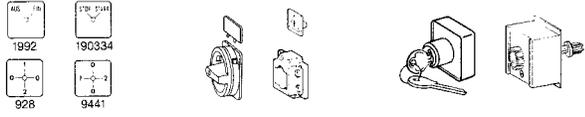
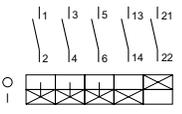
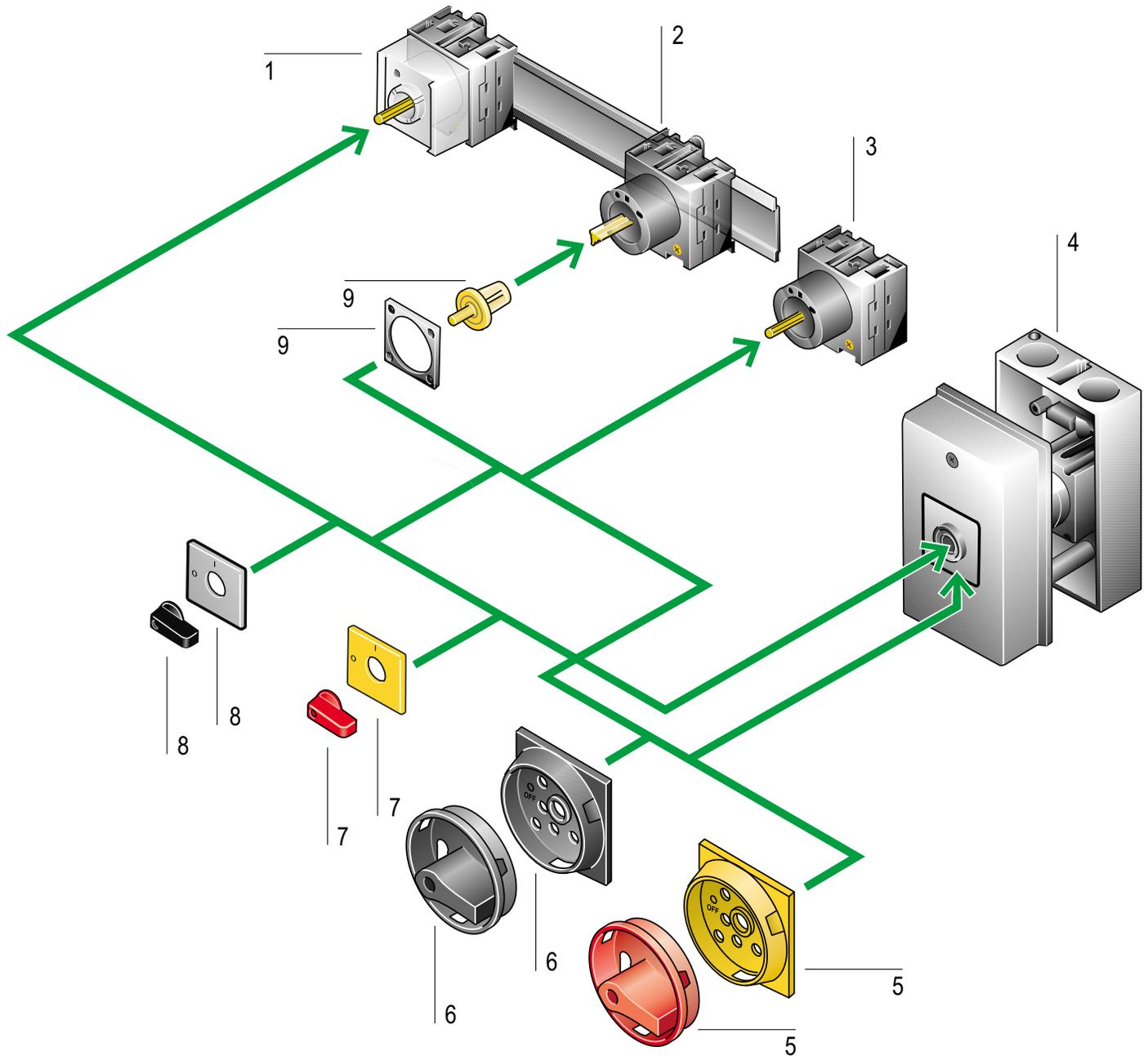


	<p>Overview</p> <ul style="list-style-type: none"> - T Cam Switches - P Manual Motor Controllers <p>Reference Chart</p> <p>Key to type reference, modular system</p>	<p>6/2</p> <p>6/4</p> <p>6/6</p> <p>6/8</p>
	<p>Single Phase Switches</p> <ul style="list-style-type: none"> Disconnect Switches On/Off Switches Reversing Switch Emergency Stop Switches Change-over Switches 	<p>6/10</p> <p>6/12</p> <p>6/12</p> <p>6/14</p> <p>6/16</p>
	<p>Three Phase Switches</p> <ul style="list-style-type: none"> Disconnect Switches On/Off Switches Change-over Switches Reversing Switches Star Delta Switches Multi-Speed Switches 	<p>6/18</p> <p>6/22</p> <p>6/26</p> <p>6/28</p> <p>6/28</p> <p>6/30</p>
	<p>Standard Control switches</p> <ul style="list-style-type: none"> Stepping Switches On/Off Switches Change-over Switches Hand/Auto Switches Spring Return Switches Three position, Coding Switches Instrumentation Switches 	<p>6/32</p> <p>6/36</p> <p>6/36</p> <p>6/38</p> <p>6/40</p> <p>6/42</p> <p>6/44</p>
	<p>Locking Switches</p> <ul style="list-style-type: none"> Panic Switches On/Off Switches Hand/Auto Switches 	<p>6/46</p> <p>6/46</p> <p>6/48</p>
	<p>Front plates</p> <p>Accessories</p>	<p>6/50</p> <p>6/52</p>
	<p>Contact Sequences, Circuit diagrams</p>	<p>6/66</p>
	<p>Technical data</p>	<p>6/67</p>
	<p>Dimensions</p>	<p>6/72</p>
	<p>Nonstandard contact sequences</p> <p>Ordering Form FO 2</p>	<p>6/83</p> <p>6/84</p>

Type T0, T3, T5B Rotary Cam Switches



Manual Motor Controllers, Motor Disconnect Switches

Rotary Cam Switches

6

Type T0, T3 and T5B manually operated rotary cam switches can be used for a wide range of power switching and control circuit functions. The rotary cam/individual contact chamber design allows the switch to be easily configured to meet both simple and complex switching requirements. A variety of handles, enclosures and accessories further enable Type T switches to fulfill a number of more specific requirements. They offer many approval features:

- UL Listing, CSA certification as manual motor controllers and motor disconnect switches per the intent of the NEC and OSHA lockout/tag-out requirements.
- Compliance with IEC/EN 60 204 as Main Disconnect and Emergency-Stop switches and conformity to IEC/EN 60 947-3 as Switch-Disconnectors for CE applications.
- Finger and Back of Hand-safe design for enhanced protection in the workplace against shock hazards.

1 Base Mounting with cover (.../IVS)
 Additional front protection when panel door is open.
 Ideal for switches mounted internally in larger panels.
 Can be either panel mounted with screws or clipped on DIN rail.
 Switch can accommodate up to 11 contact chambers. (T0 switch only)

2 Base Mounting (.../Z)
 Can be either panel mounted with screws or clipped on DIN rail.
 (T0 or T3).
 Can be equipped with knobs or padlockable handles.
 Coupling drive mounts in door or cover.
 Field-Wiring terminals accessible from front.

2 Base Mounting Motor Disconnect Switches (5,6) (.../V/SVB)
 Padlockable handle, Black or Red-Yellow (Emergency-Off), rated NEMA 3R/12, IP 65.
 OFF position lockable with up to 3 padlocks.
 Meets IEC/EN 60 204 (Main Disconnectors, Emergency-Off Switches) and IEC/EN 60 947 Part 3 (Switch-Disconnectors) up to 8 circuits for T0..., up to 12 circuits for T3...
 UL Listed/CSA certified Motor Disconnect switches per NEC.
 Cover interlocked when switch is in the ON position.

3 Cover Mounting (.../E)
 For mounting in covers, doors or walls of control panels.
 NEMA 3R/12, IEC IP 65.
 Field-Wiring terminals accessible from back for easy access.
 Finger and Back of Hand safe design.

3 Cover Mounting Motor Disconnect Switches (5,6) (.../EA/SVB)
 Padlockable handle, Black or Red-Yellow (Emergency-Off), rated NEMA 3R/12, IP 65.
 OFF position lockable with up to 3 padlocks.
 Meets IEC/EN 60 204 (Main Disconnectors, Emergency-Off Switches) and IEC/EN 60 947 Part 3 (Switch-Disconnectors) up to 8 circuits for T0..., up to 12 circuits for T3...
 UL Listed/CSA certified Motor Disconnect switches per NEC.

3 Center Mounting (.../EZ)
Same features as cover mounted (.../E) switches except it allows switch to be mounted in the standard opening used by **22.5 mm style** pilot devices. (Refer to Section 5, RMQ 22...)
 The center mounting fixing piece also permits a **"one person"** assembly to save mounting time.
 Ideal for cam switches programmed for control circuit functions and mounted together with standard pilot devices in large control panel doors.

4 Surface Mounting Enclosures (.../I...)
 Corrosion resistant, insulating material enclosures; IP 65. totally insulated
 Can be equipped with standard knobs or padlockable handles for Main Disconnect switch applications.
 Surface mounting Main Disconnect Switches in accordance with IEC/EN 60 204 and IEC/EN 60 947-3, T0 up to 8 circuits, T3 up to 10 circuits.
 Lockable in the OFF position with up to 3 padlocks.
 Suitable as Surface mounted Emergency-OFF switches per IEC/EN 60 204 with red handle, yellow collar.

5 Main Disconnect Switch handles suitable for Emergency-OFF applications
 Designed to meet the requirements of Main Disconnect switches per IEC/EN 60 204-1.
 Red padlockable handle with yellow collar.
 Lockable in the OFF position with up to 3 padlocks.

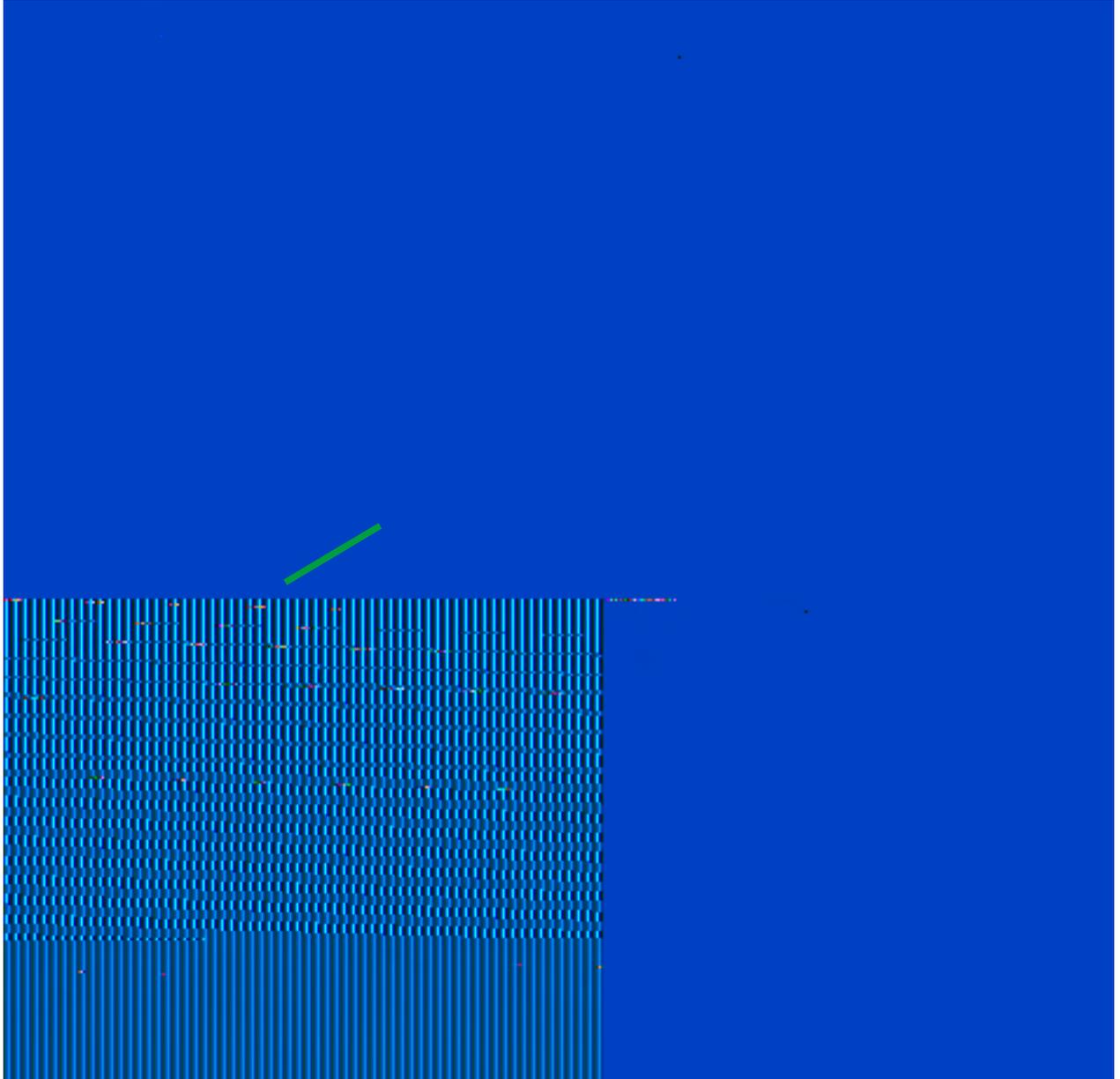
6 Main Disconnect Switch handles
 Designed to meet the requirements of Main Disconnect switches per IEC/EN 60 204.
 Black padlockable handle and collar.
 Lockable in the OFF position with up to 3 padlocks.

7 Standard knob handles suitable for Emergency-OFF applications
 Designed to meet the requirements of IEC/EN 60 204-1.
 Red handle with yellow nameplate.

8 Standard knob handles
 Designed to meet the requirements of IEC/EN 60 204.
 Black handle with silver colored nameplate.

9 Coupling Drive
 Linking mechanism used in the conversion of a basic switch (Type T0(T3)-.../XZ) into a base mounted version (.../Z).
 Can be stocked as a spare part for the T0(T3)-.../Z switch.
 Changes a cover mounted switch (Type T5B-.../E) into a base mounted version (T5B-.../Z).
 Can be stocked as a spare part for the T5B-.../Z switch.

Type P1 and P3 Controllers, Disconnect Switches



Type P1 and P3 switches are 2 position (ON-OFF), 90° rotary operated 3 phase manual motor controllers and disconnect switches rated up to 100 Amps. A variety of handles, enclosures and accessories further enable Type P switches to fulfill a number of more specific requirements. They are ideally suited as Main Disconnect switches where load shedding functions are necessary for the application:

The side-mounted auxiliary contact module operates as late-make and early-break in relation to the main contacts to execute the load shedding task.

They offer many additional approval features:

- UL Listing, CSA certification as manual motor controllers and motor disconnect switches per the intent of the NEC and OSHA lockout/tag-out requirements.
- Compliance with IEC/EN 60 204 as Main Disconnect and Emergency-Stop switches and conformity to IEC/EN 60 947-3 as Switch-Disconnectors for CE applications.
- Finger and Back of Hand-safe design for enhanced protection in the workplace against shock hazards.

- | | |
|---|---|
| <p>1 Base Mounting with cover (.../IVS)
Additional front protection when panel door is open.
Ideal for switches mounted internally in larger panels.
Can be either panel mounted with screws or clipped on DIN rail.
P3-.../IVS version can be padlocked in the OFF position.</p> <p>2 Base Mounting (.../Z)
Can be either panel mounted with screws or clipped on DIN rail.
Can be equipped with knobs or padlockable handles.
Coupling drive mounts in door or cover.
Field-Wiring terminals accessible from front.</p> <p>2 Base Mounting Main Disconnect Switches (6,7) (.../V/SVB)
Padlockable handle, Black or Red-Yellow (Emergency-Off), rated NEMA 3R/12, IP 65.
OFF position lockable with up to 3 padlocks.
Meets IEC/EN 60 204 (Main Disconnectors, Emergency-Off Switches) and IEC/EN 60 947 Part 3 (Switch-Disconnectors)
UL Listed/CSA certified Motor Disconnect switches per NEC.
Cover interlocked when switch is in the ON position.</p> <p>3 Cover Mounting (.../E)
For mounting in covers, doors or walls of control panels.
NEMA 3R/12, IEC IP 65.
Field-Wiring terminals accessible from back for easy access.
Finger and Back of Hand safe design.</p> <p>3 Cover Mounting Main Disconnect Switches (6,7) (.../EA/SVB)
Padlockable handle, Black or Red-Yellow (Emergency-Off), rated NEMA 3R/12, IP 65.
OFF position lockable with up to 3 padlocks.
Meets IEC/EN 60 204 (Main Disconnectors, Emergency-Off Switches) and IEC/EN 60 947 Part 3 (Switch-Disconnectors)
UL Listed/CSA certified Motor Disconnect switches per NEC.</p> <p>3 Center Mounting (.../EZ)
Same features as cover mounted (.../E) switches except it allows switch to be mounted in the standard opening used by 22.5 mm style pilot devices. (Refer to Section 5, RMQ 22...)
The center mounting fixing piece also permits a "one person" assembly to save mounting time.
NEMA 3R/12, IEC IP 65 (P1 only)</p> | <p>4 Add-on Modules
Switching Neutral Pole (Early-Make) for 4 pole applications (predominantly in certain IEC countries). The 4th pole switches in advance of the main power contacts.
Auxiliary Contact Module HI 11 (1 N.O. & 1 N.C.)
The N.O. contact is designed to operate as a load shedding contact: Switches after the main contacts when turning ON and opens before when turning OFF. (Late make/Early break).
Both modules feature finger-safe construction.</p> <p>5 Surface Mounting Enclosures (.../I...)
Corrosion resistant, insulating material enclosures; IP 65.
totally insulated
Can be equipped with standard knobs or padlockable handles for Main Disconnect switch applications.
Surface mounting Main Disconnect Switches in accordance with IEC/EN 60 204 and IEC/EN 60 947-3,
Lockable in the OFF position with up to 3 padlocks.
Suitable as Surface mounted Emergency-OFF switches per IEC/EN 60 204-1 with red handle, yellow collar.
Number of possible add-on modules for enclosed switches:
1 for the P1 switch; 2 for the P3 switch.</p> <p>6 Main Disconnect Switch handles suitable for Emergency-OFF applications
Designed to meet the requirements of IEC/EN 60 204-1.
Red padlockable handle with yellow collar.
Lockable in the OFF position with up to 3 padlocks.</p> <p>7 Main Disconnect Switch handles
Designed to meet the requirements of IEC/EN 60 204.
Black padlockable handle and collar.
Lockable in the OFF position with up to 3 padlocks.</p> <p>8 Standard knob handles suitable for Emergency-OFF applications
Designed to meet the requirements of IEC/EN 60 204-1.
Red handle with yellow nameplate.</p> <p>9 Standard knob handles
Designed to meet the requirements of IEC/EN 60 204.
Black handle with silver colored nameplate.</p> <p>10 Coupling Drive
Linking mechanism used in the conversion of a basic switch (Type.../XZ) into a base mounted version (.../Z).
Can be stocked as a spare part for the P1(P3)-.../Z switch.</p> |
|---|---|

Rotary Cam Switches Type T... Manual Motor Controllers, Disconnect Switches Type P...

UL / CSA / IEC / CE

Rating Data				Frame size →	T0-...	T3-...	T5B-...	P1-25	P1-32	P3-63	P3-100
Maximum HP ratings UL, CSA 50, 60 Hz	Three-phase	200 V	HP	3	5	15	5	7 1/2	15	20	
		230 V	HP	3	7 1/2	15	5	10	15	25	
		460 V	HP	10	15	40	10	20	40	60	
		575 V	HP	10	15	50	15	25	50	75	
	Single-phase	115 V	HP	3/4	1 1/2	3	1 1/2	2	3	5	
		200 V	HP	2	3	7 1/2	3	3	7 1/2	10	
		230 V	HP	2	3	10	3	5	10	15	
			A	14	25	65	20	30	60	100	
Maximum kW ratings IEC/EN 60 947 50, 60 Hz	AC 3 Three-phase	220...240 V	kW	3	6.5	15	5.5	7.5	15	22	
		380...440 V	kW	4	12	22	7.5	13	30	37	
		500 V	kW	5.5	15	22	7.5	18.5	30	45	
		690 V	kW	4	15	22	7.5	15	30	37	
Rated operational current (Resistive loads)	AC-21 Three-phase	380...440 V	A	12	25	63	25	32	63	100	
Continuous Current rating (IEC)			A	20	32	63	25	32	63	100	

Mounting Form	Type	Environmental Protection	T0-...	T3-...	T5B-...	P1-25	P1-32	P3-63	P3-100
Surface Mounting Switches	.../I...	IP 65	✓	✓	✓	✓	✓	✓	✓
Surface Mounting Main Disconnect Switches	.../I.../SVB	IP 65	✓	✓	✓	✓	✓	✓	✓
Cover Mounting	.../E...	Front IP 65 NEMA 3R/12	✓	✓	✓	✓	✓	✓	✓
Cover Mounted Main Disconnect Switches	.../EA/SVB...	Front IP 65 NEMA 3R/12	✓	✓	✓	✓	✓	✓	✓
Center Mounting Switches	.../EZ...	Front IP 65 NEMA 3R/12	✓	✓	—	✓	✓	—	—
Base Mounting Switches	.../Z...	Front IP 65 NEMA 3R/12	✓	✓	✓	✓	✓	✓	✓
Base Mounting Main Disconnect Switches	.../I/SVB...	Front IP 65 NEMA 3R/12	✓	✓	✓	✓	✓	✓	✓
Base Mounted Switches with cover	.../IVS...	Front IP 30	✓	—	—	✓	✓	✓	✓

Manual Motor Controllers, Motor Disconnect Switches

Rotary Cam Switches

6



Rotary Cam switches can be used in a wide range of applications and are just as suitable for switching motors as they are for control circuits. Applications include: ON-OFF switches, Motor Disconnectors, Manual transfer switches, Stepping switches, Instrumentation etc... They function essentially as inexpensive "hard-wired" programmable controllers and are extremely reliable. The switches are made up of the following parts:

- Handle assembly.
- The basic switch body containing contact chambers and handle position index.
- Peripheral accessories.

Each contact chamber in Types **T0**, **T3** and **T5B** switches features two contacts.

Our catalog "Rotary Switches T" (Cat. # K 115) contains over 800 commonly found standard switching sequences, a selection of which is to be found in this catalog. Catalog # K 115 is available on request.

Our Type T Rotary Cam Switches are free of any PCB's, Fluorocarbons, Asbestos and Silicon. Their contacts are cadmium-free.

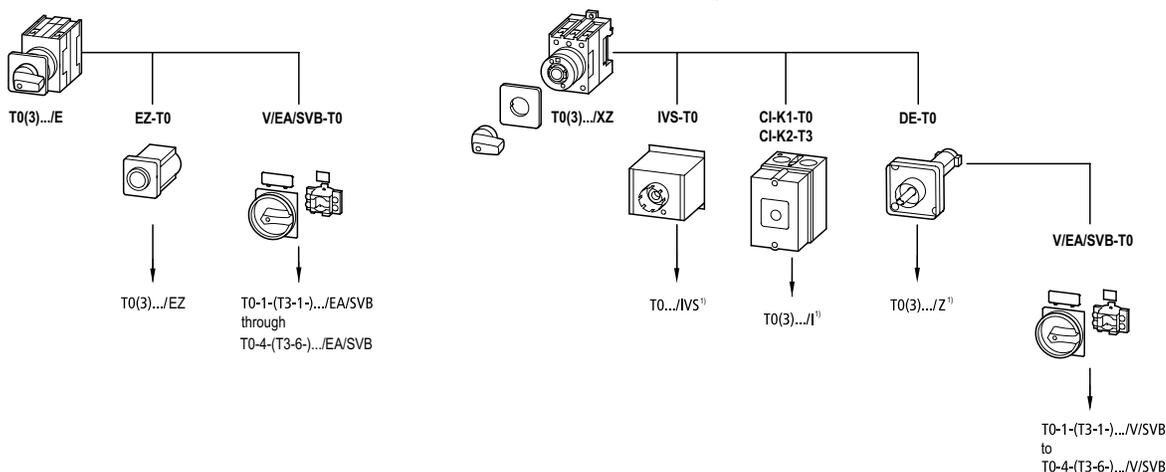
T0 and T3 Cam Switches

Key to type reference

T0 - 1 - 8210 / E + FS1665 + S

- Accessories, see pages 6/52 - 65
- Front plate type (if different from std.), see page 6/50 - 51
- Mounting form, see page 6/6
- Contact sequence number
- Number of contact chambers
- Switch size (0 or 3)
- Rotary Cam Switch

Use of modular system to convert mounting form



1) Includes shaft

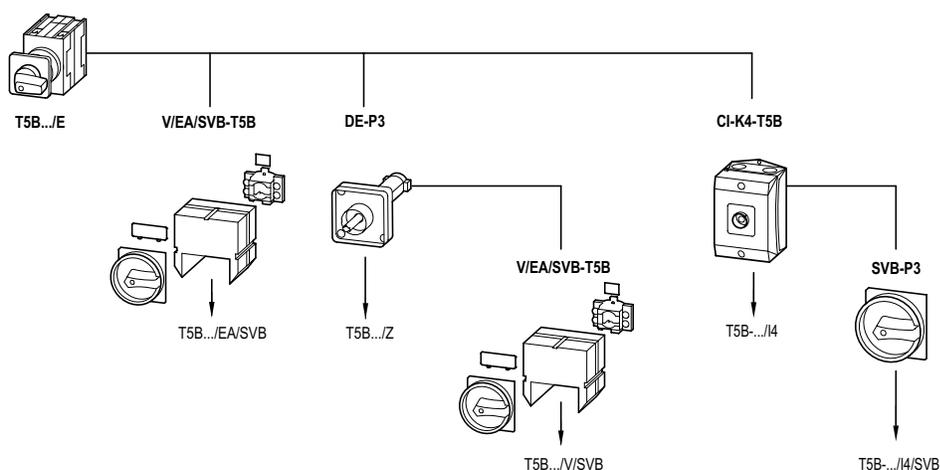
T5B Cam Switches

Key to type reference

T5B - 3 - 8342 / E + FS 1617 + ZFS 60-P3

- Accessories, see pages 6/52-65
- Front plate type (if different from standard), see 6/50-51
- Mounting form, see page 6/6
- Contact sequence number
- Number of contact chambers
- Switch size (T5B)
- Rotary Cam Switch

Use of modular system to convert mounting form T5B



Type P1 and **P3** switches are 2 position (ON-OFF), 90° rotary operated 3 phase manual motor controllers and disconnect switches rated from 20 amps up to 100 amps. They are all HP rated and ideally suited as Motor Disconnect switches.

A side-mounted auxiliary contact module operates as late-make and early-break in relation to the main contacts to execute a load shedding task which is often required in industrial applications.

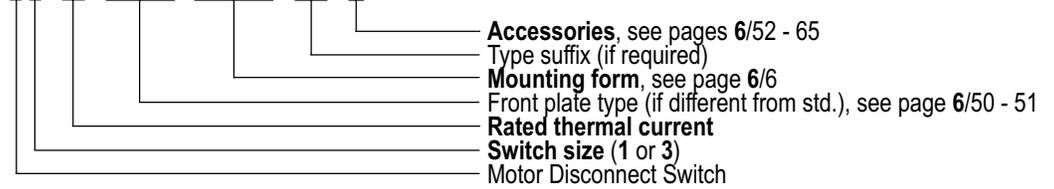
Type P (and **Type T** Cam) Switches feature a finger and back of hand safe design for enhanced safety in the workplace.

Our **Type P** Manual Controllers and Disconnects are free of any PCB's, Fluorocarbons, Asbestos and Silicon. Their contacts are cadmium-free.

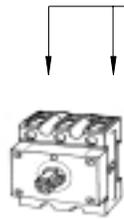
P 1 and P 3 Motor Disconnect Switches

Key to type reference

P 1 - 25 - FS 902 / EA/SVB - SW +H



Additional functions provided by modular system



Triple-pole basic unit

HI11-P1/P3



Auxiliary contact
Can be mounted left or right

H-P...



Terminal shroud
Can be mounted at top and bottom

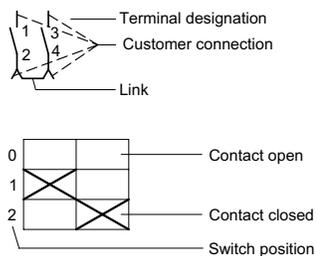
UV-P...



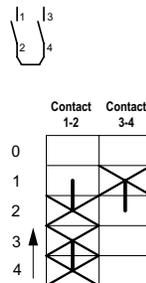
N + PE terminals
Also as cover interlock on .../Z switch

Circuit diagrams

On pages 6/10-48



Example:
(see also ordering sample on page 6/84)



Switch position 1:
Contact 1 – 2 open,
Contact 3 – 4 closed.

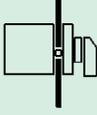
Switching from 1 to 2:
Contact 1 – 2 closes with early make,
Contact 3 – 4 opens with late break.

Switching from 2 to 3:
Contact 1 – 2 opens briefly.

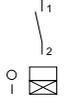
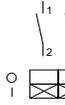
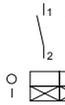
Switching from 3 to 4:
Contact 1 – 2 remains closed.
Automatic return from 4 to 3.

Rotary Cam Switches, Manual Motor Controllers and Disconnects for Single Phase Applications

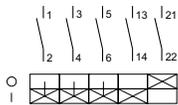
UL / CSA / IEC / CE

1	2	3	4	5	6	7	8	9			
Circuit function diagram	Front plate Number FS 908	Main Contacts (Number of power poles)	Auxiliary Contacts	Maximum HP Rating 50 - 60 Hz, Single Phase UL, CSA			Current Rating UL/CSA	Basic Type	Cover mounting Padlockable Red handle with Yellow collar, suitable as Emergency-OFF	Price	
					115 V HP	200 V HP	230 V HP	Amps	Add Mounting Form Type at right →	 Mounting Form Type	\$

Motor Disconnect Switches

	FS 908	1	0	0	3/4	2	2	14	T0-1-8200/...	EA/SVB	See Price List	See Price List
					1 1/2	3	3	25	T3-1-8200/...	EA/SVB	See Price List	See Price List
					3	7 1/2	10	65	T5B-1-8200/...	EA/SVB	See Price List	See Price List
	FS 908	2	0	0	3/4	2	2	14	T0-1-102/...	EA/SVB	See Price List	See Price List
					1 1/2	3	3	25	T3-1-102/...	EA/SVB	See Price List	See Price List
					3	7 1/2	10	65	T5B-1-102/...	EA/SVB	See Price List	See Price List
	FS 908	3	0	0	1 1/2	3	3	20	P1-25/...	EA/SVB	See Price List	See Price List
					2	3	5	30	P1-32/...	EA/SVB	See Price List	See Price List
					3	7 1/2	10	60	P3-63/...	EA/SVB	See Price List	See Price List
					5	10	15	100	P3-100/...	EA/SVB	See Price List	See Price List

Motor Disconnect Switches, with load shedding auxiliary contact

	FS 908	3	1	1	1 1/2	3	3	20	P1-25/...	EA/SVB/HI11	See Price List	See Price List
					2	3	5	30	P1-32/...	EA/SVB/HI11	See Price List	See Price List
					3	7 1/2	10	60	P3-63/...	EA/SVB/HI11	See Price List	See Price List
					5	10	15	100	P3-100/...	EA/SVB/HI11	See Price List	See Price List

Notes:

All handles supplied in the above combinations are padlockable in the OFF position.

Switches with red handles and yellow collars (...SVB) are suitable as Emergency-OFF Main Disconnect switches per the Machinery Directive Standard EN 60 204-1.

In applications where the switch is not intended to fulfill the Emergency-OFF function, use black handle and collar (...SVB-SW).

All switches are UL listed and CSA certified as manual controllers additionally evaluated as Motor Disconnect switches per the intent of NEC. (T5B evaluated as motor controller only).

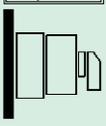
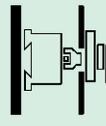
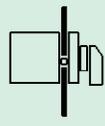
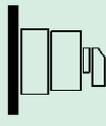
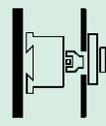
All switches are in compliance with IEC/EN 60 947-3 (Switch-Disconnectors) and are CE marked.

For IEC ratings consult Moeller Electric

Manual Motor Controllers, Motor Disconnect Switches

Rotary Cam Switches

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10	11	12	13	14	15	16	17	18	19
Surface mounting Padlockable ¹⁾ Red handle with Yellow collar, suitable as Emergency-OFF [totally insulated]  Mounting Form Type	Price \$	Base mounting Padlockable Red handle with Yellow collar, suitable as Emergency-OFF  Mounting Form Type	Price \$	Cover mounting Padlockable Black handle and collar  Mounting Form Type	Price \$	Surface mounting Padlockable ¹⁾ Black handle and collar [totally insulated]  Mounting Form Type	Price \$	Base mounting Padlockable Black handle and collar, Coupling drive  Mounting Form Type	Price \$
I1/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	I1/SVB-SW	See Price List	V/SVB-SW	See Price List
I2/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	I2/SVB-SW	See Price List	V/SVB-SW	See Price List
I4/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	I4/SVB-SW	See Price List	V/SVB-SW	See Price List
I1/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	I1/SVB-SW	See Price List	V/SVB-SW	See Price List
I2/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	I2/SVB-SW	See Price List	V/SVB-SW	See Price List
I4/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	I4/SVB-SW	See Price List	V/SVB-SW	See Price List
I2/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	I2/SVB-SW	See Price List	V/SVB-SW	See Price List
I2/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	I2/SVB-SW	See Price List	V/SVB-SW	See Price List
I4/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	I4/SVB-SW	See Price List	V/SVB-SW	See Price List
I5/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	I5/SVB-SW	See Price List	V/SVB-SW	See Price List
I2/SVB/Hi11	See Price List	V/SVB/Hi11	See Price List	EA/SVB-SW/Hi11	See Price List	I2/SVB-SW/Hi11	See Price List	V/SVB-SW/Hi11	See Price List
I2/SVB/Hi11	See Price List	V/SVB/Hi11	See Price List	EA/SVB-SW/Hi11	See Price List	I2/SVB-SW/Hi11	See Price List	V/SVB-SW/Hi11	See Price List
I4/SVB/Hi11	See Price List	V/SVB/Hi11	See Price List	EA/SVB-SW/Hi11	See Price List	I4/SVB-SW/Hi11	See Price List	V/SVB-SW/Hi11	See Price List
I5/SVB/Hi11	See Price List	V/SVB/Hi11	See Price List	EA/SVB-SW/Hi11	See Price List	I5/SVB-SW/Hi11	See Price List	V/SVB-SW/Hi11	See Price List

1) Surface mount enclosures (Columns 10, 16) are IEC type, totally insulated, corrosion resistant rated IP 65.

Ordering Information:

Complete the **Basic Type** in Column 7 by adding the desired **Mounting Form Type** suffix from columns 8, 10, 12, 14, 16 and 18.

Example: T3-1-8200/V/SVB

Rotary Cam Switches, Manual Motor Controllers and Disconnects for Single Phase Applications

UL / CSA / IEC / CE

1	2	3	4	5	6	7	8	9
Circuit function diagram	Front plate Number FS 908	Main Contacts (Number of power poles)	Auxiliary Contacts	Maximum HP Rating 50 - 60 Hz, Single Phase UL, CSA	Current Rating UL/CSA	Basic Type	Cover mounting	Price
					115 V HP 200 V HP 230 V HP			
		N.O.	N.O.	N.C.		Amps	Mounting Form Type	\$
							Add Mounting Form Type at right →	

On-Off Switches, with black handle and silver colored front-plate

	FS 908	1	0	0	3/4	2	2	14	T0-1-8200/...	E	See Price List	See Price List
					1 1/2	3	3	25	T3-1-8200/...	E	See Price List	See Price List
					3	7 1/2	10	65	T5B-1-8200/...	E	See Price List	See Price List
	FS 908	2	0	0	3/4	2	2	14	T0-1-102/...	E	See Price List	See Price List
					1 1/2	3	3	25	T3-1-102/...	E	See Price List	See Price List
					3	7 1/2	10	65	T5B-1-102/...	E	See Price List	See Price List
	FS 908	3	0	0	3/4	2	2	14	T0-2-1/...	E	See Price List	See Price List
					1 1/2	3	3	20	P1-25/...	E	See Price List	See Price List
					2	3	5	30	P1-32/...	E	See Price List	See Price List
					3	7 1/2	10	60	P3-63/...	E	See Price List	See Price List
				5	10	15	100	P3-100/...	E	See Price List	See Price List	

On-Off Switches, with auxiliary contacts

	FS 908	3	1	0	3/4	2	2	14	T0-2-15679/...	E	See Price List	See Price List		
					1	1	1 1/2	3	3	20	P1-25/...	E/HI11	See Price List	See Price List
					2	3	5	30	P1-32/...	E/HI11	See Price List	See Price List		
					3	7 1/2	10	60	P3-63/...	E/HI11	See Price List	See Price List		
					5	10	15	100	P3-100/...	E/HI11	See Price List	See Price List		

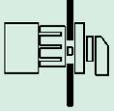
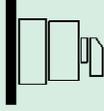
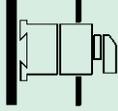
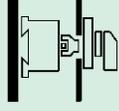
Fractional HP Motor Reversing Switch (auxiliary winding)

	FS 1665	6	0	0	3/4	2	2	14	T0-3-15098/...	E	See Price List	See Price List
	For illustration of Front Plate see page 6/51				1 1/2	3	3	25	T3-3-15098/...	E	See Price List	See Price List

Above switches are identical to the selection on pages 6/10 and 11 except that the associated handle is not padlockable. Exception: P3-.../IVS Type can be padlocked in the OFF position. All above handles are black with silver colored front plate.

Manual Motor Controllers, Motor Disconnect Switches Rotary Cam Switches

6

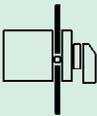
10	11	12	13	14	15	16	17
Center mounting 22.5 mm opening	Price	Surface mounting Enclosure ¹⁾ <small>totally insulated</small>	Price	Base mounting with cover	Price	Base mounting with cover mounted handle and coupling drive	Price
							
Mounting Form Type	\$	Mounting Form Type	\$	Mounting Form Type	\$	Mounting Form Type	\$
EZ	See Price List	11	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	12	See Price List	—	See Price List	Z	See Price List
—	See Price List	14	See Price List	—	See Price List	Z	See Price List
EZ	See Price List	11	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	12	See Price List	—	See Price List	Z	See Price List
—	See Price List	14	See Price List	—	See Price List	Z	See Price List
EZ	See Price List	11	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	12	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	12	See Price List	IVS	See Price List	Z	See Price List
—	See Price List	14	See Price List	IVS	See Price List	Z	See Price List
—	See Price List	15	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	11	See Price List	IVS	See Price List	Z	See Price List
EZ/HI11	See Price List	12/HI11	See Price List	IVS/HI11	See Price List	Z/HI11	See Price List
EZ/HI11	See Price List	12/HI11	See Price List	IVS/HI11	See Price List	Z/HI11	See Price List
—	See Price List	14/HI11	See Price List	IVS/HI11	See Price List	Z/HI11	See Price List
—	See Price List	15/HI11	See Price List	IVS/HI11	See Price List	Z/HI11	See Price List
EZ	See Price List	11	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	12	See Price List	—	See Price List	Z	See Price List

1) Surface mount enclosures are IEC type, totally insulated, corrosion resistant rated IP 65.

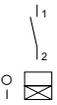
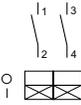
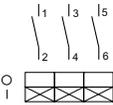
Ordering Information: Complete the **Basic Type** in Column 7 by adding the desired **Mounting Form Type** suffix from columns 8, 10, 12, 14 and 16.
Example: P1-32/Z/HI11

Rotary Cam Switches, Manual Motor Controllers and Disconnects for Single Phase Applications

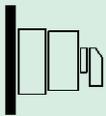
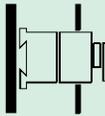
UL / CSA / IEC / CE

1	2	3	4	5			6	7	8	9	
Circuit function diagram	Front plate Number FS 908 GE	Main Contacts (Number of power poles)	Auxiliary Contacts	Maximum HP Rating 50 - 60 Hz, Single Phase UL, CSA			Current Rating UL/CSA	Basic Type	Cover mounting	Price	
	Yellow				115 V HP	200 V HP	230 V HP	Amps	Add Mounting Form Type at right →	 Mounting Form Type	\$

Emergency-Stop Switches, with red handle and yellow colored front plate

	FS 908 GE	1	0	0	3/4	2	2	14	T0-1-8200/...	E-RT	See Price List
					1 1/2	3	3	25	T3-1-8200/...	E-RT	See Price List
					3	7 1/2	10	65	T5B-1-8200/...	E-RT	See Price List
	FS 908 GE	2	0	0	3/4	2	2	14	T0-1-102/...	E-RT	See Price List
					1 1/2	3	3	25	T3-1-102/...	E-RT	See Price List
					3	7 1/2	10	65	T5B-1-102/...	E-RT	See Price List
	FS 908 GE	3	0	0	3/4	2	2	14	T0-2-1/...	E-RT	See Price List
					1 1/2	3	3	20	P1-25/...	E-RT	See Price List
					2	3	5	30	P1-32/...	E-RT	See Price List
					3	7 1/2	10	60	P3-63/...	E-RT	See Price List
				5	10	15	100	P3-100/...	E-RT	See Price List	

Above switches are identical to the selection on pages 6/12 and 13 except that the associated handle assembly is red with yellow background, making them suitable for Emergency-OFF applications. Handles are not padlockable. For padlockable handles used in Emergency-OFF applications, consult pages 6/10 and 13.

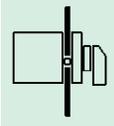
10	11	12	13
Surface mounting Enclosure ¹⁾ <small>totally insulated</small>  Mounting Form Type	Price \$	Base mounting with cover  Mounting Form Type	Price \$
I1-RT	See Price List	IVS-RT	See Price List
I2-RT	See Price List	—	See Price List
I4-RT	See Price List	—	See Price List
I1-RT	See Price List	IVS-RT	See Price List
I2-RT	See Price List	—	See Price List
I4-RT	See Price List	—	See Price List
I1-RT	See Price List	IVS-RT	See Price List
I2-RT	See Price List	IVS-RT	See Price List
I2-RT	See Price List	IVS-RT	See Price List
I4-RT	See Price List	IVS-RT	See Price List
I5-RT	See Price List	IVS-RT	See Price List

1) Surface mount enclosures are IEC type, totally insulated, corrosion resistant rated IP 65.

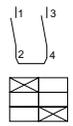
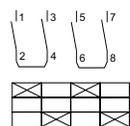
Ordering Information: Complete the **Basic Type** in Column 7 by adding the desired **Mounting Form Type** suffix from columns 8, 10 and 12.
Example: T3-1-102/E-RT

Rotary Cam Switches for Single Phase Applications

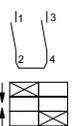
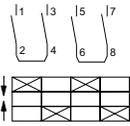
UL / CSA / IEC / CE

1	2	3	5	6	7	8	9
Circuit function diagram	Front plate Number FS... For illustration of Front Plate see Page 6/51	Main Contacts (Number of power poles) N.O.	Maximum HP Rating 50 - 60 Hz, Single Phase UL, CSA 115 V HP 200 V HP 230 V HP	Current Rating UL/CSA Amps	Basic Type	Cover mounting  Mounting Form Type	Price \$
					Add Mounting Form Type at right →		

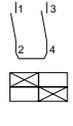
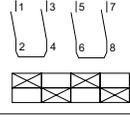
Change-over Switches with OFF position

	FS 684	1	$\frac{3}{4}$	2	2	14	T0-1-8210/...	E	See Price List
			$1\frac{1}{2}$	3	3	25	T3-1-8210/...	E	See Price List
			3	$7\frac{1}{2}$	10	65	T5B-1-8210/...	E	See Price List
	FS 684	2	$\frac{3}{4}$	2	2	14	T0-2-8211/...	E	See Price List
			$1\frac{1}{2}$	3	3	25	T3-2-8211/...	E	See Price List
			3	$7\frac{1}{2}$	10	65	T5B-2-8211/...	E	See Price List

Change-over Switches with OFF position With spring-return from both directions to "0"

	FS 4011	1	$\frac{3}{4}$	2	2	14	T0-1-8214/...	E	See Price List
			$1\frac{1}{2}$	3	3	25	T3-1-8214/...	E	See Price List
			$\frac{3}{4}$	2	2	14	T0-2-8215/...	E	See Price List
	FS 4011	2	$\frac{3}{4}$	2	2	14	T0-2-8215/...	E	See Price List
			$1\frac{1}{2}$	3	3	25	T3-2-8215/...	E	See Price List

Change-over Switches without OFF position

	FS 943	1	$\frac{3}{4}$	2	2	14	T0-1-8220/...	E	See Price List
			$1\frac{1}{2}$	3	3	25	T3-1-8220/...	E	See Price List
			$\frac{3}{4}$	2	2	14	T0-2-8221/...	E	See Price List
	FS 943	2	$\frac{3}{4}$	2	2	14	T0-2-8221/...	E	See Price List
			$1\frac{1}{2}$	3	3	25	T3-2-8221/...	E	See Price List

All handles supplied with above switches are black with silver colored front plate.

Manual Motor Controllers, Motor Disconnect Switches Rotary Cam Switches

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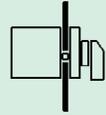
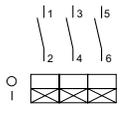
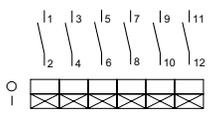
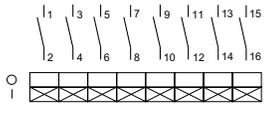
10	11	12	13	14	15	16	17
Center mounting 22.5 mm opening	Price	Surface mounting Enclosure ¹⁾ <small>totally insulated</small>	Price	Base mounting with cover	Price	Base mounting with cover mounted handle and coupling drive	Price
Mounting Form Type	\$	Mounting Form Type	\$	Mounting Form Type	\$	Mounting Form Type	\$
EZ	See Price List	11	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	12	See Price List	—	See Price List	Z	See Price List
—	See Price List	14	See Price List	—	See Price List	Z	See Price List
EZ	See Price List	11	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	12	See Price List	—	See Price List	Z	See Price List
—	See Price List	14	See Price List	—	See Price List	Z	See Price List
EZ	See Price List	11	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	12	See Price List	—	See Price List	Z	See Price List
EZ	See Price List	11	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	12	See Price List	—	See Price List	Z	See Price List
EZ	See Price List	11	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	12	See Price List	—	See Price List	Z	See Price List
EZ	See Price List	11	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	12	See Price List	—	See Price List	Z	See Price List

1) Surface mount enclosures are IEC type, totally insulated, corrosion resistant rated IP 65.

Ordering Information: Complete the **Basic Type** in Column 7 by adding the desired **Mounting Form Type** suffix from columns 8, 10, 12, 14 and 16.
Example: T0-1-8214/Z.

Rotary Cam Switches, Manual Motor Controllers and Disconnects for Three Phase Applications

UL / CSA / IEC / CE

1	2	3	4	5	6	7	8	9	
Circuit function diagram	Front plate Number FS 908	Main Contacts (Number of power poles)	Auxiliary Contacts N.O. N.C.	Maximum HP Rating 50 - 60 Hz, Three Phase UL, CSA	Current Rating UL/CSA	Basic Type	Cover mounting Padlockable Red handle with Yellow collar, suitable as Emergency-OFF	Price	
				200 V HP 230 V HP 460 V HP 575 V HP	Amps	Add Mounting Form Type at right →	 Mounting Form Type	\$	
Motor Disconnect Switch									
	FS 908	3	0 0	3 3	10 10	14	T0-2-1/...	EA/SVB	See Price List
				5 5	10 15	20	P1-25/...	EA/SVB	See Price List
				7 1/2 10	20 25	30	P1-32/...	EA/SVB	See Price List
				15 15	40 50	60	P3-63/...	EA/SVB	See Price List
				20 25	60 75	100	P3-100/...	EA/SVB	See Price List
	FS 908	6	0 0	3 3	10 10	14	T0-3-8342/...	EA/SVB	See Price List
				5 7 1/2	15 15	25	T3-3-8342/...	EA/SVB	See Price List
				15 15	40 50	65	T5B-3-8342/...	EA/SVB	See Price List
	FS 908	8	0 0	3 3	10 10	14	T0-4-8344/...	EA/SVB	See Price List
				5 7 1/2	15 15	25	T3-4-8344/...	EA/SVB	See Price List
				15 15	40 50	65	T5B-4-8344/...	EA/SVB	See Price List

Notes:

All handles supplied in the above combinations are padlockable in the OFF position.

Switches with red handles and yellow collars (Type suffix ...SVB) are suitable as Emergency-OFF Main Disconnect switches per the Machinery Directive Standard EN 60 204-1.

In applications where the switch is not intended to fulfill the Emergency-OFF function, use black handle and collar (Type suffix ...SVB-SW).

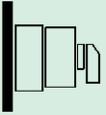
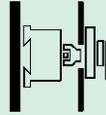
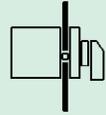
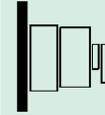
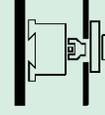
All switches are UL listed and CSA certified as manual controllers additionally evaluated as Motor Disconnect switches per the intent of NEC. (T5B... listed as manual motor controller only.)

All switches are in compliance with IEC/EN 60 947-3 (Switch-Disconnectors) as Main Disconnect switches and are CE marked. (For IEC ratings, consult MoellerElectric)

Manual Motor Controllers, Motor Disconnect Switches

Rotary Cam Switches

6

10	11	12	13	14	15	16	17	18	19
Surface mounting Padlockable¹⁾, Red handle with Yellow collar, suitable as Emergency-OFF <small>totally insulated</small> 	Price \$	Base mounting Padlockable Red handle with Yellow collar, suitable as Emergency-OFF 	Price \$	Cover mounting Padlockable Black handle and collar 	Price \$	Surface mounting Padlockable¹⁾, Black handle and collar <small>totally insulated</small> 	Price \$	Base mounting Padlockable Black handle and collar, Coupling drive 	Price \$
Mounting Form Type		Mounting Form Type		Mounting Form Type		Mounting Form Type		Mounting Form Type	
11/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	11/SVB-SW	See Price List	V/SVB-SW	See Price List
12/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	12/SVB-SW	See Price List	V/SVB-SW	See Price List
12/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	12/SVB-SW	See Price List	V/SVB-SW	See Price List
14/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	14/SVB-SW	See Price List	V/SVB-SW	See Price List
15/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	15/SVB-SW	See Price List	V/SVB-SW	See Price List
11/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	11/SVB-SW	See Price List	V/SVB-SW	See Price List
12/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	12/SVB-SW	See Price List	V/SVB-SW	See Price List
14/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	14/SVB-SW	See Price List	V/SVB-SW	See Price List
11/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	11/SVB-SW	See Price List	V/SVB-SW	See Price List
12/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	12/SVB-SW	See Price List	V/SVB-SW	See Price List
14/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	14/SVB-SW	See Price List	V/SVB-SW	See Price List

1) Surface mount enclosures (Columns 10, 16) are IEC type, totally insulated, corrosion resistant rated IP 65.

Ordering Information:

Complete the **Basic Type** in Column 7 by adding the desired **Mounting Form Type** suffix from columns 8, 10, 12, 14, 16 and 18.
 Example: P3-63/V/SVB

Rotary Cam Switches, Manual Motor Controllers and Disconnects for Three Phase Applications

UL / CSA / IEC / CE

1	2	3	4	5	6	7	8	9
Circuit function diagram	Front plate Number FS 908	Main Contacts (Number of power poles)	Auxiliary Contacts	Maximum HP Rating 50 - 60 Hz, Three Phase UL, CSA	Current Rating UL/CSA	Basic Type	Cover mounting Padlockable Red handle with Yellow collar, suitable as Emergency-OFF	Price
		N.O.	N.O. N.C.	200 V HP 230 V HP 460 V HP 575 V HP	Amps	Add Mounting Form Type at right →	 Mounting Form Type	\$

Main Disconnect Switches with Auxiliary Contacts

	FS 908	3	1	0	3	3	10	10	14	T0-2-15679/...	EA/SVB	See Price List	See Price List
	FS 908	3	1	1	5	5	10	15	20	P1-25/...	EA/SVB/HI11	See Price List	See Price List
					7 1/2	10	20	25	30	P1-32/...	EA/SVB/HI11	See Price List	See Price List
					15	15	40	50	60	P3-63/...	EA/SVB/HI11	See Price List	See Price List
					20	25	60	75	100	P3-100/...	EA/SVB/HI11	See Price List	See Price List
	FS 908	3	2	1	3	3	10	10	14	T0-3-15683/...	EA/SVB	See Price List	See Price List
					5	7 1/2	15	15	25	T3-3-15683/...	EA/SVB	See Price List	See Price List
	FS 908	6	1	1	3	3	10	10	14	T0-4-15682/...	EA/SVB	See Price List	See Price List
					5	7 1/2	15	15	25	T3-4-15682/...	EA/SVB	See Price List	See Price List
					15	15	40	50	65	T5B-4-15682/...	EA/SVB	See Price List	See Price List

Notes:

All handles supplied in the above combinations are padlockable in the OFF position.

Switches with red handles and yellow collars (Type suffix ...SVB) are suitable as Emergency-OFF Main Disconnect switches per the Machinery Directive Standard EN 60 204-1.

In applications where the switch is not intended to fulfill the Emergency-OFF function, use black handle and collar (Type suffix ...SVB-SW).

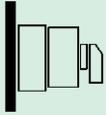
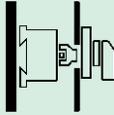
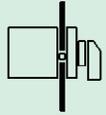
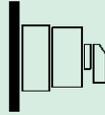
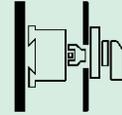
All switches are UL listed and CSA certified as manual controllers additionally evaluated as Motor Disconnect switches per the intent of NEC. (T5B... listed as manual motor controller only.)

All switches are in compliance with IEC/EN 60 947-3 (Switch-Disconnectors) as Main Disconnect switches and are CE marked. (For IEC ratings, consult Moeller Electric)

N.O. Auxiliary contact(s) can be used for load shedding purposes. (Late make, early break characteristic)

Manual Motor Controllers, Motor Disconnect Switches Rotary Cam Switches

6

10	11	12	13	14	15	16	17	18	19
Surface mounting Padlockable¹⁾ Red handle with Yellow collar, suitable as Emergency-OFF <small>totally insulated</small> 	Price \$	Base mounting Padlockable Red handle with Yellow collar, suitable as Emergency-OFF 	Price \$	Cover mounting Padlockable Black handle and collar 	Price \$	Surface mounting Padlockable¹⁾ Black handle and collar <small>totally insulated</small> 	Price \$	Base mounting Padlockable Black handle and collar, Coupling drive 	Price \$
Mounting Form Type		Mounting Form Type		Mounting Form Type		Mounting Form Type		Mounting Form Type	
I1/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	I1/SVB-SW	See Price List	V/SVB-SW	See Price List
I2/SVB/Hi11	See Price List	V/SVB/Hi11	See Price List	EA/SVB-SW/Hi11	See Price List	I2/SVB-SW/Hi11	See Price List	V/SVB-SW/Hi11	See Price List
I2/SVB/Hi11	See Price List	V/SVB/Hi11	See Price List	EA/SVB-SW/Hi11	See Price List	I2/SVB-SW/Hi11	See Price List	V/SVB-SW/Hi11	See Price List
I4/SVB/Hi11	See Price List	V/SVB/Hi11	See Price List	EA/SVB-SW/Hi11	See Price List	I4/SVB-SW/Hi11	See Price List	V/SVB-SW/Hi11	See Price List
I5/SVB/Hi11	See Price List	V/SVB/Hi11	See Price List	EA/SVB-SW/Hi11	See Price List	I5/SVB-SW/Hi11	See Price List	V/SVB-SW/Hi11	See Price List
I1/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	I1/SVB-SW	See Price List	V/SVB-SW	See Price List
I2/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	I2/SVB-SW	See Price List	V/SVB-SW	See Price List
I1/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	I1/SVB-SW	See Price List	V/SVB-SW	See Price List
I2/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	I2/SVB-SW	See Price List	V/SVB-SW	See Price List
I4/SVB	See Price List	V/SVB	See Price List	EA/SVB-SW	See Price List	I4/SVB-SW	See Price List	V/SVB-SW	See Price List

1) Surface mount enclosures (Columns 10, 16) are IEC type, totally insulated, corrosion resistant rated IP 65.

Ordering Information:

Complete the **Basic Type** in Column 7 by adding the desired **Mounting Form Type** suffix from columns 8, 10, 12, 14, 16 and 18.

Example: **T0-3-15683/EA/SVB**

Rotary Cam Switches, Manual Motor Controllers and Disconnects for Three Phase Applications

UL / CSA / IEC / CE

1	2	3	4	5	6	7	8	9			
Circuit function diagram	Front plate Number FS 908	Main Contacts (Number of power poles)	Auxiliary Contacts	Maximum HP Rating 50 - 60 Hz, Three Phase UL, CSA				Current Rating UL/CSA	Basic Type	Cover mounting	Price
				200 V HP	230 V HP	460 V HP	575 V HP	Amps	Add Mounting Form Type at right →		\$

On-Off Switches

	FS 908	3	0	0	3	3	10	10	14	T0-2-1/...	E	See Price List
					5	5	10	15	20	P1-25/...	E	See Price List
					7 1/2	10	20	25	30	P1-32/...	E	See Price List
					15	15	40	50	60	P3-63/...	E	See Price List
					20	25	60	75	100	P3-100/...	E	See Price List
	FS 908	6	0	0	3	3	10	10	14	T0-3-8342/...	E	See Price List
					5	7 1/2	15	15	25	T3-3-8342/...	E	See Price List
					15	15	40	50	65	T5B-3-8342/....	E	See Price List
	FS 908	8	0	0	3	3	10	10	14	T0-4-8344/...	E	See Price List
					5	7 1/2	15	15	25	T3-4-8344/...	E	See Price List
					15	15	40	50	65	T5B-4-8344/...	E	See Price List

Note:

Above switches are identical to the selection on pages 6/18 and 19 except that the associated handle is *not* padlockable.
 Exception: **P3-.../IVS** Type can be padlocked in the OFF position.
 All above handles are black with silver colored front plate.

Manual Motor Controllers, Motor Disconnect Switches

Rotary Cam Switches

6

10	11	12	13	14	15	16	17
Center mounting 22.5 mm opening	Price	Surface mounting Enclosure ¹⁾ <small>totally insulated</small>	Price	Base mounting with cover	Price	Base mounting with cover mounted handle and coupling drive	Price
Mounting Form Type	\$	Mounting Form Type	\$	Mounting Form Type	\$	Mounting Form Type	\$
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I2	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I2	See Price List	IVS	See Price List	Z	See Price List
—	See Price List	I4	See Price List	IVS	See Price List	Z	See Price List
—	See Price List	I5	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I2	See Price List	—	See Price List	Z	See Price List
—	See Price List	I4	See Price List	—	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I2	See Price List	—	See Price List	Z	See Price List
—	See Price List	I4	See Price List	—	See Price List	Z	See Price List

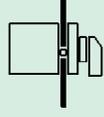
1) Surface mount enclosures are IEC type, totally insulated, corrosion resistant rated IP 65.

Ordering Information:

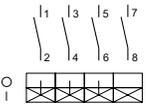
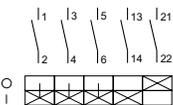
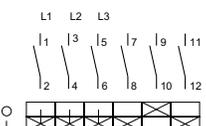
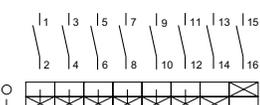
Complete the **Basic Type** in Column 7 by adding the desired **Mounting Form Type** suffix from columns 8, 10, 12, 14 and 16.
Example: T0-3-8342/Z

Rotary Cam Switches, Manual Motor Controllers for Three Phase Applications

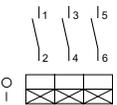
UL / CSA / IEC / CE

1	2	3	4	5	6	7	8	9
Circuit function diagram	Front plate Number FS 908	Main Contacts (Number of power poles)	Auxiliary Contacts	Maximum HP Rating 50 - 60 Hz, Three Phase UL, CSA	Current Rating UL/CSA	Basic Type	Cover mounting	Price
			 	200 V HP 230 V HP 460 V HP 575 V HP	Amps	Add Mounting Form Type at right →	 Mounting Form Type	\$

ON-OFF Switches with Auxiliary Contacts

	FS 908	3	1	0	3	3	10	10	14	T0-2-15679/...	E	See Price List
	FS 908	3	1	1	5	5	10	15	20	P1-25/...	E/HI11	See Price List
					7 1/2	10	20	25	30	P1-32/...	E/HI11	See Price List
					15	15	40	50	60	P3-63/...	E/HI11	See Price List
					20	25	60	75	100	P3-100/...	E/HI11	See Price List
	FS 908	3	2	1	3	3	10	10	14	T0-3-15683/...	E	See Price List
					5	7 1/2	15	15	25	T3-3-15683/...	E	See Price List
	FS 908	6	1	1	3	3	10	10	14	T0-4-15682/...	E	See Price List
					5	7 1/2	15	15	25	T3-4-15682/...	E	See Price List
					15	15	40	50	65	T5B-4-15682/...	E	See Price List

ON-OFF Switches used as Emergency Stop Switches

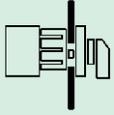
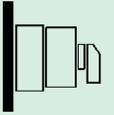
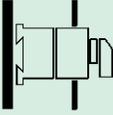
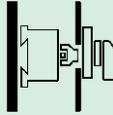
	FS 908	3	0	0	3	3	10	10	14	T0-2-1/...	E-RT	See Price List
					5	5	10	15	20	P1-25/...	E-RT	See Price List
					7 1/2	10	20	25	30	P1-32/...	E-RT	See Price List
					15	15	40	50	60	P3-63/...	E-RT	See Price List
					20	25	60	75	100	P3-100/...	E-RT	See Price List

Notes:

- ON-OFF Switches with auxiliary contacts have black handle with silver colored nameplate.
- ON-OFF Switches used as Emergency-OFF have red handle with yellow back frame.
- Above handles are **not** padlockable. Exception: **P3-.../IVS(-RT)** Type can be padlocked in the OFF position.

Manual Motor Controllers, Motor Disconnect Switches Rotary Cam Switches

6

10	11	12	13	14	15	16	17
Center mounting 22.5 mm opening  Mounting Form Type	Price \$	Surface mounting Enclosure ¹⁾ <small>totally insulated</small>  Mounting Form Type	Price \$	Base mounting with cover  Mounting Form Type	Price \$	Base mounting with cover mounted handle and coupling drive  Mounting Form Type	Price \$
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ/HI11	See Price List	I2/HI11	See Price List	IVS/HI11	See Price List	Z/HI11	See Price List
EZ/HI11	See Price List	I2/HI11	See Price List	IVS/HI11	See Price List	Z/HI11	See Price List
—	See Price List	I4/HI11	See Price List	IVS/HI11	See Price List	Z/HI11	See Price List
—	See Price List	I5/HI11	See Price List	IVS/HI11	See Price List	Z/HI11	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I2	See Price List	—	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I2	See Price List	—	See Price List	Z	See Price List
—	See Price List	I4	See Price List	—	See Price List	Z	See Price List
—	See Price List	I1-RT	See Price List	IVS-RT	See Price List	—	See Price List
—	See Price List	I2-RT	See Price List	IVS-RT	See Price List	—	See Price List
—	See Price List	I2-RT	See Price List	IVS-RT	See Price List	—	See Price List
—	See Price List	I4-RT	See Price List	IVS-RT	See Price List	—	See Price List
—	See Price List	I5-RT	See Price List	IVS-RT	See Price List	—	See Price List

1) Surface mount enclosures are IEC type, totally insulated, corrosion resistant rated IP 65.

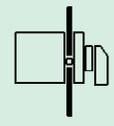
Ordering Information:

Complete the **Basic Type** in Column 7 by adding the desired **Mounting Form Type** suffix from columns 8, 10, 12, 14 and 16.

Example: **T0-3-15683/EZ**

Rotary Cam Switches Type T... for Three Phase Applications

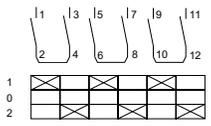
UL / CSA / IEC / CE

1	2	3	4	5	6	7	8
Circuit function diagram	Front plate Number FS... For illustration of Front Plate see Page 6/51	Main Contacts (Number of power poles) N.O.	Maximum HP Rating 50 - 60 Hz, Three Phase UL, CSA	Current Rating UL/CSA	Basic Type	Cover mounting 	Price
			200 V HP 230 V HP 460 V HP 575 V HP	Amps	Add Mounting Form Type at right →	Mounting Form Type	\$

Change-over Switches with Off position

Positions are maintained

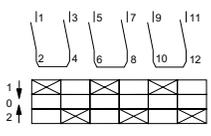
FS 684	3	3	3	10	10	14	T0-3-8212/...	E	See Price List
		5	7 1/2	15	15	25	T3-3-8212/...	E	See Price List
		15	15	40	50	65	T5B-3-8212/...	E	See Price List



Change-over Switches with Off position

Positions are spring-returned to OFF

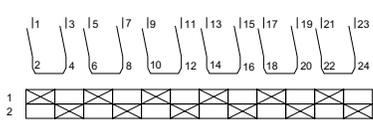
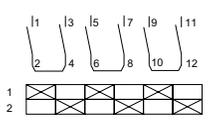
FS 4011	3	3	3	10	10	14	T0-3-8216/...	E	See Price List
		5	7 1/2	15	15	25	T3-3-8216/...	E	See Price List



Change-over Switches without Off position

Positions are maintained

FS 943	3	3	3	10	10	14	T0-3-8222/...	E	See Price List
		5	7 1/2	15	15	25	T3-3-8222/...	E	See Price List
		15	15	40	50	65	T5B-3-8222/...	E	See Price List
FS 943	6	3	3	10	10	14	T0-6-8370/...	E	See Price List
		5	7 1/2	15	15	25	T3-6-8370/...	E	See Price List



Note: Above switches have black handle with silver colored nameplate.

Manual Motor Controllers, Motor Disconnect Switches

Rotary Cam Switches

6

9	10	11	12	13	14	15	16
Center mounting 22.5 mm opening	Price	Surface mounting Enclosure ¹⁾ <small>totally insulated</small>	Price	Base mounting with cover	Price	Base mounting with cover mounted handle and coupling drive	Price
Mounting Form Type	\$	Mounting Form Type	\$	Mounting Form Type	\$	Mounting Form Type	\$
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I2	See Price List	—	See Price List	Z	See Price List
—	See Price List	I4	See Price List	—	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I2	See Price List	—	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I2	See Price List	—	See Price List	Z	See Price List
—	See Price List	I4	See Price List	—	See Price List	Z	See Price List
EZ	See Price List	—	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	—	See Price List	—	See Price List	Z	See Price List

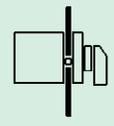
1) Surface mount enclosures are IEC type, totally insulated, corrosion resistant rated IP 65.

Ordering Information:

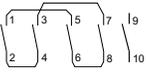
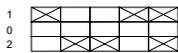
Complete the **Basic Type** in Column 6 by adding the desired **Mounting Form Type** suffix from columns 7, 9, 11, 13 and 15.
Example: **T5B-3-8212/Z**

Rotary Cam Switches Type T... for Three Phase Applications

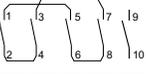
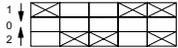
UL / CSA / IEC / CE

1	2	3	4				5	6	7	8
Circuit function diagram	Front plate Number FS...	Main Contacts (Number of power poles)	Maximum HP Rating 50 - 60 Hz, Three Phase UL, CSA				Current Rating UL/CSA	Basic Type	Cover mounting	Price
	For illustration of Front Plate see Page 6/51	N.O.	200 V HP	230 V HP	460 V HP	575 V HP	Amps	Add Mounting Form Type at right →		
									Mounting Form Type	\$

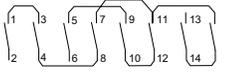
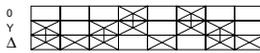
Reversing Switches with OFF ("0") position

	FS 684	3	3	3	10	10	14	T0-3-8401/...	E	See Price List
			5	7 1/2	15	15	25	T3-3-8401/...	E	See Price List
			15	15	40	50	65	T5B-3-8401/...	E	See Price List

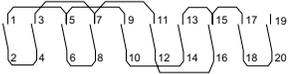
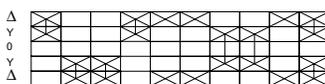
Reversing Switches with OFF ("0") position With spring-return from both directions to Off

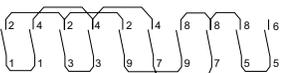
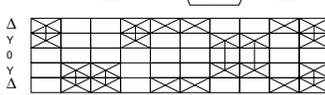
	FS 4011	3	3	3	10	10	14	T0-3-8228/...	E	See Price List
			5	7 1/2	15	15	25	T3-3-8228/...	E	See Price List
			15	15	40	50	65	T5B-3-8228/...	E	See Price List

Star-delta Switches

	FS 635	3	3	3	10	10	14	T0-4-8410/...	E	See Price List
			5	7 1/2	15	15	25	T3-4-8410/...	E	See Price List
			15	15	40	50	65	T5B-4-8410/...	E	See Price List

Reversing Star-delta Switches

	FS 638	3	3	3	10	10	14	T0-5-15876/...	E	See Price List
			5	7 1/2	15	15	25	T3-5-15876/...	E	See Price List
										

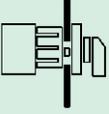
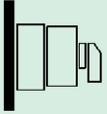
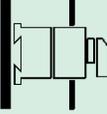
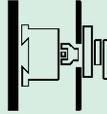
	FS 4017	3	15	15	40	50	65	T5B-5-15896/...	E	See Price List
										
										

Note: Above switches have black handle with silver colored nameplate.

Manual Motor Controllers, Motor Disconnect Switches

Rotary Cam Switches

6

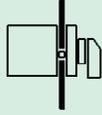
9	10	11	12	13	14	15	16
Center mounting 22.5 mm opening	Price	Surface mounting Enclosure ¹⁾ <small>totally insulated</small>	Price	Base mounting with cover	Price	Base mounting with cover mounted handle and coupling drive	Price
Mounting Form Type	\$	Mounting Form Type	\$	Mounting Form Type	\$	Mounting Form Type	\$
							
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I2	See Price List	—	See Price List	Z	See Price List
—	See Price List	I4	See Price List	—	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I2	See Price List	—	See Price List	Z	See Price List
—	See Price List	I4	See Price List	—	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I2	See Price List	—	See Price List	Z	See Price List
—	See Price List	I4	See Price List	—	See Price List	Z	See Price List
EZ	See Price List	—	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I2	See Price List	—	See Price List	Z	See Price List
—	See Price List	—	See Price List	—	See Price List	Z	See Price List

1) Surface mount enclosures are IEC type, totally insulated, corrosion resistant rated IP 65.

Ordering Information: Complete the **Basic Type** in Column 6 by adding the desired **Mounting Form Type** suffix from columns 7, 9, 11, 13 and 15.
Example: T3-4-8410/Z

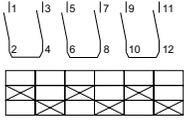
Rotary Cam Switches Type T... for Three Phase Applications

UL / CSA / IEC / CE

1	2	3	4	5	6	7	8
Circuit function diagram	Front plate Number FS...	Main Contacts (Number of power poles)	Maximum HP Rating 50 - 60 Hz, Three Phase UL, CSA	Current Rating UL/CSA	Basic Type	Cover mounting	Price
	For illustration of Front Plate see Page 6/51	N.O.	200 V HP 230 V HP 460 V HP 575 V HP	Amps	Add Mounting Form Type at right →	 Mounting Form Type	\$

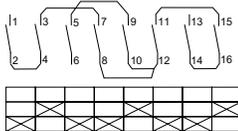
Multispeed Switches

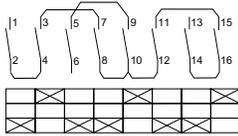
Two-speed, non-reversing for 2 separate windings

FS 644	3	3	3	10	10	14	T0-3-8451/...	E	See Price List
		5	7 1/2	15	15	25	T3-3-8451/...	E	See Price List
		15	15	40	50	65	T5B-3-8451/...	E	See Price List

Multispeed Switches

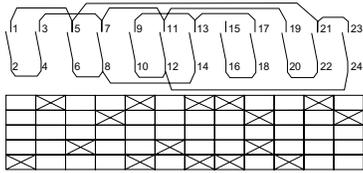
Two-speed, non-reversing, for one tapped winding

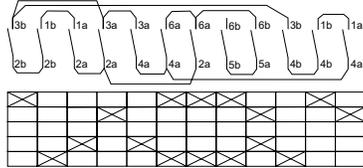
FS 644	3	3	3	10	10	14	T0-4-8440/...	E	See Price List
		5	7 1/2	15	15	25	T3-4-8440/...	E	See Price List
		15	15	40	50	65	T5B-4-8440/...	E	See Price List

FS 684	3	3	3	10	10	14	T0-4-8441/...	E	See Price List
		5	7 1/2	15	15	25	T3-4-8441/...	E	See Price List
		15	15	40	50	65	T5B-4-8441/...	E	See Price List

Reversing Multispeed Switches

Two-speed, for one tapped winding

FS 629	3	3	3	10	10	14	T0-6-15866/...	E	See Price List
		5	7 1/2	15	15	25	T3-6-15866/...	E	See Price List

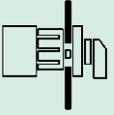
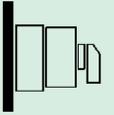
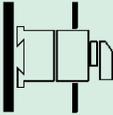
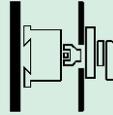
FS 441	3	15	15	40	50	65	T5B-7-66/...	E	See Price List
									See Price List

Note: Above switches have black handle with silver colored nameplate.

Manual Motor Controllers, Motor Disconnect Switches

Rotary Cam Switches

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9	10	11	12	13	14	15	16
Center mounting 22.5 mm opening	Price	Surface mounting Enclosure ¹⁾ <small>totally insulated</small>	Price	Base mounting with cover	Price	Base mounting with cover mounted handle and coupling drive	Price
							
Mounting Form Type	\$	Mounting Form Type	\$	Mounting Form Type	\$	Mounting Form Type	\$
EZ	See Price List	11	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	12	See Price List	-	See Price List	Z	See Price List
-	See Price List	14	See Price List	-	See Price List	Z	See Price List
EZ	See Price List	11	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	12	See Price List	-	See Price List	Z	See Price List
-	See Price List	14	See Price List	-	See Price List	Z	See Price List
EZ	See Price List	11	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	12	See Price List	-	See Price List	Z	See Price List
-	See Price List	14	See Price List	-	See Price List	Z	See Price List
EZ	See Price List	-	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	-	See Price List	-	See Price List	Z	See Price List
-	See Price List	-	See Price List	-	See Price List	Z	See Price List

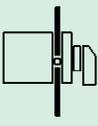
1) Surface mount enclosures are IEC type, totally insulated, corrosion resistant rated IP 65.

Ordering Information: Complete the **Basic Type** in Column 6 by adding the desired **Mounting Form Type** suffix from columns 7, 9, 11, 13 and 15. Example: **T0-4-8440/E**



Rotary Cam Switches Type T... for Control Circuit functions: Stepping Switches

UL / CSA / IEC / CE

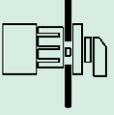
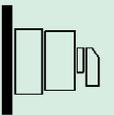
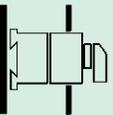
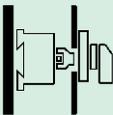
1	2	3	4	5	6	7
Circuit function diagram	Front plate Number FS...	No. of poles	No. of steps	Basic Type	Cover mounting	Price
T0... Control Circuit UL/CSA Ratings: Heavy Pilot Duty A 600 P 600	For illustration of Front Plate see Page 6/51			Add Mounting Form Type at right →		
					Mounting Form Type	\$

Stepping Switches

One contact closed per step (without overlap), with additional Off position

	FS 418	1	2	T0-1-8240/...	E	See Price List	See Price List
	FS 420	1	3	T0-2-8241/...	E	See Price List	See Price List
	FS 422	1	4	T0-2-8242/...	E	See Price List	See Price List
	FS 424	1	5	T0-3-8243/...	E	See Price List	See Price List
	FS 426	1	6	T0-3-8244/...	E	See Price List	See Price List
	FS 418	3	2	T0-3-8280/...	E	See Price List	See Price List
	FS 420	3	3	T0-5-8281/...	E	See Price List	See Price List
	FS 422	3	4	T0-6-8282/...	E	See Price List	See Price List

Notes: All switches have black handle with silver colored nameplate.
Additional choice of standard nameplates available. Nameplate text can also be customized to suit application.
Consult page 6/50-51 for selection of standard nameplates and information on ordering specials.

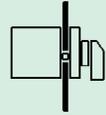
8	9	10	11	12	13	14	15
Center mounting 22.5 mm opening  Mounting Form Type	Price \$	Surface mounting Enclosure ¹⁾ <small>totally insulated</small>  Mounting Form Type	Price \$	Base mounting with cover  Mounting Form Type	Price \$	Base mounting with cover mounted handle and coupling drive  Mounting Form Type	Price \$
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	—	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	—	See Price List	IVS	See Price List	Z	See Price List

1) Surface mount enclosures are IEC type, totally insulated, corrosion resistant rated IP 65.

Ordering Information: Complete the **Basic Type** in Column 5 by adding the desired **Mounting Form Type** suffix from columns 6, 8, 10, 12 and 14. Example: **T0-2-8242/IVS**

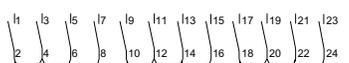
Rotary Cam Switches Type T... for Control Circuit functions: Stepping Switches

UL / CSA / IEC / CE

1	2	3	4	5	6	7
Circuit function diagram	Front plate Number FS...	No. of poles	No. of steps	Basic Type	Cover mounting	Price
T0... Control Circuit UL/CSA Ratings: Heavy Pilot Duty A 600 P 600	For illustration of Front Plate see Page 6/51					
				Add Mounting Form Type at right →	Mounting Form Type	\$

Stepping Switches

One contact closed per step (without overlap), *without* additional Off position

	FS 943	1	2	T0-1-8220/...	E	See Price List	See Price List
	FS 404	1	3	T0-2-8230/...	E	See Price List	See Price List
	FS 606	1	4	T0-2-8231/...	E	See Price List	See Price List
	FS 408	1	5	T0-3-8232/...	E	See Price List	See Price List
	FS 410	1	6	T0-3-8233/...	E	See Price List	See Price List
	FS 943	3	2	T0-3-8222/...	E	See Price List	See Price List
	FS 404	3	3	T0-5-8270/...	E	See Price List	See Price List
	FS 406	3	4	T0-6-8271/...	E	See Price List	See Price List

Notes: All switches have black handle with silver colored nameplate.
Additional choice of standard nameplates available. Nameplate text can also be customized to suit application.
Consult page 6/50-51 for selection of standard nameplates and information on ordering specials.

Manual Motor Controllers, Motor Disconnect Switches Rotary Cam Switches

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8	9	10	11	12	13	14	15
Center mounting 22.5 mm opening	Price	Surface mounting Enclosure ¹⁾ <small>totally insulated</small>	Price	Base mounting with cover	Price	Base mounting with cover mounted handle and coupling drive	Price
Mounting Form Type	\$	Mounting Form Type	\$	Mounting Form Type	\$	Mounting Form Type	\$
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	—	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	—	See Price List	IVS	See Price List	Z	See Price List

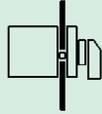
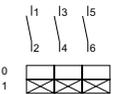
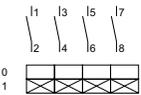
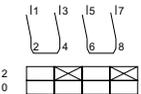
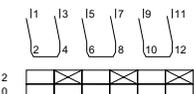
1) Surface mount enclosures are IEC type, totally insulated, corrosion resistant rated IP 65.

Ordering Information: Complete the **Basic Type** in Column 5 by adding the desired **Mounting Form Type** suffix from columns 6, 8, 10, 12 and 14.
Example: T0-3-8232/E

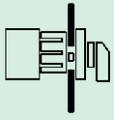
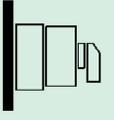
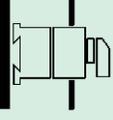
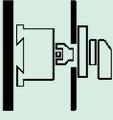


Rotary Cam Switches Type T... for Control Circuit functions: ON-OFF, Changeover switches

UL / CSA / IEC / CE

1	2	3	4	5	6
Circuit function diagram	Front plate Number FS...	No. of poles	Basic Type	Cover mounting	Price
<p>T0... Control Circuit UL/CSA Ratings: Heavy Pilot Duty A 600 P 600</p>	For illustration of Front Plate see Page 6/51				
			Add Mounting Form Type at right →	Mounting Form Type	\$
<p>Control Circuit Switches On-Off switches</p>					
	FS 415	1	T0-1-15401/...	E	See Price List
	FS 415	2	T0-1-15402/...	E	See Price List
	FS 415	3	T0-2-15403/...	E	See Price List
	FS 415	4	T0-2-15404/...	E	See Price List
<p>Control Circuit Switches Changeover switches</p>					
	FS 429	1	T0-1-15421/...	E	See Price List
	FS 429	2	T0-2-15422/...	E	See Price List
	FS 429	3	T0-3-15423/...	E	See Price List

Notes: All switches have black handle with silver colored nameplate.
Additional choice of standard nameplates available. Nameplate text can also be customized to suit application.
Consult page 6/50-51 for selection of standard nameplates and information on ordering specials.

7	8	9	10	11	12	13	14
Center mounting 22.5 mm opening	Price	Surface mounting Enclosure ¹⁾ <small>totally insulated</small>	Price	Base mounting with cover	Price	Base mounting with cover mounted handle and coupling drive	Price
Mounting Form Type	\$	Mounting Form Type	\$	Mounting Form Type	\$	Mounting Form Type	\$
							
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List

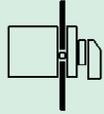
1) Surface mount enclosures are IEC type, totally insulated, corrosion resistant rated IP 65.

Ordering Information: Complete the **Basic Type** in Column 4 by adding the desired **Mounting Form Type** suffix from columns 5, 7, 9, 11 and 13.
Example: **T0-2-15422/Z**

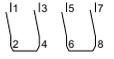


Rotary Cam Switches Type T... for Control Circuit functions: Hand/Auto switches

UL / CSA / IEC / CE

1	2	3	4	5	6
Circuit function diagram	Front plate Number FS...	No. of poles	Basic Type	Cover mounting	Price
T0... Control Circuit UL/CSA Ratings: Heavy Pilot Duty A 600 P 600	For illustration of Front Plate see Page 6/51				
			Add Mounting Form Type at right →	Mounting Form Type	\$

Control Switches, Hand/Auto Switches With Off position

	FS 1401	1	T0-1-15431/...	E	See Price List
	FS 1401	2	T0-2-15432/...	E	See Price List
	FS 1401	3	T0-3-15433/...	E	See Price List

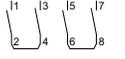
Control Switches, Hand/Auto Switches With spring-return function for HAND

	FS 1414000	1	T0-1-15434/...	E	See Price List
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Control Switches, Hand/Auto Switches With spring-return function for START

	FS 1413890	1	T0-2-15907/...	E	See Price List
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Control Switches, Hand/Auto Switches Without Off position

	FS 19334	1	T0-1-15451/...	E	See Price List
	FS 19334	2	T0-2-15452/...	E	See Price List
	FS 19334	3	T0-3-15453/...	E	See Price List

Notes: All switches have black handle with silver colored nameplate.
Additional choice of standard nameplates available. Nameplate text can also be customized to suit application.
Consult page 6/50-51 for selection of standard nameplates and information on ordering specials.

Manual Motor Controllers, Motor Disconnect Switches Rotary Cam Switches

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7	8	9	10	11	12	13	14
Center mounting 22.5 mm opening	Price	Surface mounting Enclosure ¹⁾ <small>totally insulated</small>	Price	Base mounting with cover	Price	Base mounting with cover mounted handle and coupling drive	Price
Mounting Form Type	\$	Mounting Form Type	\$	Mounting Form Type	\$	Mounting Form Type	\$
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List

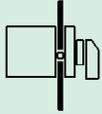
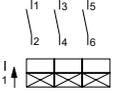
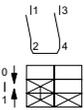
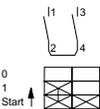
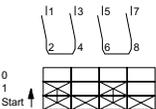
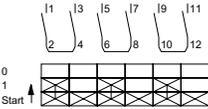
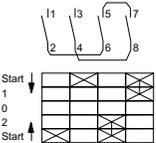
1) Surface mount enclosures are IEC type, totally insulated, corrosion resistant rated IP 65.

Ordering Information: Complete the **Basic Type** in Column 4 by adding the desired **Mounting Form Type** suffix from columns 5, 7, 9, 11 and 13.
Example: **T0-2-15432/EZ**



Rotary Cam Switches Type T... for Control Circuit functions: Spring-return application switches

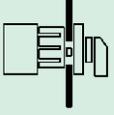
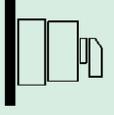
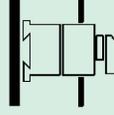
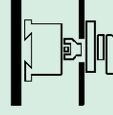
UL / CSA / IEC / CE

1	2	3	4	5	6
Circuit function diagram	Front plate Number FS...	No. of poles	Basic Type	Cover mounting	Price
<p>T0... Control Circuit UL/CSA Ratings: Heavy Pilot Duty A 600 P 600</p>	For illustration of Front Plate see Page 6/51				
			Add Mounting Form Type at right →	Mounting Form Type	\$
<p>Control Switches On switches (make contacts), Spring-return from position "1"</p>					
	FS 4721	1	T0-1-15321/...	E	See Price List
	FS 4721	2	T0-1-15322/...	E	See Price List
	FS 4721	3	T0-2-15323/...	E	See Price List
<p>Control Switches On-Off switches, spring-return from positions "0" and "1"</p>					
	FS 456	To control: 1 contactor	T0-1-15366/...	E	See Price List
<p>Control Switches On-Off switches, spring-return from the START position</p>					
	FS 147767	1	T0-1-15511/...	E	See Price List
	FS 147767	2	T0-2-15512/...	E	See Price List
	FS 147767	3	T0-3-15513/...	E	See Price List
	FS 140660	To control: 1 reversing contactor	T0-2-8177/...	E	See Price List

Notes: All switches have black handle with silver colored nameplate.
Additional choice of standard nameplates available. Nameplate text can also be customized to suit application.
Consult page 6/50-51 for selection of standard nameplates and information on ordering specials.

Manual Motor Controllers, Motor Disconnect Switches Rotary Cam Switches

6

7	8	9	10	11	12	13	14
Center mounting 22.5 mm opening  Mounting Form Type	Price \$	Surface mounting Enclosure ¹⁾ <small>totally insulated</small>  Mounting Form Type	Price \$	Base mounting with cover  Mounting Form Type	Price \$	Base mounting with cover mounted handle and coupling drive  Mounting Form Type	Price \$
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List

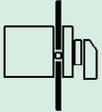
1) Surface mount enclosures are IEC type, totally insulated, corrosion resistant rated IP 65.

Ordering Information: Complete the **Basic Type** in Column 4 by adding the desired **Mounting Form Type** suffix from columns 5, 7, 9, 11 and 13.
Example: T0-2-15512/Z

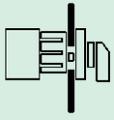
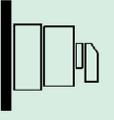
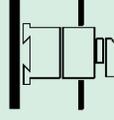
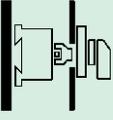


Rotary Cam Switches Type T... for Control Circuit functions: Multi-purpose, Coding, Series switches

UL / CSA / IEC / CE

1	2	3	4	5	6
Circuit function diagram	Front plate Number FS...	No. of poles	Basic Type	Cover mounting	Price
<p>T0... Control Circuit UL/CSA Ratings: Heavy Pilot Duty A 600 P 600</p>	For illustration of Front Plate see Page 6/51				
			Add Mounting Form Type at right →	Mounting Form Type	\$
<p>Multi-purpose Control Switches Maintained, 3-position switches 1 contact closed in each position; in addition: 1 contact closed in positions 0 and 1 1 contact closed in positions 0 and 2 1 contact closed in positions 1 and 2</p>					
	FS 429	—	T0-3-15391/...	E	See Price List
<p>Same as above, but with spring-return for positions "1" and "2"</p>					
	FS 458	—	T0-3-15394/...	E	See Price List
<p>Control switches Coding switches with complete rotation in both directions</p>					
	FS 312	Dual BCD-CODE	T0-4-15602/...	E	See Price List
<p>Series switches with OFF position (Heater switches)</p>					
	FS 614	1	T0-1-91/...	E	See Price List

Notes: All switches have black handle with silver colored nameplate.
Additional choice of standard nameplates available. Nameplate text can also be customized to suit application.
Consult page 6/50-51 for selection of standard nameplates and information on ordering specials.

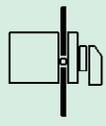
7	8	9	10	11	12	13	14
Center mounting 22.5 mm opening	Price	Surface mounting Enclosure ¹⁾ <small>totally insulated</small>	Price	Base mounting with cover	Price	Base mounting with cover mounted handle and coupling drive	Price
Mounting Form Type	\$	Mounting Form Type	\$	Mounting Form Type	\$	Mounting Form Type	\$
							
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List

1) Surface mount enclosures are IEC type, totally insulated, corrosion resistant rated IP 65.

Ordering Information: Complete the **Basic Type** in Column 4 by adding the desired **Mounting Form Type** suffix from columns 5, 7, 9, 11 and 13.
Example: **T0-3-15394/EZ**

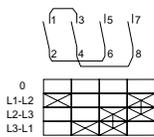
Rotary Cam Switches Type T... for Control Circuit functions: Instrumentation switches

UL / CSA / IEC / CE

1	2	3	4	5	6
Circuit function diagram	Front plate Number FS...	No. of poles	Basic Type	Cover mounting	Price
T0... Control Circuit UL/CSA Ratings: Heavy Pilot Duty A 600 P 600	For illustration of Front Plate see Page 6/51				
			Add Mounting Form Type at right →	Mounting Form Type	\$

Instrumentation Selector Switches

Voltmeter



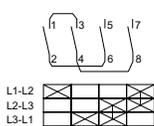
FS 1410755

3 x Phase to Phase
With OFF position

T0-2-15920/...

E

See Price List
See Price List



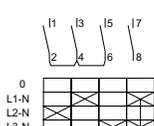
FS 164854

3 x Phase to Phase
Without OFF position

T0-2-15922/...

E

See Price List
See Price List



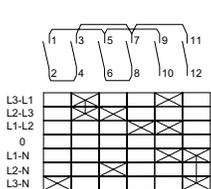
FS 1410757

3 x Phase to Neutral
With OFF position

T0-2-15921/...

E

See Price List
See Price List



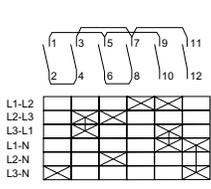
FS 1410759

3 x Phase to Phase +
3 x Phase to Neutral
With OFF position

T0-3-8007/...

E

See Price List
See Price List



FS 164721

3 x Phase to Phase +
3 x phase to Neutral
Without OFF position
With complete rotation
in both directions

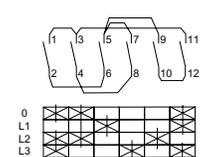
T0-3-15924/...

E

See Price List
See Price List

Ammeter

With complete rotation in both directions
Measurement via current transformers



FS 9440

With OFF position

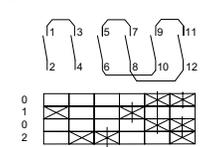
T0-3-8048/...

E

See Price List
See Price List

Voltmeter and Ammeter

With complete rotation in both directions
Measurement via transformers



FS 928

With OFF position

T0-3-8030/...

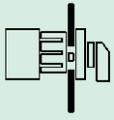
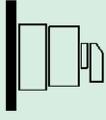
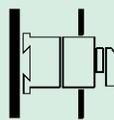
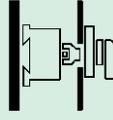
E

See Price List
See Price List

Note: All switches have black handle with silver colored nameplate.

Manual Motor Controllers, Motor Disconnect Switches
Rotary Cam Switches

6

7	8	9	10	11	12	13	14
Center mounting 22.5 mm opening  Mounting Form Type	Price \$	Surface mounting Enclosure ¹⁾ <small>(totally insulated)</small>  Mounting Form Type	Price \$	Base mounting with cover  Mounting Form Type	Price \$	Base mounting with cover mounted handle and coupling drive  Mounting Form Type	Price \$
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List
EZ	See Price List	I1	See Price List	IVS	See Price List	Z	See Price List

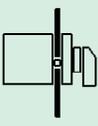
1) Surface mount enclosures are IEC type, totally insulated, corrosion resistant rated IP 65.

Ordering Information: Complete the **Basic Type** in Column 4 by adding the desired **Mounting Form Type** suffix from columns 5, 7, 9, 11 and 13.
Example: T0-3-8048/E



Rotary Cam Switches and Motor Controllers with locking arrangements

UL / CSA / IEC / CE

1	2	3	4	5	6	7	8
Circuit function diagram	Front plate Number FS 908	No. of poles	Maximum HP Rating Three-phase 50 - 60 Hz UL, CSA		Amp rating UL CSA	Cover mounting	Price
							
			200 V HP 230 V HP 460 V HP 575 V HP			Type	\$

Switches with locking arrangements, Type KMS 1 key

Panic switches without Emergency-stop function¹⁾

With Type SVA cylinder lock

The key can be withdrawn in OFF and ON positions. If the key is withdrawn in the ON position, the switch can still be turned to OFF, but cannot be switched back to ON again without the key.

	FS 908	3	3	3	10	10	14		T0-2-1/E/SVA(S) P1-25/E/SVA(S) T3-2-1/E/SVA(S) P1-32/E/SVA(S)	See Price List	See Price List
			5	5	10	15	20				
			5	7 1/2	15	15	25				
			7 1/2	10	20	25	30				

ON-OFF switches without Emergency-stop function¹⁾

With Type SVA cylinder lock

Key can be withdrawn only in OFF position (position A in diagram at right).

	FS 908	3	3	3	10	10	14		T0-2-1/E/SVA(A) P1-25/E/SVA(A) T3-2-1/E/SVA(A) P1-32/E/SVA(A)	See Price List	See Price List
			5	5	10	15	20				
			5	7 1/2	15	15	25				
			7 1/2	10	20	25	30				

Panic switches with Emergency-stop function²⁾

With Type SVA cylinder lock

Key can be withdrawn only in OFF and ON positions. If the key is withdrawn in the ON position, the switch can still be turned to OFF, but cannot be switched back to ON again without the key.

	FS 908GE	3	3	3	10	10	14		T0-2-1/E/SVA(S)-RT P1-25/E/SVA(S)-RT T3-2-1/E/SVA(S)-RT P1-32/E/SVA(S)-RT	See Price List	See Price List
			5	5	10	15	20				
			5	7 1/2	15	15	25				
			7 1/2	10	20	25	30				

Panic switches with Emergency-stop function²⁾

With Type SVC padlocking features

Locking slide can be padlocked in OFF and ON positions. If the locking slide is padlocked in the ON position with a padlock, the switch can still be turned to OFF, but cannot be switched back to ON again without removal of the padlock.

	FS 908GE	3	3	3	10	10	14		T0-2-1/E/SVC(S)-RT P1-25/E/SVC(S)-RT T3-2-1/E/SVC(S)-RT P1-32/E/SVC(S)-RT	See Price List	See Price List
			5	5	10	15	20				
			5	7 1/2	15	15	25				
			7 1/2	10	20	25	30				

ON-OFF switches without Emergency-stop function

With S-T0 key operation, silver colored nameplate

Key can be withdrawn only in OFF position (position A).

	FS 908	2	Single Phase				14		T0-1-102/EZ/S	See Price List	See Price List
			115V	200/230V							
			3/4	2							

1) With black handle and silver colored nameplate.

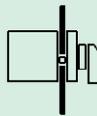
2) With red handle and yellow nameplate, per IEC/EN 60 204-1 Machinery Directive.

Manual Motor Controllers, Motor Disconnect Switches, Rotary Cam Switches

6

Rotary Cam Switches with locking arrangements

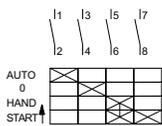
UL / CSA / IEC / CE

1	2	3	4	5	6
Circuit function diagram	Front plate Number FS...	Amp rating UL CSA		Cover mounting 	Price
	For illustration of Front Plate see Page 6/51				
		A		Type	\$

Switches with locking arrangements, Type KMS 1 key

Hand/Auto Switch with Type SVA cylinder lock

The key can be withdrawn in all positions. If the key is withdrawn in the **HAND** position, then **START** can be actuated without the key, but not the **O** position (only permissible with separate **OFF** switch).



FS 1413890

14



T0-2-15907/E/SVA(C,E,G-J)

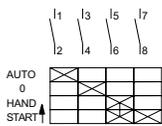
25

T3-2-15907/E/SVA(C,E,G-J)

See Price List See Price List See Price List See Price List

Hand/Auto switch with Type SVC padlocking arrangement

Locking slide can be padlocked in all positions. If the locking slide is padlocked in the **HAND** position, then **START** can be actuated without removal of the padlock, but not the **O** position (only permissible with separate **OFF** switch).



FS 1413890

14



T0-2-15907/E/SVC(C,E,G-J)

25

T3-2-15907/E/SVC(C,E,G-J)

See Price List See Price List See Price List See Price List

Special application notes:

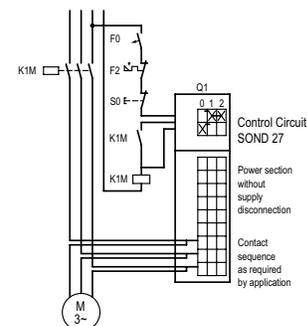
Contacting interlocking control circuits (SOND...)

Control section for standard contactor interlocking circuits
The electrical interlocking of a rotary cam switch and contactor provides a clean and economical solution to a wide range of control function tasks. For example: remote disconnection via a stop switch, overload protection via overload relays, protection against automatic restarting after a power failure or overload, OFF position interlocking, etc.

The examples shown at right (each standardized contactor interlocking circuit is issued a "SOND..." identification number) are but a few of the possible application schemes which can be realized by the combination of these components.

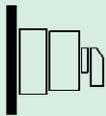
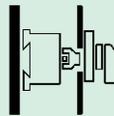
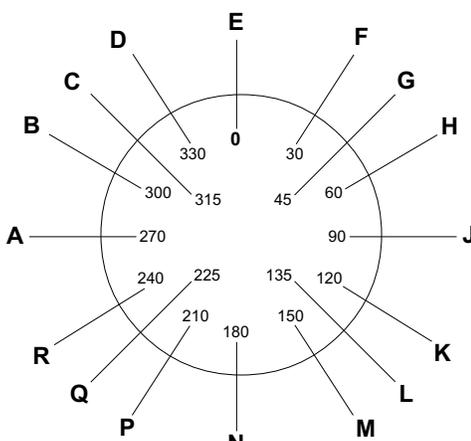
Note: If the contact sequence of a standard switch is intended to contain a contactor interlocking circuit scheme as well, it can be ordered using another contact sequence number from the Rotary Cam Switch Catalog # K-115 (please consult Moeller Electric), or as a non-standard switch.

Control Circuit Type: SOND 27

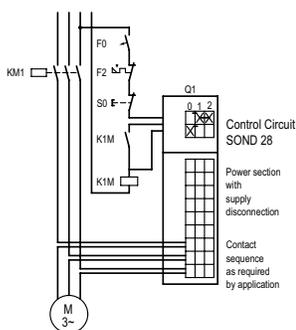


Supply disconnection **only** by contactor. Restarting possible only after reset with rotary cam switch in the **0** position. Used mainly for Star-Delta switches (only at 60° or 90° switching angles).

Note: Switches have black handle with silver colored nameplate.

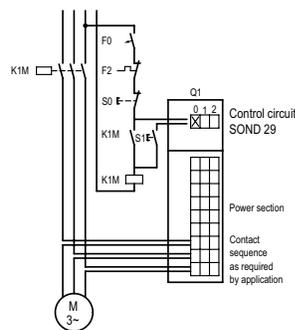
7	8	9	10	11
<p>Surface mounting Enclosure¹⁾ [totally insulated]</p>  <p>Type</p>	<p>Price</p> <p>\$</p>	<p>Base mounting with cover mounted handle and coupling drive</p>  <p>Type</p>	<p>Price</p> <p>\$</p>	<p>Cam switches with an SVA locking arrangement can also be used as Operating Mode Selector Switches for the purpose of Conformity with the EU Machine Directive 89/392 (Switching angle: 60°).</p> <p>Code letters corresponding to lockable switch positions</p> 
<p>T0-2-15907/I1/SVA(C,E,G-J)</p> <p>T3-2-15907/I2/SVA(C,E,G-J)</p> <p>T0-2-15907/I1/SVC(C,E,G-J)</p> <p>T3-2-15907/I2/SVC(C,E,G-J)</p>	<p>See Price List</p> <p>See Price List</p> <p>See Price List</p> <p>See Price List</p>	<p>—</p> <p>—</p> <p>T0-2-15907/Z/SVC(C,E,G-J)</p> <p>T3-2-15907/Z/SVC(C,E,G-J)</p>	<p>See Price List</p> <p>See Price List</p> <p>See Price List</p> <p>See Price List</p>	

Control Circuit Type: SOND 28



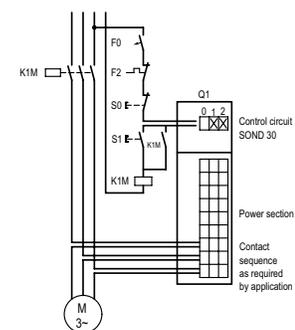
Supply disconnection by combining both contactor **and** rotary cam switch.
 Restarting: Same as **SOND 27**
 Used mainly for Star-Delta and Transfer switches (only at 60° or 90° switching angles).

Control Circuit Type: SOND 29



Power applied by contactor **only** when rotary switch is in the **0** position (Off position interlock).
 Used primarily for Star-Delta, Transfer and multi-speed switch applications.

Control Circuit Type: SOND 30



Power applied by contactor **only** when rotary switch is switched to the run positions.
 Each change in switch position causes contactor to drop out.
 Used for Transfer and Multi-speed switch applications.

1) Surface mount enclosures are IEC type, totally insulated, corrosion resistant rated IP 65.

Ordering Information: Specify the desired **Type** in Columns 5, 7 and 9.
 Example: **T0-2-15907/Z/SVC(C,E,G-J)**

Rotary Cam Switches Type T..., Motor Controllers and Disconnects Type P... Standard and Special Front plates

1	2	3	4	5	6	7	8
Switch Type	Dimensions	Type Standard front plate	Price	Type Emergency-stop front plate	Price	Type Blank plate	Price
		Insert front plate number	\$	Yellow	\$	Can be engraved on rear	\$
T0, T3, P1	45 x 45 mm (frame size 48 x 48 mm)	FS...-T0	See Price List	FS 980 GE-T0	See Price List	FS 980-T0	See Price List
P3, T5B	84 x 84 mm (frame size 88 x 88 mm)	FS...-P3	See Price List	FS 980 GE-P3	See Price List	FS 980-P3	See Price List

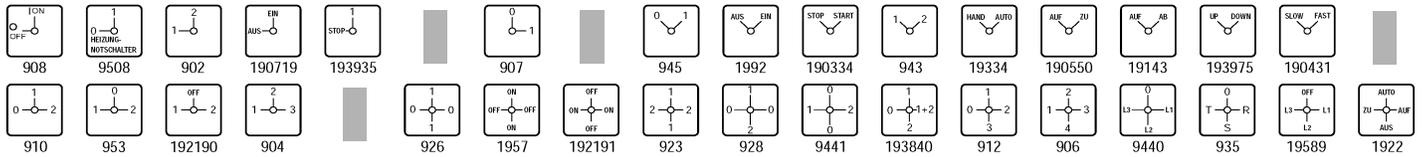
Standard front plates

Silver-colored with black lettering

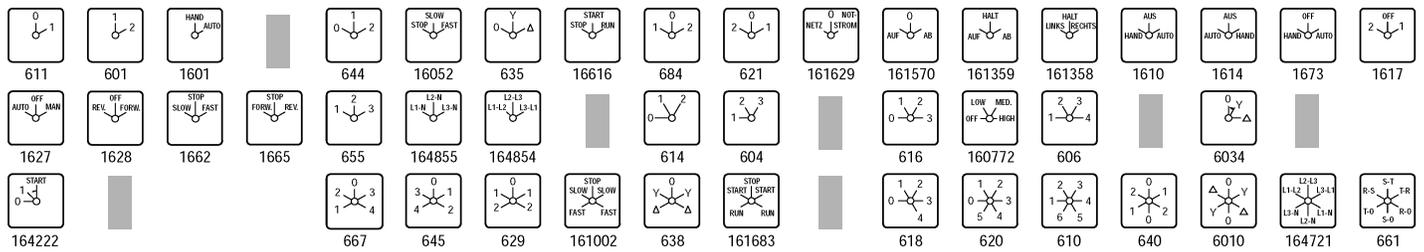
The standard front plates shown here should be used for non-standard switches wherever possible. The Front plates shown throughout the catalog that are supplied with standard switches can be exchanged for any of the ones shown here at the time of the order, at no extra charge. The prerequisite is that switching angles, the number of positions and the location of the 0 position must be identical.

To order a different Front plate, just add its FS... number shown below to the switch. Example: **T0-1-8210/E + FS 161570**

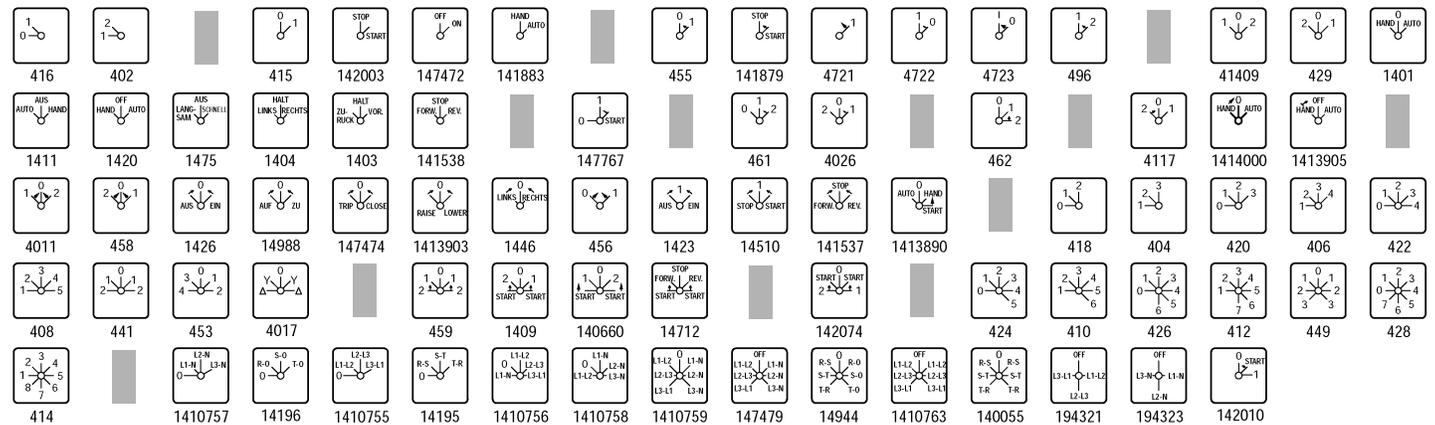
Switching angle 90°



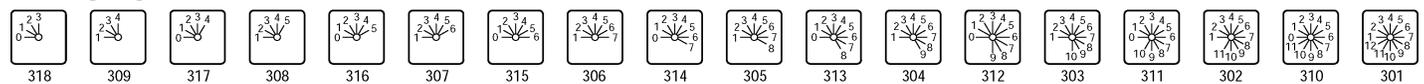
Switching angle 60°



Switching angle 45°



Switching angle 30°



Manual Motor Controllers, Motor Disconnect Switches

Rotary Cam Switches

Rotary Cam Switches Type T..., Motor Controllers and Disconnects Type P... Standard and Special Nameplates

1	2	3	4	5	6
		Type	Price	Type suffix	Price
		When ordered separately		When ordered with basic switch	
Height of letters					
≤ 2 characters		> 2 characters	\$		\$
Non-standard front plates					
4.0 mm	3.0 mm	FS-SOND-T0	See Price List	+FS-SOND-T0	See Price List
8.0 mm	5.0 mm	FS-SOND-P3	See Price List	+FS-SOND-P3	See Price List

Non-standard front plates Silver-colored with black lettering

Inscription to order

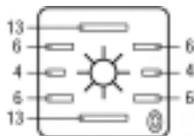
(note maximum number of characters per section)

The FS number will be sufficient for reordering purposes.
Non-standard **T 0**, **T 3** and **T 5B** switches: Non-Standard Front plate included in price.

Standard switches: Non-Standard Front plate included in price for orders of at least 50 switches.

Switching angle
90°/45°

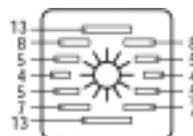
Maximum number of characters



FS-SOND-T0(T3, T5B, P1, P3)

Switching angle
60°/30°

Maximum number of characters



FS-SOND-T0(T3, T5B)

Standard plates arranged according to front plate numbers:

301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317
318	402	404	406	408	410	412	414	415	416	418	420	422	424	426	428	429
441	449	453	455	456	458	459	461	462	496	601	604	606	610	611	614	616
618	620	621	629	635	638	640	644	645	655	661	667	684	902	904	906	907
908	910	912	923	926	928	935	943	945	953	980	1401	1403	1404	1409	1411	1420
1423	1426	1446	1475	1601	1610	1614	1617	1627	1628	1662	1665	1673	1922	1957	1992	4011
4017	4026	4117	4721	4722	4723	6010	142010	6034	9440	9441	9508	14195	14196	14510	14712	14944
14988	16052	16616	19143	19334	19589	41409	140055	140660	141537	141538	141879	141883	142003	142074	147472	147474
147479	147767	160772	161002	161358	161359	161570	161629	161683	164222	164721	164854	164855	190334	190431	190550	190719
192190	192191	193840	193935	193975	194321	194323	1410755	1410756	1410757	1410758	1410759	1410763	1413890	1413903	1413905	1414000

Rotary Cam Switches Type T..., Motor Controllers and Disconnects Type P... Accessories

1	2	3	4	5
	For use with		Type suffix	Price
			When ordered with basic switch	\$
Insert plates, clip-on				
For use with front plates and for padlocking features. Consisting of one label mount, black and one insert label, aluminum colored.				
Blank , can be engraved	T.../I2/SVB(-SW) and P.../I2/SVB(-SW), except .../1, 2.../IVS		—	See Price List
	T..., P..., except .../1, 2, 3 .../IVS		—	See Price List
With inscription "Main Switch - Open only in Off position"	T.../E, T.../Z, P.../E, P.../Z 61/62 = German/English 63 = French		+ZFS 61/62-T0	See Price List
			+ZFS 63-T0	See Price List
	T.../E, T.../Z, P.../E, P.../Z 61/62 = German/English 63 = French		+ZFS 61/62-P3	See Price List
			+ZFS 63-P3	See Price List
Label holders, black				
	T.../I2/SVB(-SW) and P.../I2/SVB(-SW), except .../1, 2.../IVS		—	
	T..., P..., except .../1, 2, 3 .../IVS		—	
Insert label, aluminum colored				
Blank , can be engraved	ZFSX-T0		—	
Customized inscription (see lettering info at right) Black lettering			—	
Blank , can be engraved	ZFSX-P3		—	
Customized inscription (see lettering info at right) Black lettering			—	
Legend plates, aluminum colored				
Blank , can be engraved	T0-.../E, .../EZ, .../Z T3-.../E, .../EZ, .../Z P1-.../E, .../EZ, .../Z		—	
Customized inscription (see lettering info at right) Narrow script to DIN 30 640, black			—	
Blank , can be engraved	T5B-.../E, T 5B-.../Z P3-.../E, .../Z		—	
Customized inscription (see lettering info at right) Narrow script to DIN 30 640, black			—	

Manual Motor Controllers, Motor Disconnect Switches Rotary Cam Switches

6

Rotary Cam Switches Type T..., Motor Controllers and Disconnects Type P... Accessories

6 Type suffix	7 Price	8 Standard Pack	9 Application notes																								
When ordered separately	\$																										
ZFS 60-T0	See Price List	25	<p>ZFS...-T0 and ZFS...-P3 can optionally be used for T... and P... switches and for the motor protector PKZ 2 (See Section 7).</p> <p>Dimensions with frame W x H = 48 x 17 mm Dimensions with frame W x H = 88 x 27 mm</p> <p>Comes already supplied with: T.../EA/SVB, P.../EA/SVB, T.../V/SVB, P.../V/SVB</p> <p>For lettering of alternate languages insert language code in type number:</p> <p>Example: ZFS 68-T0 (Inscription in Italian language)</p> <table style="font-size: small; margin-left: 20px;"> <tr> <td>Afrikaans (81)</td> <td>Bulgarian (64)</td> <td>Czech (78)</td> <td>Danish (65)</td> </tr> <tr> <td>Dutch (67)</td> <td>Finnish (66)</td> <td>French (63)</td> <td>German (61)</td> </tr> <tr> <td>Greek (69)</td> <td>Hungarian (80)</td> <td>Italian (68)</td> <td>Norwegian (70)</td> </tr> <tr> <td>Polish (71)</td> <td>Portuguese (72)</td> <td>Romanian (73)</td> <td>Russian (74)</td> </tr> <tr> <td>Spanish (77)</td> <td>Swedish (75)</td> <td>Turkish (79)</td> <td>Serbo-Croatian (76)</td> </tr> </table>					Afrikaans (81)	Bulgarian (64)	Czech (78)	Danish (65)	Dutch (67)	Finnish (66)	French (63)	German (61)	Greek (69)	Hungarian (80)	Italian (68)	Norwegian (70)	Polish (71)	Portuguese (72)	Romanian (73)	Russian (74)	Spanish (77)	Swedish (75)	Turkish (79)	Serbo-Croatian (76)
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Spanish (77)	Swedish (75)	Turkish (79)						Serbo-Croatian (76)																			
ZFS 60-P3	See Price List	25																									
ZFS 61/62-T0	See Price List	25																									
ZFS 63-T0	See Price List	25																									
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ZFS 63-P3	See Price List	25																									
ZFSX-T0	See Price List	25	<p>ZFSX...-T0 and ZFSX...-P3 can optionally be used for any T... and P... switches</p> <p>Dimensions with frame W x H = 48 x 17 mm Dimensions with frame W x H = 88 x 27 mm</p>																								
ZFSX-P3	See Price List	25																									
BS 45x14-T0	See Price List	25	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Letter height (mm)</td> <td style="width: 10%;">3.5</td> <td style="width: 10%;">5</td> <td style="width: 10%;">7</td> <td style="width: 10%;">10</td> </tr> <tr> <td>No. of lines</td> <td>2</td> <td>2</td> <td>1</td> <td>1</td> </tr> <tr> <td>Letters/line</td> <td>20</td> <td>14</td> <td>11</td> <td>9</td> </tr> </table>					Letter height (mm)	3.5	5	7	10	No. of lines	2	2	1	1	Letters/line	20	14	11	9					
Letter height (mm)	3.5	5						7	10																		
No. of lines	2	2						1	1																		
Letters/line	20	14						11	9																		
BS 45x14-SOND-T0	See Price List	1																									
BS 84x24-P3	See Price List	25																									
BS 84x24-SOND-P3	See Price List	1																									
	See Price List	1	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Letter height (mm)</td> <td style="width: 10%;">3.5</td> <td style="width: 10%;">5</td> <td style="width: 10%;">7</td> <td style="width: 10%;">10</td> </tr> <tr> <td>No. of lines</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> </tr> <tr> <td>Letters/line</td> <td>39</td> <td>26</td> <td>20</td> <td>25</td> </tr> </table>				Letter height (mm)	3.5	5	7	10	No. of lines	4	3	2	2	Letters/line	39	26	20	25						
Letter height (mm)	3.5	5	7	10																							
No. of lines	4	3	2	2																							
Letters/line	39	26	20	25																							
ZS 60-T0	See Price List	1	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Letter height (mm)</td> <td style="width: 10%;">3.5</td> <td style="width: 10%;">5</td> <td style="width: 10%;">7</td> <td style="width: 10%;"></td> </tr> <tr> <td>No. of lines</td> <td>2 (3)¹⁾</td> <td>1</td> <td>1</td> <td></td> </tr> <tr> <td>Letters/line</td> <td>23</td> <td>16</td> <td>11</td> <td></td> </tr> </table>					Letter height (mm)	3.5	5	7		No. of lines	2 (3) ¹⁾	1	1		Letters/line	23	16	11						
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Letters/line	23	16						11																			
ZS-SOND-T0	See Price List	1																									
ZS 60-P3	See Price List	1																									
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Letter height (mm)	3.5	5	7																								
No. of lines	6	4	2																								
Letters/line	41	27	15																								
ZS-SOND-P3	See Price List	1	Price structure on request																								

1) Not for use with **SVB-T0**

Rotary Cam Switches Type T..., Motor Controllers and Disconnects Type P... Accessories

1	2	3	4	5
	For use with	Removability of keys	Type suffix When ordered with switch	Price \$
<p>S-T0 key operator accessory, front protected to IP 53 Supplied with two keys</p>  <p>Lock mechanism Type KMS 1 (Individual locks, not suitable for master key systems)</p> <p>Lock mechanism Type KMS 2 – 10¹⁾ Lock mechanism Type KMS 201 – 400¹⁾ (Individual locks, not suitable for master key systems)</p> <p>SAE = Custom Individual lock mechanism supplied with a security certificate. (without master key)</p> <p>SA... = Customized Master key system supplied with a security certificate. See notes below.</p>	<p>T0-.../E, .../EZ, .../I1, .../Z Up to 6 contact chambers</p> <p>T3-.../E, .../I2, .../Z Up to 5 contact chambers</p> <p>P1-.../E, .../I2, .../Z</p>	<p>Removable key positions pre-programmed from factory</p>	<p>+S-T0</p> <p>+S-SOND(KMS...)-T0</p> <p>+S-SOND(SAE)-T0</p> <p>+S-SOND(SA...)-T0</p>	<p>See Price List</p> <p>See Price List</p> <p>See Price List</p> <p>See Price List</p>
<p>SVA-T 3 cylinder lock, front protected to IP 65 Supplied with two keys</p>  <p>Key is removable in all positions</p> <p>Lock mechanism Type KMS 1 (Individual locks, not suitable for master key systems)</p> <p>Lock mechanism Type KMS 2 – 10¹⁾ Lock mechanism Type KMS 201 – 400¹⁾ (Individual locks, not suitable for master key systems)</p> <p>Lock mechanism Type KM...</p> <p>Key is removable in customer specified positions</p> <p>Lock mechanism Type KMS 1 (Individual locks, not suitable for master key systems)</p> <p>Lock mechanism Type KMS 2 – 10¹⁾ Lock mechanism Type KMS 201 – 400¹⁾ (Individual locks, not suitable for master key systems)</p> <p>SAE = Custom secured lock mechanism, supplied with a security certificate. (Individual lock.)</p> <p>SA... = Master key system (with master key) supplied with a security certificate. See notes below.</p>	<p>T0-.../E, .../I1, .../Z</p> <p>T3-.../E, .../I2, .../Z</p> <p>P1-.../E, .../I2, .../Z</p> <p>T0-.../E, .../I1, .../Z</p> <p>T3-.../E, .../I2, .../Z</p> <p>P1-.../E, .../I2, .../Z</p>	<p>Removable key positions pre-programmed from factory</p> <p>Removable key positions programmed by factory per order specifications</p>	<p>+SVA-T3</p> <p>+SVA-SOND-KMS...-T3</p> <p>+SVA-SOND-KM...-T3</p> <p>+SVA(...)-T3</p> <p>+SVA(...)-SOND-KMS...-T3</p> <p>+SVA(...)-SOND-SAE-T3</p> <p>+SVA(...)-SOND-(SA...)-T3</p>	<p>See Price List</p>

1) Availability for KMS 1 locks is immediate. Please allow 4 to 6 weeks for KMS 2-10, 201-400 lock mechanisms and SA... Master Key assemblies.
 2) SA... Master Key Systems are customized assemblies to fit individual plant setups. When ordering, fill out your desired Master key layout plan using form FO 276 (available from any Moeller Electric office) and submit it with your order. The Master key system is supplied with a security certificate and a proprietary identification number. Reordering of keys and locks for that system can be made by referencing the ID number and the item's location in the Master Key System plan. Example: Master Key System # X4711, Position 7.

Manual Motor Controllers, Motor Disconnect Switches

Rotary Cam Switches

6

Rotary Cam Switches Type T..., Motor Controllers and Disconnects Type P... Accessories

6	7	8	9
Removability of keys	Type suffix	Price	Application notes
	When ordered separately	\$	
Removable key positions programmed on site	<p>S-T0</p> <p>S-SOND(KMS...)-T0</p> <p>S-SOND(SAE)-T0</p> <p>S-SOND(SA...)-T0</p>	<p style="text-align: center;">See Price List</p>	<p>S-T0 can be used for P1... controllers, T0 switches with up to 6 chambers (T0-1...T0-6...) and T3 switches with up to 5 chambers (T3-1...T3-5...). The key replaces the thumb-grip handle and switching without the key is not possible. The switch position indicator is on the locking mechanism. In standard applications, the key is removable in each switch position. Switches using FS 908 as a nameplate (90° ON-OFF) are supplied standard with the key removable in the OFF position only. However, the user can select new positions in which the key can be withdrawn by means of the locking cam accessory "VR-T0". If the S-T0 is subsequently installed use the front plate supplied with switch for position locations. The switching angle is determined by the switch and cannot be modified in the field. Lock mechanism: standard KMS 1 (CES lock) Additional lock mechanisms and master key systems are also available upon request.</p>
Removable key positions programmed on site	<p>SVA-T3</p> <p>SVA-SOND-KMS...-T3</p> <p>SVA-SOND-KM...-T3</p>	<p style="text-align: center;">See Price List</p> <p style="text-align: center;">See Price List</p> <p style="text-align: center;">See Price List</p>	<p>SVA-T3 will fit on all T0, T3 and P1 switches. Switching is carried out using the thumb-grip handle. Turning the key will lock in the position and the key can be removed. Supplied as standard, all positions can be locked. In case of subsequent installation use the front plate supplied with switch for position locations. Standard lock mechanism: Type KMS 1 (CES lock) If required, additional lock mechanisms can be used, and, if planned in advance, master key systems as well. If desired, individual positions or an entire portion of a switching range can be pre-programmed for locking. (This can be done in the field as well using the VR-T3 locking cam accessory.) The key cannot be withdrawn from positions which are not lockable. In locked ranges, switching without a key is only possible within that range. Lockable positions or ranges are determined as follows:</p> <p>Example 1: SVA(A)-T3 = Only position A is locked. Example 2: SVA(A,E)-T3 = Positions A and E are locked. Example 3: SVA(A-J)-T3 = Positions A through J are locked. (Range). Example 4: SVA(S)-T3 = Main Disconnect switch, fulfilling also the Emergency-stop function per IEC/EN 602-4-1, with red handle and yellow colored front plate. Suitable as a "Panic switch", with lockable positions A (OFF) and E (ON); switching remains possible from ON to OFF (E to A) without a key, but not from OFF to ON (A to E).</p>
Removable key positions programmed by factory per order specifications	<p>SVA(...)-T3</p> <p>SVA(...)-SOND-KMS...-T3</p> <p>SVA(...)-SOND-(SAE)-T3</p> <p>SVA(...)-SOND-(SA...)-T3</p>	<p style="text-align: center;">See Price List</p>	
<p>Ordering Information: Specify desired Type from Columns 4 (when ordering with the switch) or 7 (when ordering separately). Example: SVA(A-J)-SOND-(SAE)-T3</p>			<p>Letter S designates panic lock switch with E-Stop FS 908 GE front plate (yellow)</p>

Rotary Cam Switches Type T..., Motor Controllers and Disconnects Type P... Accessories

1	2	3	4	5
	For use with	Interlocking provisions	Type suffix When ordered with switch	Price \$
SVC-T 3 padlocking feature , front protected to IP 65 The locking slide can be padlocked in the pushed-in, position with up to 3 padlocks				
				
Select this accessory if all switch positions need to be locked.	T0-.../E, .../I1, .../Z T3-.../E, .../I2, .../Z P1-.../E, .../I2, .../Z	Interlocked positions pre-programmed from factory	+SVC-T3	See Price List See Price List
Select this accessory if only certain positions or ranges need to be locked.	T0-1 up to T0-4.../I1, .../E T3-1 up to T3-5.../I2 T3-1 up to T3-6.../E P1-.../I2, .../E	Interlocked positions programmed by factory per order specifications	+SVC(...)-T3	See Price List See Price List See Price List
DTV-T 3 push-release interlock , front protected to IP 65 This accessory allows a position to be switched only after the push-release locking-slide has been pushed in. Should the push-release locking slide be padlocked in its released state, the device can not be operated.				
				
	T0-.../E, .../I1, .../Z T3-.../E, .../I2, .../Z P1-.../E, .../I2, .../Z padlockable with up to 2 padlocks	Interlocked positions pre-programmed from factory	+DTV-T3	See Price List See Price List See Price List
To be used if only certain positions need to be locked. Push-release locking slide can be padlocked in its release state with up to 2 padlocks.		Interlocked positions programmed by factory per order specifications	+DTV(...)-T3	See Price List See Price List See Price List
Locking cams (2 cams per set) Select this accessory to change the position in which key can be removed				
				
Select this accessory to change the position or ranges in which the switch can be locked		S-T0 , for all switching angles	—	See Price List See Price List
				
		SVA-T3, SVC-T3 , for all switching angles For DTV-T3 : order a qty. of 2 (2 x VR-T3)	—	See Price List See Price List See Price List
Spare Keys				
				
For individual lock mechanisms Type KMS1		S-T0, SVA-T3	—	See Price List See Price List
For KMS 2 – 10 or KMS 201 – 400 individual lock mechanisms		S-T0, SVA-T3	—	See Price List See Price List
For Master Key Systems and registered lock mechanisms: Specify assigned plan number and the lock number position.		S-T0, SVA-T3	—	See Price List See Price List

Ordering Information: Specify Types from Columns 4 and 7.

Rotary Cam Switches Type T..., Motor Controllers and Disconnects Type P...

1	2	3	4	5
	For use with		Type suffix	Price
			When ordered with basic unit	\$
Padlockable Handles For Main Disconnect switches with Emergency-stop function ¹⁾ Up to 4 chambers (8 contacts) are permissible for T0, and up to 6 chambers (12 contacts) for T3 switches as Main Disconnects.	T0-.../E, .../Z, .../I1 T3-.../E, .../Z, .../I2 P1-.../E, .../Z, .../I2		+SVB-T0	See Price List
	T5B-.../E, .../Z, .../I4 P3-63/E, .../Z, .../I4 P3-100/E, .../Z, .../I5		+SVB-P3	See Price List
Same, but For Main Disconnect switches without Emergency-stop function: Black handle, Black locking collar.	T0-.../E, .../Z, .../I1 T3-.../E, .../Z, .../I2 P1-.../E, .../Z, .../I2		+SVB-SW-T0	See Price List
	T5B-.../E, .../Z, .../I4 P3-63/E, .../Z, .../I4 P3-100/E, .../Z, .../I5		—	See Price List
Padlockable Handles, with PE and N terminals For Main Disconnect switches with Emergency-stop function ¹⁾ Up to 4 chambers (8 contacts) are permissible for T0, and up to 6 chambers (12 contacts) for T3 switches as Main Disconnects.	T0-.../E, .../Z T3-.../E, .../Z		—	See Price List
	T5B-.../E, .../Z		—	See Price List
Same, but For Main Disconnect switches without Emergency-stop function: Black handle, Black locking collar.	T0-.../E, .../Z T3-.../E, .../Z		—	See Price List
	T5B-.../E, .../Z		—	See Price List
Thumbgrip handles Black	T0-.../E, .../EZ, .../IVS, .../Z, .../I1 T3-.../E, .../EZ, .../IVS, .../Z, .../I2 P1-.../E, .../EZ, .../IVS, .../Z, .../I2		—	See Price List
	T0-.../E, .../IVS, .../Z, .../I1 T3-.../E, .../IVS, .../Z, .../I2 P1-.../E, .../IVS, .../Z, .../I2			+KNB-RT-T0
Black	T5B-.../E, .../Z, .../I4 P3-63/E, .../Z, .../I4 P3-100/E, .../Z, .../I5			—
Red	T5B-.../E, .../Z, .../I4 P3-63/E, .../Z, .../I4 P3-100/E, .../Z, .../I5		+KNB-RT-P3	See Price List
Maintenance Handle Designed for cover interlocked switches mounted in panels	T0-.../V, T 3-.../V P1-.../V		—	See Price List
	T5B-.../V P3-.../V		—	See Price List

1) Main Disconnect switches which fulfill the function of Emergency-stop have red handles and yellow collars and are padlockable in the OFF position only (IEC/EN 60 204-1).

Rotary Cam Switches Type T..., Motor Controllers and Disconnects Type P... Accessories

6	7	8	
Type	Price	Application notes	
When ordered separately	\$		
SVB-T0	See Price List	See Price List	<p>For padlocking switch in the OFF position. Exclusive for 90° switching angle switches such as the ones using Type FS 908 (GE) as a front plate. Will accept a maximum of 3 padlocks.</p> <div style="text-align: center;">  <p>FS 908</p> </div>
SVB-P3	See Price List	See Price List	
SVB-SW-T0	See Price List	See Price List	
SVB-SW-P3	See Price List	See Price List	
V/EA/SVB-T0	See Price List	See Price List	<p>These kits can be used to convert from one mounting form to another:</p> <ol style="list-style-type: none"> 1) T.../E cover mounting switches (with front plate FS 908 and thumb-grip handle) into T.../EA/SVB... cover mounting Main Disconnect switches with padlockable handle. or, 2) T.../Z base mounting switches (with front plate FS 908 and thumb-grip handle) into T.../V/SVB base mounting Main Disconnect switches with padlockable handle and cover interlock feature. <p>Note: The red and yellow colored handles should be used only if the switch fulfills the function of Emergency-OFF. Otherwise, select the black version for Main Disconnect applications.</p>
V/EA/SVB-T5	See Price List	See Price List	
V/EA/SVB-SW-T0	See Price List	See Price List	
V/EA/SVB-SW-T5	See Price List	See Price List	
KNB-T0	See Price List	See Price List	<p>The red color handle is used internationally to denote an Emergency-stop function and should be combined with the yellow color nameplate Type: FS 908 GE-T0. Please order separately.</p>
KNB-RT-T0	See Price List	See Price List	
KNB-P3	See Price List	See Price List	
KNB-RT-P3	See Price List	See Price List	<p>The red color handle used internationally to denote an Emergency-stop function and should be combined with the yellow color nameplate Type: FS 908 GE-P3. Please order separately.</p>
KNK-T0	See Price List	See Price List	<p>Base mounted Main Disconnect switches have a cover interlock feature which prevents inadvertent opening of a control panel door when the switch is in the ON position. Per the intent of the Machinery Directive Standard (EN 60 204 Part 1), the KNK... handles are specially designed to defeat the interlock and permit authorized personnel to switch the disconnect ON and OFF when the panel door is open in order to perform routine panel maintenance or troubleshooting tasks.</p>
KNK-P3	See Price List	See Price List	

Ordering Information: Specify Types from Columns 4 and 6.

Rotary Cam Switches Type T..., Motor Controllers and Disconnects Type P... Accessories

1	2	3	4	5
	For use with		Type suffix When ordered with basic switch	Price \$
Auxiliary contacts for P... Switches Each module has one N.O. and one N.C. contact. 2 Modules max. per 3 pole switch				
Mounts to the left and/or right of 3-pole Type P... cover mounted controllers and disconnects.	P1-.../E, .../EA, .../EZ P3-.../E, .../EA		+HI11-P1/P3E	See Price List
Mounts to the left and/or right of 3-pole Type P... base mounted controllers and disconnects. Exception: P1-.../I2 : Only one module, mounted on the left.	P1-.../Z, .../V, .../I2, .../IVS P3-63/Z, .../V, .../I4, .../IVS P3-100/Z, .../V, .../I5, .../IVS		+HI11-P1/P3Z	See Price List
Mounting aids Will enable a cover mounted switch to mount in a 22.5 mm opening (same as a 22.5 mm pilot device)				
With Front plate	T0-.../E, T3-.../E		+EZ-T0	See Price List
Without Front plate (to accommodate custom engraved front plate)	T0-.../E, T3-.../E		+EZ/OFS-T0	See Price List
For both 22.5 mm and 30.5 mm apertures	T0-.../E, T3-.../E, P1-.../E		+EZ-P1	See Price List
Cover for base mounted T0 switches Includes plug-in shaft to accommodate thumb-grip handle.				
	T0-.../XZ		+IVS-T0	See Price List
Coupling drive Supplied with plug-in shaft to accommodate handle.				
	T0-.../XZ T3-.../XZ		—	See Price List
	T5B-.../E P3-.../E		—	See Price List

Ordering Information: Specify Types from Columns 4 and 6.

Manual Motor Controllers, Motor Disconnect Switches

Rotary Cam Switches

Rotary Cam Switches Type T..., Motor Controllers and Disconnects Type P... Accessories

6 Type	7 Price	8 Application notes
When ordered separately	\$	
HI11-P1/P3E HI11-P1/P3Z	See Price List See Price List	See Price List See Price List <p>The N.O. (Normally Open) auxiliary contact is always switching as a load-shedding contact, i.e. it operates as a late make and early break contact with respect to the main power (L1, L2, L3) contacts. This feature is especially designed to insure that, when switching OFF the Main Disconnect, certain critical circuits will be de-energized prior to opening of the main contacts.</p>
EZ-T0 EZ/OFS-T0 EZ-P1	See Price List See Price List See Price List	See Price List See Price List See Price List <p>The switch snap fits into place and speeds up mounting in panel walls, plates and doors. Will also accommodate legend plates from the RMQ 22 line of 22.5 mm pilot devices (Refer to Section 5 for selection.)</p> <p>Permits one-person mounting of the switch in a 22.5 mm or 30.5 mm opening. Mounting is done with screws. Will also accommodate legend plates from the RMQ 22 line of 22.5 mm pilot devices (Refer to Section 5 for selection.)</p>
IVS-T0	See Price List	See Price List <p>Cover for a base mounted, open style panel switch. Supplied with a shaft to accommodate a thumb-grip handle. Will also accommodate front-plate supplied with the switch.</p>
DE-T0 DE-P3	See Price List See Price List	See Price List See Price List <p>Linking mechanism used in the conversion of a basic switch (Type T0(T3)-.../XZ) into a base mounted version (.../Z). Includes plug-in shaft to accommodate handle. Can also be stocked as a spare part for the T0(T3, P1)-.../Z switch.</p> <p>For conversion of T5B-.../E cover mounted switches into T5B-.../Z base mounted switches. Can also be stocked as a spare part for the T5B(P3)-.../Z switch.</p>

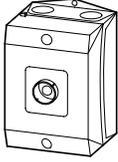
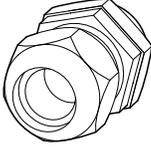
Cam Switches and Manual Motor Controllers Accessories

1	2	3	4	5	
	For use with		Type suffix	Price	
			When ordered with basic switch	\$	
Terminals, Cover Interlocks and extensions Provides cover mounted switches with 2 terminals for connection of ground (PE) and neutral (N) conductors Provides base mounted switches with a cover interlock and 2 terminals for connection of ground (PE) and neutral (N) conductors Cover Interlock extensions Plugs directly into the UV-T0 and UV-P3 cover interlocks. Each extension is 25 mm in length. A maximum number of 4 extensions can be plugged in at one time. The number of interlock extensions must be matched by an equal number of shaft extensions. (see next item) Shaft extensions Plugs directly into the switch shaft. Each shaft extension is 25 mm in length. A maximum number of 4 extensions can be plugged in at one time.	T0-.../E, .../EZ T3-.../E, .../EZ P1-.../E, .../EZ T5B-.../E P3-.../E T0-.../Z T3-.../Z P1-.../Z T5B-.../Z P3-.../Z	  	+UV-T0 +UV-P3 +UV-T0 +UV-P3 +ZVV-T0 +ZVV-P3 +ZAV-T0 +ZAV-P3	See Price List See Price List	
	Switch and Terminal covers Will accommodate cover mounted switches with up to 4 contact chambers Shrouds for protection against accidental contact Will provide additional protection of terminals for switches with up to 2 contact chambers. Will extend protection afforded by the H1-T5 cover for up to 8 contact chambers. For additional protection of field wiring terminals on P1 controllers and disconnects For additional protection of field wiring terminals on P1 controllers and disconnects with auxiliary contacts. For additional protection of field wiring terminals on P3 controllers and disconnects with auxiliary contacts.	T0-.../E T3-.../E P1-.../E T5B-.../E, .../Z H1- T5 P1-.../E, .../EZ, .../Z, .../EA, .../V P1-...HI11 P3-.../E, .../Z, .../EA, .../V P3-...HI11	   	— — — — —	See Price List See Price List

Ordering Information: Specify Types from Columns 4 and 6.

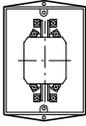
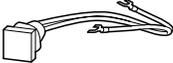
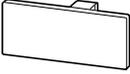
6	7	8
Type	Price	Application notes
When ordered separately	\$	
UV-T0	See Price List	The accessory features a set of terminals for connection of ground (PE) and neutral (N) conductors and mounts on the back side of the cover mounted switch to provide easier access to these terminals.
UV-P3	See Price List	
UV-T0	See Price List	With base mounted switches the accessory mounts on the front of the switch and, in addition to providing a set of PE and N terminals, functions as a cover interlock to prevent opening of the panel door when the switch is in the ON position.
UV-P3	See Price List	
ZVV-T0	See Price List	Refer to page 6/82 for hints on matching switch heights when mounting into an enclosure
ZVV-P3	See Price List	
ZAV-T0	See Price List	Refer to page 6/82 for hints on matching switch heights when mounting into an enclosure
ZAV-P3	See Price List	
H3-T0	See Price List	
H1-T5	See Price List	Can be used to shield incoming and/or outgoing conductors. Order two covers in the case of both.
HZ-T5	See Price List	1 HZ-T5 required per additional contact chamber
H-P1	See Price List	Can be used to shield incoming and/or outgoing conductors. Order two covers in the case of both.
H-P14	See Price List	Can be used to shield incoming and/or outgoing conductors. Order two covers in the case of both.
H-P3	See Price List	Can be used to shield incoming and/or outgoing conductors. Order two covers in the case of both. The cover fits over the entire width of a 5 pole switch. (3 power poles and 2 auxiliary modules). Unused portions of the cover can be broken off.

Cam Switches, Manual Motor Controllers and Disconnects Accessories

1	2	3	4	5											
	For use with	Type	Price	Notes											
			\$												
Insulated enclosures¹⁾ IP 65²⁾ <small>totally insulated</small>															
															
1 – 2 contact units	T0-.../XZ	CI-K1-T0-2	See Price List	Cable sizes which may be pushed through the membrane <table border="1"> <thead> <tr> <th rowspan="2">Type</th> <th colspan="2">Port entry diameter</th> </tr> <tr> <th>Power cable</th> <th>Control cable</th> </tr> </thead> <tbody> <tr> <td>CI-K1-T0-...</td> <td>12 mm</td> <td>—</td> </tr> <tr> <td>CI-K2-T3-...</td> <td>16 mm</td> <td>8 mm</td> </tr> </tbody> </table>	Type	Port entry diameter		Power cable	Control cable	CI-K1-T0-...	12 mm	—	CI-K2-T3-...	16 mm	8 mm
Type	Port entry diameter														
	Power cable	Control cable													
CI-K1-T0-...	12 mm	—													
CI-K2-T3-...	16 mm	8 mm													
3 – 4 contact units	T0-.../XZ	CI-K1-T0-4	See Price List												
1 – 2 contact units	T3-.../XZ P1-...	CI-K2-T3-2	See Price List												
3 – 5 contact units	T3-.../Z	CI-K2-T3-5	See Price List												
1 – 2 contact units	T5B-.../E P3-63/...	CI-K4-T5B-2	See Price List												
3 – 4 contact units	T5B-.../Z	CI-K4-T5B-4	See Price List												
1 – 2 contact units	P3-100/...	CI-K5-T5-2	See Price List												
Set of external fixing brackets															
															
	T5B-.../I4, P3-63/I4, P3-100/I5	AB-CI-K4/5	See Price List												
Metric cable fastener to EN 50 262															
															
	Thread size														
	M20	V-M20	See Price List												
	M25	V-M25	See Price List												
	M32	V-M32	See Price List												
	M50	V-M50	See Price List												
Metric cable grommets to EN 50 262															
	For M20	KT-M20	See Price List												
	For M25	KT-M25	See Price List												
	For M32	KT-M32	See Price List												

1) Enclosures designed for metric cable fasteners to EN 50 262

2) Maximum degree of protection with cable passing through membrane: IP 54

1	2	3	4	5
	For use with	Type	Price	Notes
			\$	
<p>Set of extension terminals</p> <p>For cable connection in the bottom contact chamber of the enclosure</p> 	T5B-.../14	AW-T5-1/2	See Price List	Included with T5B-.../14 as standard. Fit T5B with extension terminals to install it as T5B-.../E in an insulated enclosure.
<p>Indicator lights with neon bulb</p> <p>For mounting in enclosure covers</p>  <p>Color: White Voltage range: 230 – 400 V</p> <p>Color: Green Voltage range: 230 – 400 V</p> <p>Color: Red Voltage range: 230 – 400 V</p>	P1-.../I2, P3-.../I..., T...-.../I...	<p>L-PKZ 0 (400 V)</p> <p>L-PKZ 0-GN (400 V)</p> <p>L-PKZ 0-RT (400 V)</p>	See Price List	Other voltages, see page 7/15
<p>Indicator lights, conical (without bulb)</p> <p>For mounting in cable entries</p>  <p>Color: Red</p> <p>Color: White</p> <p>Color: Green</p> <p>Color: Yellow</p>	P1-.../I2, P3-.../I..., T...-.../I...	<p>L-R</p> <p>L-W</p> <p>L-G</p> <p>L-Y</p>	See Price List	For neon bulbs and BA 9s filament bulbs up to 2.4 W
<p>XGKS component labeling system</p> <p>Label plate with fixing stud</p>  <p>18 x 17.5 mm</p>	T0-... T3-... T5B-... P1-... P3-...	XGKS-Z	See Price List	

Cam Switches and Manual Motor Controllers Contact Sequences

1	2	3	4	5	6
	Basic type	Contact sequence		Basic type	Contact sequence
Main switches On-Off switches Safety switches without auxiliary contacts Switching angle 90°	T0-1-8200/...		Main switches On-Off switches Safety switches with auxiliary contacts Switching angle 90°	T0-2-15679/...	
	T3-1-8200/...			P1-25/.../HI11	
	T5B-1-8200/...			P1-32/.../HI11	
	T0-1-102/...			P3-63/.../HI11	
	T3-1-102/...			P3-100/.../HI11	
	T5B-1-102/...			T0-3-15683/...	
	T0-2-1/...			T3-3-15683/...	
	P1-25/...			T0-3-15681/...	
	P1-32/...			T3-3-15681/...	
	P3-63/...			T5B-3-8901/...	
	P3-100/...			T0-4-15682/...	
	T0-2-8900/...				T3-4-15682/...
				T5B-4-15682/...	
T0-3-8342/...			T5B-4-8903/...		
T3-3-8342/...					
T5B-3-8342/...					
T0-4-8344/...					
T3-4-8344/...					
T5B-4-8344/...					

Cam Switches, Manual Motor Controllers and Disconnects Technical Data for Type T Switches

	1	2	3	4	5
			T0-...	T3-...	T5B-...
General					
Standards			IEC/EN 60 947, IEC/EN 60 204, CSA, UL Switch disconnectors to IEC/EN 60 947 Part 3 Load-break switches to IEC/EN 60 947 Part 3		
Lifespan, mechanical		Operations	> 10 ⁶	5 x 10 ⁵	5 x 10 ⁵
Max. operating frequency		Ops./h	3000	3000	3000
Climatic proofing			Damp heat, constant, to IEC 60 068 Part 2-3 Damp heat, cyclic, to IEC 60 068 Part 2-30		
Ambient temperature	Open	Min./Max.	°C	-25/+50	-25/+50
	Enclosed	Min./Max.	°C	-25/+40	-25/+40
Mounting position			As required		
Dimensions			See page 6/72-76	See page 6/72-76	See page 6/77-78
Mechanical shock resistance (shock duration 20 ms)			g	> 15	> 15
Main Contact Ratings per IEC/EN 60 947					
Rated operational voltage U _e		V AC	690	690	690
Rated impulse withstand voltage U _{imp}		V	6000	6000	6000
Overvoltage category/pollution degree			III/3	III/3	III/3
Rated uninterrupted current I _u open/I _{the} enclosed (with max. cable connected)		A	22/20	25/32	72/63
Short-circuit rating max. fuse		A gL	20	25	80
Rated short-time withstand current (1 s current) I _{cw}		A _{rms}	320	650	1300
Main Contact Ratings per UL/CSA					
Rated operational voltage		V AC	600	600	600
Rated uninterrupted current (general use)		A	14	25	65
Control Contact Ratings per IEC/EN 60 947					
AC-15 Control Switches		Rated operational current I _e	A	6/4/2	10/6/4
		220-240/380-415/500V			
DC-13 Control Switches		Rated operational current I _e	A	10	20
		L/R = 50 ms			
		Voltage per contact pair in series	V	32	32
					24
Control Contact Ratings per UL/CSA					
Pilot Duty				A 600, P 600	A 600
					-
Universal Device Ratings					
Protection against direct contact per IEC				Finger- and back-of-hand proof to IEC 536	
Environmental ratings per UL/NEMA		Type		1, 3R, 12	1, 3R, 12
Switching angles				90°/60°/45°/30°	90°/60°/45°/30°
Contact chambers		Max.		11	10
Double-break contacts		Max.		22	20
Current heat loss per contact at I _e		W		0.6	1.1
Control circuit reliability		Fault probability	H _F	<10-5, <1 fault in 100,000 operations	

Cam Switches and Manual Motor Controllers

Technical Data for Type T

1	2	3	4	5	6
			T0-...	T3-...	T5B-...
Switching Capacity per IEC/EN 60 947 AC					
Rated making capacity	cos φ = 0.35	A	130	320	800
Rated breaking capacity	230 V AC, cos φ = 0.35	A	100	260	520
Motor load switches	400 V AC, cos φ = 0.35	A	110	260	600
	500 V AC, cos φ = 0.35	A	80	240	480
	690 V AC, cos φ = 0.35	A	60	170	340
Short Circuit Current rating per UL/CSA					
Manual Motor Controller	600 V AC	kA	5	5	5
With backup fuse		A	50	80	Class J
With circuit breaker		Type	NZM(H) 6(B) ²⁾	NZM(H) 6(B) ²⁾	
Circuit breaker current rating		A	50	125	
Motor Disconnect	600 V AC	kA	10	10	
With backup fuse		Class	20 A/J	40 A/J	
Terminal Capacity per IEC/EN 60 947					
Solid or stranded ¹⁾		mm ²	1 x (1-2.5)	1 x (1-6)	1 x (2.5-35)
		mm ²	2 x (1-2.5)	2 x (1-6)	2 x (2.5-16)
Flexible including ferrule ¹⁾ (ferrule to DIN 46 228)		mm ²	1 x (0.75-1.5)	1 x (0.75-4)	1 x (1.5-25)
		mm ²	2 x (0.75-1.5)	1 x (0.75-4)	2 x (1.5-10)
Terminal screw (metric size)			M3.5	M4	M6
Terminal Capacity per UL/CSA					
Cu cable	Min./Max.	AWG	18/14	14/10	12/4
torque		Nm	1	2	4

- 1) **T0 (3)-...**: maximum two sizes difference admissible between two conductors
T5B-...: maximum two sizes difference admissible between two conductors
- 2) Consult section 8 of this catalog for more information on the type **NZM(H) 6(B)** circuit breakers.

Cam Switches, Manual Motor Controllers and Disconnects Technical Data for Type P

1	2	3	4	5	6		
			P1-25	P1-32	P3-63	P3-100	
General							
Standards			IEC/EN 60 947, IEC/EN 60 204, CSA, UL Switch disconnectors to IEC/EN 60 947-3				
Lifespan, mechanical	Operations		3 x 10 ⁵	3 x 10 ⁵	10 ⁵	10 ⁵	
Max. operating frequency	Ops./h		50	50	50	50	
Climatic proofing			Damp heat, constant, to IEC 60 068 Part 2-3 Damp heat, cyclic, to IEC 60 068 Part 2-30				
Ambient temperature	Open	Min./Max.	°C	-25/+50	-25/+50	-25/+50	-25/+50
	Enclosed	Min./Max.	°C	-25/+40	-25/+40	-25/+40	-25/+40
Mounting position			As required				
Dimensions			See pages 6/79 - 81				
Mechanical shock resistance (shock duration 20 ms)			g	> 20	> 20	> 20	> 20
Main Contact Ratings per IEC/EN 60 947							
Rated operational voltage U _e			V AC	690	690	690	690
Rated impulse withstand voltage U _{imp}			V	6000	6000	6000	6000
Overvoltage category/pollution degree				III/3	III/3	III/3	III/3
Rated uninterrupted current I _v (with max. cable connected)			A	25	32	63	100
Short-circuit rating max. fuse			A gL	25	50	80	100
Rated short-time withstand current (1 s current) I _{cw}			A _{rms}	640	640	1260	2000
Main Contact Rating per UL/CSA							
Rated operational voltage			V AC	600	600	600	600
Rated uninterrupted current (general use)			A	20	30	60	100
Control Contact Ratings per UL/CSA							
Pilot Duty				A 600, P 600	A 600, P 600		
Universal Device Ratings							
Protection against direct contact per IEC				Finger- and back-of-hand proof to IEC 536			
Environmental ratings per UL/NEMA			Type	1, 3R, 12	1, 3R, 12	1	1
Switching angles				90°	90°	90°	90°
Contacts (current paths)			Max.	7	7	7	7
Current heat loss per contact at I _e			W	1.1	1.8	4.5	7.5

Note: Main switch characteristics to IEC/EN 60 204; positive opening of contacts, operator element positively located on shaft

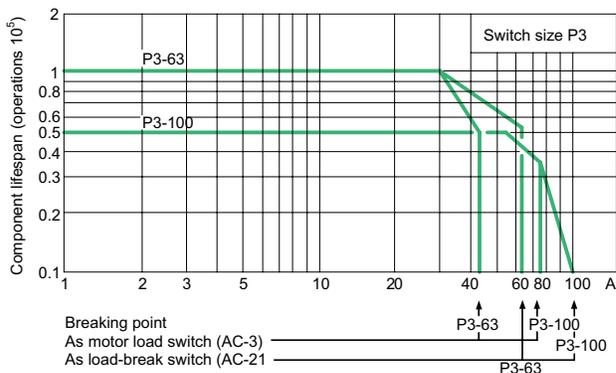
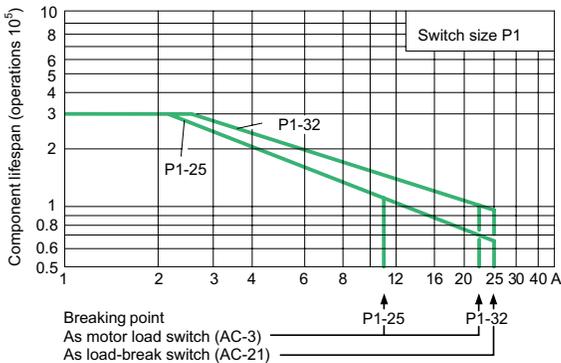
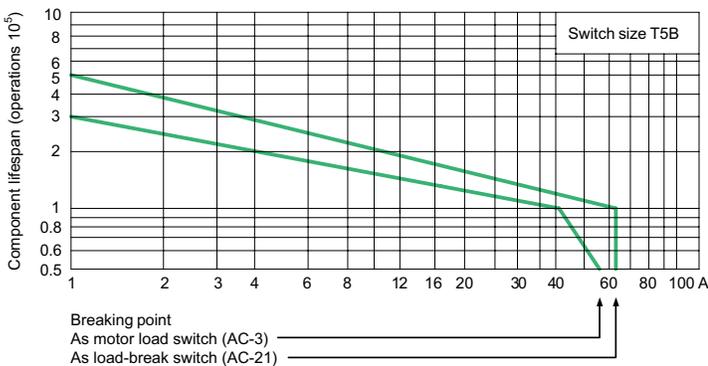
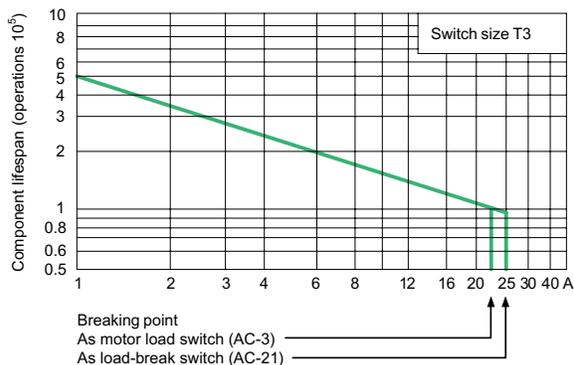
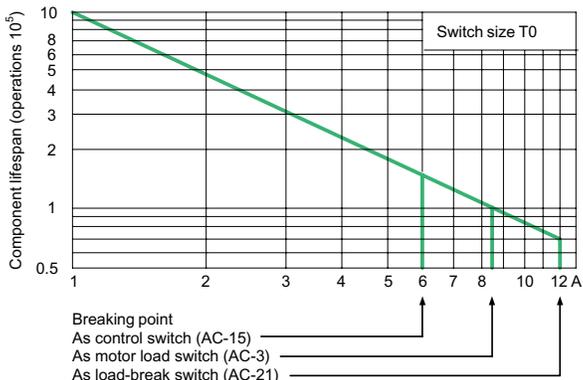
Cam Switches, Manual Motor Controllers and Disconnects

Technical Data for Type P Switches

1	2	3	4	5	6	7	
				P1-25	P1-32	P3-63	P3-100
Switching Capacity							
AC							
Rated making capacity	cos $\varphi = 0.35$	A	240	320	800	950	
Rated breaking capacity	230 V AC, cos $\varphi = 0.35$	A	190	260	640	760	
Motor load switches	400 V AC, cos $\varphi = 0.35$	A	150	300	600	740	
	500 V AC, cos $\varphi = 0.35$	A	170	290	590	880	
	690 V AC, cos $\varphi = 0.35$	A	150	250	340	520	
						100	
Short Circuit Current Ratings per UL/CSA							
Manual Motor Controller	600 V AC	kA	5	5	10	10	
With backup fuse		A	110	110	150	150	
With circuit breaker		Type	NZM(H) 6(B) ²⁾	NZM(H) 6(B) ²⁾	NZM(H) 6(B) ²⁾	NZM(H) 6(B) ²⁾	
Circuit breaker current rating		A	125	125	125	125	
Motor Disconnect	600 V AC	kA	10	10	10	10	
With backup fuse		Class	50 A/J	50 A/J	100 A	100 A	
Terminal Capacity per IEC/EN 60 947							
Solid or stranded ¹⁾		mm ²	1 x (1.5-6)	1 x (1.5-6)	1 x (2.5-35)	1 x (2.5-35)	
		mm ²	2 x (1.5-6)	2 x (1.5-6)	2 x (2.5-10)	2 x (2.5-10)	
Flexible including ferrule ¹⁾ (ferrule to DIN 46 228)		mm ²	1 x (1-4)	1 x (1-4)	1 x (1.5-25)	1 x (1.5-25)	
		mm ²	2 x (1-4)	2 x (1-4)	2 x (1.5-6)	2 x (1.5-6)	
Terminal screw (metric size)			M4	M4	M5	M5	
Terminal Capacity per UL/CSA							
Cu cable	Min./Max.	AWG	14/8	14/8	14/3	14/3	
Torque		Nm	1.6	1.6	4	4	
<p>1) P1-....: two sizes difference admissible between two conductors P3-....: two sizes difference admissible between two conductors</p> <p>2) Consult section 8 of this catalog for more information on the type NZM(H) 6(B) circuit breakers.</p>							
Auxiliary Contacts				HI11-P1/P3			
IEC Ratings				Control circuit isolators to IEC/EN 60 947-5 →			
Standards				V AC	500		
Rated insulation voltage U_i				A	10		
Rated uninterrupted current I_u	with max. cable connected						
Rated operational current I_e							
AC-15	220-240/380-415/500 V	A	6/4/3				
Short-circuit rating without welding	Maximum fuse	A gL	10				
Terminal capacity	Min. solid/ferrule	mm ²	0.75/0.5				
	Max. solid/ferrule	mm ²	2.5/1.5				
Control circuit reliability	Fault probability	H _F	<10-5, <1 fault in 100,000 operations				
	24 V DC, 10 mA						
UL/CSA Ratings							
Rated operational voltage		V AC	600				
Rated continuous current (general use)		A	10				
Pilot Duty			A 600, P 600				

General

In order to achieve a reasonable lifespan in utilization category AC-4 (severe duty: 100% inching, reversing or plugging), the stalled motor currents should not exceed the rated current of the switch at AC-21.



Cam Switches, Manual Motor Controllers and Disconnects

Dimensions for Type T0 and T3 Switches

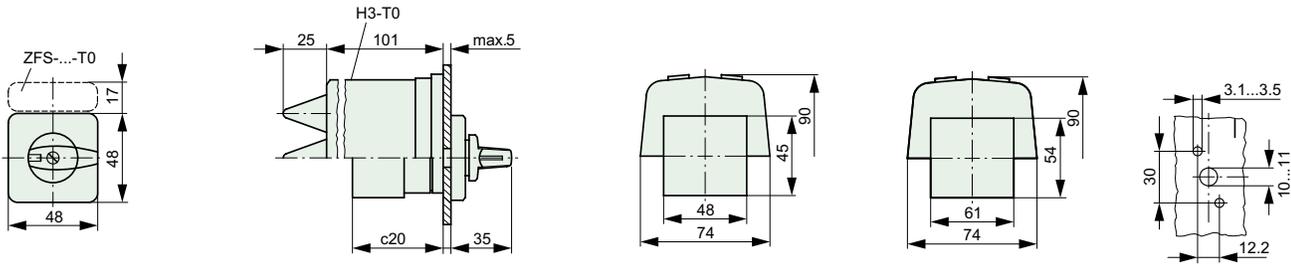
Cover mounting

T0.../E (+ H3-T0)
T3.../E (+ H3-T0)

T0.../E + H3-T0

T3.../E + H3-T0

Drilling dimensions



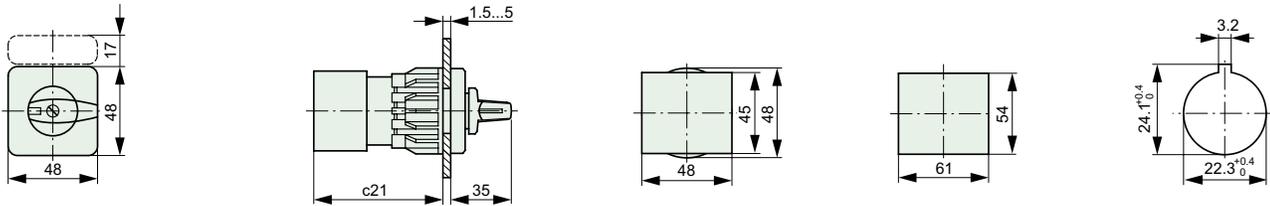
Center mounting

T0.../EZ (/OFS)
T3.../EZ (/OFS)

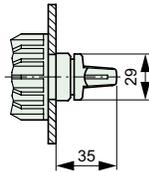
T0

T3

Drilling dimensions



T.../EZ/OFS



Type	c20	c21
T0-1...	41	61
T0-2...	50	70
T0-3...	60	80
T0-4...	69	89
T0-5...	79	99
T0-6...	88	108
T0-7...	98	118
T0-8...	107	127
T0-9...	117	137
T0-10...	126	146
T0-11...	136	156

Depth of one contact unit: 9.5 mm

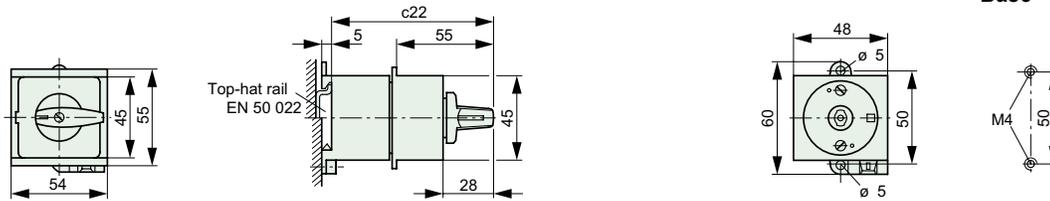
Type	c20	c21
T3-1...	44	64
T3-2...	56	76
T3-3...	67	87
T3-4...	79	99
T3-5...	90	110
T3-6...	102	122
T3-7...	113	133
T3-8...	125	145
T3-9...	136	156
T3-10...	148	168
T3-11...	159	179

Depth of one contact unit: 11.5 mm

Base mounting with cover

T0.../IVS

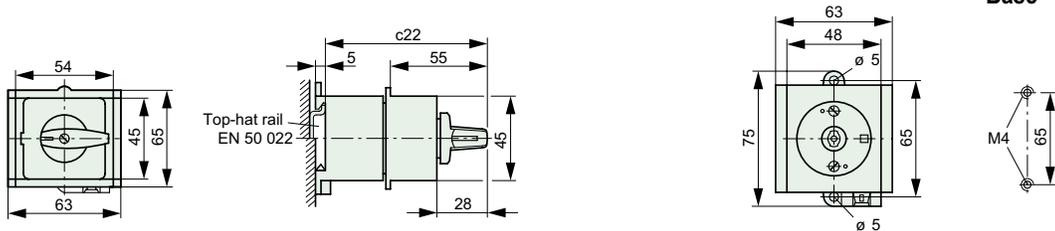
Drilling dimensions
Base



Base mounting with cover

T3.../XZ + IVS-T0

Drilling dimensions
Base

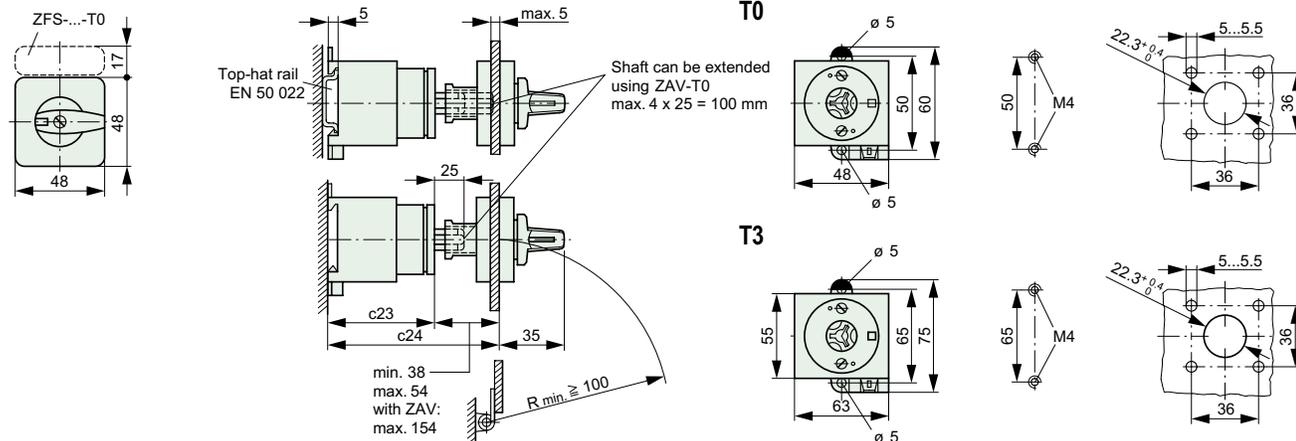


Base mounting

T0.../Z
T3.../Z

Drilling dimensions
Base

Drilling dimensions
Door

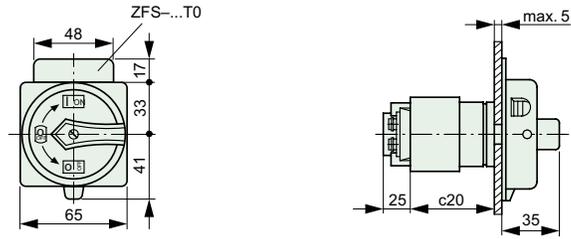


Type	c20	c21	c22	c23	c24 Min./Max.	c24 with up to 4 ZAV	c25	Type	c20	c21	c22	c23	c24 Min./Max.	c24 with up to 4 ZAV	c25
T0-1...	41	61	77	48	86 – 102	202	72	T3-1...	44	64	80	51	86 – 105	205	79
T0-2...	50	70	87	57	96 – 112	212	72	T3-2...	56	76	92	63	101 – 115	216	79
T0-3...	60	80	96	67	105 – 121	221	91	T3-3...	67	87	103	74	112 – 128	228	101
T0-4...	69	89	106	76	115 – 131	231	91	T3-4...	79	99	115	86	124 – 139	239	101
T0-5...	79	99	115	86	124 – 140	240	—	T3-5...	90	110	126	97	135 – 151	251	—
T0-6...	88	108	125	95	134 – 150	250	—	T3-6...	102	122	138	109	147 – 162	262	—
T0-7...	98	118	134	105	143 – 159	259	—	T3-7...	113	133	149	120	158 – 174	274	—
T0-8...	107	127	144	114	153 – 169	269	—	T3-8...	125	145	161	132	170 – 185	285	—
T0-9...	117	137	154	124	162 – 178	278	—	T3-9...	136	156	172	143	181 – 196	296	—
T0-10...	126	146	163	133	172 – 188	288	—	T3-10...	148	168	184	155	193 – 208	308	—
T0-11...	136	156	173	143	181 – 197	297	—	T3-11...	159	179	195	166	204 – 219	319	—

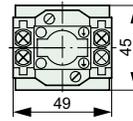
Cam Switches, Manual Motor Controllers and Disconnects Dimensions for Type T0 and T3 Switches

Cover mounting motor disconnect switches

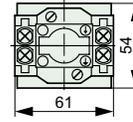
T0.../EA/SVB
T3.../EA/SVB



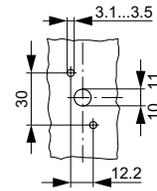
T0



T3

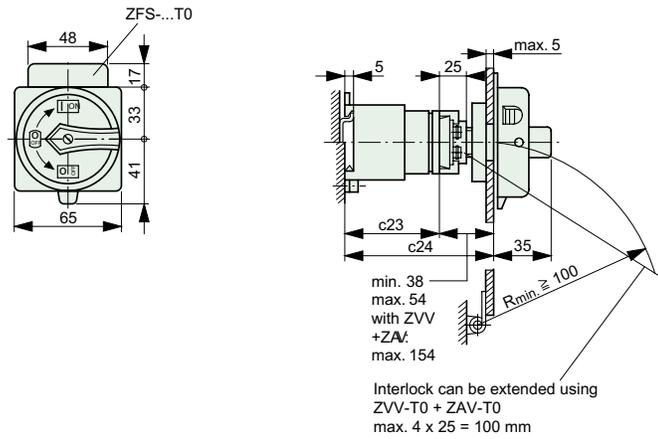


Drilling dimensions
Door

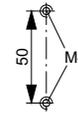
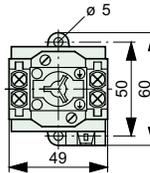


Base mounting motor disconnect switches

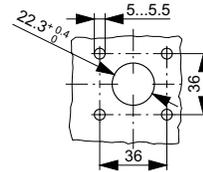
T0.../V/SVB
T3.../V/SVB



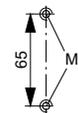
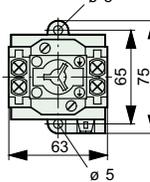
T0



Drilling dimensions
Door

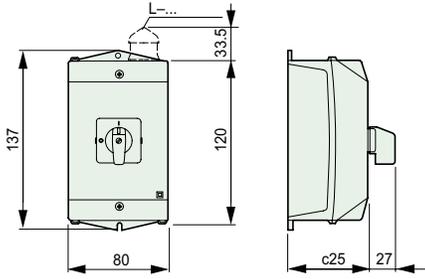


T3

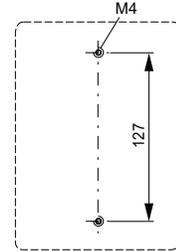


Surface mounting

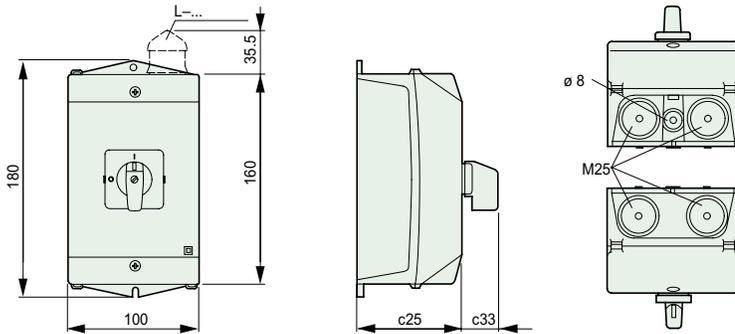
T0.../I1



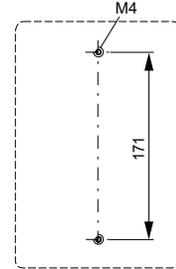
Drilling dimensions Base



T3.../I1

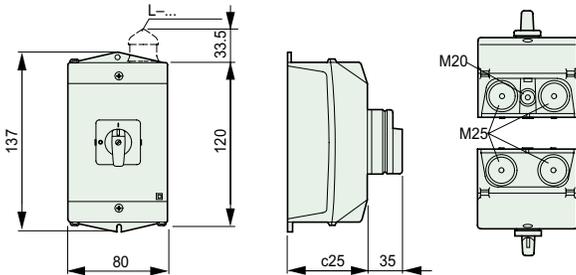


Drilling dimensions Base

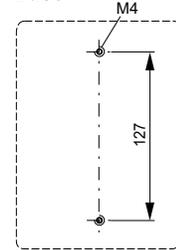


Surface mounting main switches

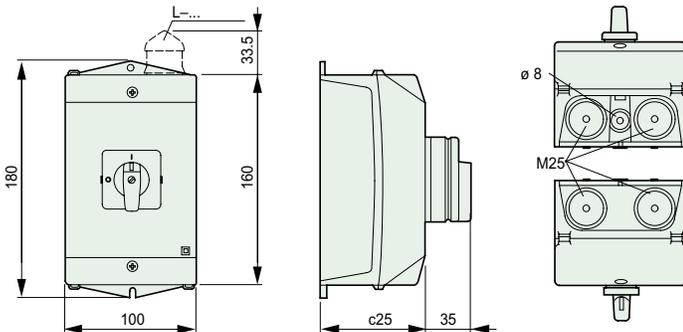
T0.../I1/SVB



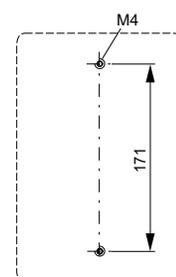
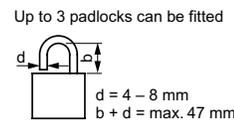
Drilling dimensions Base



T3.../I2/SVB



Drilling dimensions Base



Type	c25	Type	c25	c33
T0-1...	75	T3-1...	80	27
T0-2...	75	T3-2...	80	27
T0-3...	95	T3-3...	145	35
T0-4...	95	T3-4...	145	35
		T3-5...	145	35

Cam Switches, Manual Motor Controllers and Disconnects

Dimensions for Type T0 and T3 Switches, Accessories

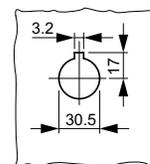
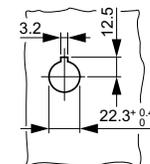
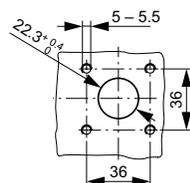
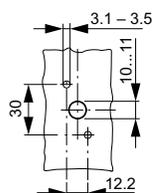
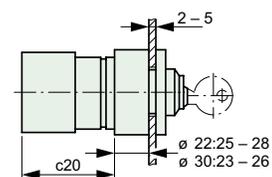
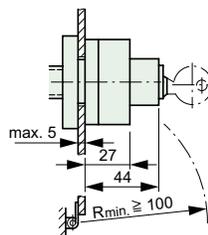
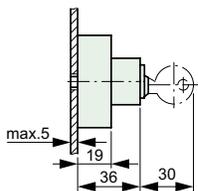
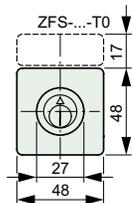
Key operation

S-T0
S-SOND...-T0

T0.../E(I1) + S-(SOND)-T0
T3.../E(I2) + S-(SOND)-T0

T0.../Z + S-(SOND)-T0
T3.../Z + S-(SOND)-T0

T0.../EZ Δ T0.../E + EZ-T0 + S-(SOND)-T0
T3.../EZ Δ T3.../E + EZ-T0 + S-(SOND)-T0



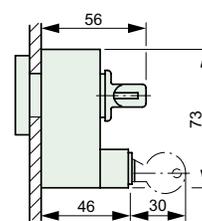
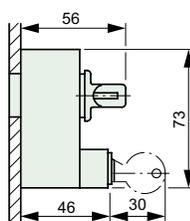
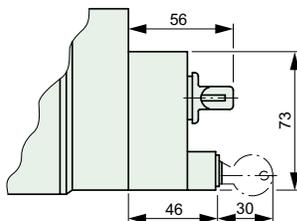
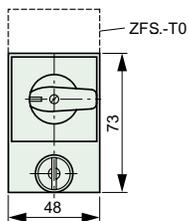
Cylinder lock

SVA-T3

T0.../I1/SVA
T3.../I2/SVA

T0.../E/SVA
T3.../E/SVA

T0.../Z/SVA
T3.../Z/SVA



Padlocking feature

Dimensions the same as for DTV-T3

SVC-T3

T0.../I1/SVC
T3.../I2/SVC

T0.../E/SVC
T3.../E/SVC

T0.../Z/SVC
T3.../Z/SVC

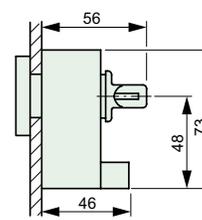
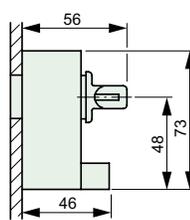
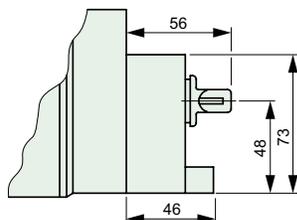
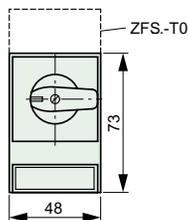
Push-Release interlock

DTV-T3

T0.../I1/DTV
T3.../I2/DTV

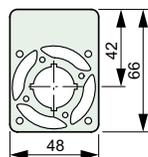
T0.../E/DTV
T3.../E/DTV

T0.../Z/DTV
T3.../Z/DTV

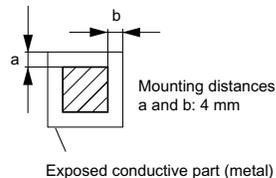


Legend plate

ZS...-T0



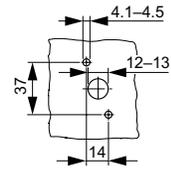
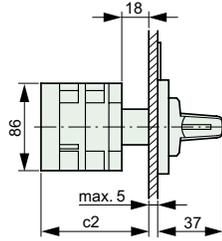
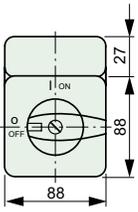
Mounting clearance



Cover mounting

T5B.../E

Drilling
dimensions
Door

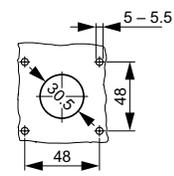
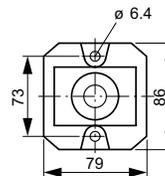
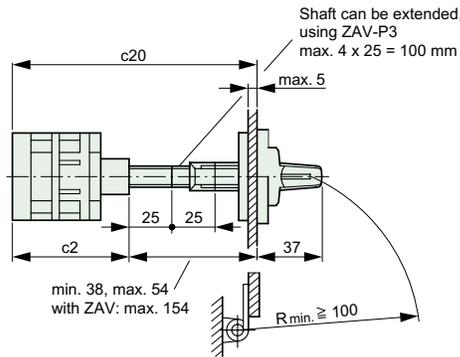
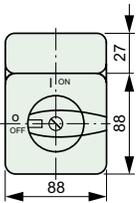


Base mounting

T5B.../Z

Drilling
dimensions
Base

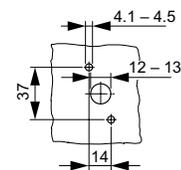
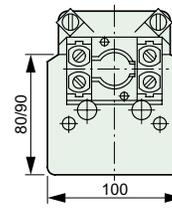
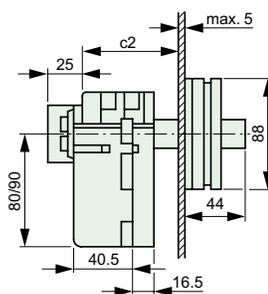
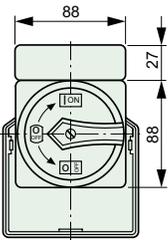
Drilling
dimensions
Door



Cover mounting switches

T5B.../EA/SVB

Drilling
dimensions
Door

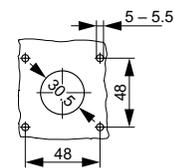
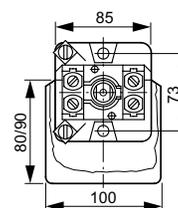
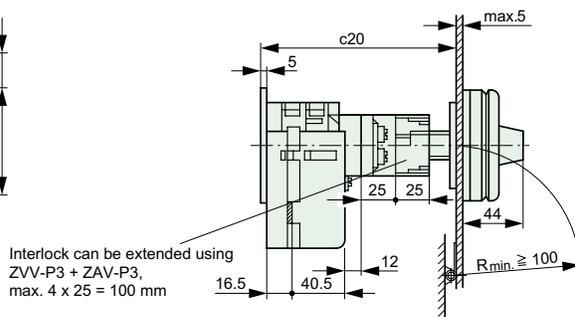
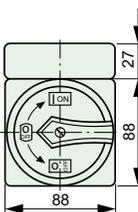


Base mounting switches

T5B.../V/SVB

Drilling
dimensions
Base

Drilling
dimensions
Door



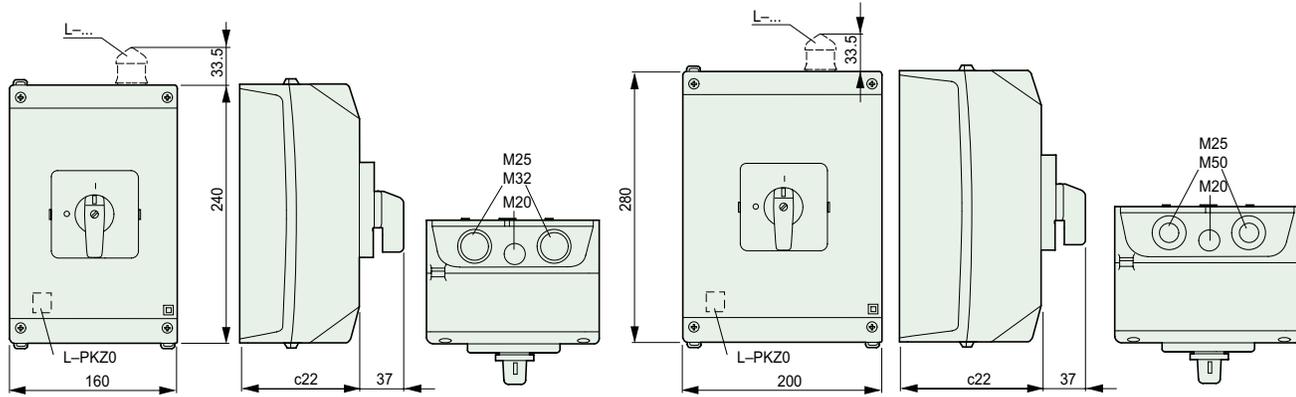
Cam Switches, Manual Motor Controllers and Disconnects

Dimensions for Type T5B Switches

Surface mounting

T5B.../I4

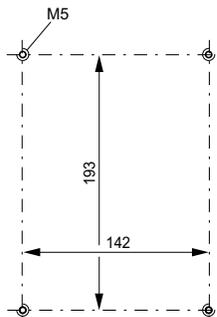
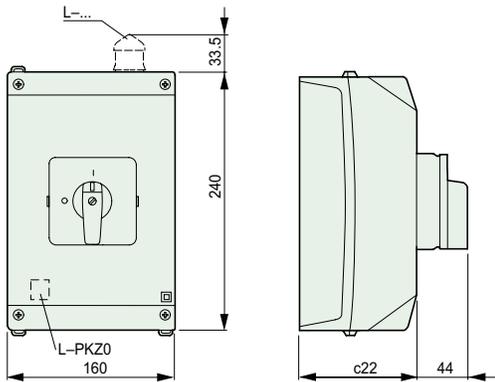
T5B.../I5



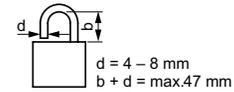
Surface mounting main switches

T5B.../I4/SVB

Drilling dimensions



Up to 3 padlocks can be fitted

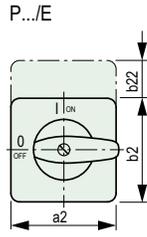


Type	c2	c20 Min./Max.	c20 with up to 4 ZAV	c21	c22
T5B-1...	54	92 - 107	207	90	95
T5B-2...	71	109 - 124	224	90	95
T5B-3...	87	125 - 140	240	123	160
T5B-4...	104	142 - 157	257	123	160
T5B-5...	120	158 - 173	273	—	—
T5B-6...	137	175 - 190	290	—	—
T5B-7...	153	191 - 206	306	—	—
T5B-8...	170	208 - 223	323	—	—
T5B-9...	186	224 - 239	339	—	—
T5B-10...	203	240 - 356	356	—	—

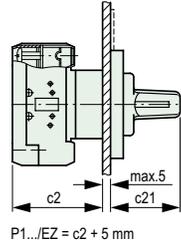
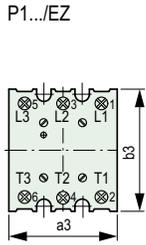
Depth of one contact unit: 16.5 mm

Motor disconnect switches

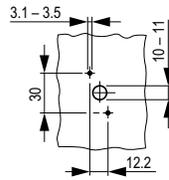
Cover mounting



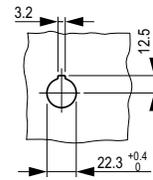
Center Mounting



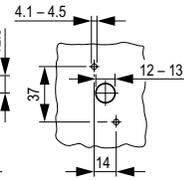
Bohrmaße
T_r
P1.../E



P1.../EZ

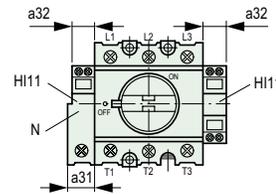
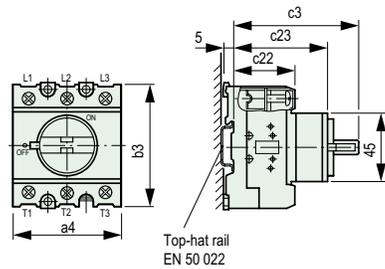


P3.../E

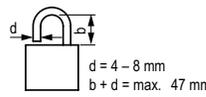


Base mounting with cover

P.../IVS (-...)

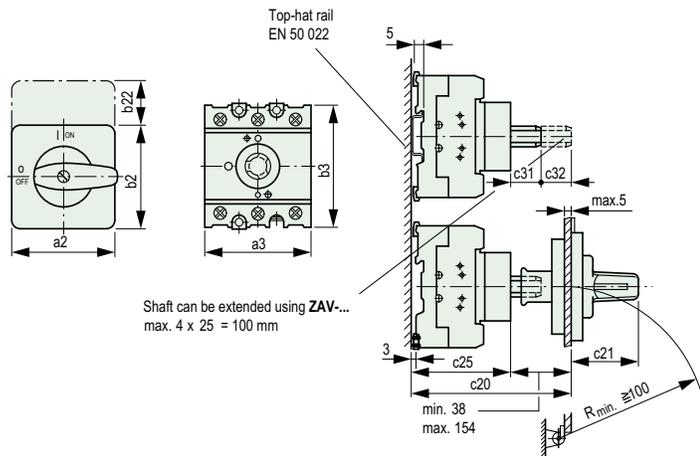


Up to 3 padlocks can be fitted

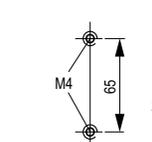


Base mounting

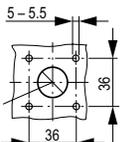
P.../Z



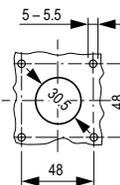
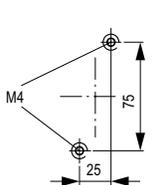
Drilling dimensions
Base
P1.../Z



Drilling dimensions
Door



P3.../Z

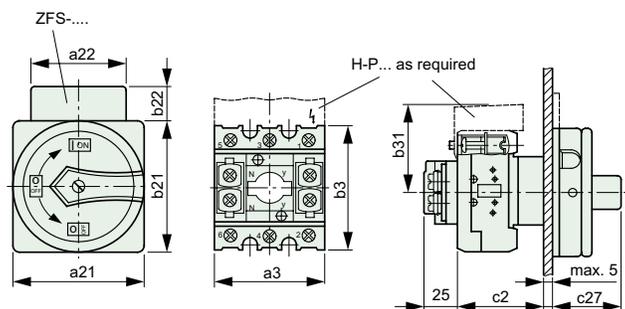


Type	a2	a3	a4	a21	a22	a23	a31	a32	a33	b2	b3	b21	b22	b23	b24	b31
P1	48	49	53.5	65	48	87	15	15	83	48	70	65	17	125	32	49
P3	87	72	71.5	87	87	125	18	15	114	87	83	87	27	175	—	60

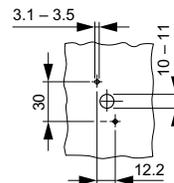
Type	c2	c3	c20 min./max.	c20 with up to 4 ZAV/ZVV	c21	c22	c23	c24	c25	c27	c28	c31	c32	c33
P1	59	86	96 - 112	212	35	32	65	68	58	35	77	25	25	27
P3	59	82	103 - 118	218	37	41	63	81	65	44	90	25	25	29

Cover mounting motor disconnect switches

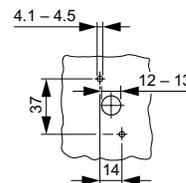
P.../EA/SVB



Drilling dimensions
Door
P1...

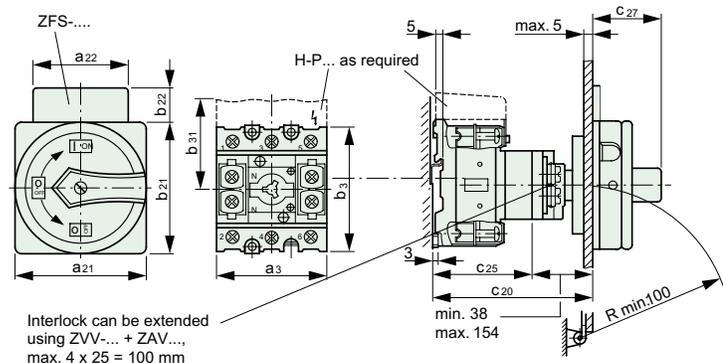


P3...



Base mounting motor switches

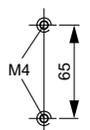
P.../N/SVB



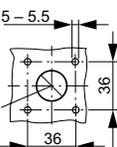
Interlock can be extended using ZVV... + ZAV...
max. $4 \times 25 = 100$ mm

Drilling dimensions
Base

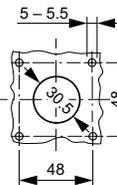
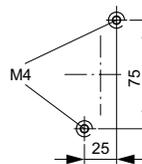
P1.../N/SVB



Drilling dimensions
Door

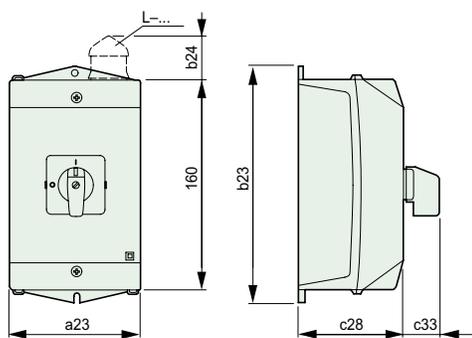


P3.../N/SVB

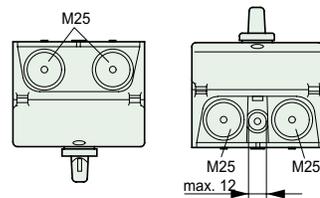


Surface mounting

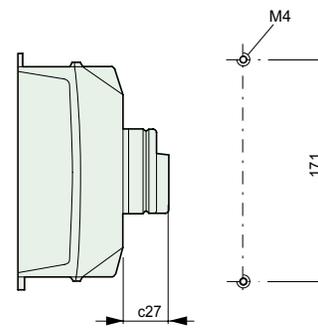
P1.../I2



P1.../I2/SVB
P1.../I2/SI

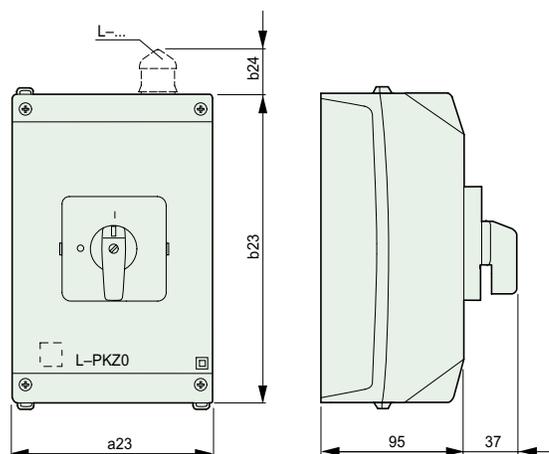


Drilling dimensions



Surface mounting

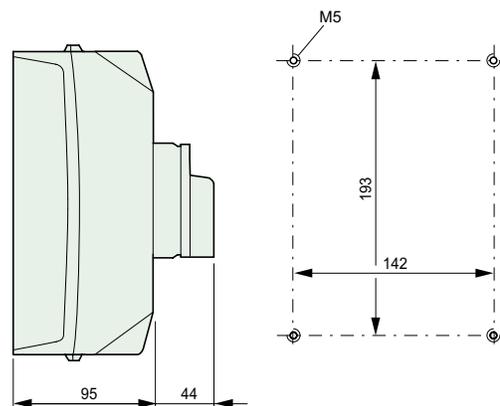
P3-63/I4



Surface mounting motor disconnect switches

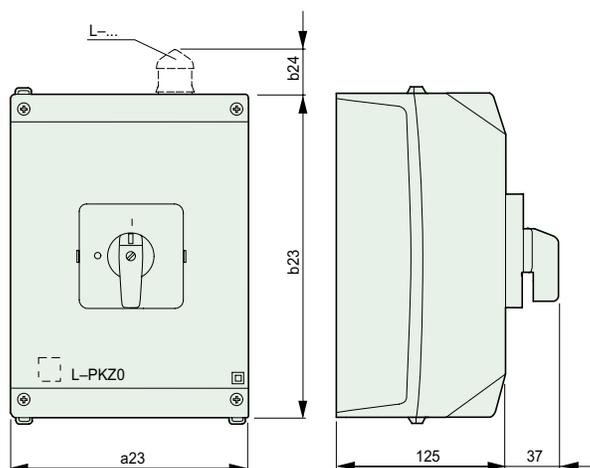
P3-63/I4/SVB
P3-63/I4/SI
T5B-.../I4/SI

Drilling dimensions



Surface mounting

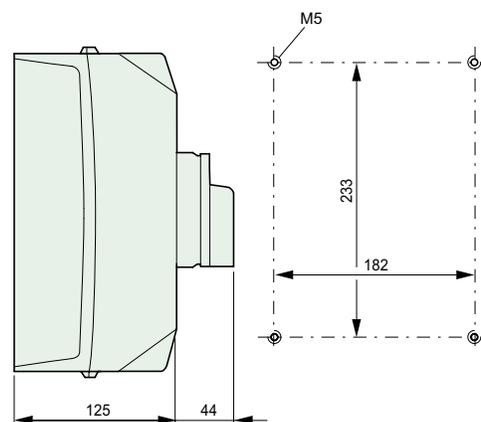
P3-100/I5



Surface mounting motor disconnect switches

P3-100/I5/SVB
P3-100/I5/SI

Drilling dimensions



Type	a2	a3	a4	a21	a22	a23	a31	a32	a33	b2	b3	b21	b22	b23	b24	b31
P1.../I2	48	49	53.5	65	48	100	15	15	83	48	70	65	17	180	35.5	49
P3-63/I4	87	72	71.5	87	87	160	18	15	114	87	83	87	27	240	35.5	60
P3-100/I5	87	72	71.5	87	87	200	18	15	114	87	83	87	27	280	35.5	60

Type	c2	c3	c20 min./max.	c20 with up to 4 ZAV/ZVV	c21	c22	c23	c24	c25	c27	c28	c31	c32	c33
P1.../I2	59	86	96 – 112	212	35	32	65	68	58	35	80	25	25	27
P3-63/I5	59	82	103 – 118	218	37	41	63	81	65	44	125	25	25	37
P3-100-I5	59	82	103 – 118	218	37	41	63	81	65	44	125	25	25	37

Cam Switches, Manual Motor Controllers and Disconnects Dimensions for Type P Accessories

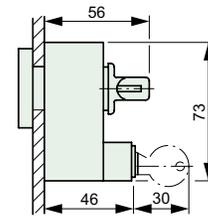
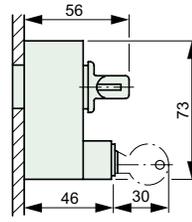
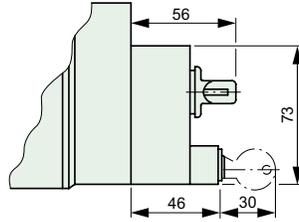
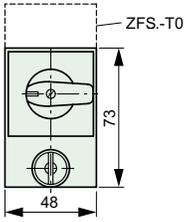
Cylinder lock

SVA-T3

P1.../I2/SVA

P1.../E/SVA

P1.../Z/SVA



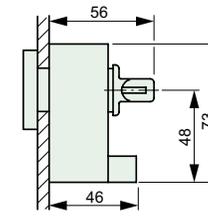
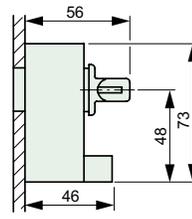
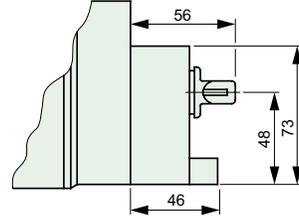
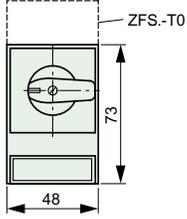
Padlocking feature

SVC-T3

P1.../I2/SVC

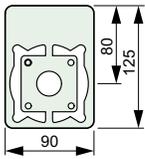
P1.../E/SVC

P1.../Z/SVC



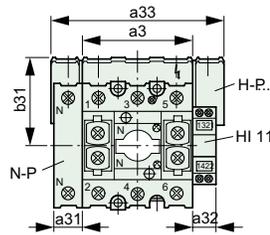
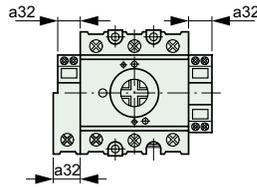
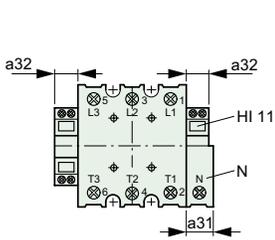
Legend plate

ZS...P3

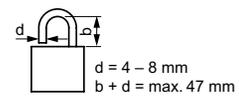


Auxiliary Contact Modules

Auxiliary contacts HI11-P1/P3



Up to 3 padlocks can be fitted



Notes

CI-K... insulated enclosures (see page 6/64) are specifically designed for the installation of Type T switches. They will accommodate **T0** and **T5B** switches with up to 4 contact chambers (8 contacts), and **T3** switches with up to 5 contact chambers (10 contacts). Type **CI-K...** enclosures have up to 5 cable entry locations. Should a larger enclosure be necessary, we recommend our System **CI** insulated enclosures (see Section 10).

Use the tables below to determine whether, and if so how many, shaft extensions (type **ZAV-...**) are required and, for **.../SVB** switches, the identical number of interlock extensions (type **ZVV-...**).

How to match enclosure and Type T... switch sizes:

- 1) Select required switch and determine cables to be connected.
- 2) Select an enclosure according to the minimum mounting depth of the switch. This depth dimension has to be less than or equal to the internal mounting depth of the enclosure. In addition, the number and size of the cable entries must be taken into account.

Example:

Switch: **T3-6-.../V/SVB**

Minimum mounting depth: **T...-6/Z** = 147 mm

Extensions: no extension is required for an enclosure having a mounting depth of 150 mm. Two **ZAV-T0** shaft extensions and two **ZVV-T0** interlock extensions are required for an enclosure having a mounting depth of 200 mm.

Dimensions in mm With extension Quantity Switch type	T0-... Mounting depths						T3-... Mounting depths						T5B-... Mounting depths					
	Without/		With ZAV-T0				Without/		With ZAV-T0				Without/		With ZAV-P3			
	from	to	+1 to	+2 to	+3 to	+4 to	from	to	+1 to	+2 to	+3 to	+4 to	from	to	+1 to	+2 to	+3 to	+4 to
T...-1-.../Z (V/SVB)	86	102	127	152	177	202	89	105	130	155	180	205	92	107	132	157	182	207
T...-2-.../Z (V/SVB)	96	112	137	162	187	212	101	116	141	166	191	216	109	124	149	174	199	224
T...-3-.../Z (V/SVB)	105	121	146	171	196	221	112	128	153	178	203	228	125	140	165	190	215	240
T...-4-.../Z (V/SVB)	115	131	156	181	206	231	124	139	164	189	214	239	142	157	182	207	232	257
T...-5-.../Z (V/SVB)	124	140	165	190	215	240	135	151	176	201	226	251	158	173	198	223	248	273
T...-6-.../Z (V/SVB)	134	150	175	200	225	250	147	162	187	212	237	262	175	190	215	240	265	290
T...-7-.../Z (V/SVB)	143	159	184	209	234	259	158	174	199	224	249	274	191	206	231	256	281	306
T...-8-.../Z (V/SVB)	153	169	194	219	244	269	170	185	210	235	260	285	208	223	248	273	298	323
T...-9-.../Z (V/SVB)	162	178	203	228	253	278	181	197	222	247	272	297	224	239	264	289	314	339
T...-10-.../Z (V/SVB)	172	188	213	238	263	288	193	208	233	258	283	308	241	256	281	306	331	356
T...-11-.../Z (V/SVB)	181	197	222	247	272	297	204	220	245	270	295	320						

Cam Switches, Manual Motor Controllers and Disconnects

Ordering of Non-Standard Contact Sequences

Key to type references

T.....-...../.....+				
↑	↑	↑	↑	↑
Switch size	Number of contact chambers (2 contacts per chamber) Max. chambers Max. contacts	Contact sequence number With manufacturing country identifier. For initial order specify SOND-FO2 and enclose completed form (see next page). Contact sequence number is issued by factory For subsequent orders, type suffix is sufficient.	Mounting form • Mounting form /E • Center mounting /EZ (for T0, T3) • Surface mounting /I... ¹⁾ • Base mounting with cover /IVS for (T0) • Base mounting /Z • Cover mounting motor disconnect switch /EA/SVB ²⁾ • Base mounting motor disconnect switch /I/SVB ²⁾	Accessories See page 6/52 – 65 State in full with every order.
T0	11 22			
T3	11 22			
T5B	10 20			

Design notes for non-standard contact sequences

Contact sequence

The form FO 2 makes it easy to determine the contact sequence. Form FO 2 can be faxed. Master copy on page 6/85

Switching angles

30, 45, 60, 90°
Preferred angle: 60°
For On-Off switches: 90°
For main switches: 90° as FS 908 Page 6/50

Interruption of contact between two switch positions (On-Off-On) not permissible on **T0**; or **T3** at switching angles of 30°, 45°, or **T5B** at switching angle of 30°.

Spring return

Switching movement is limited by a stop. The switch returns under spring pressure to the last indexed position. Where a switch has spring return from both directions, a maximum of three positions can be traversed. The return angle is < 1/2 switching angle. A maximum of 6 contacts can be returned at the same time.

Fleeting contacts

Duration of contact depends primarily on the speed of actuation. If a contactor is to be actuated by means of fleeting contact, the switching angle must not be less than 60°, or the switching pulse may be too short. Fleeting contacts always act in both directions.

Complete rotation

Possible only with a switching angle of 360°. Unrestricted rotation in either direction. The number of switch positions multiplied by the switching angle must equal 360°.

Number of contact units

of contacts = Round up to nearest whole
2

Each contact chamber = contact unit has 1 or 2 contacts, each operated by a cam. On **T5B** switches one cam operates both contacts, consequently: Where the total switching angle is less than 180° each contact can be operated independently. At switching angles of 180° or above, two contacts per chamber are possible only if their switching sequences are the same, but offset by 180° (e.g. **T5B-4-8235** step switch).

Standard features

As for Type T switches with standard contact sequences, see Page 6/2

Technical data, see Page 6/67 - 70

Dimensions, see Page 6/72 - 81

Note: The sequence of the contacts may be changed if technical reasons so dictate. For non-standard switches, it is preferable to arrange the links so that the terminals which have a difference of four are linked with one another, e.g. terminals 1-5-9, 2-6-10, 3-7-11, or 4-8-12. Such links can be removed (also applies for standard switches), whereas links 1-3, 2-4, 5-7, 6-8 cannot be removed because they are situated within the switch. Links between an even number and an odd number (e.g. 2-3) must be supplied by the user.

- 1) **T0-.../1**: up to 4 contact chambers
T3-.../12: up to 5 contact chambers
- 2) **T0**: up to 8 contacts = 4 contact chambers
T3: up to 12 contacts = 6 contact chambers

Cam Switches, Manual Motor Controllers and Disconnects

Ordering Form of Non-Standard Contact Sequences



Erstbestellung für beliebige Nockenschalter T Kombinationen
 First ordering data for Rotary switch T combinations
 Première commande de combinaisons de Commutateur T à cames

Auftrags-Nr.: Ordering number: N° de commande :		Position: Position: Poste :		Büro: Office: Bureau :		Bearbeiter: Referee: Employé:	
Kunde: Customer: Client				Kundenspez.-Nr.: Customize number: N° client:			Datum: Date: Date:
Hinweis: Note: Note : Die Anzahl der möglichen Kontakte sowie die Kombinationsmöglichkeiten mit den Bauformen entnehmen Sie bitte dem Hauptkatalog. The number of possible contacts as well as possible combinations with mounting forms are shown in the Main Catalog. Reportez-vous au Catalogue Général pour connaître le nombre maximal de contacts et les possibilités de combinaison selon les modèles.	Stückzahl: Quantity: Quantité:	Schaltwinkel: Switching angle: Angle de rotation:	Typ: Type: Référence :	Anzahl Kontakte: No. of contacts: Nombre de contacts :	Bauform: Mounting form: Modèle:		
	DM/St,ck: DM/piece: Prix unitaire :	<input type="checkbox"/> 30 <input type="checkbox"/> 45 <input type="checkbox"/> 60 <input type="checkbox"/> 90	<input type="checkbox"/> T0 <input type="checkbox"/> T3 <input type="checkbox"/> T5B	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11	<input type="checkbox"/> 12 <input type="checkbox"/> 13 <input type="checkbox"/> 14 <input type="checkbox"/> 15 <input type="checkbox"/> 16 <input type="checkbox"/> 17 <input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20 <input type="checkbox"/> 21 <input type="checkbox"/> 22	<input type="checkbox"/> E <input type="checkbox"/> EA/SVB <input type="checkbox"/> EZ <input type="checkbox"/> I... <input type="checkbox"/> I.../SVB <input type="checkbox"/> IVS <input type="checkbox"/> V/SVB <input type="checkbox"/> X <input type="checkbox"/> Z <input type="checkbox"/> + _____ <input type="checkbox"/> + _____	<input type="checkbox"/> EA/SVB-SW <input type="checkbox"/> EZ/OFS <input type="checkbox"/> I.../SVB-SW <input type="checkbox"/> V/SVB-SW <input type="checkbox"/> XZ

Frontschild Nr. Front Plate No. Plastron N° FS	Baueinheiten /Contact units/Galettes 1 2 3 4 5 6 7 8 9 10 11																					
<input type="radio"/> Rundschtaltung Complete rotation Rotation totale <input type="radio"/> autom. Rückzug Spring return Retour autom.																						
Beschriftung Marking/Repérage																						
Grad Degree/Degés	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43
	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44
270																						
300																						
315																						
330																						
0																						
30																						
45																						
60																						
90																						
120																						
135																						
150																						
180																						
210																						
225																						
240																						
Schlüssel abziehbar Key removable Retrait de la clé	X																					
	Typ für Nachbestellungen (vom Werk auszufüllen) Type for re-orders (to be filled in by Factory) Référence pour commandes ultérieures (à compléter par l'usine)																					
	T _____																					

Manual Motor Controllers, Motor Disconnect Switches Rotary Cam Switches

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