

Engineering Note: EN0024 Lightning Risk Assessment and Protection Measures

Summary: Risk reduction from Lightning Strike or electrical transients

Products affected: Various

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Hydronix equipment can be susceptible to damage caused by lightning or transient over-voltages if care is not taken during installation. This problem is not restricted to a particular product line and is due to inadequate or non-existent assessment of the risk.

The damage is caused when lightning strikes directly onto, or close by, any electronic equipment that is connected by a long length of cable to equipment with a different ground. Care should be taken when installing Hydronix sensors as they are constructed of metal and connected by a long length of cable to a different large metal structure.

Damage might also be caused during welding if this is performed without correctly grounding the welding equipment.

An assessment of the risk of damage is strongly recommended whenever Hydronix equipment is fitted. Local specialists should perform this assessment, as they will be able to make appropriate recommendations with due regard to local regulations and conditions.

Hydronix has a range of lightning and transient overvoltage protection equipment available; please contact us for further details. Alternatively these can be purchased direct from Furse.

Furse Part No	Hydronix Part No	Description
ESP 06E	0740	Lightening Protection Barrier – to protect RS485 / RS232
ESP 15E	0745	Lightening Protection Barrier – to protect current loop
ESP 30E	0750	Lightening Protection Barrier – to protect power (0-30V DC @ 1.25A)