



Pillars, Power Supply & Isolation

SIS Underground



Applications:

Street Lighting Columns, Illuminated Signs, CCTV Columns

The SIS Solo-E has been developed and incorporated into the SIS product offering, as an alternative for designers who want guaranteed disconnection, but at a comparable cost to installing plugs and sockets. The SIS Solo-E Underground fully meets EN 12767:2007 in its requirement to electrically isolate any item of street furniture containing an electrical supply in the event of an impact.

Each structure is fitted with a small SIS Impact sensor. In event of an impact the SIS sensor provides an output to the SIS Solo-E monitor unit, which in turn activates complete LV and ELV (Zero Volt) isolation within 0.4 seconds to the individual structure and all components within the IP67 equipment enclosure. The impact sensor ensures that at commissioning stage the system can be fully tested simply by disconnecting the plug attachment on the sensor.

Advantages

- ◇ Suitable for use with NE, LE and HE Passively safe columns
- ◇ Suitable for use with 6 - 25mm SWA cable
- ◇ IP68 in line plug and socket system
- ◇ Guaranteed electrical isolation of all volts within 0.2 seconds of impact
- ◇ Guaranteed isolation even if the structure has not detached from its base
- ◇ Provides fault outputs for impact, voltage drop and maintenance issues
- ◇ Fault outputs can be connected to CMS or RMS systems
- ◇ Simple to test at commissioning stage and for periodic maintenance



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SIS Multi Underground Specification

The SIS system will be fitted in an IP67 enclosure and installed on a removable shelf within a 40 tonne STAKKAbox™ Access Chamber. This will be located adjacent to the protected structure. The supply cables will be terminated within the enclosure using IP68 brass cable glands. A pre-fitted rubber flex for supply and a one pair orange flex for the sensor will then be used to connect to the structure. The impact sensor is fitted to the structure and when the impact sensor is triggered the monitor unit will be activated and the isolator switched off. The impact sensor voltage will also be switched off leaving the structure completely voltage free.

All SIS equipment has been CE and environmentally tested in accordance with TR2130.

The underground unit is assembled to customer requirements to take a range of cable sizes from 6.0mm to 25mm 4 core SWA.

The units come pre-wired with 5 metres of flex, if required a longer length can be supplied.

In addition underground units can be supplied with IP68 in line plugs and sockets.

Other customer specific requirements such as a transformer or spur supply can also be provided.

Enclosure Dimensions

The below enclosures are available depending on cable size and any additional equipment.

Option 1

Minimum chamber size 450mm x 300mm
Height 200mm, Depth 130mm, Width 200mm

Option 2

Minimum chamber size 600mm x 450mm
Height 300mm, Depth 130mm, Width 300mm

Outputs

Sensor: 24v DC,

Shunt Trip: 24v

Testing: EN50293:2000 (EMC Testing)

TR2130C/BS 7987 (Environmental Testing)

10A Double Pole circuit breaker, for outgoing supply. 1A Fuse for SIS Solo-E supply.

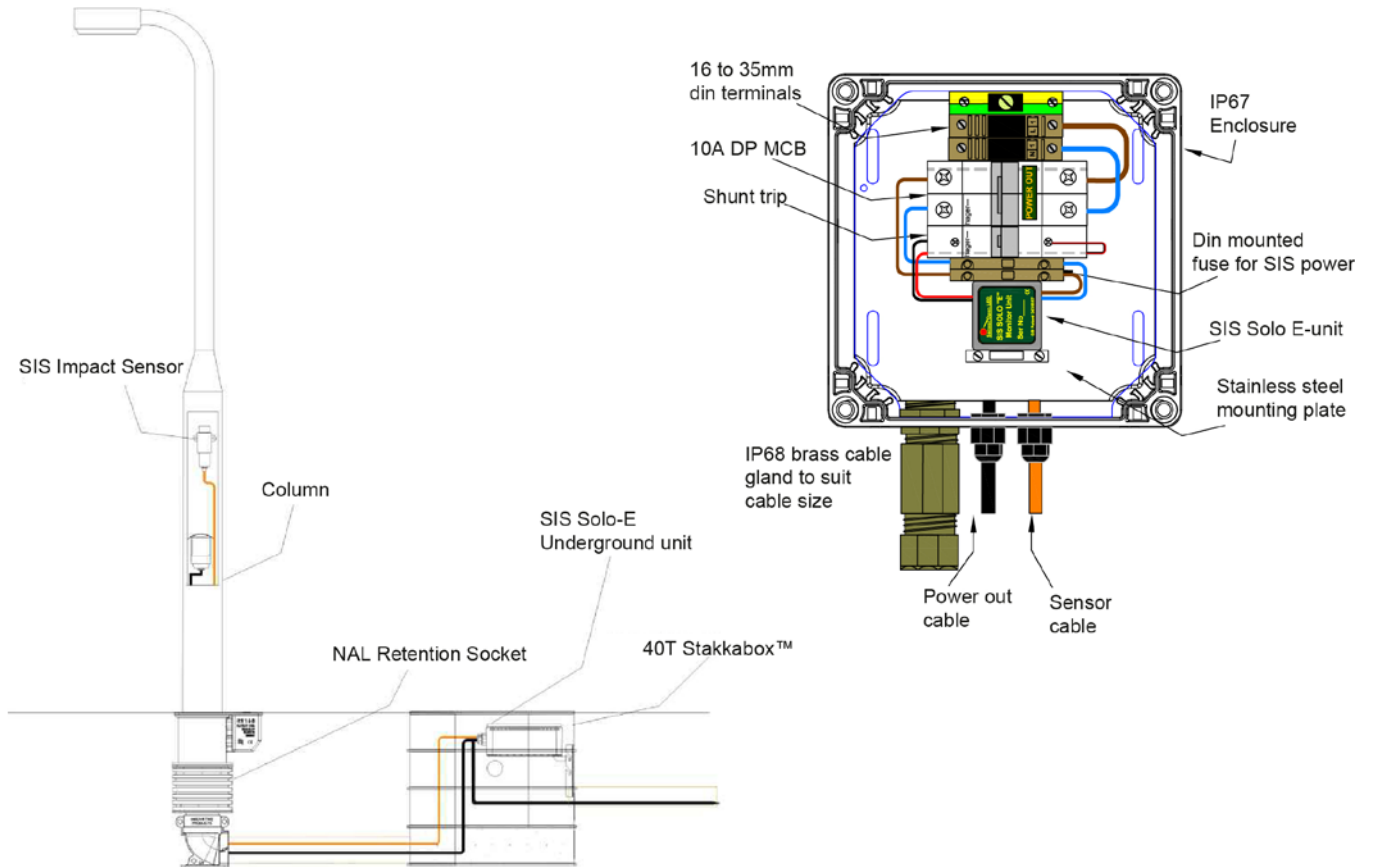
DIN Terminals for loop in loop out.



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