



SSW303HV-2S

- Standstill detection time 2s
- 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

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|-------------------------------|---------------|
| EAN (European Article Number) | 4030661546438 |
| 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

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|--------------|-----------|
| Certificates | BG EAC |
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General data

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| 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 |

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| Material of the contacts, electrical | AgSn0 + Au, self-cleaning, positive drive |
| Gross weight | 500 g |

General data - Features

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| 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

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

Safety appraisal - Relay outputs

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|--|--------------------------|
| 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

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

Mechanical data - Connection technique

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| 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

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| Width | 45 mm |
| Height | 120 mm |
| Depth | 121 mm |

Ambient conditions

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| 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

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| 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

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| 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. | 2,000 ms |

Electrical data - Safe relay outputs

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|-------------------------------------|---------|
| 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 |

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| Switching capacity, maximum | 6 A |
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Electrical data - Digital inputs

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

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

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| EMC rating | EMC-Directive |
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Status indication

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

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| Note (applications) | safe standstill monitoring |
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Notes

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| 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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