

# Dold UH6932 Speed Monitor Relays

**DOLD**


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

<b>Category</b>	4
<b>Performance level</b>	e
<b>MTTF<sub>d</sub></b>	146.1 years
<b>DC<sub>avg</sub></b>	99%

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

<b>SIL CL</b>	3
<b>SIL</b>	3
<b>HFT (Hardware Failure Tolerance)</b>	1
<b>DC<sub>avg</sub></b>	99%
<b>PFH<sub>D</sub></b>	1.8e-10

## Safety Speed Monitor Relays Selection Chart

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

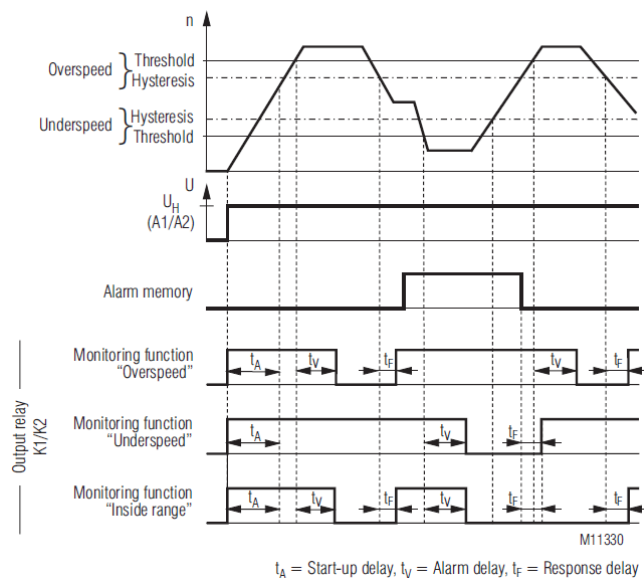
## Safety Speed Monitor Relay Module Specification Table

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

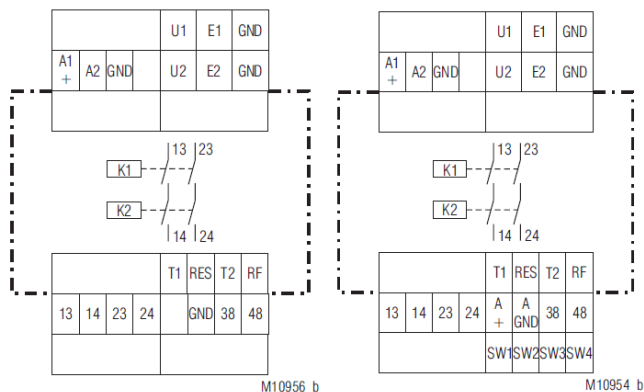
# Dold UH6932 Speed Monitor Relays



## Function Diagram

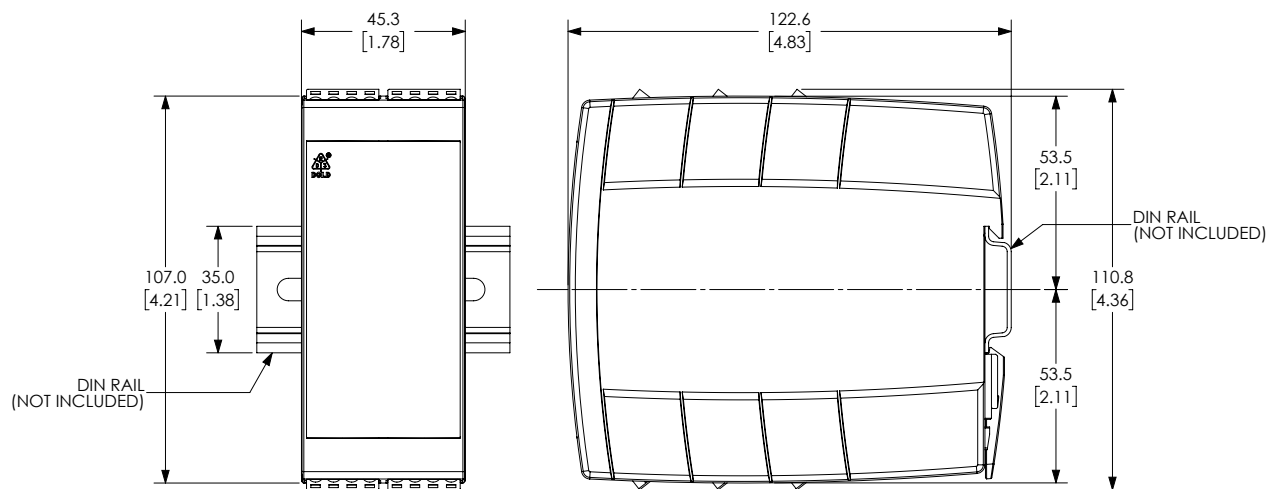


## Block Diagram



## Dimensions

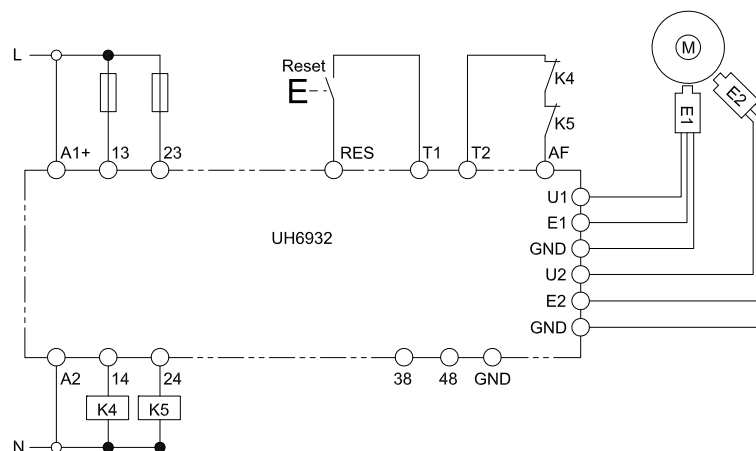
mm [in]



# Dold UH6932 Speed Monitor Relays

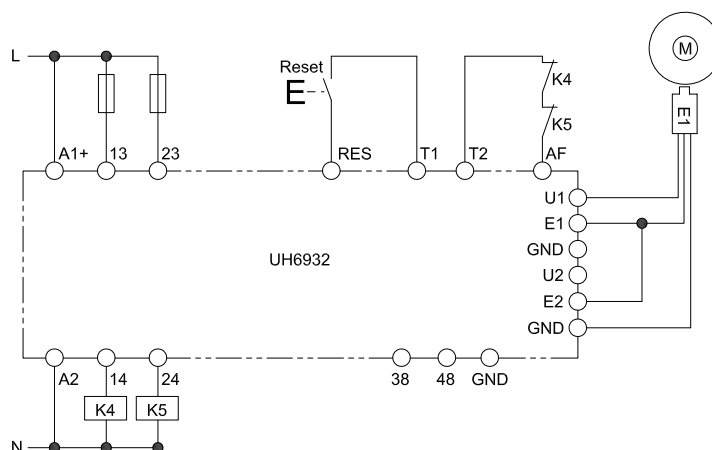


## Application Examples



### 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



*Warning: Safety products sold by AutomationDirect are Safety components only. The purchaser/installer is solely responsible for the application of these components and ensuring all necessary steps have been taken to assure each application and use meets all performance and applicable safety requirements and/or local, national and/or international safety codes as required by the application. AutomationDirect cannot certify that our products, used solely or in conjunction with other AutomationDirect or other vendors' products, will assure safety for any application. Any person using or applying any products sold by AutomationDirect is responsible for learning the safety requirements for their individual application and applying them, and therefore assumes all risks, and accepts full and complete responsibility, for the selection and suitability of the product for their respective application.*

*AutomationDirect does not provide design or consulting services, and cannot advise whether any specific application or use of our products would ensure compliance with the safety requirements for any application.*