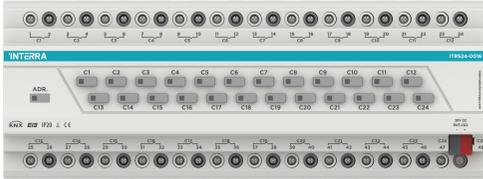


## KNX Combo Switch Actuator



<b>Product Code</b>	ITR5XX-0016
<b>Power Supply</b>	KNX Power supply
<b>Current Consumption</b>	Max. 20mA
<b>Number of Outputs</b>	4, 8, 12, 16, 20 or 24
<b>Output Current</b>	16 A @250 V AC, 120 or 165 A inrush current
<b>Commissioning Mode</b>	S-Mode
<b>Type of Protection</b>	IP 20
<b>Temperature Range</b>	Operation (-10°C...70°C) Storage (-25°C...100°C)
<b>Maximum Air Humidity</b>	< 90 RH
<b>Mounting</b>	DIN Rail
<b>Colour</b>	Light Grey and White
<b>Dimensions</b>	
4/8 outs	105 x 90 x 64 mm (W x H x D)-> 6 DIN units
12/16 outs	171 x 90 x 64 mm (W x H x D)->10 DIN units
20/24 outs	246 x 90 x 64 mm (W x H x D)->15 DIN units
<b>Certification</b>	KNX Certified
<b>Configuration</b>	Configuration with ETS

\*XX : 04, 08, 12, 16, 20 or 24.

### DESCRIPTION

The combo switch actuator is a versatile device that allows a variety of configurations. The combo device is intended to cover every automation requirement in a smart building for safe and efficient operations. The communication of the devices via the KNX bus enables information exchanges with KNX sensors and the integration with a building management system. The combo has been developed for providing the whole control in the residence and hotel sectors. The usage of these devices guarantees the efficient management and provision of rooms. The manual control of the outputs is possible through the push buttons on the device. It allows the control of the outputs when bus communication failures between devices occur. The combo actuator is supplied with power from the KNX and accordingly does not need any external power supply. The complete configuration of the device is performed via ETS. The type and number of the available objects depend on the settings with ETS.

### Combo Output Module Family

Device	Inputs	Outputs	Group Add. (Max)	Assignments (Max)
ITR504	-	4	245	245
ITR508	-	8	245	245
ITR512	-	12	245	245
ITR516	-	16	245	245
ITR520	-	20	245	245
ITR524	-	24	245	245

### Combo Output Module Functionality Differences:

Device	Number of Converters	Working Hours Counter	Logic Gates
ITR504	4	ok	4
ITR508	4	ok	4
ITR512	4	ok	4
ITR516	8	ok	4
ITR520	8	x	4
ITR524	8	x	4

Type	Tungsten	Tungsten (reference)	Electronic ballast	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
Inrush (reference value)	220 A	370 A	440 A	300 A	159 A	289 A

Coil Power 50 ms

### MAIN FUNCTIONAL CHARACTERISTICS

- Lighting control can be made with every output of the combo switch actuator.
- Heating control can be made with every output of the combo switch actuator.
- Every output of the combo module can be configured as shutter/blind provided that 2 consecutive outputs are available.
- Shutter/blind 24 V configuration can be with 4 outputs of the combo module. However, it is only available in the first four outputs of the (\*) blocks.
- Fan Coil 2 pipes configuration can be with 4 outputs of the combo module. However, it is only available in the first four outputs of the (\*) blocks.
- Fan Coil 4 pipes configuration can be with 5 outputs of the combo module. However, it is only available in the first five outputs of the (\*) blocks.
- The functionalities for each output include among other things timing functions, logic gates, scenes, disabling function, forced, working hours counter, periodical monitoring and different configurations for feedback telegrams.
- Last situation memory against power failure.

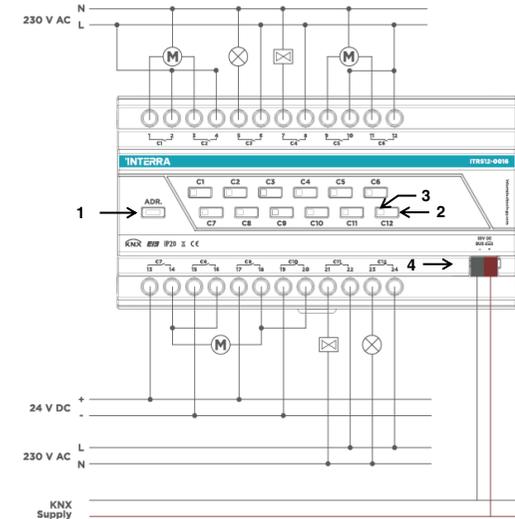
(\*): Each block consists of every 6 outputs of the combo module that starts from C1 output.

**Possible blocks** : C1-C6, C7-C12, C13-C18, C19-C24.

### MOUNTING AND SAFETY INSTRUCTIONS

- The device may only be installed and put into operation by a qualified electrician or authorized personnel.
- For planning and construction of electric installations, the appropriate specifications, guidelines and regulations in force of the respective country have to be comply.
- Do not connect the main voltage (230 V AC) or any other external voltages to any point of the KNX bus.
- Connecting an external voltage might put the KNX system at risk. Please, do not forget to consider this issue.
- Ensure that there is enough insulation between the 230 V AC voltage cables and the KNX bus.
- Do not expose this device to direct sunlight, rain or high humidity.
- Do not use aerosol sprays, solvents or abrasives that might damage the device.
- Installation only in dry locations and on a 35 mm DIN rail (TH 35).
- Accessibility of the device for operation and visual inspection must be provided.

### CONNECTION TO KNX BUS & PROGRAMMING



#### (1) Physical Address Button

This button is used to give a physical address to devices and to verify the bus presence. The red led switched on means the presence of KNX bus and the device status as physical addressing.

#### (2) Manual Control Button

Via the push buttons present on the device, the loads connected to outputs can be controlled. This manual control has priority over the commands from the KNX bus.

#### (3) Status LED

The button LED indicates the status of the outputs. When the green LED is on, the output relays are closed.

#### (4) KNX Connector

The connection of the KNX bus line is made with the terminal block (black/red) included in delivery and inserted into the slot of housing.

### MARKS

**CE:** The device complies with Electromagnetic Compatibility Directive (2004/108/EC) and Low Voltage Directive (2006/95/EC).

Tests are carried out according to

EN IEC 62368-1:2020

EN 50561-1:2013 standards.