



SSW303HV

- Standstill detection time 7s
- Fail-safe standstill monitors
- 3 safety contacts
- 3 Signalling contacts
- Sensor-free detection of standstill by monitoring e.m.f.
- Direct connection to three-phase motors
- Motor voltage range 0 ... 690 V

Data

Ordering data

EAN (European Article Number)	4030661546421
eCl@ss number, Version 9.0	27-37-18-19
eCl@ss number, Version 11.0	27-37-18-19
ETIM number, version 6.0	EC001449

Approval - Standards

Certificates	BG cULus EAC
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General data

Standards	IEC 61508 EN 60947-5-1 EN 60204-1 EN ISO 13849-1
Climatic stress	EN 60068-2-78

Enclosure material	Glass-fibre, reinforced thermoplastic
Material of the contacts, electrical	AgSn0 + Au, self-cleaning, positive drive
Gross weight	400 g

General data - Features

Stop-Category	0
Wire breakage detection	Yes
Short-circuit recognition	Yes
Feedback circuit	Yes
Automatic reset function	Yes
Earth connection detection	Yes
Integral System Diagnostics, status	Yes
Number of auxiliary contacts	3
Number of LEDs	5
Number of safety contacts	3

Safety appraisal

Standards	EN ISO 13849-1 IEC 61508
Mission Time	20 Year(s)
Common Cause Failure (CCF), minimum	65

Safety appraisal - Relay outputs

Performance level, stop 0, up to	e
Category, Stop 0	4
Diagnostic Coverage (DC) Level, Stop 0	≥ 99 %
PFH-Value Stop 0	2.00×10^{-8} /h
Safety Integrity Level (SIL), Stop 0, suitable for applications in	3

Mechanical data

Mechanical life, minimum	10,000,000 Operations
Mounting	Snaps onto standard DIN rail to EN 60715

Mechanical data - Connection technique

Terminal Connector	Screw connection, plug-in rigid or flexible
Terminal designations	IEC/EN 60947-1
Cable section, minimum	0.25 mm ²
Cable section, maximum	2.5 mm ²
Tightening torque of Clips	0.6 Nm

Mechanical data - Dimensions

Width	45 mm
Height	120 mm
Depth	121 mm

Ambient conditions

Degree of protection of the enclosure	IP40
Degree of protection of the mounting space	IP54
Degree of protection of clips or terminals	IP20
Ambient temperature, minimum	-25 °C
Ambient temperature, maximum	+55 °C
Storage and transport temperature, minimum	-40 °C
Storage and transport temperature, maximum	+85 °C
Resistance to vibrations to EN 60068-2-6	5 ... 9 Hz, Amplitude 3.5 mm
Resistance to shock	30 g / 11 ms

Ambient conditions - Insulation value

Rated impulse withstand voltage U_{imp}	8 kV
Rated impulse withstand voltage, relay output U_{imp}	6 kV
Degree of pollution to IEC/EN 60664-1	2

Electrical data

Rated operating voltage	24 ... 230 VAC 24 VDC -15%/+20%, residual ripple max. 10%
Rated AC voltage for controls, 50 Hz, minimum	21.6 VAC
Rated control voltage at AC 50 Hz, maximum	253 VAC
Rated AC voltage for controls, 60 Hz, minimum	21.6 VAC
Rated control voltage at AC 60 Hz, maximum	253 VAC
Electrical power consumption, maximum	4 W
Electrical power consumption, maximum	8.5 VA
Contact resistance, maximum	0.1 Ω
Note (Contact resistance)	in new state
Drop-out delay in case of "emergency stop", maximum	15 ms
Pull-in delay at automatic start (after detecting standstill), approx.	7,000 ms

Electrical data - Safe relay outputs

Voltage, Utilisation category AC15	230 VAC
Current, Utilisation category AC-15	6 A
Voltage, Utilisation category DC13	24 VDC
Current, Utilisation category DC13	6 A
Switching capacity, minimum	10 VDC
Switching capacity, minimum	10 mA
Switching capacity, maximum	250 VAC

Switching capacity, maximum	6 A
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Electrical data - Digital inputs

Conduction resistance, maximum	40 Ω
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Electrical data - Relay outputs (auxiliary contacts)

Switching capacity, maximum	24 VDC
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Switching capacity, maximum	2 A
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Electrical data - Electromagnetic compatibility (EMC)

EMC rating	EMC-Directive
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Status indication

Indicated operating states	OUT, green: release switching condition UB: Supply voltage on ERR: Error functional defect
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Other data

Note (applications)	safe standstill monitoring
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Notes

Note (General)	Inductive loads (e.g. contactors, relays, etc.) are to be suppressed by means of a suitable circuit.
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The details and data referred to have been carefully checked. Images may diverge from original. Further technical data can be found in the manual. Technical amendments and errors possible.

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