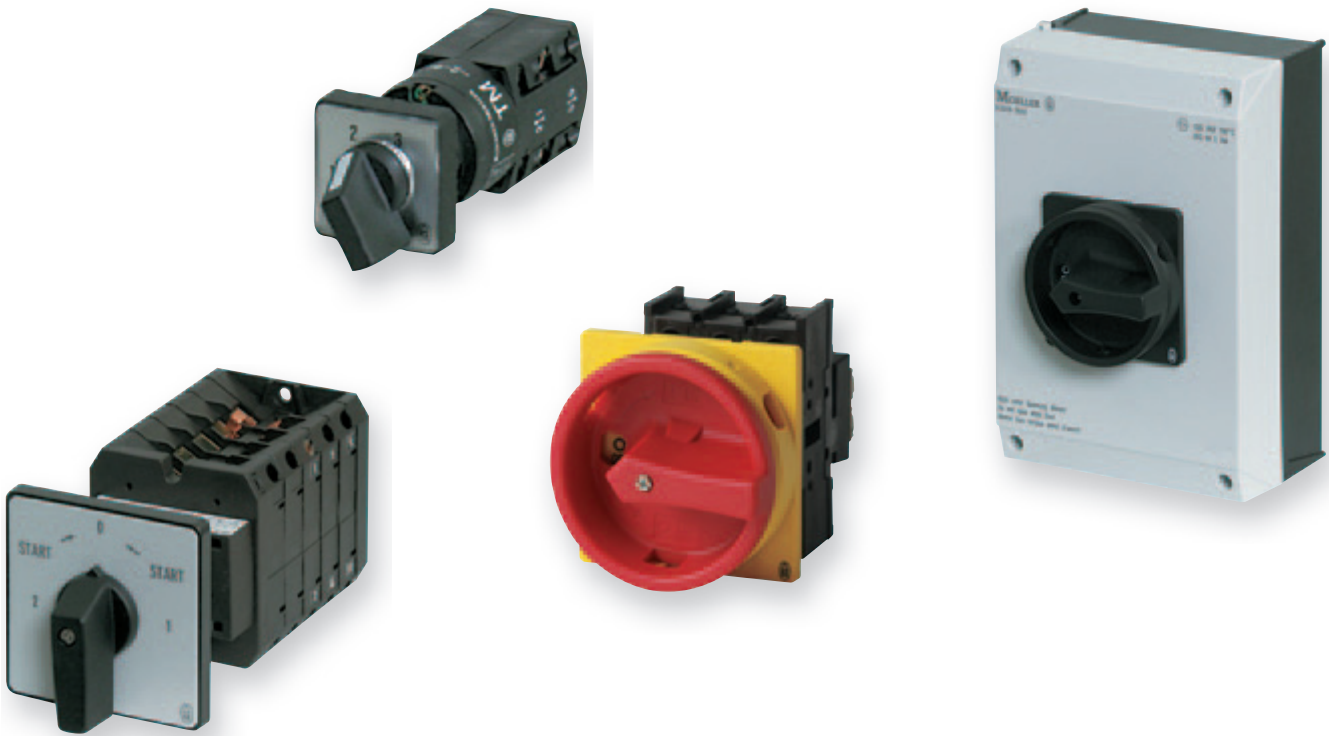


Cam switches T and switch disconnectors P





T Cam switches P Switch-disconnectors up to 315 A

The high performance and robust cam switch and switch-disconnector are used in industry, manual applications and building services management. Ten basic switch types in four different construction types can be selected in a multitude of standard contact sequences and a wide performance range.



T/TM Cam switches

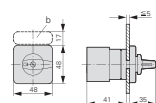
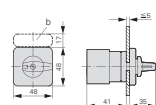
Performance up to 10/132 kW +++ Non-standard switches possible (see Online Catalog) +++
Several construction types

P switch-disconnectors

Performance up to 110 kW and 315 A +++ Switches up to 100 A (P1, P3) in housing IP65 +++
Four construction types

Switch for ATEX Zone 22

T Cam switches +++ Switch-disconnector up to 100 A (P1, P3) +++ IP65 Protection type



Cam switches, switch-disconnectors

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System overview

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Switch-disconnectors 6

Description

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Ordering

Switch-disconnectors, main switches maintenance/manual override switches 10
Switch-disconnectors – On-Off switches 22
Switch-disconnectors – safety switches 30
Switch-disconnectors – changeover switches 32
Switch-disconnectors – reversing switches 38
Switch-disconnector - (reversing) star-delta switches, reversing multi-speed switch 38
Switch-disconnectors – multi-speed switches 40
Control switches - step switches 42
Control switches - On-Off switches 46
Control switches - changeover switches, manual/automatic switches 48
Control switches – On switches 50
Universal control switches 52
Control switches - instrument switches 54
Switch with locking mechanism 56
Main switch assembly kits, thumb-grips, maintenance key 58
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Add-on front plates 60
Key operation, locking interlock 62
Neutral conductor, auxiliary contact, centre mounting accessories, service distribution board mounting accessories 64
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Mini rotary switches

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Ordering

Control circuit isolator, ON/OFF switches 60
Changeover switches 71
Hand/Auto switches 72
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Non-standard switches 83

Technical data



















Mini rotary switches 99

Dimensions

Mini rotary switches 111

(Mini) cam switches, switch-disconnector

T, P, TM

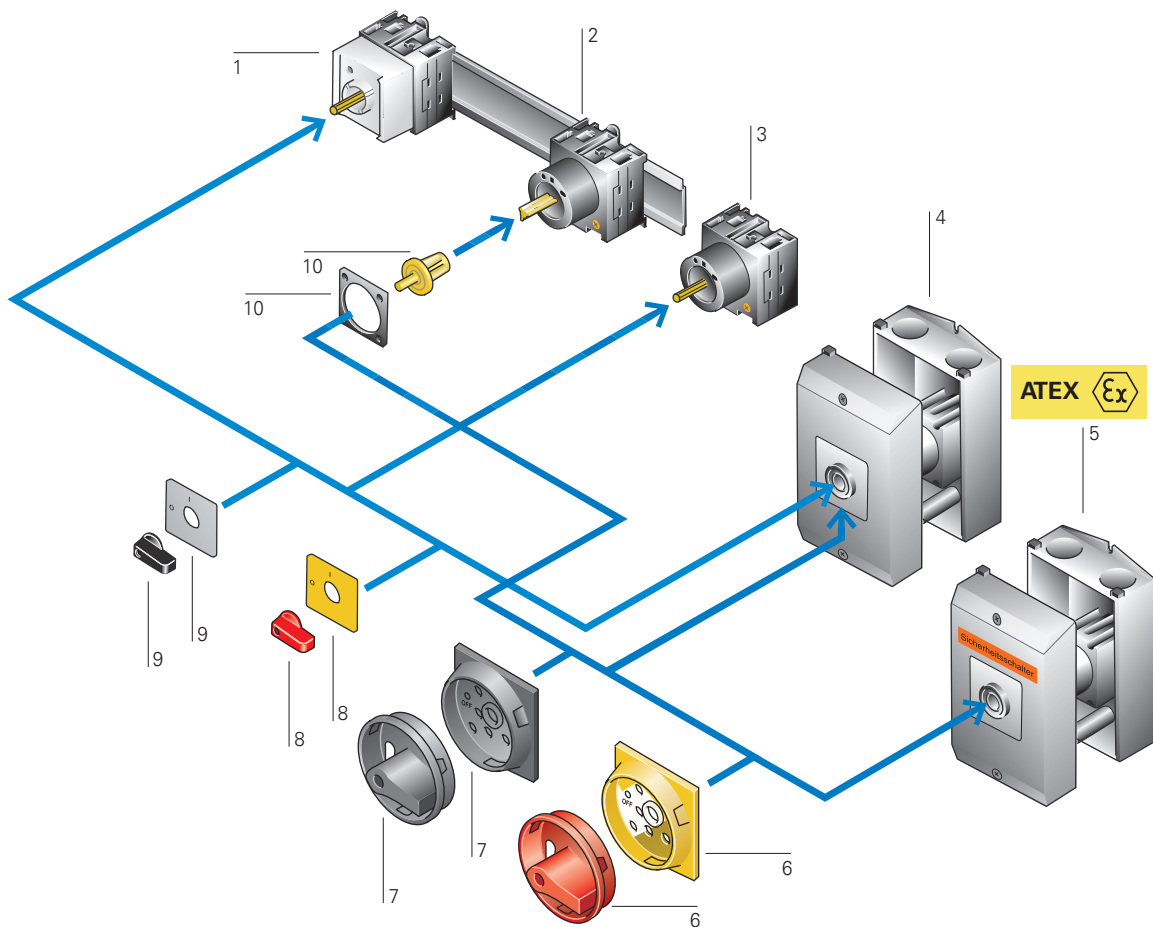
	Switch, basic type	Part no.	TM	T0	T3	T5B	
	Max. motor rating		3.0 kW	6.5 kW	13 kW	22 kW	
	AC-23 A, 400/415 V, 50/60 Hz						
	Max. rated operational current I_n		≅ 10 A	20 A	32 A	63 A	
Switch-disconnectors							
	Main switches, maintenance/manual override switches		–	→ 10	→ 10	→ 10	
	On-Off switches		→ 70	→ 22	→ 22	→ 22	
	Safety switches with warning label		–	–	–	→ 30	
	Changeover switches		–	→ 32	→ 32	→ 32	
	Reversing switch with 0 position		–	→ 38	→ 38	→ 38	
	Star-delta switches		–	→ 38	→ 38	→ 38	
	Reversing star-delta switches		–	→ 38	→ 38	→ 38	
	Multi-speed switch		–	→ 40	→ 40	→ 40	
	Reversing multi-speed switches		–	→ 40	→ 40	→ 40	
Control switch							
	Step switch		→ 72	→ 42	–	–	
	On-Off switches		–	→ 46	–	–	
	Changeover switches		→ 71	→ 48	–	–	
	Manual/Auto switches		→ 72	→ 48	–	–	
	Push button switch		–	→ 50	–	–	
	Universal control switches		–	→ 52	–	–	
	Coding switches		→ 76	→ 52	–	–	
	Series switches		–	→ 52	–	–	
	Instrument selector switches		–	→ 54	–	–	
	Group switches		→ 75	–	–	–	
	ON OFF button		→ 75	–	–	–	
	Reversing switch		→ 76	–	–	–	
Switches with interlocks							
	Panic switches without emergency switching off function		–	→ 56	–	–	
	On-Off switches without Emergency-Stop function		–	→ 56	–	–	
Non-standard switches							
Mounting form							
		Surface mounting	.../I...	–	✓	✓	✓
			ATEX 	–	✓	✓	✓
		Surface mounting main switches	.../I.../SVB...	–	✓	✓	✓
			ATEX 	–	✓	✓	✓
		Mounting	.../E...	✓	✓	✓	✓
		Flush mounting main switch	.../E(A)/SVB...	✓	✓	✓	✓
		Center mounting	.../EZ...	✓	✓	✓	–
		Rear mounting	.../Z...	–	✓	✓	✓
		Rear mounting main switches	.../V/SVB...	–	✓	✓	✓
		Service distribution board mounting	.../IVS...	✓	✓	–	–

Cam switches, switch-disconnectors

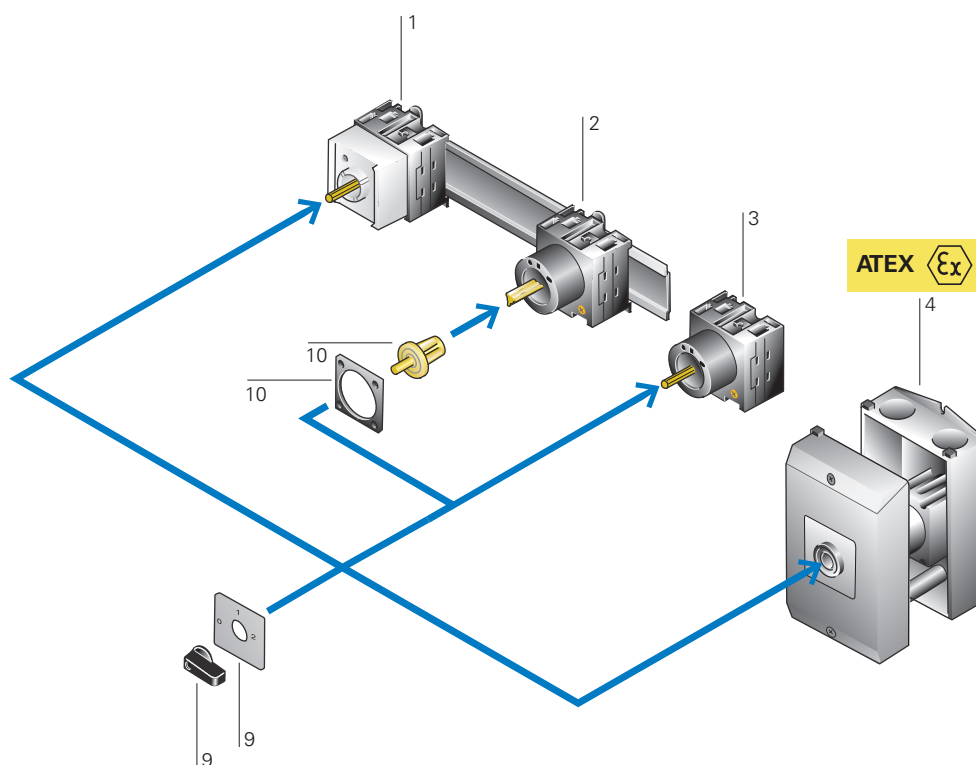
Cam switches



System overview

ON-OFF switches T0, T3, T5B, T5



Control switches T0, T3, T5B, T5

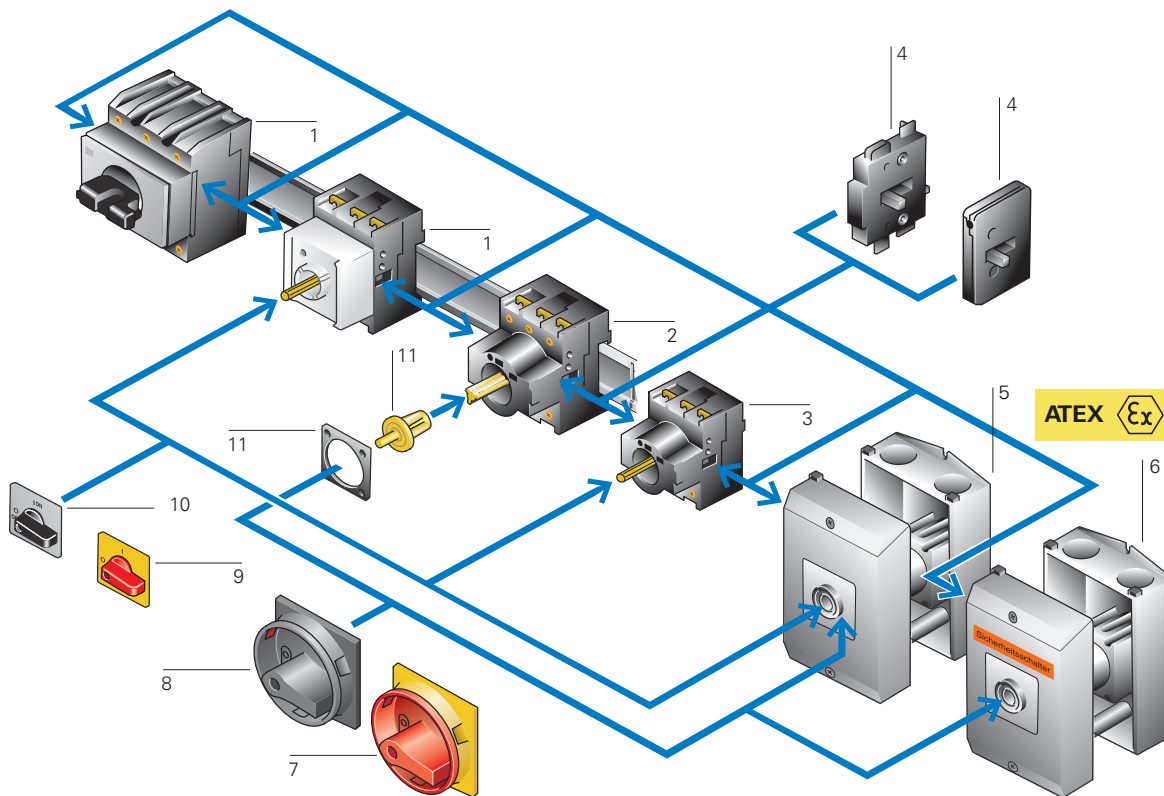


Service distribution board mounting (.../IVS) 1	Flush mounting main switch (.../EA/SVB) 3	Surface mounting main switch (.../I...) 4	Main switch (kit) for use as emergency switching off device 6
Front IP30	Front IP65	IP65	To IEC/EN 60204-1, VDE 0113 part 1
Can be snapped onto top-hat rail as per IEC/EN 60715 (only T0 and T3)	To IEC/EN 60204, VDE 0113 and IEC/EN 60947-3,	totally insulated	With red rotary handle and yellow locking collar
Mounting	For T0...: up to 8 contacts; For T3...: up to 12 contacts	To IEC/EN 60204, VDE 0113 and IEC/EN 60947-3,	Lockable in the 0 (Off) position
<ul style="list-style-type: none"> In service distribution board up to 3 contact units (45 mm mounting depth) In control panel up to 11 contact units 	N and PE terminal	For T0...: up to 8 contacts; For T3...: up to 10 contacts	→ Page 58
→ Page 22	→ Page 10	Position 0 lockable with 3 padlocks	Main switch (kit) 7
Rear mounting (.../Z) 2	Center mounting (.../EZ) 3	Enclosures for metric cable glands to EN 50262	Black rotary handle and locking collar
Front IP65	Front IP65	With an additional terminal	Lockable in the 0 position
Fixing: optionally with screw fixing or snap fitting, only T0 und T3	Mounted in Ø 22.3 fixing hole to IEC/EN 60947-5-1	→ Page 10	→ Page 58
For snap fitting to IEC/EN 60715 top-hat rail	"One man mounting" by center fixing	ATEX 	Thumb-grip, for use as emergency switching off device 8
Drive coupling in door or cover	→ Page 22	→ Page 58	To IEC/EN 60204-1, VDE 0113 part 1
Connection from front	Surface mounting (.../I...) 4	Safety switch (.../I...) 5	Red thumb-grip and yellow front plate
→ Page 22	IP65	IP65	→ Page 58
Rear mounting main switch (.../SVB) 2	totally insulated	With an additional terminal	Thumb-grip 9
Front IP65	With an additional terminal	With cover fixing in 0 position	Black thumb-grip with front plate
To IEC/EN 60204, VDE 0113 and IEC/EN 60947-3	Enclosures for metric cable glands to EN 50262	Position 0 lockable with 3 padlocks	→ Page 58
For T0...: up to 8 contacts; For T3...: up to 12 contacts	→ Page 22	Enclosures for metric cable glands to EN 50262	Coupling drive 10
With door interlock in "I" position		"Safety Switch" label; color: orange	Including push-fit shaft
→ Page 10		→ Page 30	For the retrofitting of switch T0(T3)-.../XZ as rear mounting, spare part for T0(T3)/(P1)-...Z
Flush mounting (.../E) 3		ATEX 	For the conversion of T5(B).../E flush mounting switch to rear mounting, spare part for T5(B)/(P3)-...Z
Front IP65		→ Page 58	→ Page 65
Flush mounting and connection from rear			Note:
Terminals:			Cam switches T5 and T5B are only available with screw connections for fixing on a mounting plate.
Crosshead screwdriver Pozidrive			
T8 always with extension terminals			
→ Page 22			

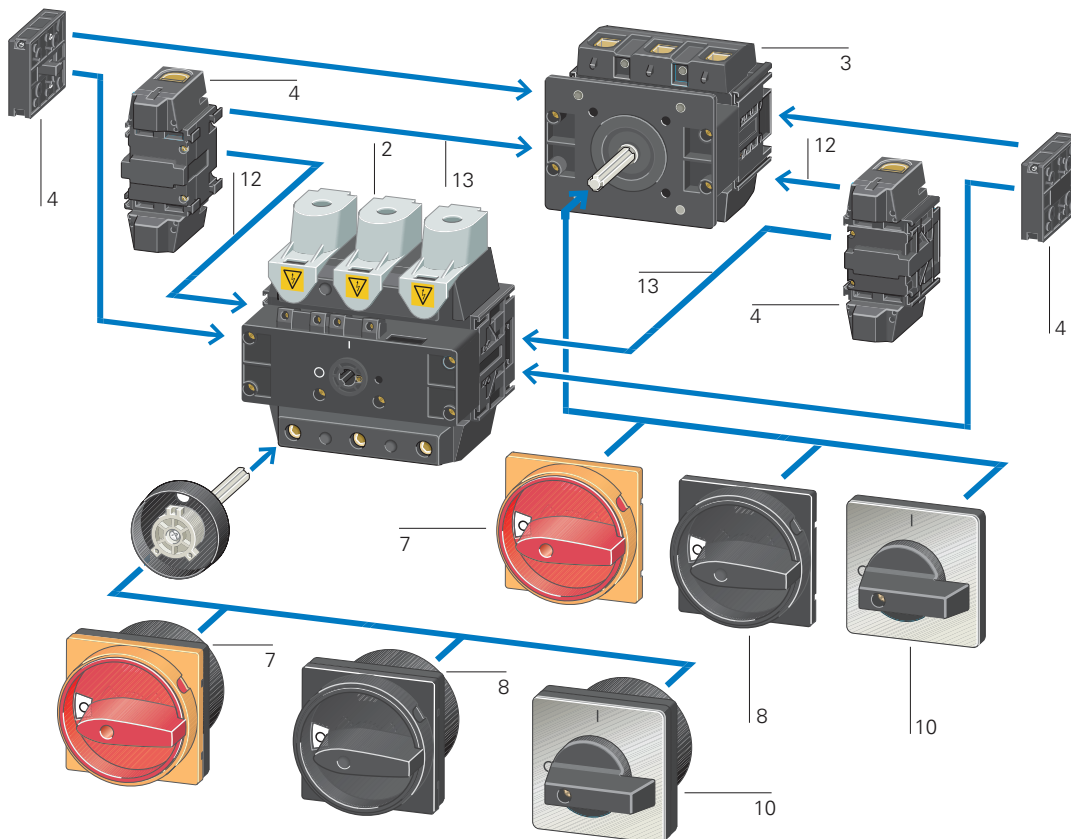
Cam switches, switch-disconnectors






Switch-disconnectors

ON-OFF switches P1, P3



ON OFF switches P5



Service distribution board mounting (.../IVS) 1	Flush mounting (.../E) 3	Surface mounting main switch (.../I...) 5	Main switch (kit) for use as emergency switching off device 7
Front IP30	Front IP65	IP65	To IEC/EN 60204-1, VDE 0113 Part 1
Fitting dimensions according to DIN 43880	Flush mounting and connection from rear		With red rotary handle and yellow locking collar
For snap fitting to top-hat rail according to IEC/EN 60715	Terminals: Crosshead screwdriver Pozidrive	With an additional terminal	Lockable in the 0 (Off) position
Space requirement	Back-of-hand proof	To IEC/ENEN 60204, VDE 0113 and IEC/EN 60947-3	→ Page 58
P1, 3 pole: 3 space units	2 add-on modules can be retrofitted	Position 0 lockable with 3 padlocks	Main switch (kit) 8
P3, 3 pole: 4 space units	→ Page 22	Installable add-on modules:	Black rotary handle and locking collar
P3-.../IVS lockable with padlock in "0" position	Flush mounting main switch (.../EA/SVB) 3	P1: HI 11-P1/P3 or N-P1..., P3: HI 11-P1/P3 and/or N-P5	Lockable in the 0 position
→ Page 22	Front IP65	Enclosures for metric cable glands to EN 50262	→ Page 58
Rear mounting (.../Z) 2	To IEC/ENEN 60204, VDE 0113 and IEC/EN 60947-3	→ Page 10	Thumb-grip, for use as emergency switching off device 9
Front IP65	N and PE terminal		To IEC/EN 60204-1, VDE 0113 Part 1
Fixing either by snap-on or screw fixing	Position 0 lockable with 3 padlocks	ATEX 	Red thumb-grip and yellow front plate
For snap fitting to top-hat rail according to IEC/EN 60715	2 add-on modules can be retrofitted	→ Page 58	→ Page 58
Drive coupling in door or cover	→ Page 10	Safety switch (.../I...-SI) 6	Thumb-grip 10
Connection from front	Center mounting (.../EZ) 3	IP65	Black thumb-grip with front plate
2 add-on modules can be retrofitted	Front IP65		→ Page 58
→ Page 22	Mounted in Ø 22.3 fixing hole to IEC/EN 60947-5-1	With an additional terminal	Coupling drive 11
Rear mounting main switch (...V/SVB) 2	"One man mounting" by center fixing	With cover fixing in 0 position	Including push-fit shaft
Front IP65	→ Page 22	Position 0 lockable with 3 padlocks	For retrofitting mounting switches T0(T3)-.../XZ as rear mounting design spare part for T0(T3)/(P1)-.../Z
To IEC/ENEN 60204, VDE 0113 and IEC/EN 60947-3	Add-on modules 4	"Safety Switch" label; color: orange	For converting flush mounting switches T5(B)-.../E into rear mounting switch spare part for T5(B)/(P3)-...Z
With door interlock in "I" position	Switchable N conductor (early-make N/O contact)	Enclosures for metric cable glands to EN 50262	→ Page 65
Maintenance key for commissioning or fault-finding	Auxiliary contacts	→ Page 30	Ground terminal 12
Position 0 lockable with 3 padlocks	Finger proof	ATEX 	Front mounting, right
2 add-on modules can be retrofitted	Auxiliary N/O contact: Always connected as a load-shedding contact (late-make on, late-break off)	→ Page 58	Service distribution board mounting, left
→ Page 10	→ Page 64		Neutral terminal 13
	Surface mounting (.../I...) 5		Front mounting, left
	IP65		Service distribution board mounting, right
			→ Page 64
	With an additional terminal		
	Installable add-on modules:		
	P1: HI 11-P1/P3 or N-P1..., P3: HI 11-P1/P3 and/or N-P5		
	Enclosures for metric cable glands to EN 50262		
	→ Page 22		

Cam switches, switch-disconnectors

Description

Cam switches can be used for many switching and control applications. For example as ON-OFF switches, main switches, main/control switches, instrument switches.

The switches consist of a hand actuator, the switch unit and the mounting accessories.

The contact chamber (contact unit = BE) contains 1 or 2 contacts.

Our "T Cam Switches" catalog has over 800 popular standard contact sequences (please request under K115D/F/GB, article no. 077643).

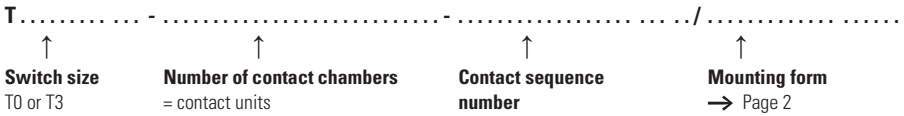
The following pages feature a selection of our standard contact sequences.

T cam switches and P switch-disconnectors are manufactured without PCB, CFC, asbestos and silicon. The contacts are cadmium free.

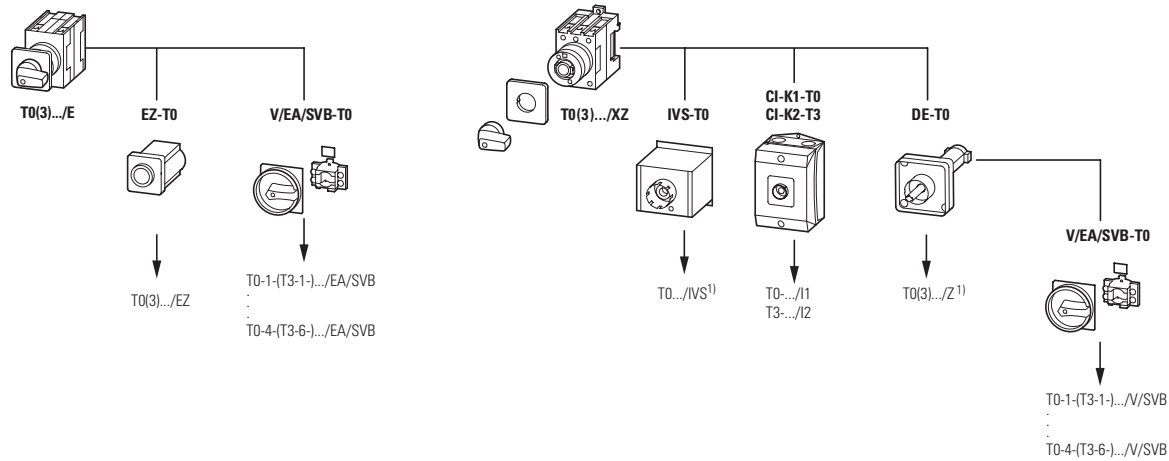
The CI-K... insulated enclosures are silicon and halogen free.

Cam switches T0 and T3

Key to part numbers



Using the modular system to convert the mounting form

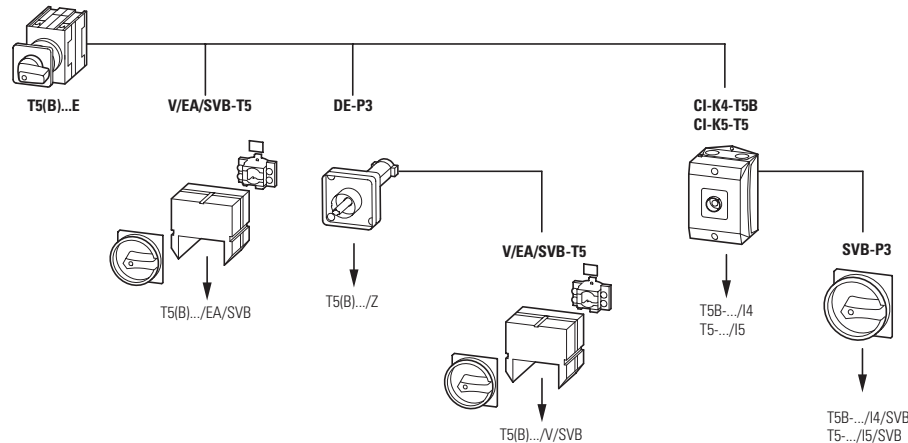


Cam switch TB5

Key to part numbers



Using the modular system to convert the mounting form T5(B)




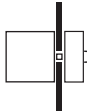
Note ¹⁾ Including shaft

Cam switches, switch-disconnectors

Switch-disconnectors – main switches, maintenance/manual override switches

Ordering




































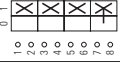


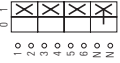
















T, P

Contact sequence	Front plate no.	Main contacts	Auxiliary contacts	Max. motor rating AC-23 A, 400/415 V, 50/60 Hz	Rated uninterrupted current	Flush mounting Front IP65	Part no. Article no.	Price See price list	Std. pack
	 FS 908	Pole N/O	N/O	400 V P k	I_u A				

Main switch as emergency switching off/emergency stop device

With red rotary handle and yellow locking collar
To IEC/EN 60204-1, VDE 0113 Part 1
Lockable in the 0 (Off) position

Without auxiliary contacts

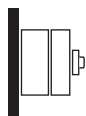
	1	0	0	6.5	20	T0-1-8200/EA/SVB 053110	1 Off	 
				13	32	T3-1-8200/EA/SVB⁽¹⁾ 066576	1 Off	 
				22	63	T5B-1-8200/EA/SVB⁽³⁾ 094279	1 Off	 
	2	0	0	6.5	20	T0-1-102/EA/SVB⁽¹⁾ 091078	1 Off	 
				13	32	T3-1-102/EA/SVB⁽¹⁾ 014374	1 Off	 
				22	63	T5B-1-102/EA/SVB⁽³⁾ 094469	1 Off	 
	3	0	0	6.5	20	T0-2-1/EA/SVB⁽¹⁾ 038873	1 Off	 
				13	25	P1-25/EA/SVB⁽¹⁾ 041097	1 Off	 
				13	25		1 Off	 
				15	32	P1-32/EA/SVB⁽¹⁾ 081438	1 Off	 
				37	63	P3-63/EA/SVB⁽¹⁾ 031607	1 Off	 
				45	125	P5-125/EA/SVB⁽⁴⁾ 280898	1 Off	 
				50	100	P3-100/EA/SVB⁽¹⁾ 074320	1 Off	 
				55	160	P5-160/EA/SVB⁽⁴⁾ 280922	1 Off	 
				90	250	P5-250/EA/SVB⁽⁴⁾ 280936	1 Off	 
				110	315	P5-315/EA/SVB⁽⁴⁾ 280950	1 Off	 
	3 + N	0	0	6.5	20	T0-2-8900/EA/SVB⁽¹⁾ 207400	1 Off	 
	3 + N	0	0	13	25	P1-25/EA/SVB/N⁽¹⁾ 081587	1 Off	 
				13	25		1 Off	 
				15	32	P1-32/EA/SVB/N⁽¹⁾ 091079	1 Off	 
				15	32		1 Off	 
				37	63	P3-63/EA/SVB/N⁽¹⁾ 010398	1 Off	 
				45	125	P5-125/EA/SVB/N⁽⁴⁾ 280910	1 Off	 
				50	100	P3-100/EA/SVB/N⁽¹⁾ 019890	1 Off	 
				55	160	P5-160/EA/SVB/N⁽⁴⁾ 280924	1 Off	 

Cam switches, switch-disconnectors

Switch-disconnectors – main switches, maintenance/manual override switches

Surface mounting

IP65



Part no.
Article no.

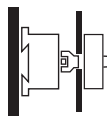
totally insulated

Price
See price list

Std. pack

Rear mounting

Front IP65















































































Part no.
Article no.

Price
See price list

Std. pack

Information relevant for export to North America



Part no. Article no.	Price See price list	Std. pack	Part no. Article no.	Price See price list	Std. pack	Information relevant for export to North America	
T0-1-8200/11/SVB 207145		1 Off	T0-1-8200/V/SVB 057856		1 Off  	1) Product Standards UL 508; CSA-C22.2 No. 14-05; IEC/EN 60947-3; CE marking E36332 UL File No. UL CCN CSA File No. CSA Class No. NA Certification Suitable for Degree of Protection	
T3-1-8200/12/SVB²⁾ 207200		1 Off  	T3-1-8200/V/SVB¹⁾ 007255		1 Off  		
T5B-1-8200/14/SVB³⁾ 207240		1 Off  	T5B-1-8200/V/SVB³⁾ 094273		1 Off  		
T0-1-102/11/SVB 207143		1 Off	T0-1-102/V/SVB¹⁾ 095824		1 Off  		
T3-1-102/12/SVB²⁾ 207198		1 Off  	T3-1-102/V/SVB¹⁾ 019120		1 Off  		
T5B-1-102/14/SVB³⁾ 207238		1 Off  	T5B-1-102/V/SVB³⁾ 094463		1 Off  		
T5-1-102/15/SVB 207273		1 Off			1 Off  		
T0-2-1/11/SVB 207147		1 Off	T0-2-1/V/SVB¹⁾ 043619		1 Off  		2) Product Standards UL 508; CSA-C22.2 No. 14-05; CSA-C22.2 No. 94; IEC/EN 60947-3; CE marking E36332 UL File No. UL CCN CSA File No. CSA Class No. NA Certification Suitable for Degree of Protection
P1-25/12/SVB²⁾ 207293		1 Off  	P1-25/V/SVB²⁾ 055335		1 Off  		
P1-25/12H/SVB 226900		1 Off			1 Off  		
P1-32/12/SVB²⁾ 207314		1 Off  	P1-32/V/SVB¹⁾ 095676		1 Off  		
P3-63/14/SVB¹⁾ 207343		1 Off  	P3-63/V/SVB¹⁾ 048218		1 Off  		
			P5-125/V/SVB⁴⁾ 280914		1 Off  		
P3-100/15/SVB¹⁾ 207373		1 Off  	P3-100/V/SVB¹⁾ 088558		1 Off  		
			P5-160/V/SVB⁴⁾ 280928		1 Off  		
			P5-250/V/SVB⁴⁾ 280942		1 Off  		
			P5-315/V/SVB⁴⁾ 280956		1 Off  		
T0-2-8900/11/SVB 207151		1 Off	T0-2-8900/V/SVB¹⁾ 207405		1 Off  	3) Product Standards UL 508; CSA-C22.2 No. 14-05; IEC/EN 60947-3; CE marking E36332 UL File No. UL CCN CSA File No. CSA Class No. NA Certification Suitable for Degree of Protection	
P1-25/12/SVB/N²⁾ 207298		1 Off  	P1-25/V/SVB/N²⁾ 086333		1 Off  		
P1-25/12H/SVB/N 227860		1 Off			1 Off  		
P1-32/12/SVB/N²⁾ 207319		1 Off  	P1-32/V/SVB/N¹⁾ 095825		1 Off  		
P1-32/12H/SVB/N 227871		1 Off			1 Off  		
P3-63/14/SVB/N¹⁾ 207349		1 Off  	P3-63/V/SVB/N¹⁾ 015144		1 Off  		
			P5-125/V/SVB/N⁴⁾ 280916		1 Off  		
P3-100/15/SVB/N¹⁾ 207379		1 Off  	P3-100/V/SVB/N¹⁾ 024636		1 Off  		
			P5-160/V/SVB/N⁴⁾ 280930		1 Off  		
					1 Off 