

CAM OPERATED ROTARY SWITCHES

<p>Isolators On-Off Switches</p> <p>6A-300A 1-4 pole with 90° rotation</p> 	<p>Isolators with Pre-close Contact</p> <p>6A-300A 1-4 pole with 90° rotation</p> 	<p>Spring Return Isolators 45°</p> <p>6A-300A 1-4 pole with 90° rotation</p> 	<p>Star Delta Switch 60° & 90°</p> <p>16A, 25A, 32A, 40A, 63A, 100A</p> 	<p>Multi step switch with off/without off</p> <p>1-4 Pole and 7-12 ways 6A to 300A</p> 	<p>Bypass Switch with off/without off</p> <p>1-4 Pole & 1-4 Ways 6A to 300A</p> 	<p>Multi step switches with off/without off, Jumper</p> <p>6A-300A 1, 2 pole</p> 	<p>Ammeter selector switches</p> <p>Line current with off with CT 6A, 10A, 16A, 25A, 40A</p> 
<p>Change Over Switches</p> <p>6A-300A 1-4 pole with or without centre off 90° rotation</p> 	<p>Phase Change Over Switches</p> <p>6A, 16A, 25A, 32A, 40A, 63A, 1 Pole 3 Way with off 90° rotation</p> 	<p>Change Over Spring Return Switches</p> <p>On-off, one side spring return, double throw with spring return With or without off 16A & 25A 45° rotation 1, 2, 3, 4 Pole</p> 	<p>Phase Change Over Switches with Neutral</p> <p>6A, 16A, 25A, 32A, 40A, 63A, 100A, 150A, 300A, 1 Pole 3 Way with off 90° rotation</p> 	<p>For-off-rev Switch</p> <p>16A-32A 3 pole On-Off, 16A-32A</p> 	<p>Voltmeter Selector Switches</p> <p>Voltage between phases with off 6A, 10A, 16A</p> 	<p>Voltmeter Selector Switches</p> <p>Voltage between phases & individual phase to neutral with off 6A, 10A, 16A</p> 	<p>Voltmeter Selector Switches</p> <p>Voltage between phases & individual phase to neutral without off 6A, 10A, 16A</p> 
<p>Change Over Stay Put Switches without Jumper</p> <p>6A-300A 1-3 pole with centre off 60° rotation</p> 	<p>Change Over Spring Return Switches</p> <p>6 A to 300 A 1-3 pole with centre off 45° rotation</p> 	<p>Motor Reversing Switches</p> <p>With off 2 & 3 pole 16A, 25A, 32A</p> 	<p>On-Off Switch with Round Pad Lock</p> <p>1 Pole, 2 Pole, 3 Pole, 4 Pole, 16A, 25A, 32A</p> 	<p>Ammeter & Voltmeter Combined Switch</p> <p>Voltage between phase to neutral & current of 10A of that phase</p> 	<p>Breaker Control Switch (Trip-Neutral-Close)</p> <p>16A, 25A, 32A 1NO+1NC, 2NO+2NC, 3NO+3NC, upto 6NO+6NC</p> 	<p>Breaker Control Switch (Trip-Neutral-Close)</p> <p>Lost Motion Device (LMD)</p> 	<p>Breaker Control Switch (Trip-Neutral-Close)</p> <p>16A, 25A, 32A, with Barrel Lock 1NO+1NC, 2NO+2NC, 3NO+3NC, upto 5NO+6NC</p> 
<p>Auto Manual with off/without off</p> <p>6A to 100A 1-4 Pole</p> 	<p>Auto Manual, Remote with off 90°/without off 60°</p> <p>6A to 100A 1-4 Pole</p> 	<p>Local Remote with off 90°/without off 60°</p> <p>6A to 100A 1-4 Pole</p> 	<p>Local Remote Bypass with off 90°/without off 60°</p> <p>6A to 100A 1-4 Pole</p> 	<p>Mode Selector Switch</p> <p>6A to 300A</p> 	<p>Motor Reversing Switches-Spring Return</p> <p>With off 3 Pole 16A, 25A, 32A</p> 	<p>On-off Switch with Rectangular Pad Lock</p> <p>With off 2 & 3 Pole 16A, 25A, 32A</p> 	<p>Gang Switches 2 & 3, Gang with off 1, 2, 3 Pole</p> <p>6A, 10A, 16A, 25A, 32A, 40A, 63A, 100 for Railway Application</p> 

PUSH BUTTON STATION

LOCAL CONTROL STATIONS

IN CAST ALUMINIUM ENCLOSURE IP-65 D.O.P WITH 22.5 MM PUSH BUTTONS AND INO OR INC CONTACT BLOCKS

Description	Cat. No.
One Unit	TPS - 2219
Two Unit	TPS - 2229
Three Unit	TPS - 2239
Four Unit	TPS - 2249



IN CAST ALUMINIUM ENCLOSURE IP-65 D.O.P WITH 22.5 MM PUSH BUTTONS AND INO OR INC CONTACT BLOCKS

Description	Cat. No.
One Unit	TFRPB - 2291 S
Two Unit	TFRPB - 2229 S
Three Unit	TFRPB - 2239 S
Four Unit	TFRPB - 2249 S



IN CAST ALUMINIUM ENCLOSURE IP-65 D.O.P WITH 22.5 MM PUSH BUTTONS AND INO OR INC CONTACT BLOCKS

Description	Cat. No.
One Unit	TTPS - 2231 S
Two Unit	TTPS - 2232 S
Three Unit	TTPS - 2233 S
Four Unit	TTPS - 2234 S



PUSH BUTTON STATION WITH Ø 30.5MM PUSH BUTTONS CAN ALSO BE MANUFACTURED ON REQUEST

PENDENT PUSH BUTTON STATION

IN CAST ALUMINIUM ENCLOSURE WITH Ø 22.5MM ACTUATOR AND INO+INC CONTACT BLOCK

Description	Cat. No.
1 Unit	TPS - P1
2 Unit	TPS - P2
3 Unit	TPS - P3
4 Unit	TPS - P4
5 Unit	TPS - P5
6 Unit	TPS - P6
8 Unit	TPS - P8
10 Unit	TPS - P10
12 Unit	TPS - P12
14 Unit	TPS - P14
16 Unit	TPS - P16
18 Unit	TPS - P18
20 Unit	TPS - P20



CUSTOMISED PUSH BUTTON STATION

No. of Switching Unit	Cast Aluminium Enclosure	FRP Enclosure
	Size L*W*D in mm Notes	
One unit with mushroom head PB	180*95*80	140*95*80
Two unit with mushroom head Stop & Start & Flush knob spring return PB	185*125*80	150*150*80
Three unit with mushroom head stop, start & Forward Flush knob spring return PB	225*125*80	200*150*90
Four unit with mushroom head stop, start, Forward & Rev, Flush knob spring return PB	225*125*80	200*150*90
Two unit with mushroom head stop & start & Flush knob spring return PB	130*100*70	150*150*80
Two unit with mushroom head stop & start & Flush knob spring return PB, with 96*96 size ammeter	225*195*80	250*250*90
Two unit with mushroom head stop & start & Flush knob spring return PB, with 72*72 size ammeter	225*195*80	250*250*90
Two unit with mushroom head stop & start & Flush knob spring return PB, with 72*72 size ammeter / 2 pole 2 way selector switch	320*240*90	300*300*90
Four unit with mushroom head stop, start, speed raise, speed lower & Flush knob spring return PB, RPM meter 48*96	350*350*120	300*300*90

Note:

- Customised Push button station are also available in various other sizes. Please refer to our detailed catalogue for Push Button Stations and Junction Boxes.
- Contact configuration can be INO or INC, INO+INC up to 4NO+4NC. Terminal blocks shall be provided as per required contact configuration.
- Push button station & junction boxes can be powder coated in different RAL/IS shade as per customer requirement.



CUSTOMISED JUNCTION OFFICES

No. Of Clip on Type 2.5/4mm Sq Terminal Blocks	In Cast Aluminium Enclosure Size L*W*D in mm	No. Of clip on type 2.5/4 mm sq. terminal blocks	In FRP Enclosure Size L*W*D in mm
4 TO 10 TB	225*125*80	4 TO 10	140*95*80
10 TO 20 TB	225*125*80	10 TO 20	150*150*100
21 TO 40 TB	320*200*90	21 TO 30	250*250*90
41 TO 60 TB	300*300*170	31 TO 40	300*300*90
61 TO 100 TB	400*300*175	41 TO 100	300*300*90
101 TO 150 TB	500*330*200	101 TO 150	500*350*100
151 TO 200 TB	510*330*200	151 TO 200	500*350*100
POLE BOX JB WITH ONE SINGLE POLE 6A MCB AND NEUTRAL LINK	130*100*70	POLE BOX JB WITH ONE SINGLE MCB	150*150*100
POLE BOX JB WITH TWO SINGLE POLE MCB	200*180*85	POLE BOX JB WITH TWO SINGLE POLE MCB	150*150*100

Note:

Customised junction boxes are also available in various other sizes. Please refer to our detailed catalogue for Push Button Stations and Junction Boxes.



LIMIT SWITCH

INO+INC with push rod Normal & snap action	INO+INC with protective cover and push rod normal & snap action	2NO+INC/INO+2NC, 2NO+2NC with push rod, with or without protective cover normal action	In Die cast aluminium enclosure Oil Tight (IP-65D.O.P)-INO+INC normal & snap action	General Purpose Non-Oil Tight in Die cast aluminium enclosure INO+INC normal & snap action
TLS-000-0 (Normal Action) TLS-000-1 (Snap Action)	TLS-1010-0 (Normal Action) TLS-1010-1 (Snap Action)	TLS-1002 INO+2NC TLS-2001 2NO+INC TLS-2002 2NO+2NC	TLS-100-0 (Normal Action) TLS-100-1 (Snap Action)	TELS-100-0 (Normal Action) TELS-100-1 (Snap Action)

HOOTERS/ALARMS/BUZZERS

INDUSTRIAL HOOTER	ELECTRONIC BUZZER/ALARM/HOOTER		
TH-000-A/D 220V/110V/48V/24V Available in: AC & DC Range: 70 mtr. Sound Level: 90db to 110db	TSB-000-A Single Tone/Three Tone 220V/110V/48V/24VAC	TSB-007-M Multi Tone Multi Voltage 12V to 220V AC/DC Range: 80 mtr.	ETH-000-A/D Multi Tone Multi Voltage 12V to 220V AC/DC Range: 80 mtr.

HCR FUSE HOLDERS & BASES

TMF/TMB Front/Bus Bar/Panel Connection 20, 32, 63, 125 AMP	TFBO Circlip Mounted Bakelite/DMC Moulded 160A/250A/400A/630A	TFBLD Fuse Base with Link Disconnecter 250A/400A/630A	TNL Neutral Link 16A/32A/63A

RAILWAY SPECIFIC CLW APPROVED PRODUCTS

Illuminated Push Button with INO Contact Block & BA 9S LED Replaceable Continuous Glow Bulb	Emergency Flasher Light 2Position with 2NO Contact Block with BA 9S LED Replaceable Bulb	Booted Button with INO Contact Block	Pilot Light with Pin Type BA 9S LED Replaceable Continuous Glow Bulb	Railway Specific Application Rotary Switch

CONTROL & SIGNALLING DEVICES Ø 22.5MM

Flush	Projecting	Mushroom	Stay-put
			
9XTAF	9XTAP	9XTAM	9XTAPR
Booted	Key Mushroom Actuator	Press To Lock Key To Reset	Twin Button
			
9XTAB	9XTAK-IL/2L/3L	9XTAK-PL	9XTADB
Selector Actuator 2/3 Position	Key Selector 2/3 Position	Spring Return Selector	2/3 Position Spring Return Key Selector
			
9XTA-2S/3S	9XTA-2CL/3CL	9XTAS-1/2/3/4/5	9XTAS-1A/2A/3A/4A/5A

LED CONTROL & SIGNALLING DEVICES Ø 30.5MM & LED PANEL LIGHT

Flush	Key Mushroom Actuator	Contact Element	Mushroom Stay Put	Key Actuator For Railway Application	Led Panel Light 5w/7w 24v to 220v Ac/Dc
					
TSRM	TS-IPL	TES-1 (INO+INC) TES-2 (INO) TES-3 (INC)	TS-PR	TS-2L	TS-PL

LED CONTROL & SIGNALLING DEVICES Ø 22.5MM

LED INDICATOR		
		
9XTLDIL-S STANDARD 220V/110V/48V/24V AC or DC	9XTLDIL-BN BARREL 220V/110V/48V/24V AC or DC	9XTLDIL-BN-U MULTI VOLTAGE 12V-220V AC/DC
LED LUMINOUS BUTTON		
		
9XTLDLST SPRING RETURN 220V/110V/48V/24V AC or DC	9XTLDL3SL 2/3 POS LUMINOUS SELECTOR 220V/110V/48V/24V AC or DC	9XTLDDBL LUMINOUS TWIN BUTTON 220V/110V/48V/24V AC or DC
CONTACT ELEMENT - REAR CONNECTION	CONTACT ELEMENT - FRONT CONNECTION	LED INDICATORS
		
T1	T5	Suitable for Ø 6.5, 8.5, 9.5, 10.5, 12.5, 14.5, 16.5, 19.5 mm
		
T2	T6	VOLT LED INDICATORS