



RISHABH

# Data Sheet

## LED Phase Changeover Switch



• Rish Cam switch 63A with single LED

• Rish Cam switch 63A with three LED



Measure



Control



Record



Analyze

### Product Features



- **Three Phase indication :**

The three LED indicate the presence or absence of phases R, Y, and B, Respectively. Therefore does not require an additional indicating device in the distribution board.

- **Output indication :**

Selected Output Phase Indication. Therefore does not require an additional indicating device in the distribution board.

- **Wiring Routing :**

No need of external wiring for indication device.  
Input connections are internally derived from bus bar.

- **Compact Size :**

Their compact dimensions optimize the space inside distribution boards.  
They have been specially designed to make wiring and use easier.

- **Reliable Design :**

These switches are tested in various laboratories as per National and International standards for performance and user safety.

- **Quick & Easy Installation :**

Captive +/- screw save installation time.  
The ability to assemble a bus bar on a direct on switch terminal.

- **Protection Class :**

IP 50 protection class from front of cam switch .  
to eliminate the risk of touching live parts without adding any protective covers.

### Application

- **Phase Changeover switch :**

The cam switch is used for the changeover/shift of the supply from one phase to another phase.  
In Phase Selection Distribution Board, the phase priority selection is manually carried out by selector switch & user can select the desired selection of phase according to his own choice i.e. R Phase, Y Phase, B Phase .

- **Phase Selector DB :**

Phase selector DBs provide flexibility in selecting and interchanging the phases in case there is a power outage in one particular phase.



Measure



Control

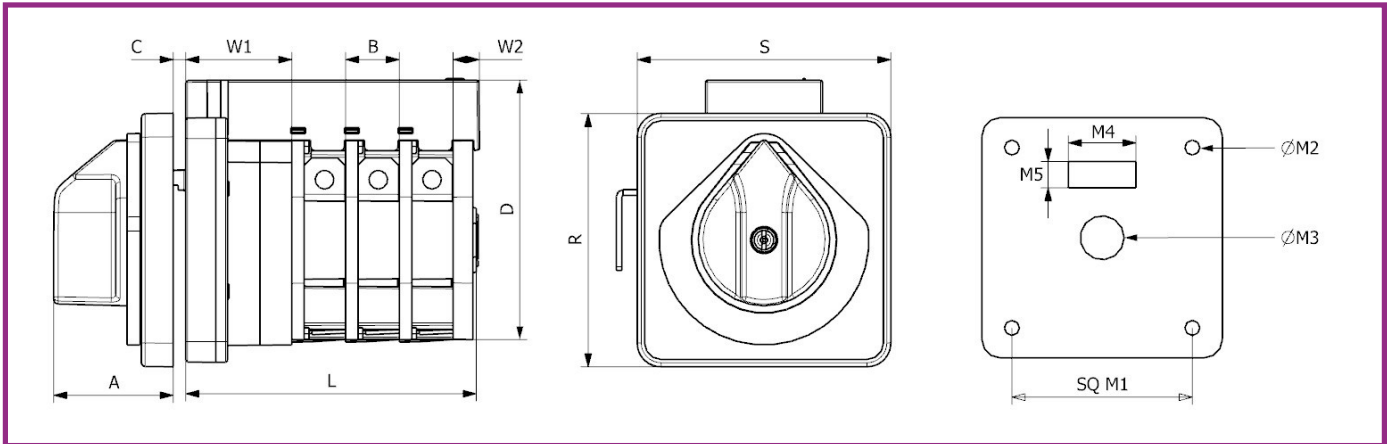


Record



Analyze

### Rotary Cam Switches Dimensional Details

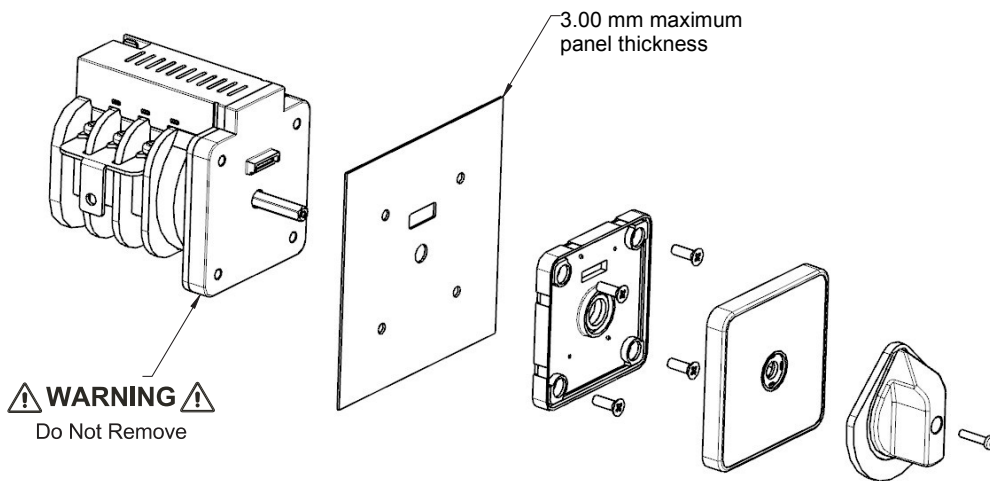


Length(L)=NO. Of Stages of Prog x S+W1+W2

Type	A	B	C (Max.)	D	L	R	S	W1	W2	M1	M2	M3	M4	M5
Rish CSW 3LED 63A	32	14.50	3	69	77	67.5	67.5	28	7	48	4	12	18	7
Rish CSW 1LED 63A	32	14.50	3	69	77	67.5	67.5	28	7	48	4	12	18	7

All the dimensions are in mm.

### Installation



### Panel Mounting Assembly

### AC Duty Ratings

Category	Typical AC Application
AC-1	Non-Inductive or slightly inductive loads, Resistance furnaces
AC-3	Squirrel-cage motors: starting switching off motors during running
AC-15	Control of AC electromagnetic loads.
AC-21-A	Switching of resistive loads, including moderate overloads (frequent switching)
AC-23-A	Switching of motor loads or other highly inductive loads (frequent switching)



Measure



Control



Record




Analyze

# Data Sheet

## LED Phase Changeover Switch

### Technical Data

<b>Conformance to standards :</b> European : *IEC 60947-1 IEC 60947-3 IEC 60947-5  Indian :     IS 13947-1/3/5		<b>Operating Conditions :</b> Frequency : 50/60 Hz Operating Temp. : -25°C to 60°C Over voltage category : III Storage : -40°C to 80°C Max. Altitude : 2000 m IP: 50 Front		<b>Switch Life :</b> Mechanical Life : 1 Lac operations @ 300 Cycles/hr Electrical Life : 10,000 operations @ 100% Rated duty at 120 cycles/hr Contacts : Double break type AgCdO	
Parameter		Unit	63A		
Rated operational voltage (Ue)		V	690		
Rated Insulation voltage (Ui)		V	690		
Rated operational current (Ie)		A	63		
Conventional free air thermal current (Ith)		A	63		
Rated short time withstand current (Icw)		(1s- Current)	756		
Rated Fuse short circuit current		KA	10		
Fuse size (Type gG /gM)		A	63		
AC23A 3phase			220-240V		
		KW	11		
			380-440V		
		KW	18.5		
			500V		
		KW	22		
			660-690V		
		KW	22		
AC23A 1phase			110V		
		KW	3		
			220-240V		
		KW	7.5		
			380-440V		
		KW	11		
AC3 3phase			220-240V		
		KW	11		
			380-440V		
		KW	18.5		
			500V		
		KW	22		
			600-690V		
		KW	22		
AC3 1phase			110V		
		KW	3		
			220-240V		
		KW	7.5		
			380-440V		
		KW	11		
AC21A/AC1		A	63		
AC15			220-240V		
		A	16		
			380-440V		
		A	7		
Terminal cross -section					
Single / Multiple(Prepared with lug)		Min	mm <sup>2</sup>	4	
		Max	mm <sup>2</sup>	16	
Fine strand with sleeve(Prepared with lug)		Min	mm <sup>2</sup>	2.5	
		Max	mm <sup>2</sup>	16	
Terminal screw			Metric	M4	
Terminal tightening torque			Nm	1.2	

\*Dielectric properties pass without electronic circuits



Measure



Control



Record



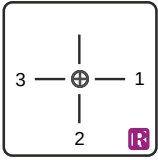
Analyze

# Data Sheet

---

## LED Phase Changeover Switch

### Ordering Information



Sr.No	Ordering Code	Description
1	CSS1-G90T301OF1000	CHANGEOVER 63A 90D 3P 1W OFF 1L3S
2	CSS1-G90T301OF3000	CHANGEOVER 63A 90D 3P 1W OFF 3L3S



Measure



Control



Record



Analyze



RISHABH



Measure



Control



Record



Analyze

**RISHABH INSTRUMENTS PVT. LTD.**

Trishala Unit, C-6, NICE Area, MIDC, Satpur, Nashik - 422007, India.

Tel: +91 253 2202371 / 028 | Fax: +91 253 2351064 | E-mail: [marketing@rishabh.co.in](mailto:marketing@rishabh.co.in) | [www.rishabh.co.in](http://www.rishabh.co.in)