



Safety Alert

Vaisala Weather Station Equipment Rack

10 June 2020

The following pages of this safety alert were issued by
Highways England's supply chain partner:

Bam Nuttall Morgan Sindall JV



HEALTH & SAFETY ALERT

Issues regarding the Vaisala Weather Station Equipment Rack and its non-compliance with BS7671:2018 Requirements for Electrical Installations



Issues Identified

- Where the incoming mains flexible cable is terminated there are exposed single insulated cables and unprotected live 230v terminals on the connectors and associated switchgear.
Regulation 416 Basic Insulation of Live Parts (refer to regulation 416.1, 416.2)
- There is no method of cable restraint provided to prevent the mains flex being pulled out of the terminals (Stuffing Gland Cord Grip, Etc).
Regulation 526 Electrical Connections (refer to regulation 526.5, 526.6, 526.8)
- Additional Issues:
 - No designated connection point provided for the supplementary bonding conductor
 - No mains isolation switch or power on indication provided
Hard wired mains connection (Not IEC 320 Connector)

Normally all equipment intended to be mounted within the 19" equipment rack in the 600 cabinet is housed within a specialist enclosure to overcome most of the issues raised above. These always incorporate a mains isolation switch, connection point for the incoming mains (IEC connector) and an earth connection point for the bonding conductor. All other functional connection ports are either located on the front or rear of the unit depending on the specific use.

Actions

- Discussions ongoing with Vaisala, modifications are still to be agreed. Once approved, changes to be implemented within the Weather Station Equipment rack before installation on site.
- Report this potential issue to the wider motorway technology community in case there are similar installations installed on the network that do not comply with BS7671:2018 regulations.