

Dold UH6932 Speed Monitor Relays



UH6932 speed monitoring safety relay modules use inputs from proximity sensors that are detecting rotating targets on the motor that needs monitoring.

- Two PNP or NPN sensors
- Adjustable range
- Monitors rotation and linear movement
- LED status indicators
- Time delay settings available

Safety Data – Values per EN ISO 13849-1

| | |
|--------------------------|-------------|
| Category | 4 |
| Performance level | e |
| MTTF_d | 146.1 years |
| DC_{avg} | 99% |

Safety Data – Values per IEC/EN 62061/IEC/EN 61508

| | |
|---|---------|
| SIL CL | 3 |
| SIL | 3 |
| HFT (Hardware Failure Tolerance) | 1 |
| DC_{avg} | 99% |
| PFH_D | 1.8e-10 |

Safety Speed Monitor Relays Selection Chart

| Part Number | Price | Marking Type | Voltage | Sensor Input | Outputs |
|---------------------------|----------|--|---------|--------------|-------------------|
| UH6932-02PS-24 | \$569.00 | Digital speed-monitoring safety relay module | 24VDC | NPN | 2 N.O. and 1 N.C. |
| UH6932-02PS-010-24 | \$569.00 | | | PNP | |

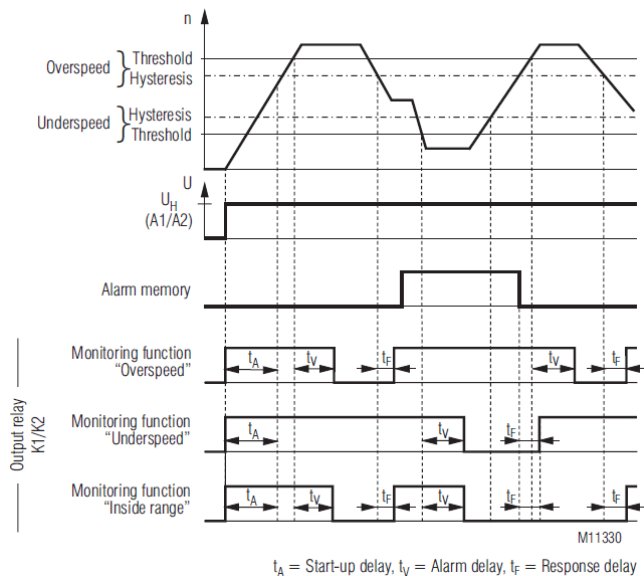
Safety Speed Monitor Relay Module Specification Table

| General Specifications | |
|--|---|
| Temperature | Storage: -20°C to 70°C (-4°F to 158°F) – Operating: -20°C to 60°C (-4°F to 140°F) |
| Altitude | < 2,000m (6562ft) |
| Vibration Resistance | IEC/EN 60-068-2-6 |
| Degree of Protection | Housing: IP40; Terminals IP20 |
| Housing | UL 94V-0 Thermoplastic; DIN mount 35mm (1.38 in) x 7.5 mm (0.30 in) |
| Weight | 320g (11.29 oz.) |
| Agency Approvals and Standards | cULus file E107778, CE, RoHS |
| Terminal Designation | EN 50005 |
| Wire Fixing | Captive slotted screw. Torque 0.8 Nm (7 lb-in) |
| Input Specifications | |
| Nominal Voltage | 24VDC |
| Voltage Range | 0.8 to 1.1 VDC |
| Nominal Consumption | Typ 3.2 W |
| Nominal Frequency | – |
| Control Current | Maximum 30mA |
| Overvoltage Protection | Internal VDR (Voltage Dependent Resistor) |
| Sensor Inputs | Output: PNP or NPN HIGH-level: 10 - 26.4 VDC LOW-level: < 2VDC Min. pulse duration (e.g. on and off time): 75µs Input frequency: < 3kHz |
| Output Specifications | |
| Electrical Contact Life | To AC15 at 3A, 230V: 2.2x10 ⁵ switching cycles IEC/EN 60 947-5-1 |
| Mechanical Life | 20x10 ⁶ switching cycles |
| Contact Type | 2 N.O. positively driven and 2 semiconductor monitoring outputs |
| Reaction Time of Frequency Monitoring | Duration of 1 cycle (inverse value of adjusted frequency) + 10ms + adjusted response delay |
| Nominal Output Voltage | 250VAC |
| Thermal Current (I_{th}) | Max. 8A per contact. See continuous current limit curve in installation manual. |
| Short Circuit Strength | Max fuse rating: 10A gl (IEC/EN 60 9470-5-1) |
| Switching Capacity IEC/EN 60 947-5-1 | AC15: 3A/230V; DC13: 2A/24V |
| Switching Frequency | Max. 1,200 switching cycles/hr |

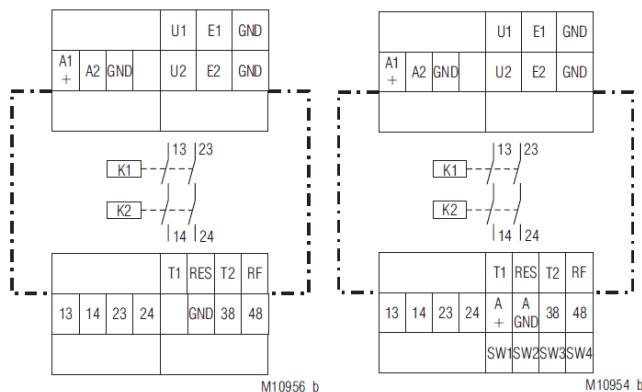
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Function Diagram

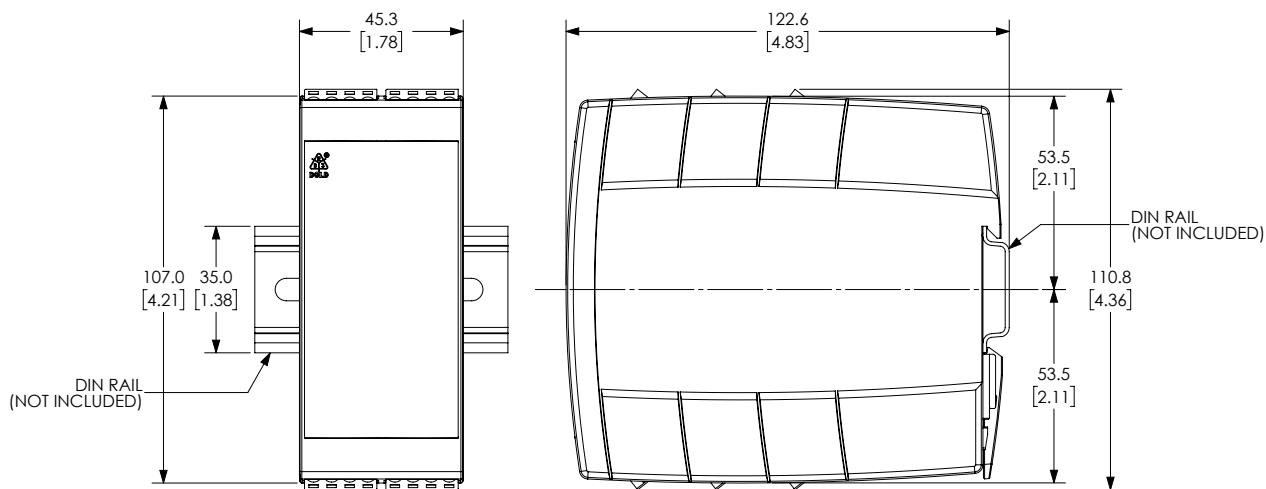


Block Diagram



Dimensions

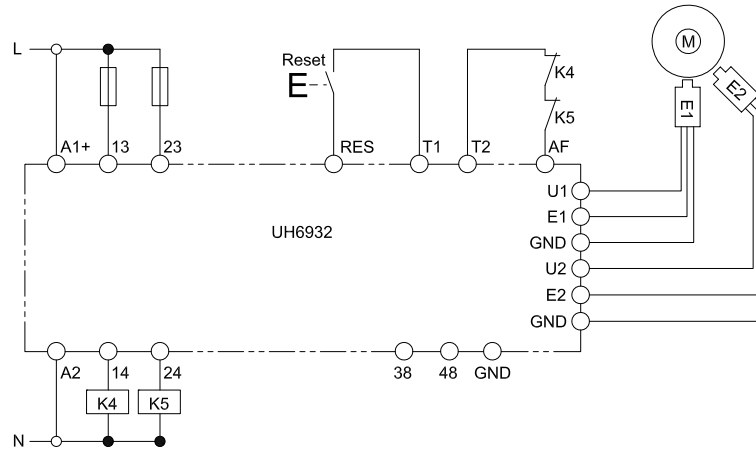
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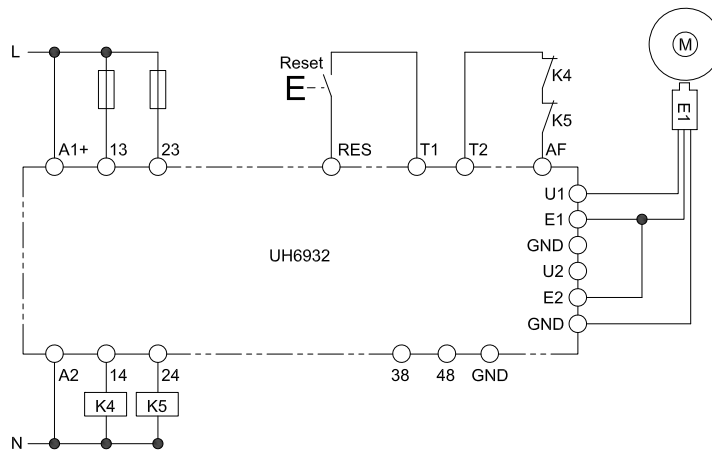


Application Examples



Standard connection

Suited up to SIL3, Performance Level e, Cat.4



Connection with a proximity sensor

Suited up to SIL2, Performance Level c, Cat.2

(To achieve Cat. 2, the safety function has to be tested on a regular basis.)

Safety Products



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