



- ◆ Please thoroughly read this instruction sheet before installing the device and putting them into use.
- ◆ The content of this instruction sheet may be revised without prior notice.

- ◆ Please consult our web site and download the most updated version of this document.
(<https://www.gefran.com/en/download/3518/attachment/en>)



1. Description

The PTC-DO1 device interfacing of a PTC temperature sensor with GEFran drives.

The electric circuit compares the resistive value of the input sensor with a double threshold circuit and closes the output contact if the pre-established limits are exceeded. Alarm functions include over-temperature, interruption and sensor/connection short-circuit.

The external power supply is a 24Vdc voltage; the insulation rating of the output contact is functional and does not feature safety requirements.

Mechanically, all the circuitry is inserted in a DIN rail box with screw type output terminals for connections to the drive and to the sensor.

For simplicity, all the information in the document refers to the ADV series drives but is also applicable to other product families.



2. Electrical specifications

Power supply	+24Vdc ±10%
Output	Single opto-isolated contact (2 pins) I _{max} = 10mA Insulation >1KV - OPEN = No temperature alarm active - CLOSE = Temperature alarm
Input	PTC compliant with DIN 44081/2 stability standards and IEC 60034.11.2 motor - V _{TLOW} = 50Ω Sensor/connection short-circuit alarm - V _{THIGH} = 1900Ω Over-temperature alarm or sensor/connection interruption - V _{TRIP} = 1500Ω Over-temperature alarm reset threshold.

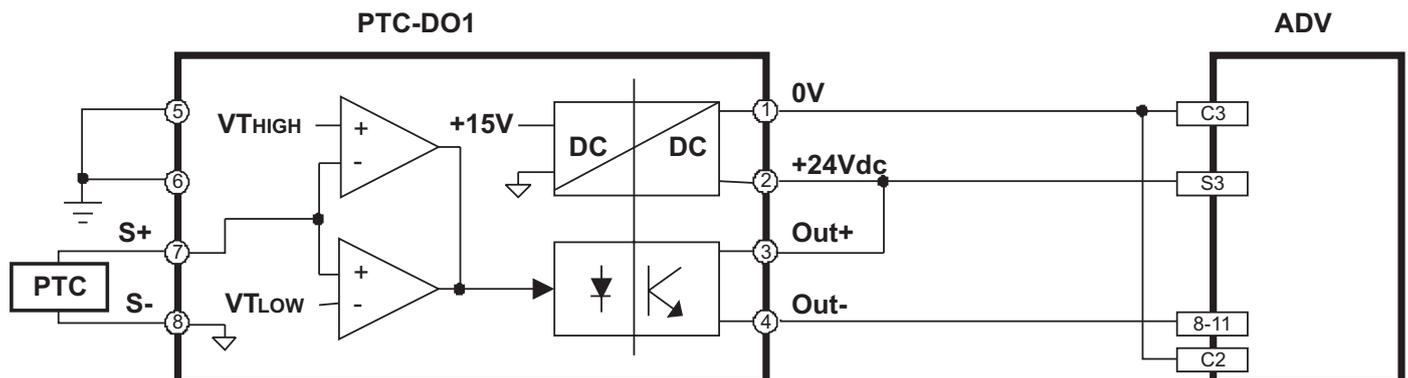
4. Connection

- ◆ The standard connection with ADV drives is shown in Fig_1.
- ☞ **For connections, use >0.25mm twisted cables (preferably shielded).**
- ☞ **Do not connect they temperature sensor together with power cables.**

5. Configuration

Menu: 24 - ALARM CONFIG			
IPA	Descr.	Note	Default
4520	MotorOT src	digital input selection	Null
4522	MotorOT activity	type of alarm selection	Warning
4528	MotorOT holdoff	digital filter selection	1000ms

3. Connection diagram



Fig_1