

DSFi SURGE POWER FILTER

INSTALLATION GUIDE

INSTALLATION

1. Turn off power before installation.
2. All wiring must be carried out by a qualified electrician to comply with local standards.
3. Remove 4 screws on face of unit and remove termination covers.
4. Fit cable glands as required. If glands are not required, use a grommet or suitable material to prevent cable damage.
5. Install unit to switchboard geartray, equipment cabinet or other suitable location. Do not expose to direct sun or water. Allow plenty of ventilation - do not mount inside a small or sealed enclosure.
6. Connect wiring - refer to connection diagram. Use a suitably rated cable for power connections and 6mm² to 10mm² cable for earth connections.
7. Tighten glands if fitted. If not using glands, use cable ties to secure cables.
8. Refit termination covers and screws.

Keep all wiring short and avoid sharp bends in cables

OPERATION

Two lamps on the front panel indicate the operation status of the unit. The 'POWER - OK' lamp indicates that power is applied to the unit and the 'FAULT' lamp indicates reduced protection. If the 'FAULT' lamp is lit it is likely that the unit is damaged and must be replaced. If the supply breaker/fuse is intact and power is definitely being supplied through the unit (check with meter) but the 'POWER - OK' lamp doesn't light then the unit is faulty and must be replaced.

EARTHING

For proper operation, all surge filters rely upon a good earth connection. In some installations, the existing earth system will require upgrading. Important things to look for are:

1. The main earth wire (from earth link on switchboard to ground rod or system) MUST be in accordance with local requirements and must be as short as possible. Earth cable size should be 6mm² to 10mm².
2. The resistance to earth of the ground connection should not exceed 3Ω. In some areas (rocky/sandy/hilly ground), a new grounding system may be required. If high earth resistance is unavoidable, please consult factory.
3. If the ground system is located far from the unit, a heavier gauge cable or paralleled cables should be used, or if metallic building structure is available close to unit, make a bond to it and run another earth cable to unit.
4. If load is earthed at a separate point to the supply earth, this unit should be connected to the load earth, not supply earth.

Failure to consider the above points can result in danger to personnel, improper operation of the unit and possible damage to the installation.

REMEMBER !

Surges from outside the building 'want' to conduct to earth, surges generated by equipment inside the building 'want' to conduct to neutral. The common link is the M.E.N point - this is why a low system earth resistance is so important.

WARRANTY

Eaton Power Quality warrants the DSFi against faulty parts and workmanship for a period of 12 months from the date of purchase. If this product fails to operate correctly, please return to your supplier or Eaton Power Quality for replacement. This warranty doesn't cover neglect or intentional misuse. As this product is intended for use in electrically harsh environments no claim is made of suitability for purpose. Please also note that an excessive surge (such as from a direct lightning strike to the building, substation malfunction or a building wiring fault) may cause damage to the unit and render it inoperable. A unit that has been damaged in this way is not warrantable.

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Technical Specification – DSFi

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