

AKH-0600.03

KNX Heating Actuator 6-channel, 3 SU MDRC, 24 - 230 V AC



Product description:

The MDT Heating Actuators AKH have an integrated PI controller for heating and cooling per channel. The actuator only needs the room temperature - e.g. from an MDT push-button or presence detector with temperature sensor - to start controlling. There is no need for an external temperature controller. Electrothermic drives with 24 or 230 V AC can be connected to the outputs and controlled.

Product functions:

- **New generation with extended functionality**
- Each channel can control up to 4 valve drives (230 V AC)
- **Free assignment of the outputs to the controller channel**
- Control with 1 Bit (Switch/PWM) / 1 Byte (continuous) control variables or direct control with temperature value over the KNX Bus
- **Integrated PI temperature controller (heating and cooling)**
- Comfort-, night-, frost protection mode. summer-/winter operation
- Setpoint setting adjustment with 1 Bit +/-, 1 Byte or 2 Byte absolute object
- Independent setpoint setting for comfort, standby and night
- Setpoint storage in the event of a bus power failure
- Emergency operation on failure of the control value
- Overload protection with fault message object (230 V AC)
- Error message via object in case of 230 V supply voltage failure
- Heating request object as well as a valve anti-stick object
- **Comprehensive scene functions**
- **Compatible with many visualisations**
- **Minimum flow temperature**
- **Clear text diagnostics for each channel with a 14 Byte object**
- Fast application download (long frame support as of ETS 5)

Technical data:

Device	Device type	AKH Heating Actuator
	Article Number	AKH-0600.03
	EAN / GTIN	4251916130138
	Installation width	3 SU / 54 mm
	Dimensions (H x W x D)	90 x 54 x 65 mm
	Weight, gross (incl. packaging)	0.137 kg
	Protection classification	IP20
	Installation type	MDRC, DIN rail 35 mm
	Installation position	any
	Weight, net	0.111 kg
Performance data	Nominal voltage U_n	24 ... 230 V AC
	Nominal current I_n (per output)	500 mA
	Nominal frequency	50/60 Hz
	Mech. switching frequency	wear-resistant
	Power dissipation of the device, typical	≤ 6 W
Outputs	Number of outputs	6
	Output type	Triac
	Number of integrated temperature controllers	6
	Room temperature control range	7 ... 35 °C
	Inrush current	4 A (channel A+B), 4 A (channel C+D), 4 A (channel E+F)
	Number of Electrothermal drives 230 V	4 per channel for valve drives < 1.2 W 3 per channel for valve drives < 1.6 W
	Number of Electrothermal drives 24 V	3 per channel for valve drives < 1.4 W 2 per channel for valve drives < 2 W
KNX	Nominal voltage KNX	30 V DC SELV
	Voltage range KNX	21 ... 31 V DC SELV
	Typical power consumption KNX bus	< 0,3 W
	KNX Medium	TP-256 with long frame support
	KNX Application	as of ETS 5 (latest)
Environmental conditions	Ambient operating temperature	0 ... 45 °C
	Storage	-20 ... +55 °C
	Humidity	< 95 %
	Condensation permissible	No

Technical data:

Connections	Connection type	Screw terminal with slotted head
	Conductor cross section 1 x	0,5 ... 2,5 mm ²
	Screw terminal tightening torque	0.5 Nm
	KNX connection type	KNX terminal
	KNX cable cross section	0.6 ... 0.8 mm, solid conductor

Wiring diagram:

