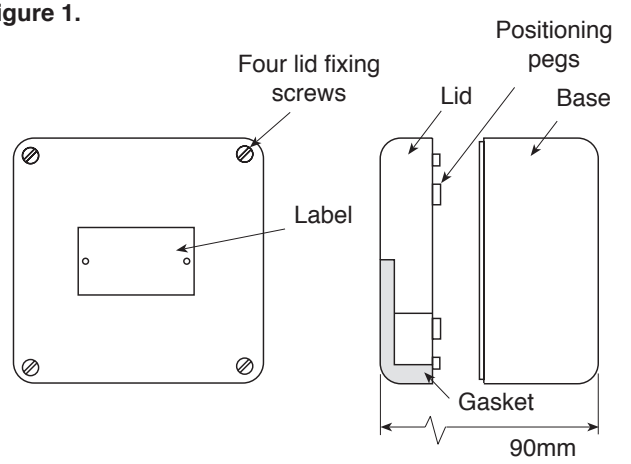
Hazardous Area Terminal Boxes and Earth Stud

RS Stock No.	Description	BASEEFA Cert. No.	Ref No.
730-363	terminal box 122 x 120	Ex 90.C. 3070X	GB-5103-1221/2090 E1173
730-379	terminal box 160 x 160	Ex 90.C. 3070X	GB-5103-1601/6090 E2199
730-385	terminal box 255 x 250	Ex 90.C. 3070X	GB-5103-2552/5102 E4118

Figure 1.



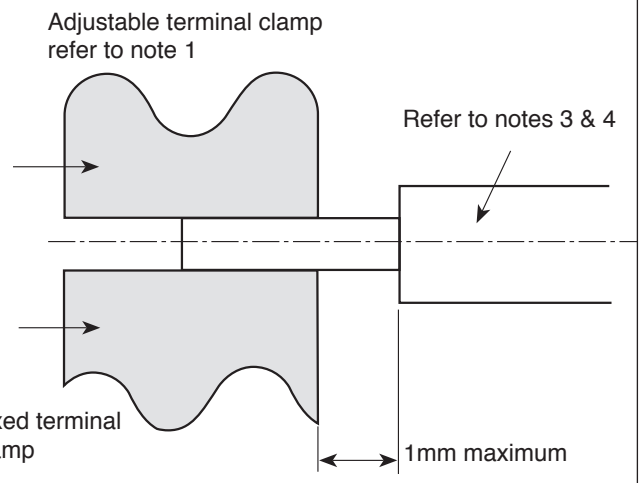
Conditions for safe use

1. All terminal screws, used and unused, shall be fully tightened down by the installer.
2. The use of any cross-connection devices between adjacent terminal ways shall be in accordance with the requirements given in the BASEEFA Component Certificate No. Ex 813092U for the Klippon SAK range of terminals.
3. Only one conductor shall be connected to each terminal way, unless the multiple conductors have previously been joined in a suitable manner (for example with an insulated crimped boot-lace ferrule) such that they form a single cohesive item for insertion into the terminal way.
4. Conductor insulation shall extend to within 1mm of the metal in the terminal throat. See Figure 2.
5. The installer shall use an appropriate method to ensure a minimum ingress protection of IP54 at each cable entry, choosing cable entry devices in accordance with a recognized Code of Practice e.g. BS 5345 Part 6 Clause 17.
6. Where earth continuity is required, via cable entry devices, either:
   i. The entry device shall be screwed into a tapped hole in the wall of the enclosure and the lock-nut shall be securely tightened against the 'dimples' provided around the clearance hole in the earth continuity plate, or
   ii. In the event that the hole in the enclosure wall is a clearance hole and/or the clearance hole in the earth continuity plate is not provided with the 'dimples' then the installer shall provide a resilient washer for installation between the earth continuity plate and the lock-nut.

The installer is responsible for ensuring that the resilient washer is suitable for the conditions of use, noting particularly that any earth fault current must pass via the washer.

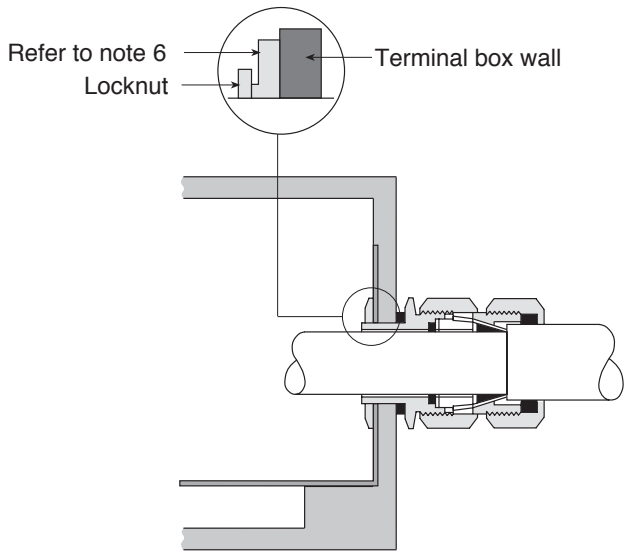
7. Unused entry holes must have the self adhesive label removed and the appropriate stopping plug fitted prior to commissioning.
8. The installer shall ensure the creepage and clearance distances are not reduced.

Figure 2.



9. When used as a general purpose junction box or marshalling box, the circuits shall be protected with excess current protection which shall operate within four hours at 1.5 times the designed load current.

Figure 3.

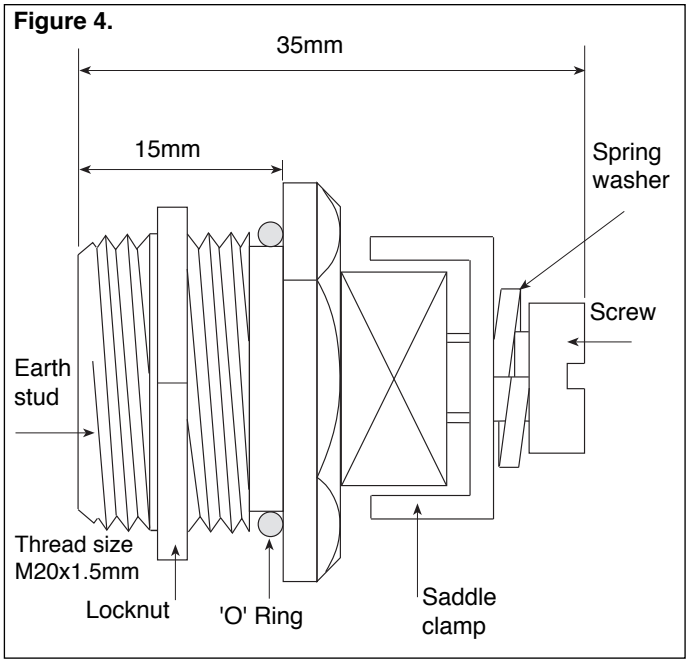


RS Stock No.	No. of terminals	Terminal type	Conductor size Max	Conductor size Min	Max voltage	Max current	Term resistance at 20°C	Insulating stripping length
730-363	10	Klippon SAK 2.5	2.5mm^2	0.5mm^2	550	15A	0.34mΩ	9mm
730-379	15	Klippon SAK 2.5	2.5mm^2	0.5mm^2	550	15A	0.34mΩ	9mm
730-385	20	Klippon SAK 2.5	2.5mm^2	0.5mm^2	550	11.5A	0.34mΩ	9mm

Hazardous area earth stud

RS Stock No.	Description	BASEEFA cert no.
730-391	Earth stud	Ex 90.C.3482U

Figure 4.



Maximum conductor size
16mm^2 solid strand
10mm^2 stranded

1. Conductors shall be equally distributed either side of the screw beneath the saddle clamp, or suitable crimped eyelets shall be used.
2. The earth studs shall be installed so as not to reduce the safe clearance distances within the increased safety enclosures.
3. When fitted into enclosures with clearance holes or enclosures with uneven external surfaces, additional sealing methods may be required to maintain the enclosure IP rating. (See BS5345 Pt 6).
4. **Metallic enclosures**
   The installer shall ensure that the earth stud/enclosure materials are selected to ensure compatability.

Figure 5. Typical applications

