

Ziegler

Redefine Innovative Metering

Technical Datasheet

TNC SWITCH

CAM SWITCH

TNC SWITCH

CAM SWITCH

TNC SWITCH

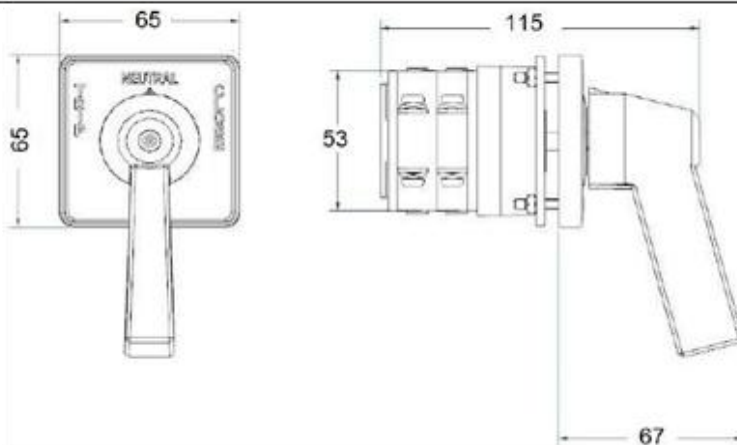
TNC (Trip Neutral Close) switch is 3 position switch, mainly used for locally Breaking or closing of circuit breaker during maintenance purpose. When TNC switch is at close position then it put Circuit Breaker in operating condition by energizing the closing coil of the CB while in Trip position CB goes in OFF condition as trip coil of CB get energies . TNC switch comes with Spring Return Mechanism as it just momentarily energies the coils of CB. Ziegler TNC switch comes with a current range of 25A,32A and working mechanism according to IEC 60947-1,2 &5.

Product Features

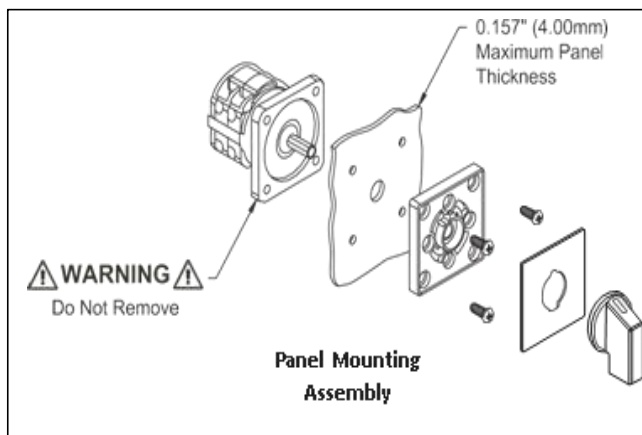
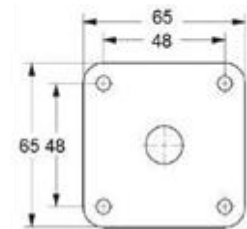
- Compact Design.
- 60° Angle of Throw.
- Pistol grip handle.
- Spring loaded mechanism.
- Standard Mounting Plate.
- IP 50 protection for front facia.
- Multi pole design.
- Quick and easy installation.
- Arrow marking on knob for long distance visibility.



TNC Dimensional Drawings



Panel Mounting



Procedure:-

1. First unscrew knob and front plate.
2. Insert the Cam Switch from inside of the panel door and then mount front plate on it keeping panel door in between.
3. Insert mounting screws and screw them tightly.
4. Install marking plate on it and follow it with knob.
5. Top marking Sticker on Front Plate should be on top side of the switch.

TNC SWITCH

CAM SWITCH

TECHNICAL SPECIFICATION

| Technical Data | | | | |
|---|------|-----------------|--------|-----|
| Description | Unit | TNC 25 | TNC 32 | |
| Rated Operational Voltage U_e | V AC | 690 | 690 | |
| | V DC | 250 | 250 | |
| Resistance to Surge Voltage U_{imp} | kV | 6 | 6 | |
| Rated Uninterrupted Current I_{th} | A | 32 | 40 | |
| Rated Operational Current Pilot Duty AC15 I_e | | | | |
| 220-240 V AC | A | 8 | 14 | |
| 380-440 V AC | A | 5 | 6 | |
| Short Circuit Protection HRC Fuse Size | A | 25 | 32 | |
| Rated Short Circuit | kA | 10 | 10 | |
| Terminal Cross Section | | | | |
| Rigid Wire | min | mm ² | 1.5 | 2.5 |
| | max | | 4 | 6 |
| Flexible Wire | min | mm ² | 1 | 1.5 |
| | max | | 2.5 | 4 |
| Terminal Screw | | M4 | M4 | |
| Terminal Tightening Torque | | 1.2 Nm | 1.2 Nm | |

General Endurance:-
Mechanical - 100,000 operations at 300 cycles/hour

Electrical - 10,000 Operations at 120 cycles/hour
 Operational Temperature 25°C to 55°C, frequency up to 5kHz

| DC Breaking Capacity | | | | | | | | | |
|----------------------|---------------------------|----------------|--------------------|---------|---------|----------------|--------------------|---------|---------|
| Voltage | No. of Contacts in series | Resistive Amps | TNC 25 | | | Resistive Amps | TNC 32 | | |
| | | | Inductive L/R Amps | | | | Inductive L/R Amps | | |
| | | | 10 msec | 20 msec | 40 msec | | 10 msec | 20 msec | 40 msec |
| 50 V | 1 | 20 | 20 | 15 | 6 | 25 | 25 | 18 | 8 |
| | 2 | - | - | 20 | 14 | - | - | 25 | 18 |
| | 3 | - | - | - | 20 | - | - | - | 25 |
| 125 V | 1 | 3 | 2.5 | 1.5 | 1.0 | 5 | 3 | 2 | 1.2 |
| | 2 | 20 | 15 | 10 | 5 | 25 | 18 | 12 | 6 |
| | 3 | - | 20 | 20 | 10 | - | 25 | v | 12 |
| 250 V | 1 | 1.0 | 0.5 | 0.3 | 0.2 | 1.2 | 0.6 | 0.4 | 0.3 |
| | 2 | 5 | 2 | 1.0 | 0.5 | 6 | 2.5 | 1.2 | 0.6 |
| | 3 | 20 | 10 | 4 | 1 | 25 | 12 | 5 | 1.2 |

AC DUTY RATINGS

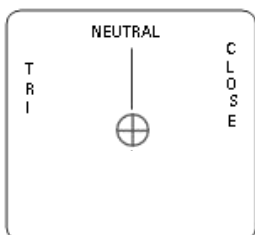
| Category | Typical AC Application |
|----------|---|
| AC-1 | Non-Inductive or slightly inductive loads, Resistance furnaces |
| AC-3 | Squirrel-cage motors: starting switching off motors during running |
| AC-15 | Control of AC electromagnetic loads. |
| AC-21-A | Switching of resistive loads, including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

TNC SWITCH

CAM SWITCH

Ordering Information

| | | | | | | | | | | |
|--|---|--------|--------|--------|----|---|---|---|--------|----|
| TRCX | X | X | X | XX | X | X | X | X | XX | XX |
| TSR1 : TNC 1NO 1NC Switch TSR2 : TNC 2NO 2NC Switch | | | | | | | | | | |
| Ampere code : A : 25A B : 32A | | A B | | | | | | | | |
| TYPE 2 : 1NO 1NC 4 : 2NO 2NC | | | 2 4 | | | | | | | |
| NO of POLE 2 : 2 pole 4 : 4 pole | | | | 2 4 | | | | | | |
| Max. no of ways : 01 : 1 way | | | | | 01 | | | | | |
| Neutral N : with Neutral | | | | | | N | | | | |
| Angle 6 : 60 Degree | | | | | | | 6 | | | |
| Knob Shape L : Pistol shape | | | | | | | | L | | |
| Front Plate Color A : Silver sheet and Black B : Yellow sheet and Red | | | | | | | | | A B | |
| Blank | | | | | | | | | | 00 |
| Customer Specification | | | | | | | | | | 00 |



| Sr. No. | Ordering Code | Description |
|---------|--------------------|---------------------|
| 1 | TSR1-A2201N6LA0000 | TNC 25A 1NO 1NC 60D |
| 2 | TSR2-A4401N6LA0000 | TNC 25A 2NO 2NC 60D |
| 3 | TSR1-B2201N6LA0000 | TNC 32A 1NO 1NC 60D |
| 4 | TSR2-B4401N6LA0000 | TNC 32A 2NO 2NC 60D |

Ziegler

Redefine Innovative Metering

Ziegler Instrumentation UK Ltd.

Central Buildings, Woodland close old woods Trading Estate, Torquay Devon, TQ2 7BB, United Kingdom
+441803 616 800 | info@ziegler-instrument.com | ziegler-instrument.com