

NHS Mobile Trailer Supplies

Mobile Trailers have been widely used within the NHS for many years and they currently play a key role in the national breast screening programme. Trailer mounted assets also provide temporary or mobile facilities for a wide range of health related activities across the UK.

Most trailers are supplied from the mains and the Department of Health document HTM 06-01 (Electrical services Health Technical Memorandum 06-01) states in paragraph 16.73 that 'Designers and stakeholders should ensure that the final supply / connection cable to any mobile unit includes a monitored earth as described in BS 4444'.

There are a number of ways of providing monitored earth protection in accordance with BS4444 but the method specified by the NHS Breast Screening Programme (NHS BSP), as detailed in publication NHS BSP no. 72, is through the use of standard industrial sockets working in combination with a supplementary earth connection via a POAG-ID6 socket. Conformity with NHS BSP no. 72 therefore requires a monitored, supplementary earth connection from the supply socket to the mobile trailer.

To meet this requirement, Blakley Electrics have developed a range of monitored earth protected socket outlet assemblies, which also incorporate RCD protection and a supplementary earth connection via a POAG-ID6 socket. Only when both the mains socket and the POAG socket are connected to the trailer can the supply to the trailer be energised. Once all connections are made, ON / OFF control is via easy to use push switches fitted to the front of the protected socket assembly. Should either socket become disconnected or if the impedance of the "main earth - supplementary earth" loop circuit rises above a pre-set figure (normally 1.5 ohms), the supply to the trailer will trip automatically.

Blakley Electrics can supply monitored earth / RCD protected socket assemblies with integral POAG sockets, for 230V single phase or 400V three-phase applications, in current ratings of 16A, 32A, 63A or 125A. Assemblies are protected to a minimum of IP44 and can be supplied in all-insulated or steel enclosures. All assemblies incorporate a Blakley Electrics ECM series earth continuity monitor and further information on this device can be found on data sheet ref. PDS052. The ECM has the option of pilot core protection, which enhances the integrity of the "main earth - supplementary earth" loop by disconnecting the supply should there be a short circuit in the loop. This option requires the incorporation of a diode within the trailer.

Assemblies incorporating monitored earth, RCD, industrial and POAG sockets are made to order and our Projects team would be pleased to quote for specific requirements.



Assembly incorporating a 32A 230V mains socket, a POAG supplementary earth socket, RCD protection and monitored earth protection to BS4444.

