MDT Heating Actuator

MDT Heating Actuator 4/6/8-fold, MDRC

Version		
AKH-0400.03	Heating Actuator 4-fold	2SU MDRC, to control electrothermic valve drives 24-230VAC
AKH-0600.03	Heating Actuator 6-fold	3SU MDRC, to control electrothermic valve drives 24-230VAC
AKH-0800.03	Heating Actuator 8-fold	4SU MDRC, to control electrothermic valve drives 24-230VAC

The MDT Heating Actuator with integrated temperature controller receives KNX/EIB telegrams and controls up to 8 independent electrical outputs . Each channel has its own LED indicator.

Each channel supplies up to 4 electrothermic valve drives and can be parameterized individually via ETS. The channels are controllable with PWM (1Bit) or 1Byte telegrams. The integrated temperature controller manages the actuating value given by external KNX temperature sensors. The temperature controller offers comfort-, night-, frost protection- and summer- /winter- operation.

The MDT Heating Actuator detects mains voltage failure and has emergency operation if the cyclic telegram is missing. Additionally they provide objects for heating request and cyclic movement of the valves.

The MDT Heating Actuator is a modular installation device for fixed installation in dry rooms. It fits on DIN 35mm rails in power distribution boards or closed compact boxes.

For project design and commissioning of the MDT Heating Actuator it is recommended to use the ETS or later. Please download the application software at www.mdt.de/Downloads.html
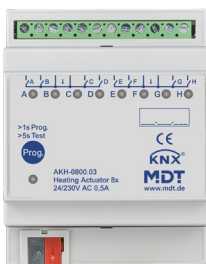
AKH-0400.03

AKH-0600.03

AKH-0800.03

- Production in Germany, certified according to ISO 9001
- **New generation with function extension**
- Each channel controls up to 4 electrothermic valve drives (230VAC)
- Free assignment of the outputs to the controller channel
- Controllable with 1Bit (Switching/PWM) / 1Byte actuating variable or direct control with temperature value via KNX bus
- **Integrated PI temperature controller (Heating and Cooling)**
- Comfort-, night- and frost protection. Summer-/winter operation
- 1Bit +/-, 1Byte or 2Byte absolute object to set the given value
- Setpoint values are stored at bus voltage failure
- Emergency operation if cyclic actuating variable fails
- Overload protection with fault message object (230VAC)
- Mains voltage failure detection with fault message object (230VAC)
- Objects for heating request and cyclic movement of the valves
- **Comprehensive scene functions**
- **Compatible with many visualisations**
- **Minimum flow temperature**
- **Diagnostics for each channel with 14Byte plain text object**
- 3 years warranty

Technical Data	AKH-0400.03 AKH-0600.03 AKH-0800.03
Number of outputs	4/6/8
Output switching current	
24VAC and ohmic load	500mA
230VAC and ohmic load	500mA
max. inrush current**	4A
External switching voltage	24-230VAC
Maximum load	
Number of electrothermic valves*	230 V AC: 4 per channel for electrothermic valves < 1,2 W | 3 per channel for electrothermic valves < 1,6W 24 V AC: 3 per channel for electrothermic valves < 1,4 W | 2 per channel for electrothermic valves < 2,0W
Output life expectancy	Triac output, wearless
Specification KNX Interface	TP-256 with long frame support for ETS5
Available application software	ETS5/6
Permitted wire gauge	
Screw terminal (max. 0,5Nm tightening torque)	0,5 - 4,0mm² solid core 0,5 - 2,5mm² finely stranded
KNX busconnection terminal	0,8mm Ø, solid core
Power supply	KNX bus
Power consumption KNX bus typ.	< 0,3W
Operation temperature range	0 to + 45°C
Enclosure	IP 20
Dimensions MDRC (Space Units)	2/3/4SU

* depends on manufacturer. Inrush current for 4 electrothermic valves has to be < 1A each electrothermic valve
** every group of four outputs (AKH-0400.03 and AKH-0800.3) or every group of three outputs (AKH-0600.03)

Examplary circuit diagram AKH-0800.03