

Pillars, Power Supply & Isolation

SIS Multi Underground



Applications:

Street Lighting Columns, Illuminated Signs, CCTV Columns

The SIS Solo Underground (Multi) has been specifically designed to meet 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 the event of an impact the SIS sensor provides an output to the SIS Underground Multi monitor unit, which in turn activates complete LV and ELV (Zero Volt) isolation within 0.4 seconds to the individual structure. All SIS Underground Multi equipment and cable terminations are located within an IP67 enclosure. This enclosure is mounted in a STAKKAbOX™ underground access chamber within 1 km of the structures they are monitoring. In areas with frequent high water levels the unit can be fitted with an optional float switch.

A sensor or float switch activation will automatically isolate all voltages to the individual structures and is capable of monitoring up to four columns

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

Isolation - SIS Solo Multi underground disconnection system to meet BS EN 12767 (disconnection of roadside structure within 0.4ms of impact).

Enclosure - SIS Solo 2 to 4 units housed in IP67 enclosure with clear cover to aid inspection.

Mounting - SIS Solo enclosure to be mounted on drop in removable galvanised steel equipment shelf to ensure maximum elevation.

Access Chamber - SIS Solo unit to be housed in a minimum 600 x 600mm 40 tonne STAKKAbOX™ access chamber. Access chambers must withstand a 40 tonne vertical load without the need for concrete surround.

Remote Monitoring - SIS Solo unit will provide switchable fault outputs to indicate an impact and unit failure.

Failsafe Mode - In the unlikely event of a SIS Solo unit failure, the monitored structure will be isolated, removing potentially dangerous voltages and drawing attention to the defect.

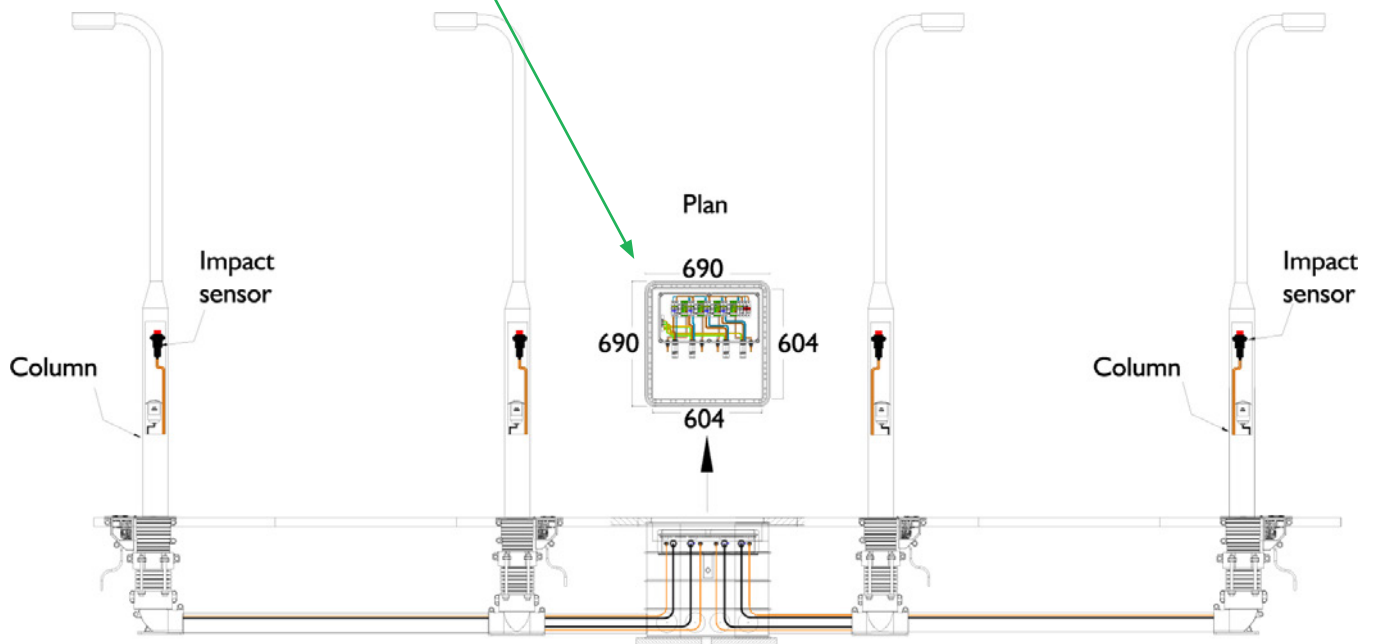
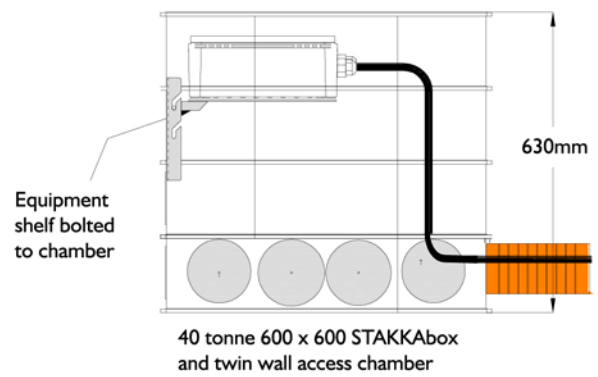
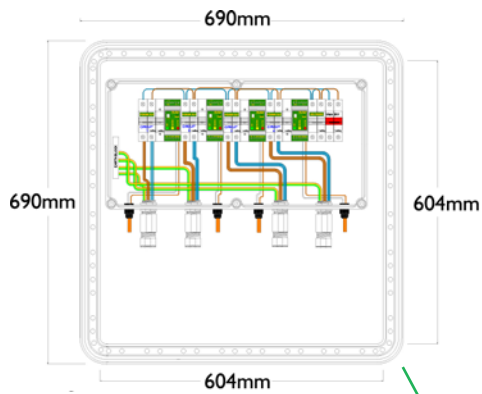
Float Switch available for areas with high water table, the switch detects excessive water in the underground unit and will turn off the protected structure.

Cable Terminations - terminations are provided with IP68 brass glands with a maximum of IO per enclosure.

Sensor - IP64 rated mechanical impact sensor to be mounted vertically within the structure. The sensor also provides a means of confirming the system operation during commissioning and routine maintenance.

Plugs and Sockets - If required IP68 rated plugs and sockets can be supplied. If used, install and secure within the structure, just below ground level.

Retention Sockets - columns are to be housed into ductile iron Retention Socket foundation with bottom entry cable access bend.



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