



Glasgow fuse-switch-disconnectors & switch-disconnectors

For many years, the Glasgow product name has been synonymous with quality, trust and reliability and as part of our long standing commitment to its tried and tested design we've reinvested for the future by re-tooling the whole range. All units are supplied with fuselinks or switchlinks fitted. Glasgow fuse switch disconnectors and switch disconnectors meet the constructional requirements for isolation of and are type tested to BS EN 60947-3. Conditional short circuit current rating tests at a value of 80kA rms Ue 415V have been carried out with Eaton HRC fuses fitted. Five frame sizes are available to provide a range from 63A to 800A, with utilisation category AC22A and AC23A Ue 415V ratings. Switch-disconnectors fitted with copper links give assigned AC20A Ui 660V and AC21A Ue 415V ratings. All units have retractable operating handles which drive overcentre mechanisms incorporating powerful operating springs. Opening and closing of the switches is thus independent of the action of the operator. Moving contact assemblies can be removed to facilitate installation or for contact inspection or renewal. Flag "on-off" indication is provided and terminal cover shields prevent contact with live metal. TPSN indicates triple-pole and switched neutral, the neutral pole making first and breaking last. Rated Insulation Voltage Ui 660V.

Enclosures

Surface-mounting enclosures comprise heavy gauge steel body plates incorporating cast iron frame members and are rustprotected, with a light grey paint finish (RAL7004). Front access doors, which are detachable, are fitted with dust-excluding gaskets and are interlocked to prevent opening when the switch is 'on'. The interlock can be defeated by a competent person for maintenance purposes. Operating handles may be locked in both the 'on' and 'off' positions. Castell type interlocks can be supplied to special order. Internal fixing holes allow units to be mounted closely side by side and all models have removable top and bottom end plates. These are pierced for connections, divided into front and rear (fixed) portions to simplify cabling using Eaton's MEM series split-type cable boxes, and provided with undrilled cover plates.

Fuses

Glasgow units are designed for use with HRC cartridge fuse links to BS88: Part 2. 63A and 100A units employ off-set contact fuse links. Details of suitable types of HRC cartridge fuse links are listed on page 101. All performance tests have been carried out using Eaton BS88 fuselinks.

Motor ratings

The motor ratings assigned to TPN switch-disconnector units are utilisation category AC23A (frequent operation) to BS EN 60947-3, which calls for make and break testing at 10 and 8 times rated current respectively for units having a motor rating up to and including 100 Amps. Ratings for switch-disconnector-fuses are dependent on suitable HRC fuses being fitted.

Auxiliary equipment

A comprehensive range of extension boxes and spreader boxes is available. Units are fitted with HRC Fuselinks of maximum rating but will accept fuselinks of a lower rating, refer to the Paramount HRC Fuselinks section on page 101. SPSN and TPSN indicate switched neutral. Neutral makes first and breaks last. If DP fuse-switch-disconnectors are required, use SPSN and replace the supplied switch link with a compatible fuselink.

Definitions of utilisation category

AC20a – Connecting and disconnecting under no load condition.

AC21a – Switching of resistive loads including moderate overloads.

AC22a – Switching of mixed resistive and inductive loads including moderate overloads.

AC23a – Switching of motor, or other high inductive loads.

Cable extension boxes

Fabricated sheet steel boxes can be fitted top/bottom of Glasgow switch units to provide additional space for spreading multi-core PVC insulated cables with solid aluminium conductors and for some larger cables with stranded copper conductors. For 1–3PCB, a plain flame retardant plywood plate is provided for fitting between the box and switch unit, the steel endplate supplied fitted to the switch unit being used on the box's cable entry side. For 4PCB, a plain steel plate is provided for cable entry on box. The switch enclosure has 8mm thick insulated endplates fitted both ends. For 5–6PCB, a 10mm thick insulated plate is provided for cable entry on box. The switch enclosure has 10mm thick insulated endplates fitted both ends, 5PCB includes a flame-retardant plywood packer for fitting between PCB and switch unit's endplate to provide lid flange clearance.