



Features & Benefits

- **Tamper-resistant** ... integral actuator arm prevents bypassing by operator.
- **“Positive-break” NC contacts** ... ensure circuit interruption upon only 4.5° of guard displacement.
- **Watertight design** ... meets IP67 washdown and immersion requirements.
- **Rugged, corrosion-resistant housing** ... tolerates the most hostile environments.
- **Designed to meet the Performance Level requirements of EN ISO 13849-1 and Safety Control Categories of EN 954-1.**
- **Four 90° actuator head positions** ... provide installation flexibility.

Description

The T.C 235/236 Series are designed for use with hinged movable machine guards which must be closed for operator safety. Their tamper-resistant design and positive-opening NC contacts provide a significantly higher level of safety than conventional, spring-driven limit switches often used to monitor hinged-guard position. Their IP67 rating make them ideal for interlocking safety guards in hostile environments.

Operation

The T.C 235/236 is a single-piece, electromechanical safety interlock switch which is designed to mount to a hinged machine guard. After opening the guard only 4.5°, the unit’s positive-break, normally-closed contacts are forced to open by a direct (non-resilient) actuating mechanism. These positive-break contacts ensure circuit interruption (and machine stoppage).

Typical Applications



The T.C 235/236 is intended for use as a safety interlock switch on hinged, movable machine guards which, when open, expose operator/maintenance personnel to machine hazards. Their sealed design (IP67) and oil-tolerant seals make them ideal for use in hostile environments.

AVAILABLE STANDARD MODELS

| Part Number | Contacts (Guard Closed) | Description* |
|--------------------------|-------------------------|--|
| T3C235-11Z T3C236-11Z | 1 NO & 1 NC | Hinged safety interlock switch with actuating lever to right in rest position |
| T3C235-02Z T3C236-02Z | 2 NC | |
| T3C235-01Z T3C236-01Z | 1 NC | |
| T4C235-11Z T4C236-11Z | 1 NO & 1 NC | Hinged safety interlock switch with actuating lever vertical to switch body in rest position |
| T4C235-02Z T4C236-02Z | 2 NC | |
| T4C235-01Z T4C236-01Z | 1 NC | |
| T5C235-11Z T5C236-11Z | 1 NO & 1 NC | Hinged safety interlock switch with actuating lever to left in rest position |
| T5C235-02Z T5C236-02Z | 2 NC | |
| T5C235-01Z T5C236-01Z | 1 NC | |

*The actuator head may be rotated into any one of four 90° positions.

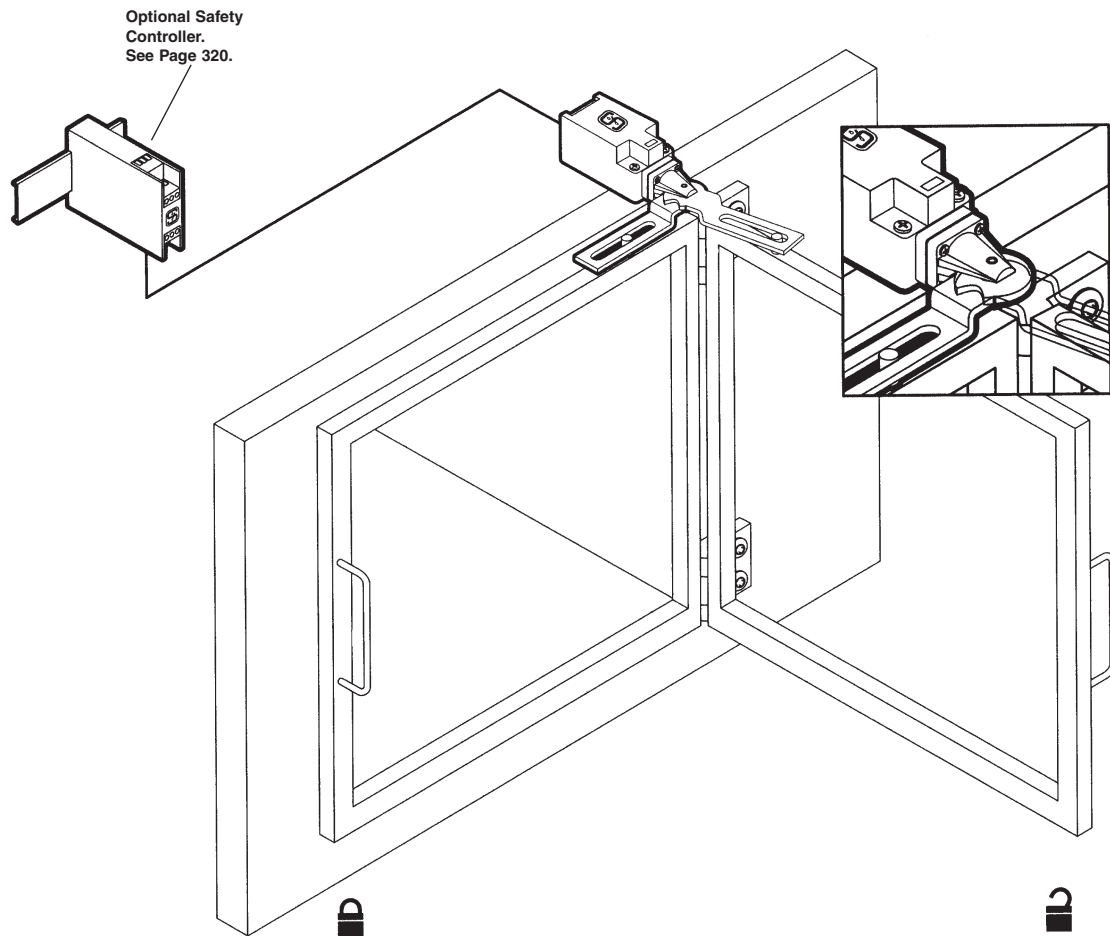
T.C 235/236 TECHNICAL DATA

MECHANICAL SPECIFICATIONS

| | | |
|---|--|--|
| Housing | (Series 235): Diecast zinc, enamel finish (Series 236): Glass-fiber, reinforced, self-extinguishing thermoplastic | |
| Displacement Angle for Contact Opening | 4.5° | |
| Degree of Protection | IP67 | |
| Operating Temperature | -22°F to +175°F | |
| Mechanical Life | >106 operations | |
| Operating Rate | 5,000 operations/hour (maximum) | |
| Conformity to Standards | IEC 947-5-1 EN 60947-5-1 EN ISO 13849-1 EN 954-1 CE | BG-GS-ET15 DIN-EN50047 UL CSA |

ELECTRICAL SPECIFICATIONS

| | |
|--|--|
| Contacts | Fine silver |
| Contact Configuration | Double-pole, double-break with electrically-separated contact bridges |
| Contact Rating | 4A (230VAC) 2.5A (400VDC) 1A (500VAC) |
| Switching Action | Slow-action, positive-break NC contacts |
| Short Circuit Protection | Fuse 6A (time-delay) as a positive-break switch |
| Rated Insulation Voltage | 500VAC |
| Rated Impulse Withstand Voltage | 6kV |
| Electrical Connections | Screw terminals with self-lifting clamps for 13AWG (2.5mm ²) maximum wire size |



T.C 235 TECHNICAL DATA

Types of Actuator Levers



Lever 3 C



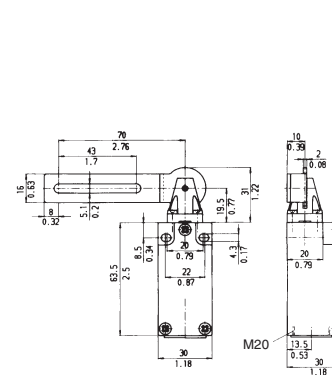
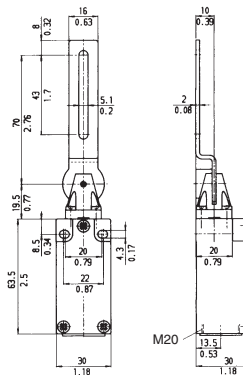
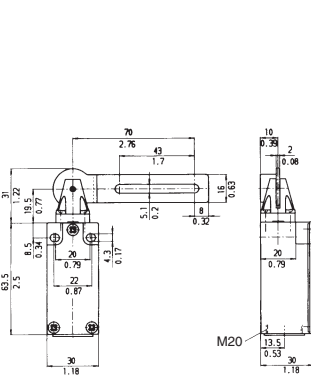
Lever 4 C



Lever 5 C

Dimensions

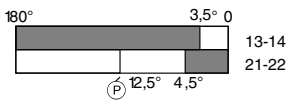
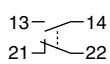
mm
inch



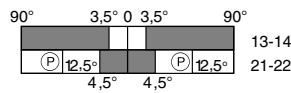
Contact Function Diagrams

Slow action
1 NO + 1 NC

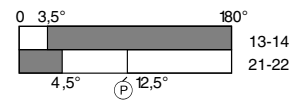
T3C 235-11z



T4C 235-11z

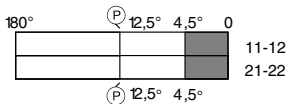
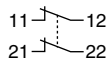


T5C 235-11z

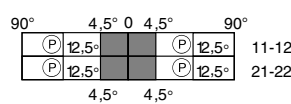


Slow action
2 NC

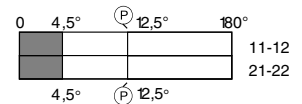
T3C 235-02z



T4C 235-02z

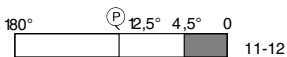
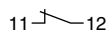


T5C 235-02z

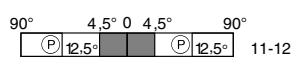


Slow action
1 NC

T3C 235-01z



T4C 235-01z



T5C 235-01z

