

## AKS-0816.03

KNX Switch Actuator 8-channel, 6 SU MDRC, 16 A, 230 V AC, C-load, standard, 140 µF



### Product description:

The MDT Switch Actuator AKS 16 A in standard version for medium to large loads and with a wide range of functions. The AKS series offers more channels with less space requirement, which minimises costs per channel and for the distribution board. The actuator is equipped with bistable relays for currents up to 16 A and a C-load of up to 140 µF. Each channel can be switched directly by means of a button on the actuator.

### Product functions:

- **Space saving due to an optimised form factor**
- **Comprehensive application**
- Manual mode blockable and LED indicator per channel
- Normally open and normally closed
- Status feedback for all channels (also for manual operation)
- Time functions (switch on-/switch off delay, staircase light function)
- **Extended logic and scene function per channel**
- Extended status functions (inverted, cyclic, during locking)
- **Threshold switch (1 Byte/2 Byte/2 Byte float)**
- **Operating hours meter**
- **Priority/forced operation with automatic release time**
- **4 mm<sup>2</sup> connection terminals. Individual L-connections**
- Power supply over the KNX Bus
- Fast application download (long frame support as of ETS 5)
- 3 year warranty

## Technical data:

|  |   |                                    |                        |
|--|---|------------------------------------|------------------------|
| <b>Device</b>                            | Device type                                     | AKS Switch Actuator                |                        |
|  | Article Number                                  | AKS-0816.03                        |                        |
|  | EAN / GTIN                                      | 4251916130336                      |                        |
|  | Installation width                              | 6 SU / 108 mm                      |                        |
|  | Dimensions (H x W x D)                          | 90 x 108 x 65 mm                   |                        |
|  | Weight, gross (incl. packaging)                 | 0.342 kg                           |                        |
|  | Protection classification                       | IP20                               |                        |
|  | Installation type                               | MDRC, DIN rail 35 mm               |                        |
|  | Installation position                           | any                                |                        |
|  | Weight, net                                     | 0.308 kg                           |                        |
|  | Mechanical manual override                      | No                                 |                        |
|  | <b>Performance data</b>                         | Nominal voltage $U_n$              | 230 V AC <sup>*1</sup> |
|  |   | Nominal current $I_n$ (per output) | 16 A                   |
| Nominal frequency                        |   | 50/60 Hz                           |                        |
| Relay type                               |   | bistable                           |                        |
| Mech. switching frequency                |   | 1.000.000                          |                        |
| Capacitive load                          |   | 140 $\mu$ F / 16 A                 |                        |
| Fluorescent lamp load AX                 |   | $\leq$ 16 AX                       |                        |
| Power dissipation of the device, typical |   | $\leq$ 8 W                         |                        |
| <b>Outputs</b>                           | Number of outputs                               | 8                                  |                        |
| <b>Lamp data</b>                         | Incandescent lamp load                          | 2500 W                             |                        |
|  | HV-Halogen lamps                                | 2500 W                             |                        |
|  | NV-Halogen lamps                                | 1500 W                             |                        |
|  | Fluorescent lamp uncompensated                  | 2300 W                             |                        |
|  | Fluorescent lamp parallel compensation          | 1500 W                             |                        |
|  | Max. number of ECG                              | 20                                 |                        |
| <b>Currents</b>                          | Inrush current (150 $\mu$ s)                    | 600 A                              |                        |
|  | Inrush current (600 $\mu$ s)                    | 250 A                              |                        |
|  | Total current carrying capacity of the actuator | 96 A                               |                        |
| <b>KNX</b>                               | Nominal voltage KNX                             | 30 V DC SELV                       |                        |
|  | Voltage range KNX                               | 21 ... 31 V DC SELV                |                        |
|  | Typical power consumption KNX bus               | $<$ 0,25 W                         |                        |
|  | KNX Medium                                      | TP-256 with long frame support     |                        |
|  | KNX Application                                 | as of ETS 4                        |                        |

## Technical data:

|                                 |                                  |                                  |
|---------------------------------|----------------------------------|----------------------------------|
| <b>Environmental conditions</b> | Ambient operating temperature    | 0 ... 45 °C                      |
|                                 | Storage                          | -20 ... +55 °C                   |
|                                 | Humidity                         | < 95 %                           |
|                                 | Condensation permissible         | No                               |
| <b>Connections</b>              | Connection type                  | Screw terminal with slotted head |
|                                 | Conductor cross section 1 x      | 0,5 ... 4 mm <sup>2</sup>        |
|                                 | Screw terminal tightening torque | 0.5 Nm                           |
|                                 | KNX connection type              | KNX terminal                     |
|                                 | KNX cable cross section          | 0.6 ... 0.8 mm, solid conductor  |

## Hinweise

Protection against induced voltage spikes: To protect against voltage spikes when switching off inductive loads, it is recommended to use appropriate protective circuits such as flyback diodes, RC networks, or varistors directly at the actuator output.

\*1 Mixed operation of nominal and safety extra low voltage (SELV) within the actuator is not permitted!

## Wiring diagram:

