

# 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

<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

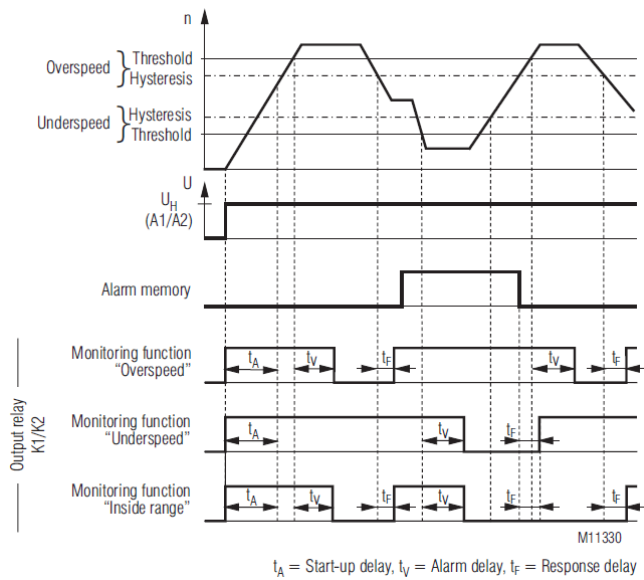
Part Number	Price	Marking Type	Voltage	Sensor Input	Outputs
<b>UH6932-02PS-24</b>	\$569.00	Digital speed-monitoring safety relay module	24VDC	NPN	2 N.O. and 1 N.C.
<b>UH6932-02PS-010-24</b>	\$569.00			PNP	

## Safety Speed Monitor Relay Module Specification Table

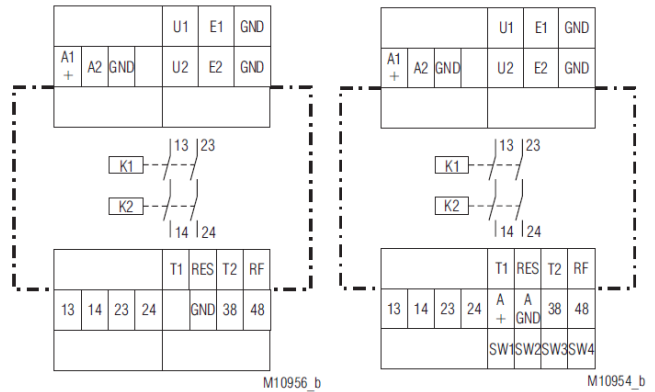
General Specifications	
<b>Temperature</b>	Storage: -20°C to 70°C (-4°F to 158°F) – Operating: -20°C to 60°C (-4°F to 140°F)
<b>Altitude</b>	< 2,000m (6562ft)
<b>Vibration Resistance</b>	IEC/EN 60-068-2-6
<b>Degree of Protection</b>	Housing: IP40; Terminals IP20
<b>Housing</b>	UL 94V-0 Thermoplastic; 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

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## Function Diagram

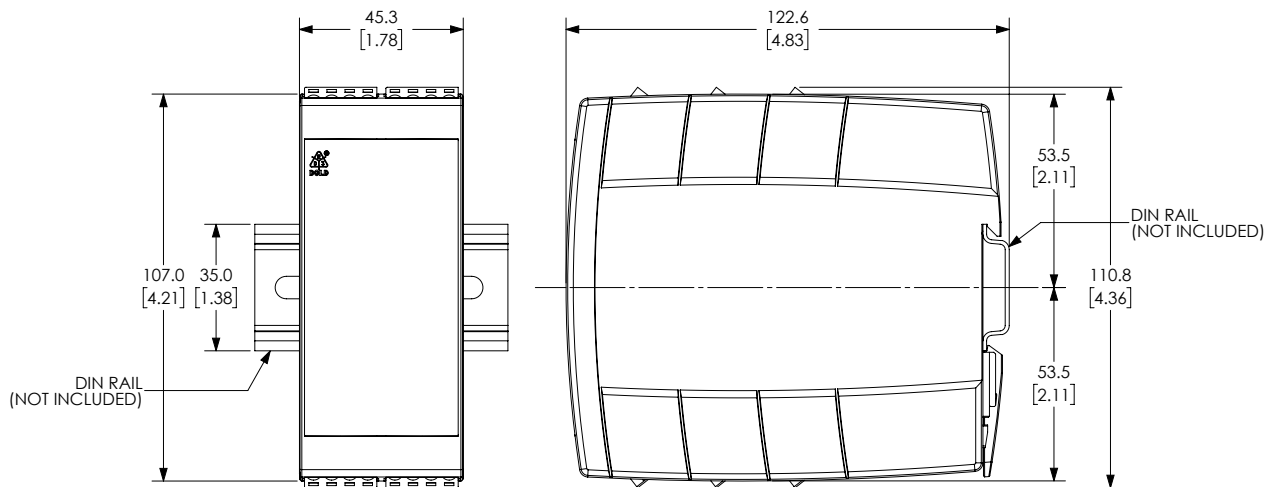


## Block Diagram



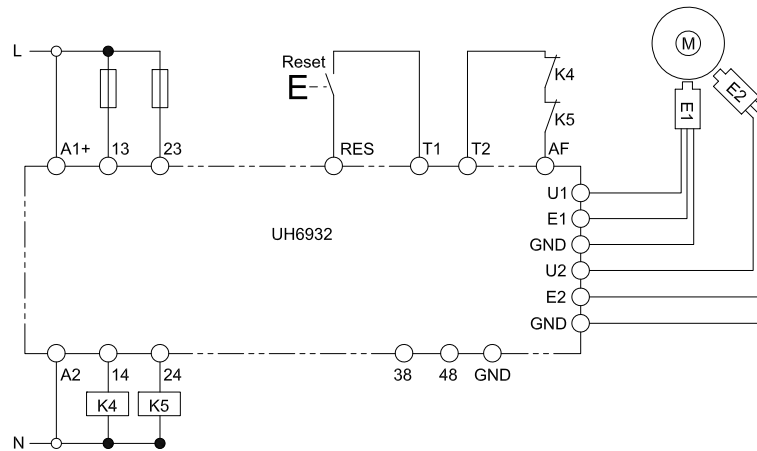
## Dimensions

mm [in]



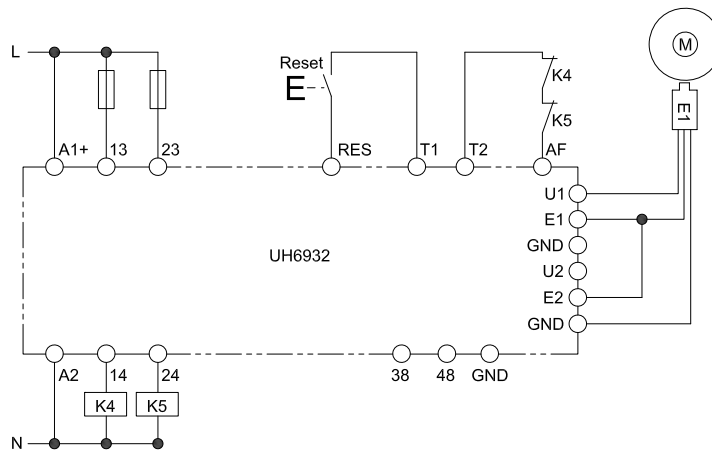
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## Application Examples



### 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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