







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

- 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

Application

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 signallingColour display, also for operationPROFIBUS DP and Ethernet interfaces

Order code

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

# **TECHNICAL INFORMATION**

Туре	TNC-A1412
Supply voltage	18 - 32 V DC (AUX) 21 - 31.6 V DC (AS-i)
Current consumption	< 500 mA
<b>Programming interface</b>	Ethernet RJ45; 10/100 MBd
Data interface	PROFIBUS DP (EN 50170); slave 12 MBd max.
Display	Full graphic LC colour display
Status LED	$1 \times \text{red/green}$ (combination LED)
<b>Ambient temperature</b>	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

#### 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  $^{\circ}$
- Protection level: IP 20
- Status display: LED 1 × red/yellow/green
   Manufacturer: TROX GmbH
   Type: TNC-A1412

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- Colour display, also for operation PROFIBUS DP and Ethernet interfaces