

## **Industrial enclosures are a knock out for trace heating system manufacturer**

**16 March 2023**

**Industrial enclosures are crucial to protect thermostats from harm in tough environments, but they've got to be fast to install too. Trace heating system designer Cross Electrical (Nottingham) Ltd needed to reduce manual labour when installing its thermostats into their protective casings. To maintain a high IP rating while ensuring an easy-to-use design, Cross Electrical (Nottingham) Ltd turned to Spelsberg UK to achieve the industrial enclosure to meet its specification.**

Trace heating is a vital technology to prevent frozen water pipes during cold months. Electric elements, controlled by a thermostat, run along pipework to ensure a desired temperature is maintained. Trace heating is essential to largescale municipal and commercial buildings, such as hotels, schools, and prisons, that could take up to 20 km or more of trace heating cable.

### **Protecting the thermostat**

However, the technology is also vital to many other applications – and to maintain much higher temperatures. To ensure the fluidity of bitumen for the aggregate industry, trace heating maintains pipes and tanks at 160°C, or when industrial chemicals are involved, temperatures can reach into several hundred degrees centigrade.

Since 1971, Cross Electrical (Nottingham) Ltd has designed and installed trace heating systems, as well as thermal insulation, across the UK for the full variety of applications. This ranges from supplying Formula One racing teams to frost protecting grape vines at vineyards. As the company designs and manufactures its own systems, Cross Electrical (Nottingham) Ltd also supplies trace heating systems to contractors and installers.

A crucial device within the system is the thermostat that controls trace heating temperature. Installed both indoors and outside, and often within industrial environments, thermostats have to be well protected from the elements as well as impacts. For this reason, enclosures play a vital protective role, but the housings also have to be sufficiently flexible to allow fast and easy installation of the thermostat device and its connections.

### **Easy installation**

“With the previous types of enclosures we used, we had to drill and tap every housing in order to create cable entry and exit points. This was a very time-consuming process,” explains Paul Dable, Director, Cross Electrical (Nottingham) Ltd. “Now, with the Spelsberg enclosures, these are provided with knock outs that can be quickly removed to create the entry and exit points we need, saving us a lot of time in manufacture. We also supply thermostats and cables to contractors as kits, so this ease of use improves their installation process too.”

The Spelsberg enclosures feature a selection of knock-out points in 20mm or 25mm diameters that can be fitted with cable glands to meet the required ingress protection. This also removes pressure on manual labour, where careful drilling to maintain IP rating was previously necessary for Cross Electrical (Nottingham) Ltd engineers when working with its former enclosure manufacturer.

The Spelsberg enclosure achieves IP66, making it suitable for indoor and outdoor use against virtually all conditions. Polycarbonate construction also means that it's highly durable and able to withstand impact, while ensuring light weight for ease of installation.

### **Enclosure printing service**

Cross Electrical's XSP thermostat unit comprises a mechanical, pressure-controlled thermostat device that can manage bands of temperature ranging from 0°C-300°C for pipe sensing, or 0°C-40°C air sensing. With a power supply entering the enclosure and two heating connections exiting, temperature setting is controlled by a dial, and status lights confirm heating on/off and system health. These internals are protected by a clear enclosure cover that allows facility managers to check settings while preventing tampering. As the thermostats are typically required to maintain a set temperature, adjustment isn't usually necessary, and Cross Electrical's devices are designed to be maintenance free.

Spelsberg also supplies enclosures with Cross Electrical's branding printed directly onto the housing. "This not only presents a far more professional image, but printing onto the enclosure means that branding, contact details, and any safety information, is a lot longer lasting and less likely to be rubbed off. Previously, we applied these details with an adhesive sticker, but again, this process took extra time," says Paul.

As well as product quality, Paul also says that an important benefit of working with Spelsberg is the trust it has in a reliable service. "Working with Spelsberg, stock is always provided on time. Support is always very good too, and Spelsberg's engineers can always help us whenever we need it. Every enclosure they've provided has always achieved exactly what Spelsberg said it would do," says Paul.

The thermostat enclosures are just one of many durable industrial components that Cross Electrical (Nottingham) Ltd relies on, but thanks in part to Spelsberg, this service helps them maintain the temperature of key processes in industries and commercial applications across the country.

**Image captions:**



**Image 1:** Thermostat enclosures are durable industrial components.



**Image 2:** Spelsberg enclosure with Cross Electrical's branding printed directly onto the housing.

The image(s) distributed with this press release are for Editorial use only and are subject to copyright. The image(s) may only be used to accompany the press release mentioned here, no other use is permitted.

## About Spelsberg

Spelsberg is one of the largest manufacturers of electrical enclosures in the world. With over 4,000 enclosures available as standard and further customisation possible, it offers solutions for almost any application.

With the largest supply of non-metallic enclosures, ex-stock in the UK, its products are often available for delivery within 24 hours; customisation is possible on any product, including bespoke entries, engraved corporate logos or fitted terminals, within 48 hours. Products can be ordered direct from Spelsberg or from most leading supply specialists including RS, Rapid, Farnell and CPC.

The image(s) distributed with this press release may only be used to accompany this copy and are subject to copyright. Please contact DMA Europa if you wish to license the image for further use.

### **Press contact:**

**Spelsberg els UK Ltd.**

Chris Lloyd

Tel.: +44 (0)1952 605849

[cll@spelsberg.co.uk](mailto:cll@spelsberg.co.uk)

### **PR agency:**

**DMA Europa**

**Elizabeth Patrick**

Progress House, Great Western Avenue, Worcester,

WR5 1AQ, UK

Tel.: +44 (0)1905 917477

[liz.patrick@dmaeuropa.com](mailto:liz.patrick@dmaeuropa.com)

[news.dmaeuropa.com](http://news.dmaeuropa.com)