

Thermo Scientific™ Pro-Line Emergency Cable Pull Switch Model 60-31

The Pro-Line Model 60-31 safety pull-cord switch is used as an emergency shut-down device for conveyors or other equipment.

Emergency pull cords are attached to the actuating arm of the switch. When a force is applied to the pull-cord the actuating arm and shaft rotate, and, at a 18° rotation, the switch enters a locked tripped position.

The actuating shaft has two cams inside the housing. Each cam actuates an independent SPDT micro-switch for alarm and shut-down signals. Both cams work simultaneously, for safety reason.

Standard safety pull-cord switches include a manual reset lever that keeps the switch locked in an alarm condition until it is manually reset by the Operator. This feature makes the remote restarting impossible, thus eliminating the possibility to restart the belt conveyor when people are working locally.

This model has 2 NC contacts and 2 NO contacts, wired to the terminal board.

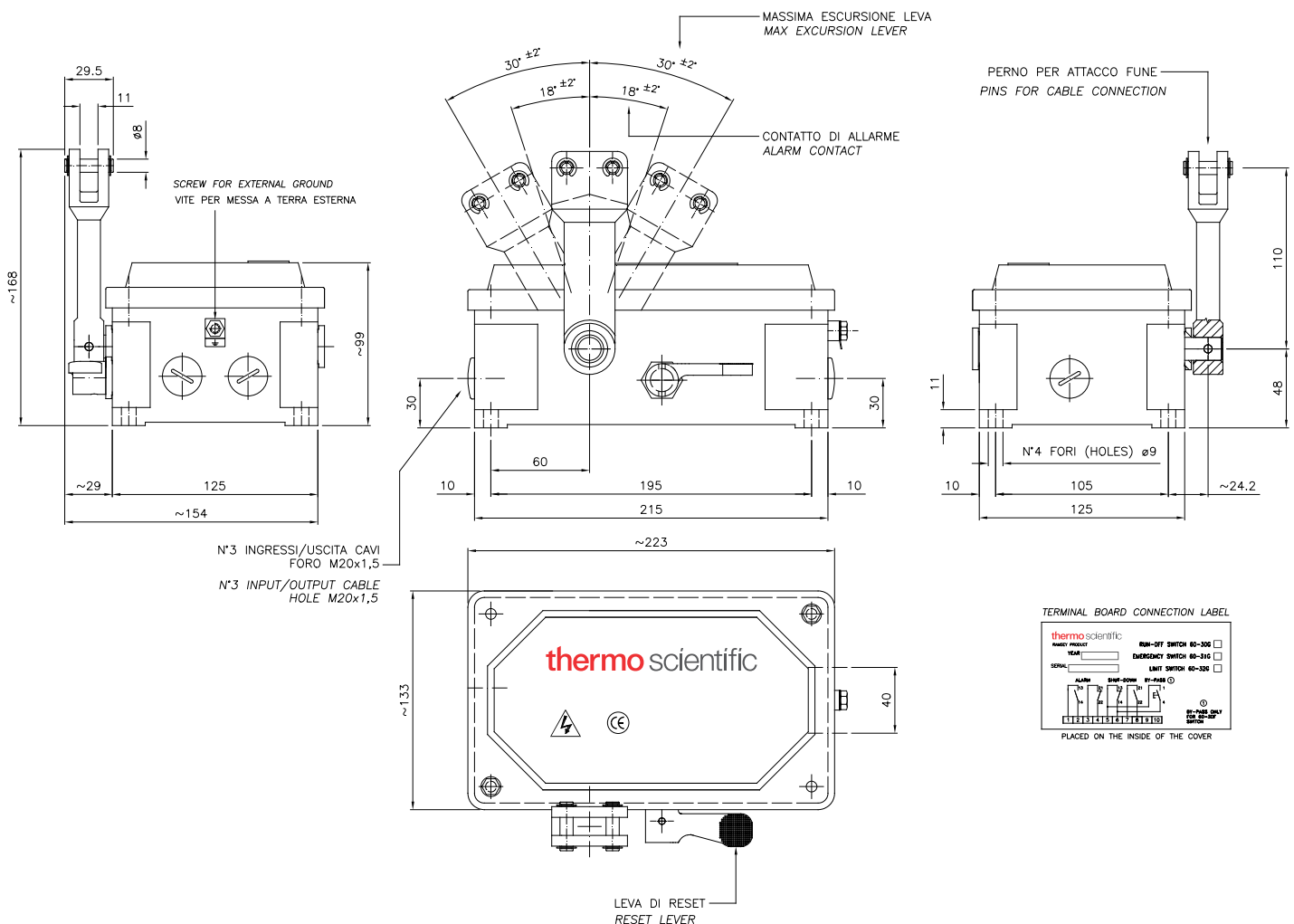
Use of one Safety Pull-Cord Switch every 50 m is recommended.

Mounting accessories are available for a correct installation:

- Safety springs
- Redances (thimbles)
- Helical nuts for fixing or supporting
- Steel cord clamps
- Steel cord



Pro-Line emergency cable pull switch, model 60-31



Thermo Scienti c™ Pro-Line Tripper Position Switch Model 60-32

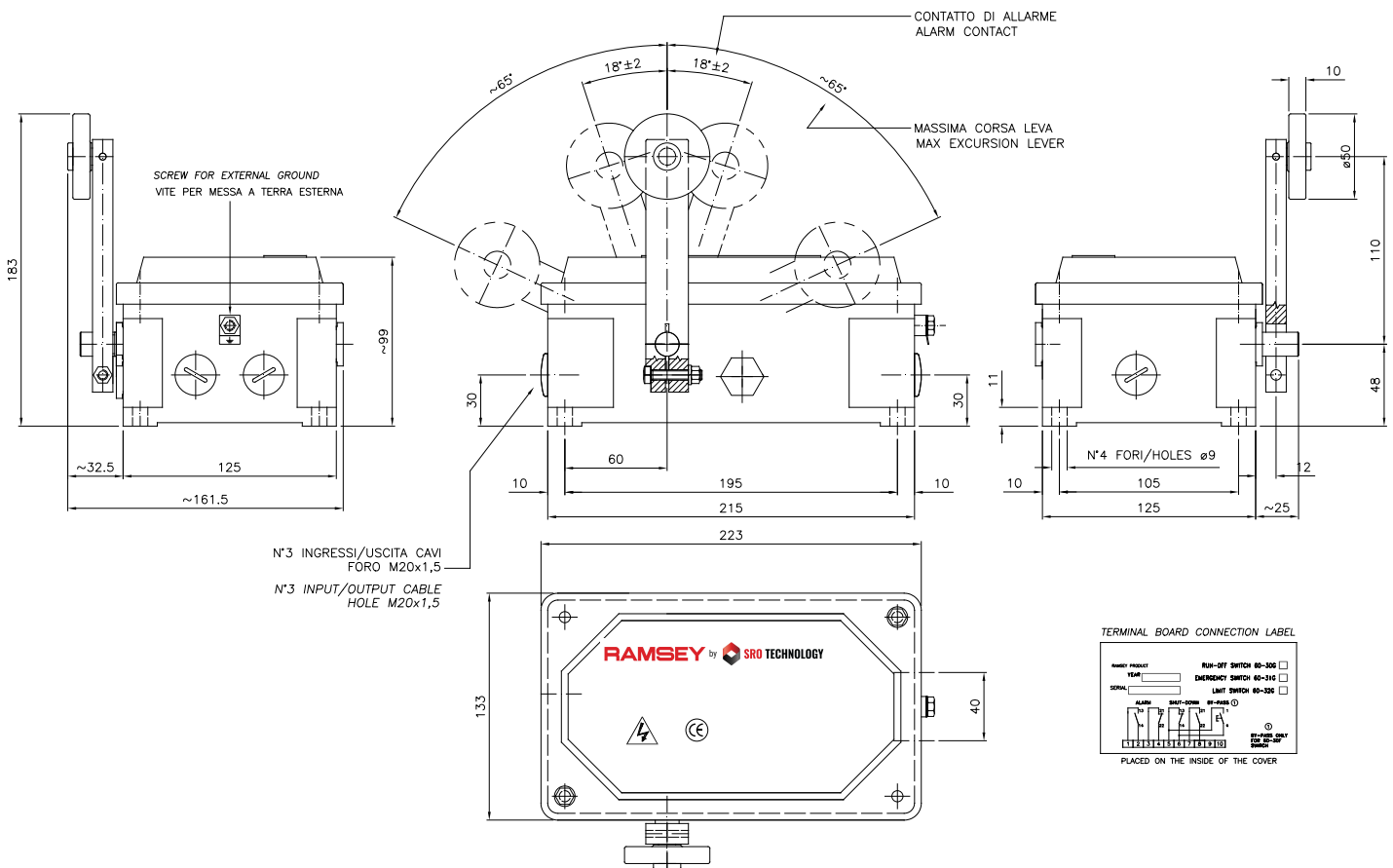
The Pro-Line Model 60-32 tripper position switch is a heavy-duty limit switch often used to indicate the position of a tripper on a conveyor with multiple discharge points. However, it can be used anywhere you need an extremely heavy-duty limit switch with physical activation.

The actuating arm of the tripper position switch uses a contact wheel: when the wheel contacts a mechanical contrast the actuating arm and shaft rotates and, at a 18° rotation, the micro-switches are operated. The actuating shaft has two cams inside the housing: each cam actuates an independent SPDT micro-switch for alarm and stop signals.

Both cams work simultaneously, for safety reason. This model has 2 NC contacts and 2 NO contacts, wired to the terminal board.

The position of the lever on the shaft can be changed as needed so that you can mount the switch on a horizontal, vertical or inclined plane.

Pro-Line tripper positioning switch, model 60-32



Ramsey Pro-Line Series 60 conveyor protection switches

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|------------------------------------|---|
| Contact Rating | Contact configuration: 2NO + 2NC Contact rating AC15: 24V=10A, 250V=6A Contact rating DC13: 24V=8A, 48V=2A Contact elements with Positive Break Function according to IEC/EN 60947.5.1 |
| Operating Temperature Range | -45 °C +85 °C |
| Enclosure Rating | IP65 (NEMA4) |
| Cable Inlet | N.3 cable inlets M20X1,5 (PG21, M25 or different available on request) |
| Construction | Rugged cast Aluminum, heavy duty design |
| Approvals | ATEX for Zone 21 and 22 |

Options:

- Special version for sea/aggressive ambients with screws, O-rings and other parts Stainless Steel AISI 316L construction;
- Belt misalignment switches with “short” lever or different actuating angle;
- Mounting kit (springs, thimbles, nuts, cord...) for Safety Pull-Cord Switches;
- Possibility for pre-installation of Dupline® tracking modules.

Beside the above described equipment,

Thermo Scientific Ramsey Pro-Line also includes:

- Safety pull-cord switches model 60-34, for light applications or short conveyors;
- Belt Misalignment (Run-Off) Switches model 60-33, for light applications;
- Under speed switches 60-23;
- Mercury Free Tilt Sensors (for level or plugged chute detector), now certified for ATEX20, 21 and 22;
- Metal detectors Ramsey Oretronic IV.

Find out more at thermofisher.com/bulkweighing