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TNC-A1412

## TNC-A1412

### CONTROLLERS FOR DATA ACQUISITION AND FOR CONTROLLING FIELD MODULES

Controller for controlling actuators and for monitoring the damper blade position and duct smoke detectors

- Controller with TROXNETCOM Basic User Software
- Easy and safe commissioning without programming
- Controller with master function for stand-alone operation
- System monitoring
- Automatic detection of components and their status
- Menu-driven user interface (controller display) for system configuration
- Peripheral equipment can be tested without additional auxiliary equipment

## General information



### Application

- TROXNETCOM controllers with AS-i master interfaces manage the data traffic with AS-i field modules
- The controllers detect the devices on the bus, perform error diagnoses and report states
- The controllers regularly query the status of each AS-i field module and send control signals to the AS-i field modules
- Each controller can be used for up to 2 × 31 AS-i field modules
- The controllers can be connected to the touch display (communication master) via Ethernet or PROFIBUS DP
- Single controllers and touch displays with multiple controllers each represent independent systems. As an option, they can be used to transmit messages to a central BMS
- Each controller comes with the TROXNETCOM Basic User Software pre-installed and can be configured with a CSV file for a group of dampers. There is usually no programming required.

### Description

TNC-A1412 is used as a universal controller and is provided with 2 AS-i master interfaces that can be activated. Only one AS-i master interface is factory activated. It must be connected to an AS-i power supply unit. To activate the second AS-i master interface, another AS-i power supply unit is required. The controller can either be used as a stand-alone solution or to create a network with PROFIBUS DP or Ethernet.

- AS-i controller TNC-A1412 with one or two master interfaces for 31 or 62 AS-i devices, respectively.
- With TNC Basic User Software
- Recognition of all devices on a bus
- For initialising the AS interface network
- Error diagnosis and signalling
- Colour display, also for operation
- PROFIBUS DP and Ethernet interfaces

Order code

TNC-A1412 for 1 or 2 AS-i master devices

TECHNICAL INFORMATION

Type	TNC-A1412
Supply voltage	18 – 32 V DC (AUX) 21 – 31.6 V DC (AS-i)
Current consumption	< 500 mA
Programming interface	Ethernet RJ45; 10/100 MBd
Data interface	PROFIBUS DP (EN 50170); slave 12 MBd max.
Display	Full graphic LC colour display
Status LED	1 × red/green (combination LED)
Ambient temperature	0 to 60 °C
Storage temperature	-20 to 70 °C
MTTF	39 years
AS-i profile	M4
AS-i certificate	97302
Casing materials	Powder-coated aluminium, galvanised sheet steel, PC
Fixing	On DIN mounting rail
Weight	0.699 kg

## Specification text

The AS-i controller TNC-A1412 is fitted with:

- AS-i master interface 1 (factory activated)
- AS-i master interface 2 (can be activated)
- Text and graphic display
- 6 push buttons
- SD card slot for system configuration
- Optional: Controller integration into a network, either PROFIBUS DP (slave) or Ethernet with Modbus TCP (slave/server)

The pre-installed TNC Basic User Software allows for:

- Configuring the controller integration (PROFIBUS DP/Ethernet Modbus TCP/no network)
- Activating the second AS-i master interface
- Control of components as part of fire damper control
- Automatic detection of TROX modules and their functions
- Automatic grouping
- Optional system configuration with CSV file (SD card)
- Automatic functional test
- Manual control of dampers
- Integral display, also for operation
- Simple, menu-driven configuration and adjustment
- Supply voltage: 24 V DC
- Current consumption 24 V DC < 500 mA and AS-i < 10 mA
- Casing materials: aluminium, galvanised sheet steel, PC
- Ambient temperature: 0 – 60 C°
- Protection level: IP 20
- Status display: LED 1 × red/yellow/green
- Manufacturer: TROX GmbH
- Type: TNC-A1412

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