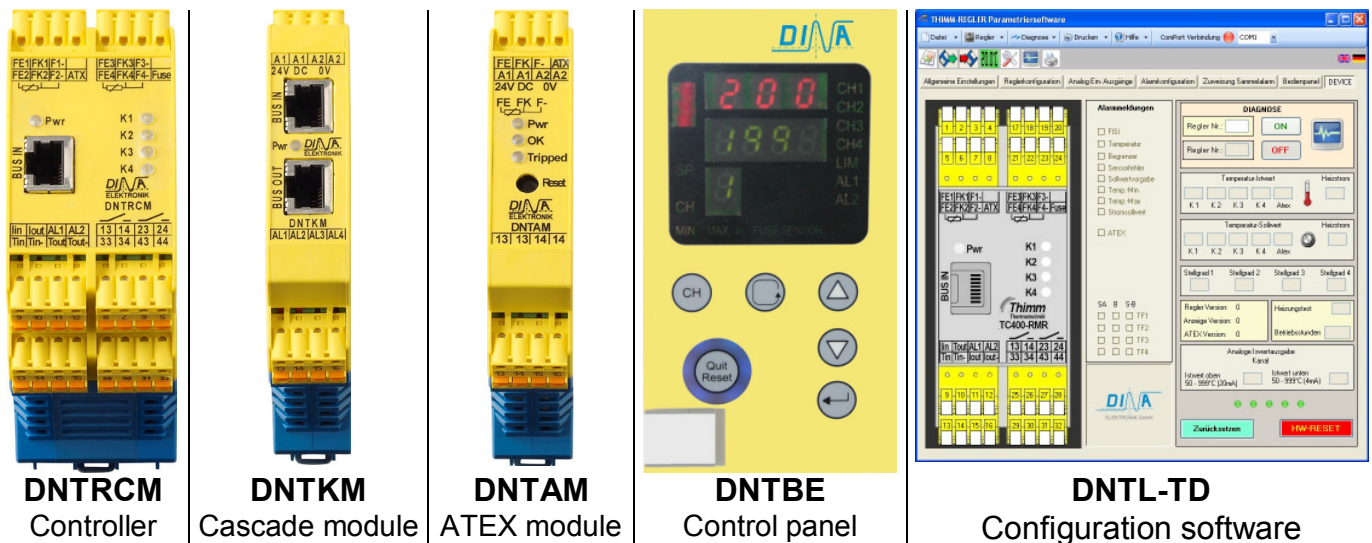


DINA-TempLine: Cascadable temperature controller with temperature limiter

The cascadable temperature controller system consists of a cascade module, controller module, control panel and a field bus gateway. A temperature limiter (ATEX module) can be added. The gateway enables a communication between the temperature controller system and a host diagnostic system.



Controller module type DNTRCM

The controller modules and the cascade modules will be connected via a bus of a 35mm DIN rail. The power supply results via the cascade module. The connection from the controller to the control panel will be done via RJ45 plug socket. To measure the temperature four PT100 sensors can be connected. Alternative thermo elements are possible. Every controller has 4 digital outputs. An analogue output (4-20mA) to drive a power controller is available. 2-point- or PID-controller is available for the temperature regulation. The controller can be used to monitor a minimum temperature (anti-freeze protection). A stand alone function is also possible. The controller module is placed in a 45mm housing. It can be mounted to a 35mm DIN rail.

Cascade module type DNTKM

The cascade modules provide the electrical connection between the temperature controller lines. 16 temperature controllers can be connected to one cascade module. In the whole installation there are 250 controllers modules possible. The number of the cascade modules is optional. The cross linking between the cascade modules will be done via RJ45 plug socket. Diagnostic communication results between controller lines and cascade modules. Four semi conductor outputs enable error messages. The outputs can be optionally configured. The cascade module is placed in a 22,5mm housing. It can be mounted to a 35mm DIN rail.

ATEX limiter module type DNTAM

The ATEX limiter works autarkic and can be used with a PT100 sensor. The output contacts open and remain open, if the temperature limit is exceeded. To reset the contacts the temperature limit has to be under-running and a quit button at the module has to be activated. An unidirectional interface enables a data communication with the controller about the set value, actual value and status information. The data can be displayed via the control panel or via the configuration software. The module is placed in a 22,5mm housing. It can be mounted to a 35mm DIN rail.

Control panel type DNTBE

The control panel provides the configuration of all controller modules. Set value, actual value and the status of the system can be displayed via the 7-segment display and a lot of various LED. The control panel is provided to be mounted in a control board.

DNTL-TD

The configuration software enables an easy programming and a online diagnostic of the controllers via a computer.

Type Features

DNTRCM Controller module with 4 control loops
 4 inputs for 4 temperature sensors
 1 current input for set-temperature
 1 current input to measure the plant current
 4 contact outputs
 1 current output (4-20mA) to control the plant heater
 1 current output (4-20mA) for actual-temperature
 2 alarm outputs positive switching
 1 communication interface to ATEX-module
 1 communication interface via the DIN rail to the gateway

DNTKM Cascade module
 4 outputs positive switching
 1 communication interface via the DIN rail and RJ45 female connector to the gateway

DNTAM ATEX module
 1 input for temperature sensor
 1 safe contact output
 1 communication interface to the controller

DNTBE Control panel for the configuration of the controller
 Display for actual- and set-temperature
 Display for the selected control loop

All products are supplying with 24V DC.

Plan of installation

