

## SPECIFICATIONS

BRAND NAME: ZELLER  
 PRODUCT NAME: ZMAX24 - Actuator 24 Channel 16A  
 MODEL NO: ZA24/16A  
 Body Material: ABS  
 CERTIFICATION: RoHS  
 FIRE RESISTANCE LEVEL: UL94V-0  
 APPLICABLE TEMPERATURE: -25° ~ +60 °c

## FEATURES

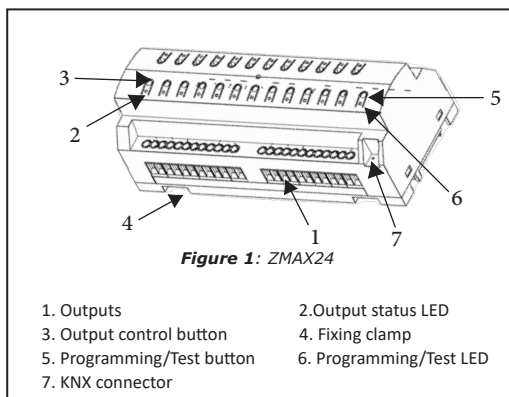
- 4 different configurable fan coil control 2 pipe blocks or individual outputs (up to 24) shutter channels (up to 12)
- Outputs suitable for capacitive loads, maximum 140 µF
- Manual output operation with push button and LED status indicator
- 24 Master Light controls
- PID compressor sequence
- Output timing and protecting delay
- Total data saving on KNX failure
- Dimensions 64 x 90 x 212 mm (12 DIN units)
- DIN rail mounting according to IEC 60715 TH35, with fixing clamp
- Possibility of connecting different phases in adjacent outputs

## DESCRIPTION

The combo switch actuator presents versatility by accommodating various configurations, aiming to fulfill automation needs in smart buildings for safe and effective operations comprehensively. Utilizing KNX bus communication facilitates data exchange with KNX sensors and integration with building management systems. Designed to cater to control requirements in residential and hotel sectors, this combo device ensures efficient room management. Manual output control is achievable through device push buttons, providing a fallback option in case of bus communication failures between devices. Powered by KNX, the combo actuator eliminates the necessity for external power sources. Device configuration is entirely conducted via ETS, where the available object types and quantities are determined by ETS settings.

Type	Tungsten	Tungsten (reference)	Elektronik Balast	LED (reference)	Fourescent (reference)	Capacitive load (reference)
Load	3500 W 277 V AC	4000 W + 140 µF 277 V AC	16 A 277 V AC	600 W 220 V AC	1000 W + 120 µF 230 V AC	1000 W + 120 µF 230 V AC
Inrush (reference value)	220 A	370 A	440 A	300 A	159 A	289 A

## ZMAX24 Actuator 24 Channel 16A ZELLER



Product Code	
Power Supply	KNX Power supply
Current Consumption	MAX, 20mA
Number of Output	24
Group Add. (Max)	245
Assignments (Max)	245
Number of Converters	8
Logic Gates	4
Output Current	16 A @250 V AC, 120 OR 165 A inrush current
Commissioning Mode	S-Mode
Type of Protection	IP 20
Temperature Range	Operation (-10°C...70°C) Storage (-25°C...100°C)
Maximum Air Humidity	< 90 RH
Mounting	DIN Rail
Colour	Light Grey
Dimensions	246 x 90 x 64 mm (W x H x D)->15 DIN units
Certification	KNX Certified

## MAIN FUNCTIONAL CHARACTERISTICS

- Lighting control is possible using any output of the combo switch actuator.
- Every output of the combo switch actuator can be used for heating control.
- Each output of the combo module can be set up as a shutter or blind, granted that two consecutive outputs are accessible.
- The 24 V configuration for shutter/blind requires four outputs from the combo module, but it's exclusively accessible within the first four outputs of the (\*) blocks.
- The Fan Coil with a 2-pipe configuration can be achieved using four outputs of the combo module, but this option is limited to the first four outputs of the (\*) blocks.
- The Fan Coil configured for a 4-pipe system can be established with five outputs from the combo module, but this setup is constrained to the first five outputs of the (\*) blocks.
- Each output offers various functionalities, including timing functions, logic gates, scene settings, disabling options, forced operation, working hour tracking, periodic monitoring, and diverse configurations for feedback telegrams, among other features.
- The system retains the last state memory to safeguard against power failures.

## CONNECTION TO KNX BUS & PROGRAMMING

### (1) Physical Address Button:

This button is utilized to assign a physical address to devices and to verify the bus presence. When the red LED is illuminated, it indicates the presence of the KNX bus and confirms the device status as being physically addressed.

### (2) Manual Control Button:

Using the push buttons located on the device, the loads connected to outputs can be controlled manually. This manual control takes precedence over commands from the KNX bus.

### (3) Status LED:

The LED button displays the status of the outputs. When the green LED is illuminated, it indicates that the output relays are closed.

### (4) KNX Connector:

The KNX bus line is connected using the terminal block (black/red) provided in the package, which is inserted into the housing slot.

## MOUNTING AND SAFETY INSTRUCTIONS

- Only a qualified electrician or authorized personnel should install and operate the device.
- During the planning and construction of electric installations, it's essential to adhere to the relevant specifications, guidelines, and regulations in force in the respective country.
- Avoid connecting the main voltage (230 V AC) or any other external voltages to any part of the KNX bus.
- It's crucial to note that connecting an external voltage could pose a risk to the KNX system. Please, ensure this issue is taken into consideration.
- Make sure there is adequate insulation between the 230 V AC voltage cables and the KNX bus to prevent any potential hazards..
- Avoid exposing this device to direct sunlight, rain, or high humidity to maintain its proper functioning and longevity.
- Avoid using aerosol sprays, solvents, or abrasives that could potentially damage the device.
- Install the device only in dry locations and on a 35 mm DIN rail (TH 35).
- Ensure that the device is accessible for operation and visual inspection.

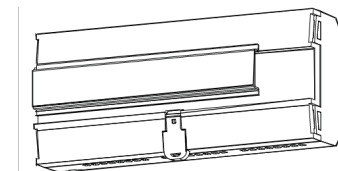
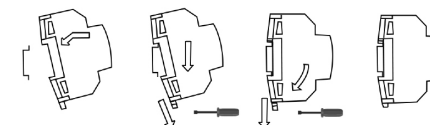
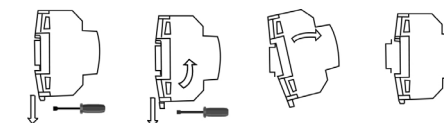


Figure 3: Mounting ZMAX24 on DIN rail

### Attaching ZMAX24 to



### Removing ZMAX24 From



## WIRING DIAGRAMS

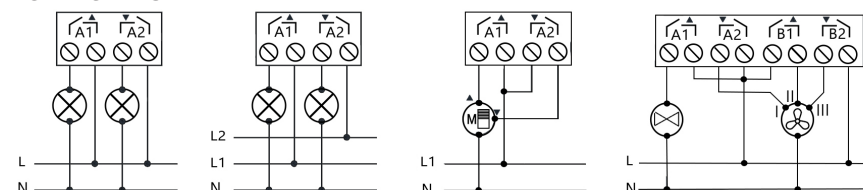


Figure 4: Wiring example (from left to right): 2 loads, 2 loads, connected to different phases, shutter and fan coil