCHES

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	12,95			
	10	2,2	A1/ 6	E	A1/ 6	ZM	12,95	A1/ 6	T	
	25	5,5	A1/ 7	E	A1/ 7	ZM	14,30			
	25	5,5	A1/ 8	E	A1/ 8	ZM	14,30	A1/ 8	T	
	25	7,5	A1/ 16	E	A1/ 16	ZM	16,25	A1/ 16	T	
	32	9,0	A1/ 20	E	A1/ 20	ZM	25,80	A1/ 20	T	
45	11,0	A1/ 32	E	A1/ 32	ZM	34,40	A1/ 32	T		
90° Off/On switch  F 908 3-pole	10	2,2	A3/ 4	E	A3/ 4	ZM	17,60			
	10	2,2	A3/ 6	E	A3/ 6	ZM	17,60	A3/ 6	T	
	25	5,5	A3/ 7	E	A3/ 7	ZM	19,85			
	25	5,5	A3/ 8	E	A3/ 8	ZM	19,85	A3/ 8	T	
	25	7,5	A3/ 16	E	A3/ 16	ZM	23,55	A3/ 16	T	
	32	9,0	A3/ 20	E	A3/ 20	ZM	34,00	A3/ 20	T	
45	11,0	A3/ 32	E	A3/ 32	ZM	48,85	A3/ 32	T		
90° Off/On switch  F 908 4-pole	10	2,2	A4/ 4	E	A4/ 4	ZM	19,55			
	10	2,2	A4/ 6	E	A4/ 6	ZM	19,55	A4/ 6	T	
	25	5,5	A4/ 7	E	A4/ 7	ZM	21,80			
	25	5,5	A4/ 8	E	A4/ 8	ZM	21,80	A4/ 8	T	
	25	7,5	A4/ 16	E	A4/ 16	ZM	26,35	A4/ 16	T	
	32	9,0	A4/ 20	E	A4/ 20	ZM	37,00	A4/ 20	T	
45	11,0	A4/ 32	E	A4/ 32	ZM	53,50	A4/ 32	T		
60° Change-over switch  F 604 1-pole	10	2,2	U1/ 4	E	U1/ 4	ZM	14,80			
	10	2,2	U1/ 6	E	U1/ 6	ZM	14,80	U1/ 6	T	
	25	5,5	U1/ 7	E	U1/ 7	ZM	16,45			
	25	5,5	U1/ 8	E	U1/ 8	ZM	16,45	U1/ 8	T	
	25	7,5	U1/ 16	E	U1/ 16	ZM	18,90	U1/ 16	T	
	32	9,0	U1/ 20	E	U1/ 20	ZM	28,80	U1/ 20	T	
45	11,0	U1/ 32	E	U1/ 32	ZM	39,15	U1/ 32	T		
60° Change-over switch  F 604 2-pole	10	2,2	U2/ 4	E	U2/ 4	ZM	19,55			
	10	2,2	U2/ 6	E	U2/ 6	ZM	19,55	U2/ 6	T	
	25	5,5	U2/ 7	E	U2/ 7	ZM	21,80			
	25	5,5	U2/ 8	E	U2/ 8	ZM	21,80	U2/ 8	T	
	25	7,5	U2/ 16	E	U2/ 16	ZM	26,35	U2/ 16	T	
	32	9,0	U2/ 20	E	U2/ 20	ZM	37,00	U2/ 20	T	
45	11,0	U2/ 32	E	U2/ 32	ZM	53,50	U2/ 32	T		
Change-over switch with double-sided return  F 312 1-pole	10	2,2	URR1/ 4	E	URR1/ 4	ZM	14,80			
	10	2,2	URR1/ 6	E	URR1/ 6	ZM	14,80	URR1/ 6	T	
	25	5,5	URR1/ 7	E	URR1/ 7	ZM	16,45			
	25	5,5	URR1/ 8	E	URR1/ 8	ZM	16,45	URR1/ 8	T	
	25	7,5	URR1/ 16	E	URR1/ 16	ZM	18,90	URR1/ 16	T	
	32	9,0	URR1/ 20	E	URR1/ 20	ZM	28,80	URR1/ 20	T	
45	11,0	URR1/ 32	E	URR1/ 32	ZM	39,15	URR1/ 32	T		
60° Change-over switch  F 614 1-pole	10	2,2	WS1/ 4	E	WS1/ 4	ZM	14,80			
	10	2,2	WS1/ 6	E	WS1/ 6	ZM	14,80	WS1/ 6	T	
	25	5,5	WS1/ 7	E	WS1/ 7	ZM	16,45			
	25	5,5	WS1/ 8	E	WS1/ 8	ZM	16,45	WS1/ 8	T	
	25	7,5	WS1/ 16	E	WS1/ 16	ZM	18,90	WS1/ 16	T	
	32	9,0	WS1/ 20	E	WS1/ 20	ZM	28,80	WS1/ 20	T	
45	11,0	WS1/ 32	E	WS1/ 32	ZM	39,15	WS1/ 32	T		
Step switch, 3 positions  F 302 1-pole	10	2,2	ST31/ 4	E	ST31/ 4	ZM	17,85			
	10	2,2	ST31/ 6	E	ST31/ 6	ZM	17,85	ST31/ 6	T	
	25	5,5	ST31/ 7	E	ST31/ 7	ZM	19,80			
	25	5,5	ST31/ 8	E	ST31/ 8	ZM	19,80	ST31/ 8	T	
	25	7,5	ST31/ 16	E	ST31/ 16	ZM	23,55	ST31/ 16	T	
	32	9,0	ST31/ 20	E	ST31/ 20	ZM	34,00	ST31/ 20	T	
45	11,0	ST31/ 32	E	ST31/ 32	ZM	48,85	ST31/ 32	T		
Step switch, 3 positions + off position  F 315 1-pole	10	2,2	ST031/ 4	E	ST031/ 4	ZM	17,85			
	10	2,2	ST031/ 6	E	ST031/ 6	ZM	17,85	ST031/ 6	T	
	25	5,5	ST031/ 7	E	ST031/ 7	ZM	19,80			
	25	5,5	ST031/ 8	E	ST031/ 8	ZM	19,80	ST031/ 8	T	
	25	7,5	ST031/ 16	E	ST031/ 16	ZM	23,55	ST031/ 16	T	
	32	9,0	ST031/ 20	E	ST031/ 20	ZM	34,00	ST031/ 20	T	
45	11,0	ST031/ 32	E	ST031/ 32	ZM	48,85	ST031/ 32	T		

ROTARY CAM SWITCHES

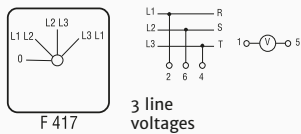
Connection diagram

Step switch, 3 positions + Off position



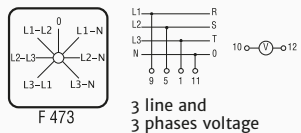
2Ka-A1142a F 375 1-pole

Voltmeter change-over switch



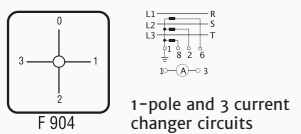
2Ka-A1086 F 417 3 line voltages

Voltmeter change-over switch



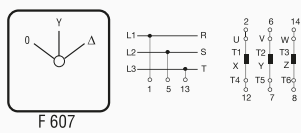
3Ka-A1088 F 473 3 line and 3 phases voltage

Ammeter change-over switch



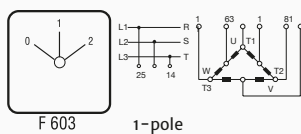
3Ka-A1092 F 904 1-pole and 3 current changer circuits

Star delta switch, 1 direction



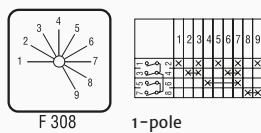
4Ka-A1031 F 607

Pole change switch



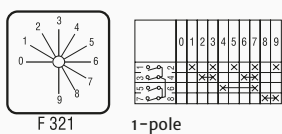
4Ka-A1044 F 603 1-pole

Binary code switch



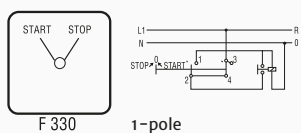
2Ka-A1410 F 308 1-pole

Binary code switch



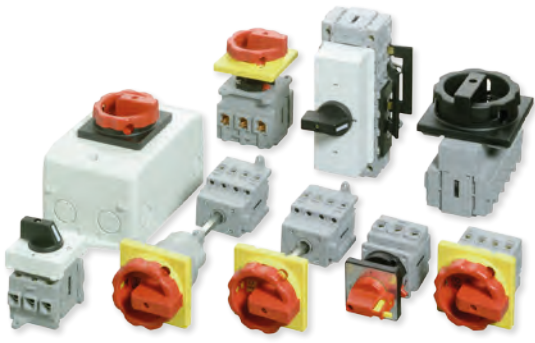
2Ka-A1413 F 321 1-pole

Stop/Start switch



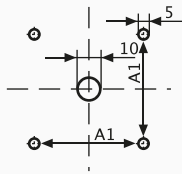
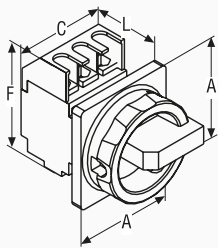
2Ka-A1103 F 330 1-pole

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

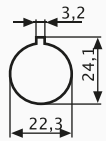
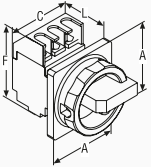


Other configurations and sizes on request

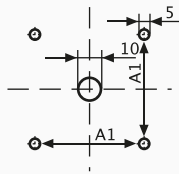
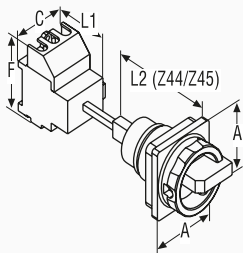
	I_{th} A	AC23 kW (3x400V)	AC3 kW	U V	connection cross mm ²
LT16	16	7,5	5,5	690	6
LT25A	25	9,5	7,5	690	6
LT32	32	11,5	9,5	690	16
LT40	40	20,0	11,0	690	16
LT63	63	22,0	18,5	690	35
LT80	80	30,0	22,0	690	35
LT100	100	37,0	30,0	690	50
LT125	125	45,0	37,0	690	50
LT180	180	90,0	75,0	690	185
LT250	250	132,0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



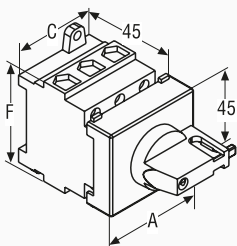
E	TYPE	A	A1	C 3 pole	C 4 pole	C 6 pole	C 8 pole	F	L
	LT16-25A	66	48	48	48	/	/	62	50
	LT32-40	66	48	45	61	91	122	72	50
	ULT25-40	64	48	91	122	/	/	72	64
	LT63-80	66	48	60	80	121	161	83	59
	ULT63-80	64	48	121	161	/	/	83	74
	LT100-125	66	48	70	93	141	187	96	75
	ULT100-125	64	48	141	187	/	/	96	90
	LT180-250	94	68	112	150	224	300	169	93
	ULT180-250	94	68	224	300	/	/	169	110



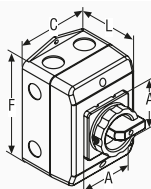
ZM	TYPE	A	C 3 pole	C 4 pole	F	L
	LT16-25A	66	48	48	62	73
	LT32-40	66	45	61	72	73
IP65	LT63-80	66	60	80	83	84



V	TYPE	A	A1	C 3 pole	C 4 pole	C 6 pole	C 8 pole	F	L1	L2 Z44/45
	LT16-25A	66	48	48	48	/	/	62	50	80
	LT32-40	66	48	45	61	91	122	72	50	80
	ULT25-40	64	48	91	122	/	/	72	64	80
	LT63-80	66	48	60	80	121	161	83	59	80
	ULT63-80	64	48	121	161	/	/	83	74	80
	LT100-125	66	48	70	93	141	187	96	75	80
	ULT100-125	64	48	141	187	/	/	96	90	80
	LT180-250	94	68	112	150	224	300	169	93	47
	ULT180-250	94	68	224	300	/	/	148	110	47



T	TYPE	A 3 pole	A 4 pole	A 6 pole	A 8 pole	F	C 3 pole	C 4 pole	C 6 pole	C 8 pole
	LT16-25A	52,5	52,5	52,5	/	50	48	48	/	/
	LT32-40	52,5	65	98	98	55	45	61	91	122
	ULT25-40	98	98	/	/	55	91	122	/	/
	LT63-80	63	83	125	125	64	60	80	121	161
	ULT63-80	125	125	/	/	64	121	161	/	/
	LT100-125	70	93	140	140	83	70	93	141	187
	ULT100-125	140	140	/	/	83	141	187	/	/

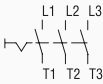
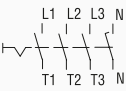



IP65
Enclosures
Sheet metal enclosures and EMC-accessories

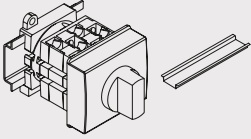
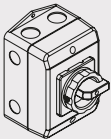
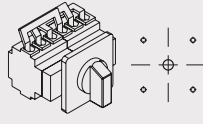
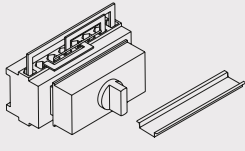
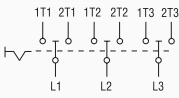

IP65
Enclosures

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	4x M50/63, 6 x M20
K4/Z33	90	373	373	230	2x M40/63, 2 x M32/50, 4 x M25/40

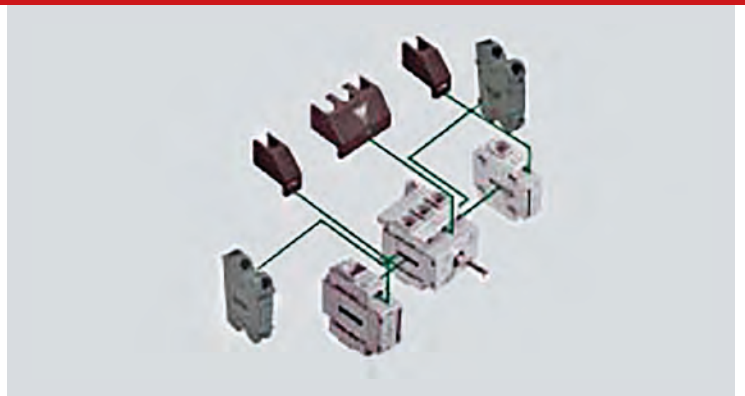
ON LOAD SWITCHES LT

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	
	3-pole	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/ Z45 HLT 16/ 3V/ Z33/ Z45
		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/ Z45 HLT 25/ 3V/ Z33/ Z45
		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/ Z45 HLT 32/ 3V/ Z33/ Z45
		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/ Z45 HLT 40/ 3V/ Z33/ Z45
		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/ Z45 HLT 63/ 3V/ Z33/ Z45
		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/ Z45 HLT 80/ 3V/ Z33/ Z45
		100	30,0	37,0	NLT 100/ 3E/ Z33 HLT 100/ 3E/ Z33		NLT 100/ 3V/ Z33/ Z45 HLT 100/ 3V/ Z33/ Z45
		125	37,0	45,0	NLT 125/ 3E/ Z33 HLT 125/ 3E/ Z33		NLT 125/ 3V/ Z33/ Z45 HLT 125/ 3V/ Z33/ Z45
		180	75,0	90,5	NLT 180/ 3E/ Z20 HLT 180/ 3E/ Z20		NLT 180/ 3V/ Z20/ Z65 HLT 180/ 3V/ Z20/ Z65
		250	110,0	132,0	NLT 250/ 3E/ Z20 HLT 250/ 3E/ Z20		NLT 250/ 3V/ Z20/ Z65 HLT 250/ 3V/ Z20/ Z65
	4-pole	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/ Z45 HLT 16/ 4V/ Z33/ Z45
		25	7,5	9,5	NLT 25A/ 4E/ Z33 HLT 25A/ 4E/ Z33	NLT 25/ 4ZM/ Z33 HLT 25/ 4ZM/ Z33	NLT 25/ 4V/ Z33/ Z45 HLT 25/ 4V/ Z33/ Z45
		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/ Z45 HLT 32/ 4V/ Z33/ Z45
		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/ Z45 HLT 40/ 4V/ Z33/ Z45
		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/ Z45 HLT 63/ 4V/ Z33/ Z45
		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/ Z45 HLT 80/ 4V/ Z33/ Z45
		100	30,0	37,0	NLT 100/ 4E/ Z33 HLT 100/ 4E/ Z33		NLT 100/ 4V/ Z33/ Z45 HLT 100/ 4V/ Z33/ Z45
		125	37,0	45,0	NLT 125/ 4E/ Z33 HLT 125/ 4E/ Z33		NLT 125/ 4V/ Z33/ Z45 HLT 125/ 4V/ Z33/ Z45
		180	75,0	90,5	NLT 180/ 4E/ Z20 HLT 180/ 4E/ Z20		NLT 180/ 4V/ Z20/ Z65 HLT 180/ 4V/ Z20/ Z65
		250	110,0	132,0	NLT 250/ 4E/ Z20 HLT 250/ 4E/ Z20		NLT 250/ 4V/ Z20/ Z65 HLT 250/ 4V/ Z20/ Z65
	6-pole	16	5,5	7,5	E NLT 20/ 6E/ Z33 HLT 20/ 6E/ Z33		V NLT 20/ 6V/ Z33/ Z45 HLT 20/ 6V/ Z33/ Z45
		25	7,5	9,5	NLT 25/ 6E/ Z33 HLT 25/ 6E/ Z33		NLT 25/ 6V/ Z33/ Z45 HLT 25/ 6V/ Z33/ Z45
		32	9,5	11,5	NLT 32/ 6E/ Z33 HLT 32/ 6E/ Z33		NLT 32/ 6V/ Z33/ Z45 HLT 32/ 6V/ Z33/ Z45
		40	11,0	20,0	NLT 40/ 6E/ Z33 HLT 40/ 6E/ Z33		NLT 40/ 6V/ Z33/ Z45 HLT 40/ 6V/ Z33/ Z45
		63	18,5	22,5	NLT 63/ 6E/ Z33 HLT 63/ 6E/ Z33		NLT 63/ 6V/ Z33/ Z45 HLT 63/ 6V/ Z33/ Z45
		80	22,0	30,0	NLT 80/ 6E/ Z33 HLT 80/ 6E/ Z33		NLT 80/ 6V/ Z33/ Z45 HLT 80/ 6V/ Z33/ Z45
		100	30,0	37,0	NLT 100/ 6E/ Z33 HLT 100/ 6E/ Z33		NLT 100/ 6V/ Z33/ Z45 HLT 100/ 6V/ Z33/ Z45
		125	37,0	45,0	NLT 125/ 6E/ Z33 HLT 125/ 6E/ Z33		NLT 125/ 6V/ Z33/ Z45 HLT 125/ 6V/ Z33/ Z45
		180	75,0	90,5	NLT 180/ 6E/ Z20 HLT 180/ 6E/ Z20		NLT 180/ 6V/ Z20/ Z65 HLT 180/ 6V/ Z20/ Z65
		250	110,0	132,0	NLT 250/ 6E/ Z20 HLT 250/ 6E/ Z20		NLT 250/ 6V/ Z20/ Z65 HLT 250/ 6V/ Z20/ Z65

ON LOAD CHANGE-OVER-SWITCHES

DIN-Railmounting		Maintenance switch, plastic enclosed		Thermal rated current I_{th} (in A)	Rated perf. at 3x400V (in kW)	Rated perf. at 3x400V (in kW)	4-Hole mounting	DIN-Railmounting
			IP65	I_{th}	AC3	AC23		
Type	Type	Connection diagram					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	ULT 32/ 3E	ULT 32/ 3T
NLT 32/ 3T/ Z20 HLT 32/ 3T/ Z20	RLT 32/ 3PM-D1/ Z33			40	11,0	20,0	ULT 40/ 3E	ULT 40/ 3T
NLT 40/ 3T/ Z20 HLT 40/ 3T/ Z20	RLT 40/ 3PM-D1/ Z33			63	18,5	22,5	ULT 63/ 3E	ULT 63/ 3T
NLT 63/ 3T/ Z20 HLT 63/ 3T/ Z20	RLT 63/ 3PM-D2/ Z33			80	22,0	30,0	ULT 80/ 3E	ULT 80/ 3T
NLT 80/ 3T/ Z20 HLT 80/ 3T/ Z20	RLT 80/ 3PM-D2/ Z33			100	30,0	37,0	ULT 100/ 3E	ULT 100/ 3T
NLT 100/ 3T/ Z20 HLT 100/ 3T/ Z20	RLT 100/ 3PM-D3/ Z33			125	37,0	45,0	ULT 125/ 3E	ULT 125/ 3T
NLT 125/ 3T/ Z20 HLT 125/ 3T/ Z20	RLT 125/ 3PM-D3/ Z33			180	75,0	90,5	ULT 180/ 3E	
	RLT 180/ 3K4/ Z20			250	110,0	132,0	ULT 250/ 3E	
	RLT 250/ 3K4/ Z20							
T NLT 16/ 4T/ Z20 HLT 16/ 4T/ Z20	RLT 16/ 4PM-D1/ Z33	4-pole 		25	7,5	9,5	E ULT 25/ 4E	T ULT 25/ 4T
NLT 25/ 4T/ Z20 HLT 25/ 4T/ Z20	RLT 25/ 4PM-D1/ Z33			32	9,5	11,5	ULT 32/ 4E	ULT 32/ 4T
NLT 32/ 4T/ Z20 HLT 32/ 4T/ Z20	RLT 32/ 4PM-D1/ Z33			40	11,0	20,0	ULT 40/ 4E	ULT 40/ 4T
NLT 40/ 4T/ Z20 HLT 40/ 4T/ Z20	RLT 40/ 4PM-D1/ Z33			63	18,5	22,5	ULT 63/ 4E	ULT 63/ 4T
NLT 63/ 4T/ Z20 HLT 63/ 4T/ Z20	RLT 63/ 4PM-D2/ Z33			80	22,0	30,0	ULT 80/ 4E	ULT 80/ 4T
NLT 80/ 4T/ Z20 HLT 80/ 4T/ Z20	RLT 80/ 4PM-D2/ Z33			100	30,0	37,0	ULT 100/ 4E	ULT 100/ 4T
NLT 100/ 4T/ Z20 HLT 100/ 4T/ Z20	RLT 100/ 4PM-D3/ Z33			125	37,0	45,0	ULT 125/ 4E	ULT 125/ 4T
NLT 125/ 4T/ Z20 HLT 125/ 4T/ Z20	RLT 125/ 4PM-D3/ Z33			180	75,0	90,5	ULT 180/ 4E	
	RLT 180/ 4K4/ Z20			250	110,0	132,0	ULT 250/ 4E	
	RLT 250/ 4K4/ Z20							

ADDITIONAL- AND AUXILIARY CONTACTS



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 16-150	HE11	HV11
------------	------	------

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

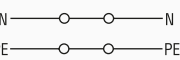
Neutral Pole (early make)



Neutral Pole (simultaneous make)



Neutral Pole (solid neutral)



T NLT 20/ 6T/ Z20 HLT 20/ 6T/ Z20	RLT 20/ 6PM-D1/ Z33
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
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
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





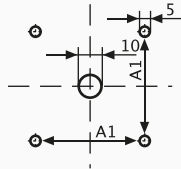
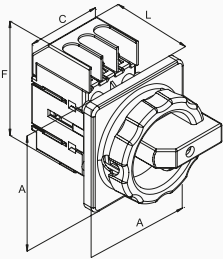
24

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



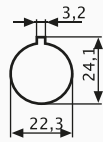
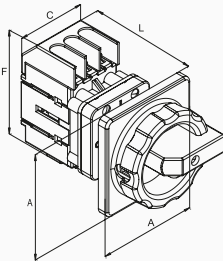
	I_{th} A	AC23 kW (3x400V)	AC3 kW	U V	connection cross mm ²
LO16	16	7,5	5,5	690	25
LO25	25	9,5	7,5	690	25
LO32	32	11,5	9,5	690	25
LO40	40	20,0	11,0	690	25
LO63	63	22,0	18,5	690	25
H11	10			240	4

Other configurations and sizes on request



E

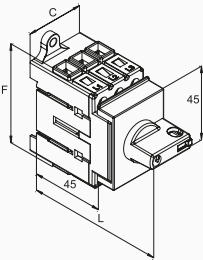
TYPE	A	A1	C 3 pole	C 4 pole	C 6 pole	F	L
LO16	66	48	36	49	72	73	54
LO25	66	48	36	49	72	73	54
LO32	66	48	36	49	72	73	54
LO40	66	48	36	49	72	73	54
LO63	66	48	36	49	72	73	54



ZM

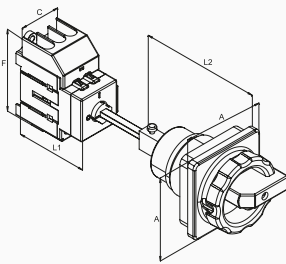
TYPE	A	A1	C 3 pole	C 4 pole	C 6 pole	F	L
LO16	66	-	36	49	-	73	77
LO25	66	-	36	49	-	73	77
LO32	66	-	36	49	-	73	77
LO40	66	-	36	49	-	73	77
LO63	66	-	36	49	-	73	77

IP65

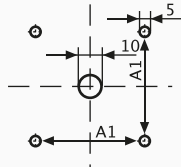


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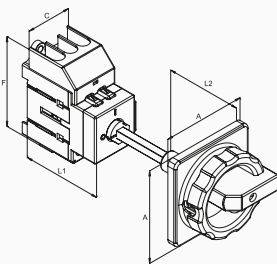
TYPE	A	A1	C 3 pole	C 4 pole	C 6 pole	F	L
LO16	66	-	36	49	72	73	77
LO25	66	-	36	49	72	73	77
LO32	66	-	36	49	72	73	77
LO40	66	-	36	49	72	73	77
LO63	66	-	36	49	72	73	77



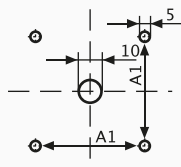
V/Z33/Z45



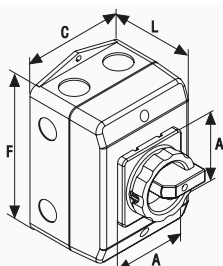
TYPE	A	A1	C 3 pole	C 4 pole	C 6 pole	F	L1	L2
LO16	66	48	36	49	72	73	66	77
LO25	66	48	36	49	72	73	66	77
LO32	66	48	36	49	72	73	66	77
LO40	66	48	36	49	72	73	66	77
LO63	66	48	36	49	72	73	66	77



V/Z33/Z71



TYPE	A	A1	C 3 pole	C 4 pole	C 6 pole	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



Enclosures

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

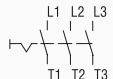
Sheet metal enclosures and EMC-accessories

IP65

ON LOAD SWITCHES LO

Connection diagram

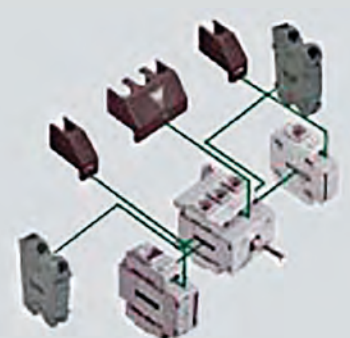
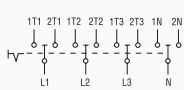
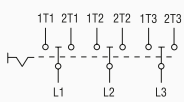
Thermal rated current I_{th} (in A)	Rated perf. at 3x400V (in kW)	Rated perf. at 3x400V (in kW)	4-Hole mounting		Central mounting		Base mounting		
			Type	Type	Type	Type			
I_{th}	AC3	AC23	Type		Type		Type		
3-pole	16	5,5	7,5	E NLO 16 / 3E/ Z33 HLO 16 / 3E/ Z33	ZM NLO 16/ 3ZM/ Z33 HLO 16/ 3ZM/ Z33	V NLO 16/ 3V/ Z33/ Z71 HLO 16/ 3V/ Z33/ Z71			
	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/ Z71 HLO 25/ 3V/ Z33/ Z71			
	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/ Z71 HLO 32/ 3V/ Z33/ Z71			
	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/ Z71 HLO 40/ 3V/ Z33/ Z71			
	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/ Z71 HLO 63/ 3V/ Z33/ Z71			
							IP65		
							Type		
	4-pole	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/ Z71 HLO 16/ 4V/ Z33/ Z71		
		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/ Z71 HLO 25/ 4V/ Z33/ Z71		
		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/ Z71 HLO 32/ 4V/ Z33/ Z71		
		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/ Z71 HLO 40/ 4V/ Z33/ Z71		
		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/ Z71 HLO 63/ 4V/ Z33/ Z71		
	6-pole	16	5,5	7,5	E NLO 16/ 6E/ Z33 HLO 20/ 6E/ Z33		V NLO 16/ 6V/ Z33/ Z71 HLO 20/ 6V/ Z33/ Z71		
		25	7,5	9,5	NLO 25/ 6E/ Z33 HLO 25/ 6E/ Z33		NLO 25/ 6V/ Z33/ Z71 HLO 25/ 6V/ Z33/ Z71		
		32	9,5	11,5	NLO 32/ 6E/ Z33 HLO 32/ 6E/ Z33		NLO 32/ 6V/ Z33/ Z71 HLO 32/ 6V/ Z33/ Z71		
		40	11,0	20,0	NLO 40/ 6E/ Z33 HLO 40/ 6E/ Z33		NLO 40/ 6V/ Z33/ Z71 HLO 40/ 6V/ Z33/ Z71		
		63	18,5	22,5	NLO 63/ 6E/ Z33 HLO 63/ 6E/ Z33		NLO 63/ 6V/ Z33/ Z71 HLO 63/ 6V/ Z33/ Z71		

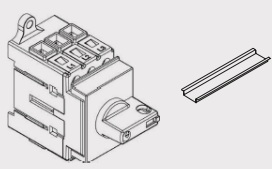
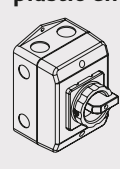


ON LOAD CHANGE-OVER-SWITCHES

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
I_{th}	AC3	AC23	Type		Type	
3-pole	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	
4-pole	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	

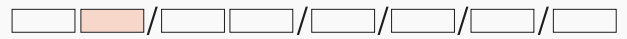


DIN-Railmounting		Maintenance switch, plastic enclosed	
			IP65
Type	Type	Type	Type
T	NLO 16/ 3T/ Z20C/ X74F HLO 16/ 3T/ Z20C/ X74F NLO 25/ 3T/ Z20C/ X74F HLO 25/ 3T/ Z20C/ X74F NLO 32/ 3T/ Z20C/ X74F HLO 32/ 3T/ Z20C/ X74F NLO 40/ 3T/ Z20C/ X74F HLO 40/ 3T/ Z20C/ X74F NLO 63/ 3T/ Z20C/ X74F HLO 63/ 3T/ Z20C/ X74F	RLO 16/ 3PM-D1/ Z33 RLO 25/ 3PM-D1/ Z33 RLO 32/ 3PM-D1/ Z33 RLO 40/ 3PM-D1/ Z33 RLO 63/ 3PM-D2/ Z33	
T	NLO 16/ 4T/ Z20C/ X74F HLO 16/ 4T/ Z20C/ X74F NLO 25/ 4T/ Z20C/ X74F HLO 25/ 4T/ Z20C/ X74F NLO 32/ 4T/ Z20C/ X74F HLO 32/ 4T/ Z20C/ X74F NLO 40/ 4T/ Z20C/ X74F HLO 40/ 4T/ Z20C/ X74F NLO 63/ 4T/ Z20C/ X74F HLO 63/ 4T/ Z20C/ X74F	RLO 16/ 4PM-D1 /Z33 RLO 25/ 4PM-D1 /Z33 RLO 32/ 4PM-D1/ Z33 RLO 40/ 4PM-D1 /Z33 RLO 63/ 4PM-D2 /Z33	
T	NLO 16/ 6T/ Z20 HLO 16/ 6T/ Z20 NLO 25/ 6T/ Z20 HLO 25/ 6T/ Z20 NLO 32/ 6T/ Z20 HLO 32/ 6T/ Z20 NLO 40/ 6T/ Z20 HLO 40/ 6T/ Z20 NLO 63/ 6T/ Z20 HLO 63/ 6T/ Z20	RLO 16/ 6PM-D2/ Z33 RLO 25/ 6PM-D2/ Z33 RLO 32/ 6PM-D2/ Z33 RLO 40/ 6PM-D2/ Z33 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

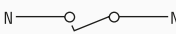
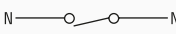

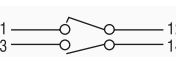
Z33 = Round padlock device
 Z20C = Padlock handle
 Z1 = Shaft packing IP65 (ZM/PM standard)
 Z44 = Door coupling (construction form V)
 Z71 = Door coupling (construction form V)
 Z45 = Door coupling with door interlock (construction form V)
 Z75 = Door coupling with door interlock and funnel (construction 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 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 (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 16-150 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

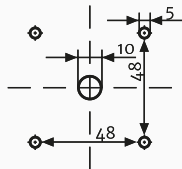
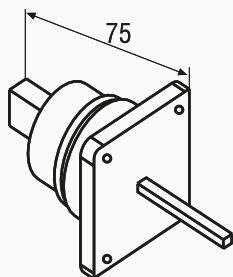




Door couplings for base mounted cam- and onload switches

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.

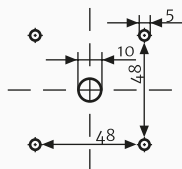
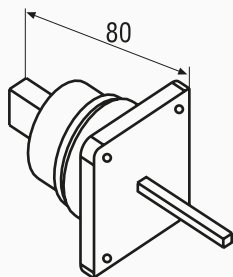


available for group, design

Doo	Do	D1	D2	D3
-	V	V	-	-
	LT16	LT25	LT63	LT100
	-25A	-LT40	-LT80	-LT125
	V	V	V	V
		LO		
		V		

Door coupling with compensation, without interlock

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

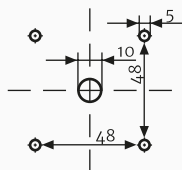
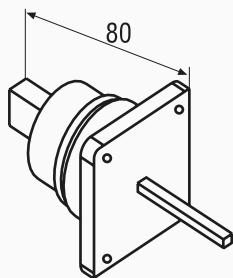


available for group, design

Doo	Do	D1	D2	D3
-	V	V	V	-
	LT16	LT25	LT63	LT100
	-25A	-LT40	-LT80	-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.

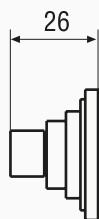


available for group, design

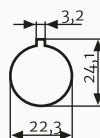
Doo	Do	D1	D2	D3
-	V	V	V	-
	LT16	LT25	LT63	LT100
	-25A	-LT40	-LT80	-LT125
	V	V	V	V
		LO		
		V		

Short door coupling with interlock

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



inside panel



available for group, design

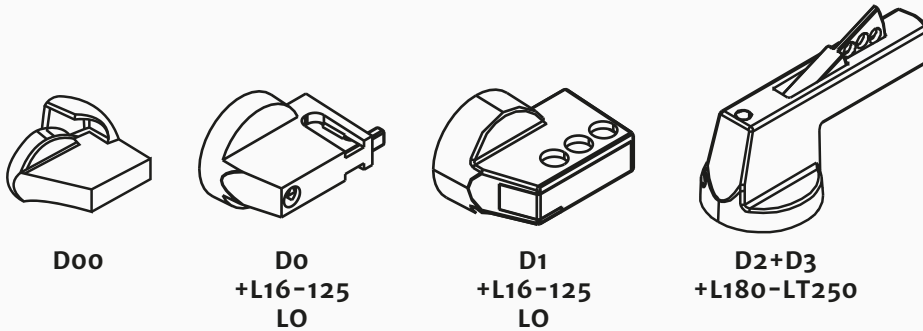
Doo	Do	D1	D2	D3
-	V	V	-	-
	LT16	LT25	LT63	LT100
	-25A	-LT40	-LT80	-LT125
	V	V	V	V
		LO		
		V		

various enclosures

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

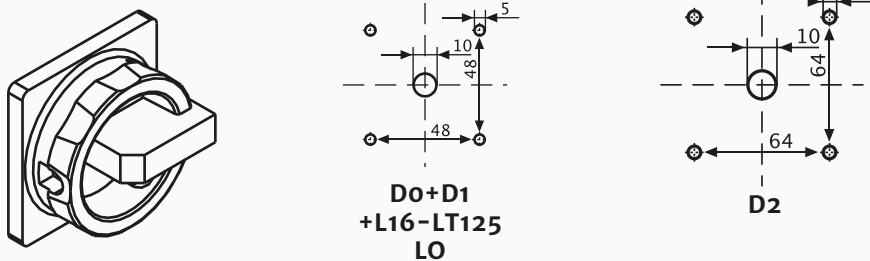


available for group, design

D00	D0	D1	D2	D3
E	E		E	E
ZM	ZM	ZM	V	V
	V	V	V	V
	T	T		
various enclosures				
LT16-25A	LT25-LT40	LT63-LT80	LT100-LT125	LT180-LT250
E	E	E	E	E
ZM	ZM	ZM	V	V
V	V	V	V	V
T	T	T	T	
	LO	LO		

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		-
	ZM	ZM	ZM	
	V	V	V	
various enclosures				
LT16-25A	LT25-LT40	LT63-LT80	LT100-LT125	
E	E	E	E	
ZM	ZM	ZM	V	
V	V	V	V	
	LO			

Ingress protection IP65 seal systems Z1

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

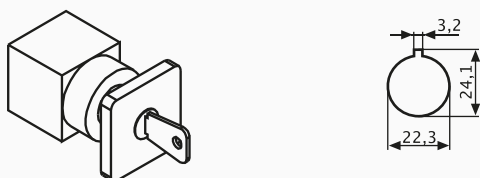
IP65 higher protection classes and other construction forms on request

available for group, design

D00	D0	D1	D2	D3
E	E	E	E	E
ZM	ZM	ZM	V	V
	V	V	V	V
various enclosures				
LT16-25A	LT25-LT40	LT63-LT80	LT100-LT125	LT180-LT250
E	E	E	E	E
ZM	ZM	ZM	V	V
V	V	V	V	V
		LO		

Key operator device Z32

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

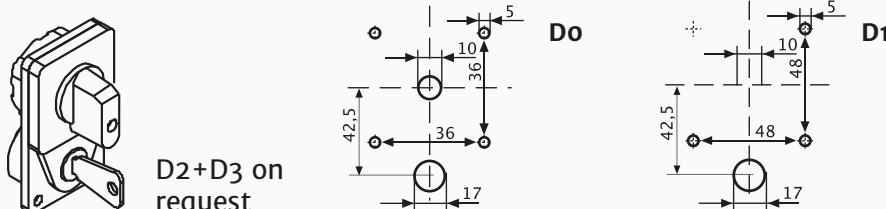


available for group, design

D00	D0	D1	D2	D3
ZM	ZM	ZM	-	-

Cylinder lock Z31

A cylinder lock allows locking certain or all positions.



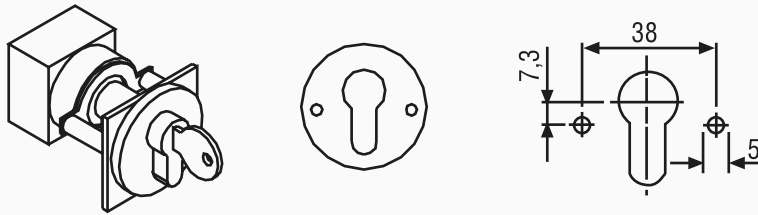
available for group, design

D00	D0	D1	D2	D3
-	E	E	E	E

Various accessories

Key operator device for DIN standard cylinder lock Z70

Allows integration into locking system. Cylinder not supplied.

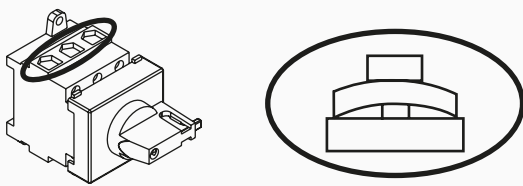


available for group, design

Doo	Do/8			
-	E			

Terminal for control circuits Z58

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

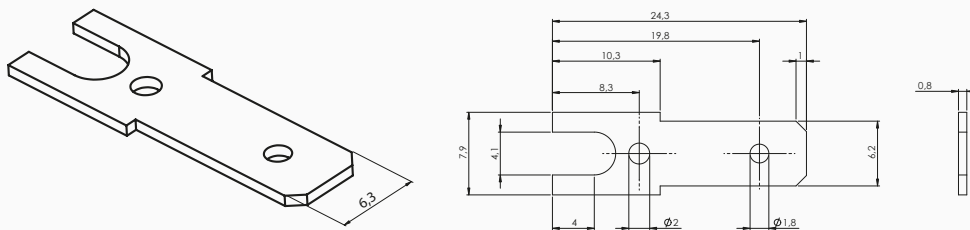


available for group, design

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

Flat connection Z6

For connection with sockets according DIN 46247.

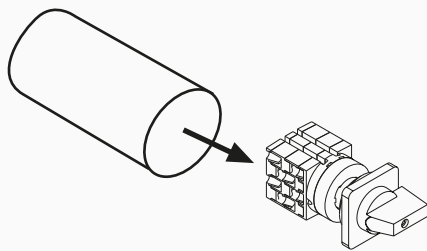


available for group, design

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

Full terminal shroud Z10

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

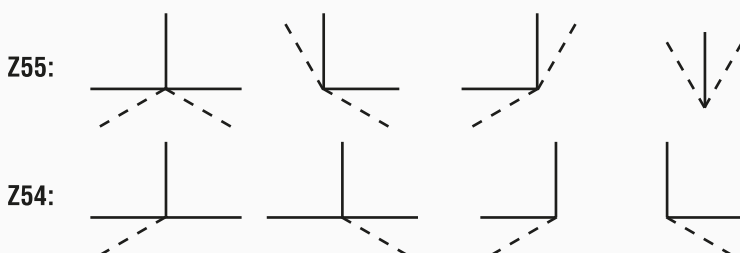


available for group, design

Doo	Do	D1	D2	D3
-	E ZM	E	E	-

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 ZM V T	E ZM V T	E V	E V

REPRESENTATIVES IN GERMANY

04317	Leipzig	Kiesewetter Excelsiorwerk Meßtechnik- und Anlagenausrüstungs Handelsgesellschaft mbH Prager Str. 34	Tel. 0341/5501606 Fax 0341/5501609
10318	Berlin-Karlshorst	Dipl. Ing. Rudolf-Georg Korinek Gleyeweg 76	Tel. 030/50898180 Fax 030/50898181
22926	Ahrensburg	Industrie-Agentur Chr. Fanenbrück Kurt-Fischer-Str. 41	Tel. 04102/20010 Fax 04102/200120
40237	Düsseldorf	Industrie-Repräsentanz (CDH) Norbert Hüffmeier Rethelstr. 20	Tel. 0211/2395580 Fax 0211/23955829
66131	Saarbrücken	NSV GmbH Küstriner Straße 38	Tel. 0681/8390335 Fax 0681/8390337
55559	Bretzenheim	NSV GmbH Winzenheimer Straße 30	Tel. 0671/9202800 Fax 0671/92028055
70806	Kornwestheim	Schiele-Vollmar Gesellschaft für Automatisierungspr. mbH Friedenstr. 20	Tel. 07154/820520 Fax 07154/820599

REPRESENTATIVES AROUND THE WORLD

Australia	ASN-Switchgear (AUST) Pty.Ltd. Fac.4/72, Makland Driv AU-3030 Derrimut Vic.	Tel. 0061/3/83906790 Fax 0061/3/83906790
Denmark	Desim Elektronik ApS Tåsingevej 15 DK-9500 Hobro	Tel. 0045/98510066 Fax 0045/98512220
Finland	HEDENGREN GROUP Oy HedTec Ab Installation Materials Lauttasaarentie 50 FI- 00200 Helsinki	Tel. 00358/9682881
Sweden	HEDENGREN GROUP Oy HedTec Ab Göteborg	Tel. 0046/708829202
France	MADEP Parc des Bellevues, 2 Avenue du Gros Chene FR- 95610 Eragny	Tel. 0033/134301720 Fax 0033/134649909
Great Britain + North Ireland	LC Automation Ltd. Shadsworth Business Park, Dultons Way GB-Blackburn, BB1 3QR	Tel. 0044/1254685900 Fax 0044/1254685901
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Iran	Anderson Bldg No. 35, Rahimi St, Jordan Ave Tehran	Tel. 009821/75999 Fax 009821/26232083
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Italy	Blumel SRL GmbH Luis Zueggstr. 22/E IT- 39012 Meran	Tel. 0039/0473449549 Fax 0039/0473440342
Canada	ITC Inc. 220 Viceroy Road, Unit 1 Concord, ON, L4K 3C2 CA	Tel. 001/4166637223 Fax 001/4166637224
Korea	Korics Trading Co., Ltd 212-2F, Byucksan Digital Valley II KR 481-10 Gasan-Dong, Kumcheon-GU, Seoul	Tel. 002/2113/66673 Fax 002/2113/665
Netherlands + Belgium	Oude-Elferink B.V. Seizoensweg 48 NL-7532 SL Enschede	Tel. 0031/534304009 Fax 0031/534304005
Norway	Nortelco AS Ryensvingen 3 NO- 0612 Oslo-Manglerud	Tel. 0047/22576100 Fax 0047/22576130
Austria + Hungary	Pan-electronics Lohnergasse 7 AT- 1210 Wien	Tel. 0043/12787544 Fax 0043/1278754433
Portugal + Africa + Spain + Brazil	IBIS Eurofios-Fios Especiais Estrada Da Moita, L.d.P CCI 7607 P- 2950-425 Palmela	Tel. 0035/1212334333 Fax 0035/1212334332
Switzerland	Carl Geisser AG Hungerbühlstrasse 22 CH-8500 Frauenfeld	Tel. 0041/448066500 Fax 0041/448066501
Shanghai	Shanghai Ilerda Electric Co. Ltd. Unit 1603 /North Block, Fortune 108 Plaza No. 1839 Qixin Rd. CN-201101Shanghai China	Tel. 0086/2154337015 Fax 0086/2154337016
Slovenia	Elektrospoji d.o.o. Stegne 25 SI- 1000 Ljubljana	Tel. 00386/15113810 Fax 00386/15111601
Czech Republic	Jork spol. s. r.o. K Trebonicum 100 CZ- 15500 Praha 5 – Reporyje	Tel. 00420/251626660 Fax 00420/251625619
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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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