

Front view



Features

- Individually selectable temperature sensor for each measuring point:
 - TRK277, K243: measurement range -45...+65°C
 - DGF: measurement range 0...+150°C
- Alarm with alarm delay time for overtemperature or undertemperature
- Avoiding false alarms (to deactivate monitoring, e.g. when defrosting or when cold locations are switched off)
- Collective alarm relay
- Simple parameter settings
- Plug-in screw terminals
- Large data memory for temperature list
- Connection to the Wurm system through a Wurm CAN communication bus (C-BUS) and FRIGODATA XP

Writing conventions

Symbol	Meaning
 CAUTION	Avoid the described hazard: otherwise minor or medium physical injury or damage to property will result.
 WARNING	Avoid the described hazard: otherwise there is danger from electric voltage that could lead to death or serious physical injury.

For your safety

For safe operation and to avoid personal injury and equipment damage through operator error, always read these instructions, become familiar with the device, and follow all safety instructions on the product and in this document, as well as the safety guidelines of Wurm GmbH & Co. KG Elektronische Systeme. Keep these instructions ready to hand for quick reference and pass them on with the device if the product is sold.

Wurm GmbH & Co. KG Elektronische Systeme accepts no liability in case of improper use or use for other than the intended purpose.

Target group	These instructions are intended for "service technicians".
Intended use	The DOC-XP is a measurement and monitoring module for 4 temperatures.



WARNING

Danger to life from electric shock and/or fire!

- Switch off the power to the entire plant when carrying out installation, wiring or removal work. Otherwise a mains voltage and/or external voltage may still be present even if the control voltage is switched off. Always remove both power plugs (L and N).
- Only qualified electricians are permitted to wire the device.
- Use only the correct tools for all work.
- Check all wiring after connection.
- Take note of the maximum loads on all connections.
- Never expose the device to moisture, for example due to condensation or cleaning agents.
- Take the device out of operation if it is faulty or damaged and is therefore compromising safe operation.
- Do not open the device.
- Do not attempt to repair the device yourself. If the device requires repairs, send it in with an exact description of the fault.



Wurm Infocenter



paperless info



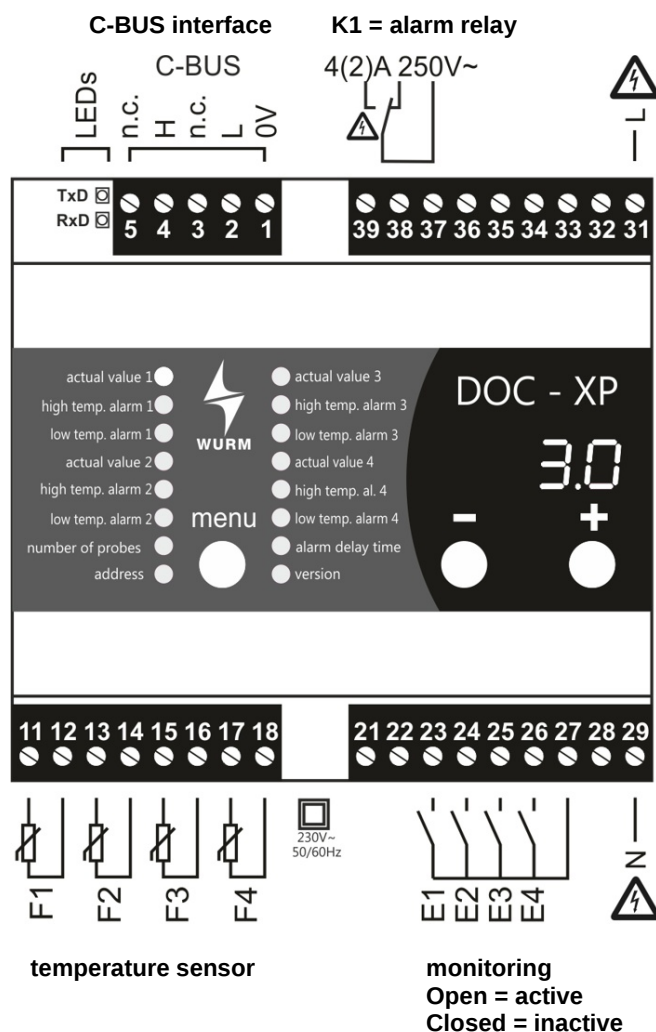
Software revisions and validity of documentation

Software version		
V1.2	2019-04	Documentation status

Any software versions not listed are special solutions for individual projects and are not described in detail in this document. This document automatically ceases to be valid if a new technical description is issued.

Manufacturer: Wurm GmbH & Co. KG Elektronische Systeme, Morsbachtalstraße 30, D-42857 Remscheid
For further information, see our website at www.wurm.de

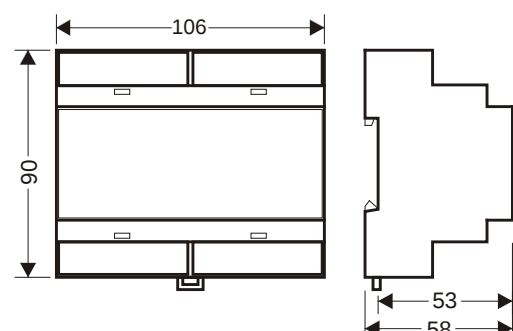
Circuit diagram



Installing and connecting

WARNING
Danger to life from electric shock and/or fire!

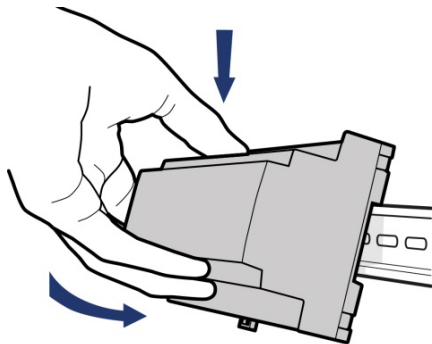
- Switch off the power to the entire plant when carrying out installation, wiring or removal work. Otherwise a mains voltage and/or external voltage may still be present even if the control voltage is switched off. Always remove both power plugs (L and N).



This device is designed for top-hat rail installation. The housing has standard dimensions and is also suitable for installation in fuse boxes and distribution cabinets. The devices can be positioned next to one another without gaps.

DOC-XP

Measurement and monitoring module for 4 temperatures



Place the device with the upper guide edge on the top-hat rail.
Then press the device gently downward until it engages with the fastening safety catch on the top-hat rail.

For wiring of the data lines, we recommend the use of standard telephone lines 2x2x0.8ø up to lengths of 100m. The shielding must be grounded in the control cabinet.

For cable lengths from 100m to 400m, shielded lines with braided sheathing should be used.

For sensor extensions, it is recommended that sheathed cable be laid.

Cable length	Cross section
Up to 100m	0.75mm ²
Up to 400m	1.5mm ²

Technical data

Power supply	230V~, +10% / -15%, approx. 5VA	
Temperature sensor	4 x TRK277, DGF or K243	
Digital inputs	4 x potential-free, monitoring inactive	
Output relay	1 x alarm, changeover contact, 230V~, 4(2)A	
Central unit	Single-chip microcomputer, data memory and quartz clock with 5000h power reserve	
Monitoring system	Monitoring of connected sensors, self-monitoring of data memory and microcomputer	
Communication	3-wire CAN bus interface with integrated power supply, galvanically isolated	
Dimensions	(WxHxD) 106 x 90 x 58mm (DIN 43880)	
Fastening	Top-hat rail TH 35-15 or TH 35-7.5 (DIN EN 60715)	
Ambient temperature	Operation: 0...+55°C, storage: -25...+70°C	
Weight	About 450g	
CE conformity	– 2014/30/EU (EMC Directive) – 2014/35/EU (Low Voltage Directive)	CE
EAC conformity	– TR CU 004/2011 – TR CU 020/2011	EAC
	RoHS II	
Valid from	Version 1.2	



NOTICE

- You can find more information about the device in the Wurm Infocenter.