

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

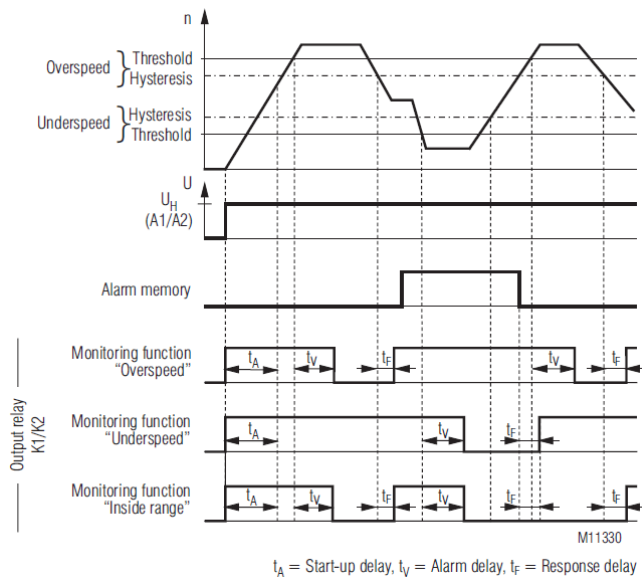
Part Number	Price	Marking Type	Voltage	Sensor Input	Outputs
UH6932-02PS-24		Digital speed-monitoring safety relay module	24VDC	NPN	2 N.O. and 1 N.C.
UH6932-02PS-010-24				PNP	

Safety Speed Monitor Relay Module Specification Table

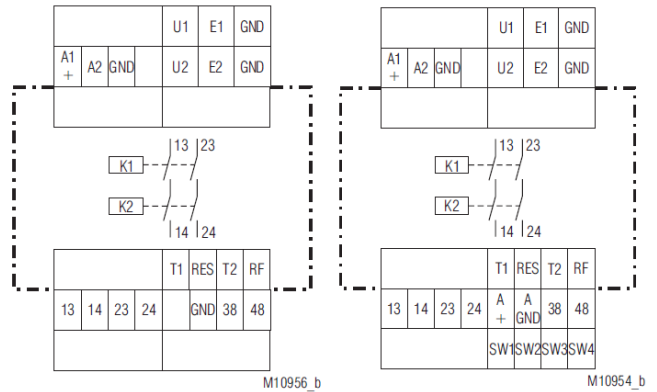
General Specifications	
Temperature	Storage: -20°C to 70°C (-4°F to 158°F) – Operating: -20°C to 60°C (-4°F to 140°F)
Altitude	< 2,000m (6562ft)
Vibration Resistance	IEC/EN 60-068-2-6
Degree of Protection	Housing: IP40; Terminals IP20
Housing	UL 94V-0 Thermoplastic; DIN mount 35mm (1.38 in) x 7.5 mm (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

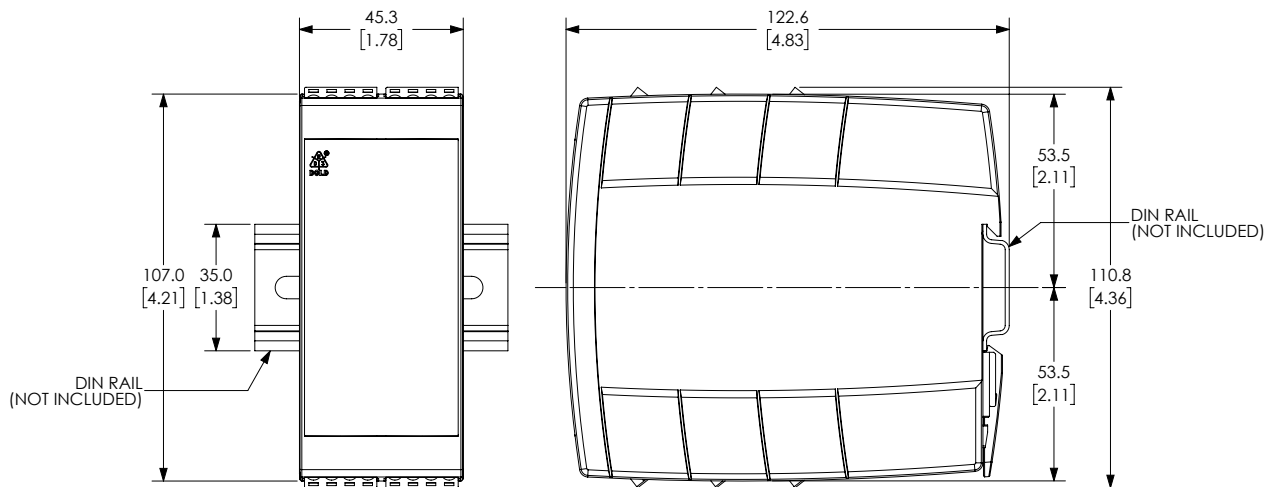


Block Diagram



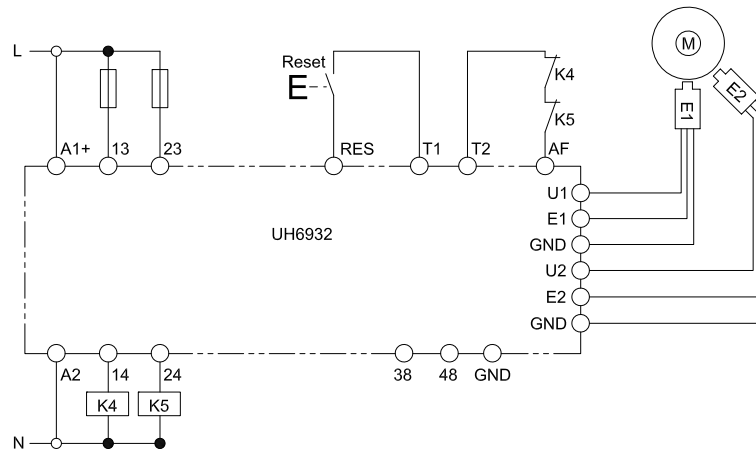
Dimensions

mm [in]



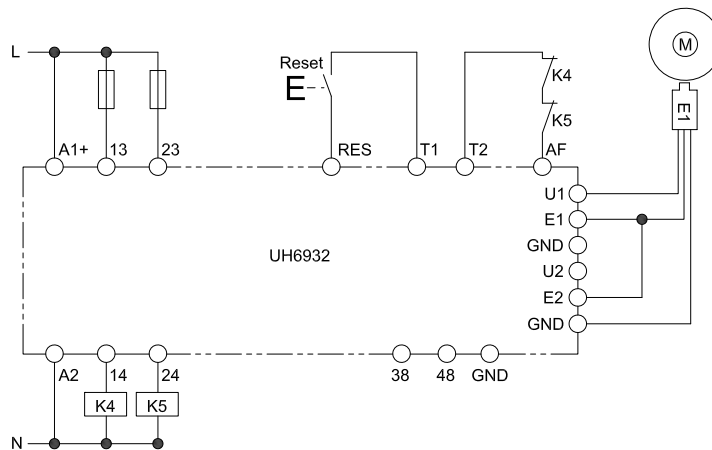
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Application Examples



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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