

IL TEMPERATURE

Temperature specifications for Inline terminals

Application note
8299_en_00

© PHOENIX CONTACT 2011-11-07

When using Inline terminals, observe the different temperature specifications.

Ambient temperature	Example	Location of information	Limit value for
Storage/transport	-45°C ... +85°C	Data sheet	
Operation	-25°C ... +55°C	Data sheet	Reliable and permanent function
Acc. to UL 60079-15 (Ambient temperature)	60°C	Labeling on the Inline terminal (see Figure 1)	Explosion protection according to UL 60079-15

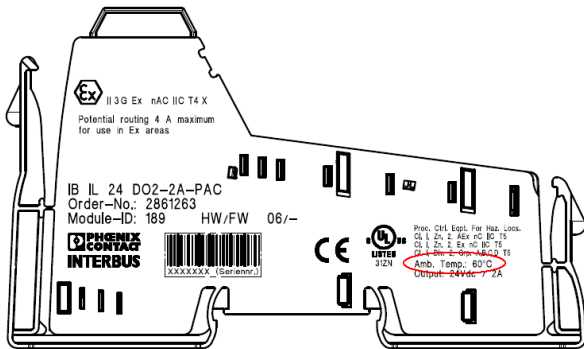


Figure 1 Labeling of an Inline terminal (example)

Ambient temperature (operation) in the data sheet

The technical data given in the terminal-specific data sheet include the limit values released by Phoenix Contact for **reliable and permanent function** of a terminal.

Maximum ambient temperature in potentially explosive areas according to UL 60079-15

The maximum ambient temperature specified on the device together with the UL approval results from the UL standard for areas in which an explosive atmosphere may typically occur. A temperature range from -20°C to 60°C is assumed there.

Thus, the specified, maximum upper limit of the temperature applies for **explosion protection** according to UL 60079-15.

The test conditions mainly consider the maximum permissible device surface temperature which is influenced directly by the ambient temperature. The device function or its service life will not be taken into consideration for the UL approval tests.

The approval requirements are printed on the terminal in accordance with UL specifications.

Due to the different aspects by which the maximum limits can be determined, the maximum permissible ambient temperature for operation specified in the terminal-specific data sheet can be different from the data printed on the terminal itself.



NOTE: No reliable function when the permissible ambient temperature is exceeded

Always use the terminal in compliance with the technical data in the terminal-specific **data sheet!**

Reliable and permanent functioning can only be guaranteed when the limit values given in the data sheet are kept.