



## Step-up Your Safety and Escalate Your Reputation

Escalate your reputation for safety with Elesta's reliable **forcibly guided safety SIS Series PCB Relays** from Willow Technologies Ltd. ([www.willow.co.uk](http://www.willow.co.uk))! These compact and most energy efficient force guided SEN type relays (Sensitive, meaning the coil takes less current to actuate than "standard" type) include the smallest forcibly guided (safety) relays currently available on the market: Each features an innovative notch-crown contact system with a sensitive coil, which renders the relay capable of impressive current switching extremes as low as 3mA and as high as 6A/250VAC.

Fully compliant with DIN standard IEC/EN61810-3 type 'A', the SIS Series force guided relays operate with category III protection over voltage. These safety PCB relays incorporate contacts from 1NO+1NC to 4NO+2NC enabling equipment to be designed to comply fully with safety standards.



John Merrill, Product Manager Relays at Willow commented "The smallest relay in the SIS Series (SIS212) occupies a mere 7.85 cm<sup>3</sup>, with 3 forcibly guided contacts and is currently the smallest safety relay on the market worldwide. A distinct advantage with this relay and others in the SIS series is it **can be used in the tightest of spaces, even where a cooling problem exists**. The coil's rated capacity is 0.4 Watt. While the relay responds at 0.22 Watt. The excitation voltage can subsequently be reduced even further. In reduced operation the relay operates with absolutely minimal inherent consumption (holding capacity) of as little as 0.05 Watt. This "low power" version enables the coil's generation of heat to be kept at a very low level. Despite the low drive capacity, contact is maintained without loss on the contact side."

A safe electrical separation exists between control and output side. Coil and control contacts are separated from the two output contacts by double and reinforced insulation, with clearance and creepage distances > 8mm. Large air gaps and tracking distances with accordingly high test voltage values, guarantee safe separation of the current circuits throughout the SIS Series. Coil low power dissipation ensures the circuit for relay activation can be kept simple with inexpensive components. The relay is installed directly on the printed circuit board with solder connections. The coil is monostable and of neutral execution. Coils can be produced for all common voltages from 3 to 110 VDC.

"At Willow we can provide all common coil voltages between 3 VDC and 110 VDC, with standard 0.6W or sensitive 0.4W coils. We also offer the full range of Elesta forcibly guided contact safety relays <http://www.willow.co.uk/html/Forcibly-Guided-Safety/View-all-products.html> which comprise 24 separate relay series, capable of switching currents from 3mA to 16A and can offer up to 10 contacts in a single relay. Please refer to our website for additional product details and contact us at [reply@willow.co.uk](mailto:reply@willow.co.uk) if samples or prompt technical support are required." continued Merrill.

Elesta is the world's foremost manufacturer of high quality forcibly guided relays, designed for public protection. Typical application areas for SIS3 relays include sensor technology, photoelectric cells, light curtains, elevators, escalators, foot mats, railways and frequency changers. All Elesta Relays are RoHs compliant and carry UL, cUL and TÜV approvals.

"With demand for smaller components constantly increasing, the SIS Series is unquestionably an apt and popular choice. Elesta relays should be considered wherever people or equipment must be protected and where a monitored contact is required." Concluded Merrill.

[Click here to view an example datasheet from the SIS Series - the SIS2 SENS](#) 

### About Willow Technologies Limited

Founded in 1989, Willow Technologies is located in Copthorne, West Sussex in the UK. We provide electronic solutions to customers by designing, manufacturing and supplying components and systems globally to the electrical and electronic marketplace. Specialists in switching, sensing, resistive and hermetic seal solutions we have a wide portfolio of sensing technologies and over 60 years of application experience. Our in-house engineering capability and rapid prototyping facility for custom parts enable us to develop products to match specific application requirements. Willow is ISO9001:2000 registered.

### For further information please contact:

[reply@willow.co.uk](mailto:reply@willow.co.uk), Tel +44 (0) 1342 717102



Willow Technologies Limited, Unit 3 Borers Yard, Borers Arms Road, Copthorne, West Sussex, RH10 3LH, UK

 [www.willow.co.uk](http://www.willow.co.uk)

 +44 (0) 1342 717102

 +44 (0) 1342 717014

 [reply@willow.co.uk](mailto:reply@willow.co.uk)