TROX® **TECHNIK**
The art of handling air

AS-EM

AS-EM

MODULE USED TO CONTROL FIRE DAMPERS, AIR TRANSFER DAMPERS, DUCT SMOKE DETECTORS AND MULTILEAF DAMPERS

The module is used to connect the control system with the components

- Integral AS-Interface slave
- Monitoring of signal receipt
- With short circuit protection
- Easy wiring due to flat cable insulation displacement connectors ('click and go')
- Certified motor control modules for safe communication up to SIL2
- Special modules for dampers with special functions including redundant voltage supply
- Universal module for the connection of various terminal units such as fire dampers, smoke protection dampers or duct smoke detectors

Application

Application

- Module used to control actuators for fire dampers, air transfer dampers, smoke detectors and multileaf dampers
- Capturing the damper blade end positions (CLOSED and OPEN) as well as intermediate positions
- Actuators can be started even without controller communication
- Emergency position can be set (OPEN or CLOSED)
- LEDs for OPEN and CLOSED positions; monitoring of running time errors
- Integral AS-Interface slave
- Monitoring of signal receipt
- Master can be used to monitor the running time of the damper blade actuator
- Connection with flat cable insulation displacement connector
- Supply voltage of the module and 24 V DC actuator using AS-Interface (2-wire control)
- Plug-in connection for Belimo actuators

TECHNICAL INFORMATION

Description	AS-EM
Electrical design	4 inputs/3 outputs
Output function	PNP transistor
Supply voltage	26.5 – 31.6 V DC
Current consumption, incl. actuator	450 mA
Inputs	
Switching	DC PNP
Sensor voltage supply	AS-i
Voltage range	18 – 30 V DC
With short circuit protection	Yes
Switching level – high signal 1	10
Input current high/low	> 7 mA/< 2 mA
Input characteristic	IEC 61131-2 Type 2
Outputs, PNP	
Galvanically isolated	No
With short circuit protection	Yes
Max. current load per output	400 mA per output/400 in total (from AS-i)
Outputs, relay	
Galvanically isolated	Yes
Maximum voltage	32 V
Max. current load	500 mA
Ambient temperature	–5 to 75 °C
Protection level	IP 42
AS-i profile	S-7.A.E
I/O configuration	7 Hex
ID code	7 Hex
EMC	EN 61000-6-2; EN 61000-6-3

Standard description (characteristics)

- Module used to control fire dampers, air transfer dampers, smoke detectors and multileaf dampers: fire damper / multileaf damper: actuator with spring return (2DI/1DO); smoke control damper / multileaf damper: actuator without spring return (2DI/2DO); air transfer damper: actuator with spring return and smoke detector RM-O-3-D (4DI/2DO); 24 V terminal. F. RM); smoke detector (4DI/2DO)
- Capturing the damper blade end positions (CLOSED and OPEN) as well as intermediate positions
- Actuators can be started even without controller communication
- Emergency position can be set (OPEN or CLOSED)
- LEDs for OPEN and CLOSED positions; monitoring of running time errors
- Integral AS-Interface slave
- Monitoring of signal receipt
- Master can be used to monitor the running time of the damper blade actuator
- Connection with flat cable insulation displacement connector
- Supply voltage of the module and 24 V DC actuator using AS-Interface (2-wire control)
- Plug-in connection for Belimo actuators
- Ambient temperature: –5 to 75 °C
- Protection level: IP42
- Make: TROX GmbH or equivalent
- Type: AS-EM

Life cycle assessment
A life cycle assessment is available for the product series in form of an Environmental Product Declaration (EPD) that has been checked and published by a programme holder.

AS – EP

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1 **Module**

AS-EPR   Module for the connection of four limit switches
AS-EM   Module for controlling an actuator
AS-EM/EK   Module for controlling actuators on smoke control dampers
AS-EM/SO   Module for controlling actuators with special functions
AS-EM/SIL2   Module for controlling actuators with SIL2 certificate
AS-EM/C   Module for universal control functions, 2 outputs, 4 inputs
TNC-A005S   AS-i safety input module
TNC-Z0094   Relay module 4E/4A
TNC-Z0047   Illuminated push button module