IMPORTANT READ THIS

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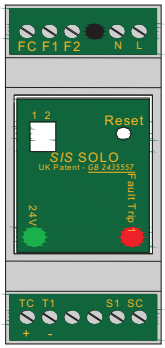
SIS Solo/Duo Short Installation Guide

For street lights and illuminated signs requiring electrical disconnection under BS EN 12767, the SIS SOLO and Duo disconnection system will provide complete isolation in under 0.2 seconds.



Monitor Units

The units are DIN rail mounted suitable for a standard 35mm top hat DIN rail, they can therefore be fitted to any standard distribution enclosure. The SOLO/Duo unit itself will require two ways of space and the shunt trip and MCB three ways, making a total of five ways per circuit or structure. Monitor units have a number of screw terminal connections, two for mains supply, two/three for the sensor input, two/three for the trip output, and three for fault outputs.

The mains supply should be taken from a 3A circuit breaker or fuse, due to its low power consumption of 3w a number of units can be taken from the same 3A supply. The trip connections will be soft wired to either side of the shunt trip which is attached to the MCB. The sensor terminals are soft wired to a suitably sized terminal block. The fault outputs can be connected to a monitoring unit if required.

Isolation Device

Isolation devices are standard Hager curve C MCBs with 10Kva rating; they can be supplied in different ratings to suit the installation. Units are mounted on standard 35mm top hat DIN rail. The addition of a shunt trip allows the remote tripping function. If required the MCB's can be uprated to 40A to allow for an inline BS88 fuse, this allows cable calculations done with a BS88 fuse to be used.

Sensors

The impact sensors should be installed in the vertical position, with the red cap at the top, at installation the red cap should be depressed to ensure the sensor is reset. Impact sensors can be supplied in a number of possible ways and with a number of different bracket options. With 0.5metre of wiring, for mounting directly to a backboard, mounted on a small enclosure, fitted with SWA cable glands (a standard detail drawing is available for this). With a post top bracket where there is no access door. We can of course provide bespoke options as required.

Supply

The SOLO/Duo system can be supplied in a number of variations;

SIS Mini - A single circuit unit for mounting in an existing column or pencil pillar.
SIS Mini Pillar – A single circuit pillar that can accommodate armoured cables.
General feeder pillar from a few circuits up to large pillars with many circuits and bulk switching etc.
NAL only supply complete feeder pillars to customer specifications, we do not supply individual components for others to fit.

Testing

Once all items comprising the installation are connected the SIS system should be powered up, the flashing channel LED on the front of the Monitor unit will indicate system is running.

All the red LED's should be unlit (a single flash every few seconds is a heat beat indicating all is well), a solid red LED illuminated will prevent a circuit from switching on and will need to be rectified by checking the sensor circuit. A quick check would be to apply a temporary short to the sensor terminals, if the unit can then be reset it would indicate a fault on street.

Switch all isolation devices on.

Each structure fitted with an impact sensor should now be visited and the sensor operated by hand, or disconnected to create an open circuit to simulate sensor operation. It is preferable to operate the sensor itself where practicable.

With the sensor operated or open circuit created, the supply pillar housing the isolation devices should be checked to ensure the correct device has tripped on the relevant structure.

Whilst the open circuit remains the isolation device should be operated to ensure it cannot reconnect whilst an open circuit is present. Subject to these tests being satisfactory the sensor or open circuit can be reset or restored. The isolation devices can now be reset.

For more details please see the full SOLO/Duo manual.