# INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS FOR ABTECH 'SX & MSX' RANGE ENCLOSURES - INDUSTRIAL

## **Gland Plates Preparation**

If the gland plates are removed, when replaced they must be secured with all fixing screws tightened to a minimum torque of 2 Nm, maximum 2.5 Nm.

#### **Installation**

- 1) Using the mounting dimensions data provided, either in the product catalogue data sheets or on the drawings supplied (as part of the project documentation) mark out the positions for the mounting holes on the surface where installation is required.
- 2) Drill the mounting holes for M10 fixing studs (for size S64 upwards) or for M6 fixing studs for size S45.
- 3) Insert the top two studs leaving 8 to 10mm protruding and lift the enclosure into position using such assistance as may be necessary to avoid injury and hang the top fixing brackets of the box onto the studs. Ensuring that the box is secure, insert and tighten the bottom two studs. Now complete tightening the top two studs.
- 4) Install and secure the cable glands in accordance with the manufacturers instructions.
- 5) Terminate all cable conductors in the terminals provided. All spare conductors should be terminated at the enclosure earth stud, on a dedicated earth bar or by way of rail mounted terminals. Rail mounted earth terminals are available but may not be fitted
- 6) Secure the lid by closing the lid and tightening the lid fixing screws and ensure that all gland plate securing screws are tightened.
- 7) For additional security a padlock may be fitted to all box sizes larger than and including size S0.

# Earthing/Grounding

All S range enclosures are provided with an internal and external earthing/grounding facility. This must be connected to the appropriate earth bonding circuit before electrical power is connected to the contents of the enclosure.

An earth connection between the lid and the box is provided. Care must be taken to ensure this is not damaged during installation or maintenance.

#### **Operation**

- 1) The lid must be secured using all the lid screws provided in order to maintain the IP rating.
- 2) No attempt must be made to remove the enclosure lid whilst electrical power is connected to the contents of the enclosure. Unless additional safety precautions are in place to the approval of the responsible engineer
- 3) The earthing/grounding facility must be connected to the earth bonding circuit at all times when electrical power is connected to the enclosure.

## Maintenance

Routine maintenance is likely to be a requirement of local Health and Safety legislation. The laws of the applicable country must be considered and maintenance checks carried out accordingly.

Additional checks that are advisable to ensure the efficiency of ABTECH 'S' range enclosures are:-

Activity		Frequency
1	Check that the lid seal is not damaged and is in place	Each time the enclosure is opened
2	Check that all lid fixing screws are in place and secured	Each time the enclosure is opened
3	Check that all gland plate fixing screws are in place and secured	Each time the enclosure is opened
4	Check that the mounting bolts are tight and free of corrosion	Annually
5	Check lid earth strap continuity (hot work permit may be required)	Every 3 years
6	Check that the mounting bolts are tight and free of corrosion	Annually
7	Check the security of all cable glands	Annually
8	Check the enclosure for damage	Annually

## **Chemical attack**

The ABTECH S range enclosures are available in mild steel or 316 stainless steel. The following additional material are also used :-

Neoprene or silicone rubber,

Brass.

If the enclosure is of mild steel it may be zinc plated prior to painting. The standard paint finish is epoxy polyester grey hammer.

Stainless steel enclosures are not painted except to customer specifications.

Consideration should be given to the environment in which these enclosures are to be used to determine the suitability of these materials to withstand any corrosive agents that may be present.

#### Static hazard

S range enclosures do not present a hazard from static electricity.