



SURFACE HEATING

UFS Controller: the new control of heating systems precise, safe and convenient

Heating systems for frost protection in cold stores and freezer rooms offer a reliable precaution against frost damages and humidity wherever the natural thermal flow is not sufficient for preventing a freezing of humidity in the foundation.

For controlling these heating systems, Klöpper-Therm developed a new controller offering maximum safety and convenience apart from the approved precise and reliable control.

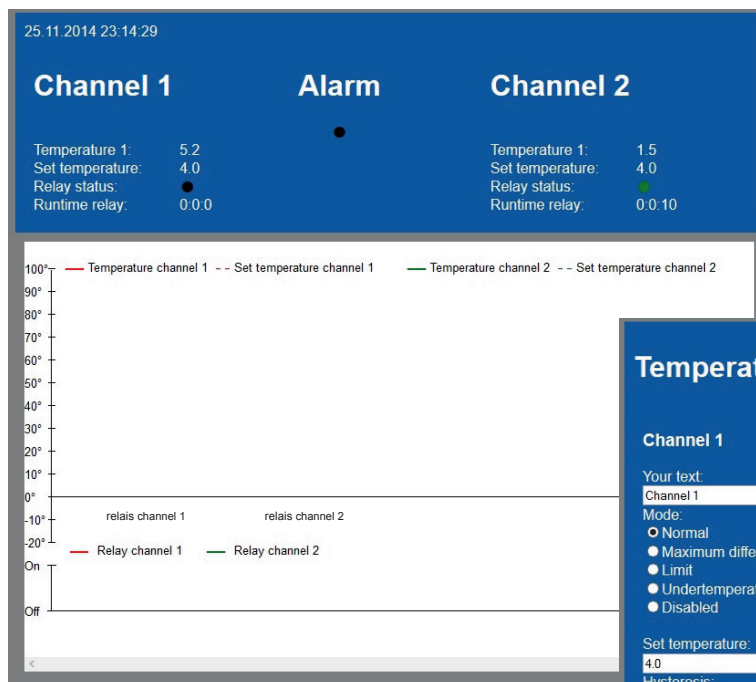
The frost protection controller can easily be configured and monitored via web interface. The integrated wake-on-LAN function enables the booting-up of a PC in case of failures (e.g. in a control room) and informs the operating personnel about the type and place of failures.

Highlights:

- ▶ two independent and separately configurable channels in one device
- ▶ 4 different operating modes
- ▶ operating hour meter for each channel
- ▶ visualization of measuring values on the web surface
- ▶ graphic chart of temperature courses
- ▶ wake-on-LAN function
- ▶ combinable with other monitoring and control devices from the Klöpper-Therm product range
- ▶ communication over Modbus TCP/IP

Technical Data

Nominal voltage:	230V- ±6%, 50Hz - 60Hz
Power consumption:	2 VA approx.
Switching power per channel:	230V (AC) / 6(2)A
Switching hysteresis:	1K (variable)
Ambient temperature:	0°C up to 60°C
Temperature control range:	-20°C ... +90°C
Sensor:	NTC type 31xx
Display accuracy:	0.1°C
Measuring accuracy:	0.2°C up to 0.3°C (depending on the sensor used)
Alarm contact:	changeover 24V (DC) 2A / 230V (AC) 2A
Ethernet:	10/100/1000Base-T
Display:	LCD, illuminated
Insulation test:	2 kV (AC)
Space requirements:	6TE according to DIN 43880 105 x 86 x 66.5 mm (WxHxD)



Temperature configuration

Channel 1	Channel 2
Your text: Channel 1	Your text: Channel 2
Mode: <input type="radio"/> Normal <input checked="" type="radio"/> Maximum difference <input type="radio"/> Limit <input type="radio"/> Undertemperature <input type="radio"/> Disabled	Mode: <input type="radio"/> Normal <input checked="" type="radio"/> Maximum difference <input type="radio"/> Limit <input type="radio"/> Undertemperature <input type="radio"/> Disabled
Set temperature: 4.0	Set temperature: 4.0
Hysteresis: 1	Hysteresis: 1
Maximum difference: 2.0	Maximum difference: 2.0
Limit: 40.0	Limit: 40.0
Undertemperature: 2.0	Undertemperature: 2.0
<input type="button" value="Save"/>	
Set local Date/Time <input type="button" value="Set local Date/Time"/>	
Reset chronical Graph: <input checked="" type="checkbox"/> Runtime relay 1: <input checked="" type="checkbox"/> Runtime relay 2: <input checked="" type="checkbox"/> <input type="button" value="Reset"/>	