Eurotherm

by Schneider Electric

Installation of the T2750/versadac/E+PLC400 Backplane Spacer

The Backplane Spacer (BD032622) helps support the backplane on the T2750, versadac and E+PLC400 instruments, and ensures the CPU module maintains good contact with the terminal unit. All new instruments ship with the backplane spacer in place and we recommend this be installed in all existing units. The spacer is inserted between the backplane and rear housing on the left of the instrument close to the CPU modules.

A smaller spacer is required for 0-way base configurations. This spacer is available upon request (part number BE032622), and is installed in the same manner as outlined on this sheet.

Note: Disconnecting and removing the CPU will result in losing time and date settings. As a result, when recommissioning the system, it will be necessary to set the time and date as documented in the appropriate user guide for your instrument. Other settings, including the current strategy and automatic application restart options may require the use of the appropriate PC tools to reconfigure the instrument after following this procedure.

Safety and EMC Information

The instrument is intended for industrial temperature and process control applications within the requirements of the European Directives on Safety and EMC.

Information contained here is subject to change without notice. While every effort has been made to ensure the accuracy of the information, your supplier shall not be held liable for errors contained herein.

Safety and EMC protection can be seriously impaired if the unit is not used in the manner specified. The installer must ensure the safety and EMC of the installation.

The instrument complies with the European Low Voltage Directive 2006/95/EC, by application of safety standard EN 61010.

Unpacking and storage. If on receipt, the packaging or unit is damaged, do not install but contact your supplier. If being stored before use, protect from humidity and dust in an ambient temperature range of -20°C to +70°C.

Electrostatic discharge precautions. Always observe all electrostatic precautions before handling the unit.

Service and repair. The instrument has no user serviceable parts. Contact your supplier for repair.

Cleaning. Isopropyl alcohol may be used to clean labels. Do not use water or water based products. A mild soap solution may be used to clean other exterior surfaces.

Electromagnetic compatibility. The instrument conforms to the essential protection requirements of the EMC Directive 2004/108/EC, by the application of a Technical Construction File. It satisfies the general requirements of the industrial environment defined in EN 61326.

Caution: Charged capacitors. Before removing an instrument from its sleeve, disconnect the supply and wait at least two minutes to allow capacitors to discharge. Avoid touching the exposed electronics of an instrument when withdrawing it from the sleeve. **Symbols**. If any of the symbols shown below are used on the instrument they have the following meaning:

CE Mark. A Refer to manual. Risk of electric shock. Take precautions against static ESD symbol.
TCA-tick Australia (ACA) and New Zealand (RSM).
Dispose of properly

Ochina RoSH (Wheel) Logo. R Complies with the RoHS2 (2011/65/EU) directive. 🖾 Earlier RoHS symbol (RoSH1). 🗆 Protected by DOUBLE INSULATION. 🕲 🚓 🖓 cUL Mark.

Installation Category and Pollution Degree. This unit has been designed to conform to BSEN61010 installation category II and pollution degree 2, defined as follows:-

- Installation Category II (CAT II). The rated impulse voltage for equipment on nominal 230V supply is 2500V.
- Pollution Degree 2. Normally only non-conductive pollution occurs. However, a temporary conductivity caused by condensation must be expected.

Personnel. Installation must only be carried out by suitably qualified personnel

Enclosure of Live Parts. To prevent hands or metal tools touching parts that may be electrically live, the unit must be installed in an enclosure.

Caution: Live sensors. The controller is designed to operate if the temperature sensor is connected directly to an electrical heating element. However, you must ensure that service personnel do not touch connections to these inputs while they are live. With a live sensor, all cables, connectors and switches for connecting the sensor must be mains rated for use in 230Vac +15%: CATII.

Wiring. It is important to connect the unit in accordance with the data in this sheet. Always use copper cables. Wiring must comply with all local wiring regulations, i.e. UK, the latest IEE wiring regulations, (BS7671), and USA, NEC Class 1 wiring methods.

Voltage rating. The maximum voltage applied to the following terminals must not exceed 230Vac +15%: :- relay output to logic; dc or sensor connections; any connections to ground. The controller must not be wired to a three phase supply with an unearthed star connection.

Electrically Conductive pollution e.g. carbon dust, MUST be excluded from the unit enclosure. Where necessary, fit an air filter to the air intake of the enclosure. Where condensation is likely, include a thermostatically controlled heater in the enclosure.

Grounding of the temperature sensor shield. In some installations it is common practice to replace the temperature sensor while the controller is still powered up. Under these conditions, as additional protection against electric shock, we recommend that the shield of the temperature sensor is grounded. Do not rely on grounding through the framework of the machine.

Over Temperature Protection. To prevent overheating of the process under fault conditions, a separate over-temperature protection unit should be fitted which will isolate the heating circuit. This must have an independent temperature sensor. Alarm relays within the unit will not give protection under all failure conditions.

Installation Requirements for EMC. To comply with European EMC directive certain installation precautions are necessary:-

- General guidance. Refer to EMC Installation Guide, Part no. HA025464.
- Relay outputs. It may be necessary to fit a suitable filter to suppress conducted emissions.
- Table top installation. If using a standard power socket, compliance with commercial and light industrial emissions standard is usually required. To comply with conducted emissions standard, a suitable mains filter must be installed.

Equipment Required

Installation of the Backplane Spacer requires:

- Flat headed screwdriver, 3mm wide
- Backplane Spacer (BD032622)

Installation Consideration

This procedure requires the removal of the left side panel. This cannot be removed in situ if the instrument is panel (not DIN) mounted. Therefore, the instrument will need to be removed if panel mounting has been employed.

Installation of the Backplane Spacer

To install the Backplane Spacer, proceed as follows:

1. Remove the instrument's front cover that shields the terminals.





- 2. The CPU modules must be removed before the backplane spacer can be installed. If your instrument already has CPUs mounted, unlock them by turning the small locking screw anti-clockwise a quarter turn with the small flat-headed screwdriver to the unlocked position. Pull both the CPUs away from the terminal unit.
- 3. Remove the end panel from the left side of the chassis (the end that the CPU modules fit). If need be, carefully use a small screwdriver to gently ease the panel away, alternating between the top and bottom to ensure the panel is removed straightly and does not pivot around either the top or bottom tabs. Once lose enough, pull the panel off by hand.
- 4. Locate the slot beneath the backplane and orientate the backplane spacer, BD032622 (or BE032622 for 0-way bases), as shown.

5. Insert the backplane spacer and push fully home. The spacer should slide in with minimal force.

















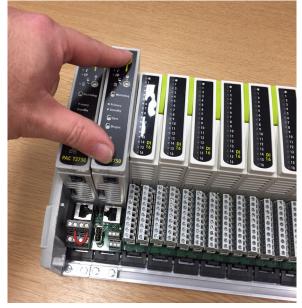


6. Push the end panel back on by hand, ensuring it is aligned with the chassis.



7. If the CPU modules were originally installed, push these back onto the CPU terminal units and lock in place with the screwdriver. Reattach the front cover to the hinges.

> Scan for local contacts



8. Finally, using the appropriate PC software tool for your instrument, ensure the internal clock is set correctly and the appropriate application or strategy is configured to run when the instrument is recommissioned.

Eurotherm Limited

Faraday Close WORTHING BN13 3PL United Kingdom

Tel: +44 1903 268500 Fax: +44 1903 265982

www.eurotherm.com/worldwide

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