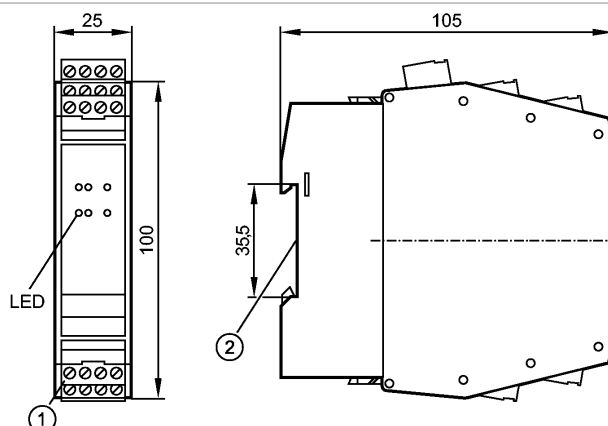


# DA101S

Safety Standstill Monitor

Evaluation systems

replaced by: DA102S  
Discontinued article



- 1: Combicon connector with screw terminals  
2: Mounting on DIN rail



## Product characteristics

Safety standstill monitor for underspeed detection

Evaluation system for safe standstill monitoring

with start-up monitoring

for 2 pnp switching sensors

4 switch points selectable

Error message

Complies with the requirements:  
EN ISO 13849-1: category 4 PL e  
IEC 61508: SIL 3

## Application

Application	Monitoring rotational or linear movements for minimum switch point not reached (standstill)
Start-up monitoring	After first application of the operating voltage, the standstill monitor first waits for pulses at the input before closing the enabling contacts upon the next standstill. The protective guard cannot be opened before the first start of the machine.

## Electrical data

Electrical design	Relay
Operating voltage [V]	24 DC (19.2...30 DC); incl. 5 % residual ripple
Current consumption [mA]	≤ 200
Protection class	II
Sensor supply	24 V DC / ≤ 50 mA

## Inputs

Input characteristics	Pulse inputs S34, S43: "1": ≥ 11 V, ≤ 10 mA "0": ≤ 5 V, ≤ 2 mA Input voltage: ≤ 36 V
Max. power-on delay time of the sensors [ms]	≤ 100
Input frequency [Hz]	≤ 3500

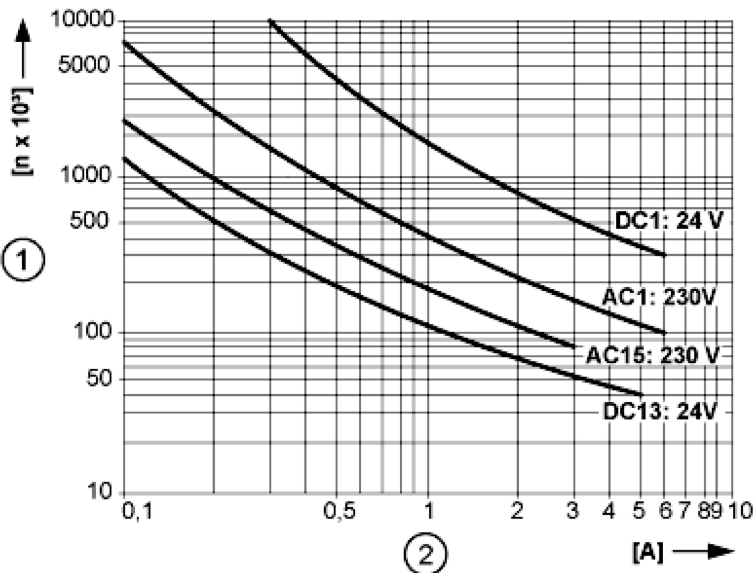
## Outputs

Output function	2 safety-related switching outputs (floating contacts); 1 fault output (positive switching)
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Contact rating	6 A, 250 V AC / 24 V DC ( $\geq 6$ mA)
Switching cycles (mechanical)	$> 10000 \times 10^3$
Switching cycles (electrical)	 <p>1: switching cycles; 2: switching current</p>
Max. switching capacity (DIN EN 60947-5-1 / EN 60947-5-1)	AC1: 250 V / 6 A AC15: 230 V / 3 A DC1: 24 V / 6 A DC13: 24 V / 5 A / 0.1 Hz UL 508: B300 / R300
Short-circuit protection	The contacts are to be protected by means of fuses with a nominal current of $< 3.6$ A.
Switch points	0.2 / 0.5 / 1.0 / 2.0 Hz
Switching function	Switching outputs 13-14 and 23-24 closed with standstill Y7 transistor output open (LOW) with fault

Accuracy / deviations	
Hysteresis [%]	$\pm 5$
Reaction times	
Power-on delay time [s]	6
Environment	
Ambient temperature [°C]	-25...55
Protection	IP 20
Safety classification	
Mission time TM [h]	$\leq 175200$ , (20 years)
Test interval T1 [Years]	0.5
Safety-related reliability PFHd [1/h]	3.38 E-09
Mechanical data	
Housing materials	PA (polyamide)
Weight [kg]	0.288
Displays / operating elements	
Display	Voltage green Fault Red Switching status 2x yellow Input pulses 2x yellow
Electrical connection	

## DA101S

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Connection	Terminal block Phoenix Contact MSTBO
<b>Accessories</b>	
Accessories (included)	Combicon connector with screw terminals
<b>Remarks</b>	
Remarks	<p>Additional comments concerning the cULus approval (UL 508):</p> <ul style="list-style-type: none"> <li>• Maximum ambient temperature 55°C (in the control cabinet)</li> <li>• The safety functions were not assessed by UL. The approval has been made according to UL 508 for general applications.</li> <li>• Use 60/75°C copper conductors only.</li> <li>• For use in pollution degree 2 environment</li> <li>• Same polarity (phase) referred to the output contacts</li> </ul>
Pack quantity	1
[piece]	

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**replaced by: DA102S**  
**Discontinued article**