ACTinBOX Classic-Hybrid

ACTinBOX Classic-Hybrid - Multi-function Actuator 4 outputs 10A / 6 inputs ZN1IO-AB46A

## MAIN FEATURES

- Reduced size: $90 \times 60 \times 35 \mathrm{~mm}$ (2 DIN rail units).
- No external supply required different from BUS. .
- EIB/KNX BCU integrated.
- 2 actuation channels to be configured as:
o 2 shutter channels or,
o 1 shutter channel and 2 individual outputs or,
o 4 individual outputs.
- 6 multi-function opto-coupled inputs configurable as:
o 4 binary inputs for free potential contacts.
o 2 binary or AID Inputs, from serial number 10AAF. A NTC temperature probe and a motion sensor can be connected
- Inputs \& Outputs connectors wiring can be executed without the device.
- Independent device can be mounted within distribution boxes, junction boxes and cabinets.
- Including Advanced Logical Functions.
- Inputs and Outputs timing facilities.
- CE directives compliant.

| 1. Outputs | 2. Programming <br> button | 3.LED <br> KNX | 4. KNX <br> terminal | 5. Inputs |
| :--- | :--- | :--- | :--- | :--- |



Programming button: a push button to set the programming mode. If this button is held while plugging the device into the KNX bus, it goes into secure mode.

LED: programming mode indicator. When the device goes into secure mode, it blinks every half second

| GENERAL SPECIFICATIONS |  |
| :--- | :--- |
| Concept |  |
| Bevice type | Description |
|  | Electric operation control device. |
|  | Operation voltage |
|  | Voltage margin |
|  | Power consumption |
|  | Bus connection |
| External supply | Max 240mW (all inputs connected) |
| Ambient temperature | Typical TP1 (red-grey) KNX bus connector. |
| Storage / transport temperature | No |
| Ambient humidity (relative) | $0^{\circ} \mathrm{C}$ to $+55^{\circ} \mathrm{C}$ |
| Storage humidity (relative) | $-20^{\circ} \mathrm{C}$ a $+70^{\circ} \mathrm{C}$ |
| Complementary characteristics | 30 a 85\% RH (No condensation) |
| Safety class: | 30 a $85 \%$ RH (No condensation) |
| Operation type | Class B |
| Device action type | II |
| Electrical solicitations period | Continuous operation |
| Protection class | Type 1 |
| Fitting method | Long |
| Minimum clearances | IP20, clean environment |
| Response to bus voltage failure | Snap onto DIN rail (2 units width) or install in electrical box |
| Response in case of restarting | --- |
| Operation indication | Data saving and outputs changes as programmed |
| Weight / Dimensions (W x H x T) | Data recovery and outputs changes as programmed. |
| PCB CTi index | Programming led lighting when pushing programming bottom. |
| Enclosure | 170 g. / 35x90x60mm |


| INPUTS. SPECIFICATIONS AND CONNECTIONS |  |
| :--- | :--- |
| Isolation method | Opto-coupler |
| Input voltage | +5 V DC for the common |
| Input current | $1,0 \mathrm{~mA}$ at $4,75 \mathrm{~V}$ DC in every input |
| Inputs per common | 6 |
| Input impedance | Aprox. $4,7 \mathrm{k} \Omega$ |
| SwitchTtype | Dry contacts between input and common. |
| Connection Method | Cable screw terminal and matching socket |
| NTC probe cable | 1.5 m. (extending up to 30m.) |
| Max. Cable length | 30 m. |
| Max. Section | $0,15 \mathrm{~mm}^{2}$ to $1 \mathrm{~mm}^{2}$ |
| Response time | $<10 \mathrm{ms.}^{\text {N }}$ Number of digitals inputs |
| Number of analogs/digitals inputs | 6 (inputs 1, 2, 3, 4,5 y 6) |

Connections Diagrams for ACTinBOX Classic-Hybrid (from serial number 10AAF)
Application program ACTinBOX Classic-Hybrid 1.3 o higher version required.

BINARY INPUTS


TEMPERATURE PROBES


## MOTION SENSORS



## OUTPUTS. SPECIFICATIONS AND CONNECTIONS

| Contact type | Potential-free make contact. Outputs 1 and 2 NOT VALID for C-Load. <br> Outputs 3 and 4 VALID for Capacitive Load from serial number <br> 09AAD0001 (maximum C-load 140 $\mu \mathrm{F} /$ output). |
| :--- | :--- |
| Type of disconnection | Micro-disconnection |
| Rated current by output | 10A 250V AC (2500 VA), 10A 30V DC (300W) |
| Rated current by channel | 15 A 250 V AC (3750 VA), 15A 30V DC (450W) |
| Outputs per common (channel) | 2 outputs per common /per channel |
| Switching of different phases | Not possible |
| Connection Type | Cable screw terminal and matching socket |
| Cable Section | $0,25 \mathrm{~mm}^{2}$ to 2,5 mm ${ }^{2}$ |
| Cable Type | Flexible cable using crimping terminals or rigid cable. |
| Number of automatic <br> cycles (A) per automatic <br> action | Mechanical (Min) |
|  | Electrical (min.) |

## SAFETY INSTRUCTIONS

- Do not connect the Main Voltage ( 230 V ) or any other external voltages to any point of the BUS.
- Connecting an external voltage might put all the EIB/KONNEX system into risk.
- Installation should only be performed by qualified electricians following applicable regulations on preventing accidents, as required by law. Once the device is installed, it shouldn't be accessible.
- Ensure there is enough insulation between the AC Voltage cables and the BUS ones. A minimum spacing of 4 mm must be ensured.
- To avoid interfering EMC beams, the circuits for the inputs should not be installed in parallel to mains conducting lines.
- Flexible cable with crimping terminals or rigid cable without terminals must be used for output connection.
- Keep away from water. If product comes into contact with water or other liquid, unplug immediately.
- Do not cover the device with clothes, paper or any other material when in use.
- Any non-observance of these safety instructions may cause fire or other hazards.

