

FEATURES

- 4 channels for consumption counters (meters) with S0-pulse outputs (UNE-EN 62053-31) *.
- Registration of consumed electric power, cost and CO2 emissions that can be split in up to 4 time intervals.
- Compliant with UNE-EN 62053-31 Class B.
- Total data saving on KNX bus power failure.
- KNX BCU integrated.
- Size 90 x 60 x 35 mm (2 DIN units).
- DIN rail unit assembly (EN 50022), with snap fit clamp.
- CE directives compliant (CE mark on the front side).

*Other counters (meters) with dry-voltage output or not complying S0 standard may also work (previous test is recommended)

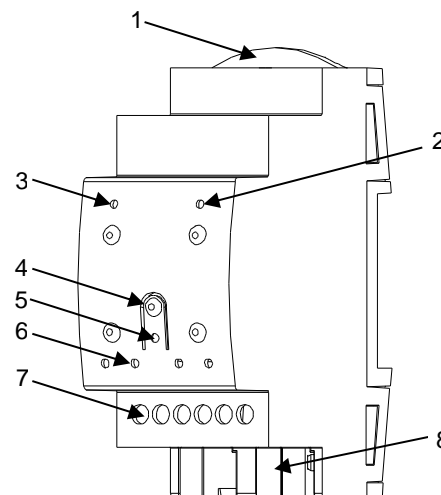


Figure 1: KCI

1. Battery holder	2. EMPTY batt. LED indicator	3. LOW batt. LED indicator	4. Programming button
5. Programming LED	6. Input Indicator LED	7. Input connectors	8. KNX connector

Programming button: short press to set programming mode. If this button is held while plugging the device into the KNX bus, it enters the safe mode.
 Programming LED: programming mode indicator (red). When the device enters the safe mode, it blinks (red) every half second. During the start-up (reset or after KNX bus failure) and if the device is not in safe mode, it emits a red flash.
 LOW batt. LED: if this LED is blinking in red, replace the batteries as soon as possible.
 EMPTY batt. LED: if this LED is blinking in red, the batteries are empty.

GENERAL SPECIFICATIONS

CONCEPT		DESCRIPTION		
Type of device		Electric operation control device		
KNX supply	Voltage (typical)	29VDC SELV		
	Voltage range	21..31VDC		
	Maximum consumption	Voltage	mA	mW
		29VDC (typical)	12.5	363
24VDC ¹	15	360		
Connection type		Typical TP1 bus connector for 0.80mm Ø rigid cable		
External power supply		2 CR2032 battery (2 x 3V). It allows to keep counting pulses without the KNX bus power supply		
Operation temperature		0°C .. +55°C		
Storage temperature		-20°C .. +55°C		
Operation humidity		5 .. 95% (No condens.)		
Storage humidity		5 .. 95% (No condens.)		
Complementary characteristics		Class B		
Protection class		III		
Operation type		Continuous operation		
Device action type		Type 1		
Electrical stress period		Long		
Degree of protection		IP20, clean environment		
Installation		Independent device to be mounted inside electrical panels with DIN rail (EN 50022)		
Minimum clearances		Not required		
Response on KNX bus failure		Data saving according to parameterization		
Response on KNX bus restart		Data recovery according to parameterization		
Operation indicator		Programming LED indicates programming mode (red) or safe mode (blinking red). LOW and EMPTY batt. LED indicate the battery level when blinking in red (KNX supply necessary). LED input indicator blinks when a pulse is received		
Weight		89g (+ 6g bat.)		
PCB CTI index		175V		
Housing material		PC FR V0 halogen free		

¹ Maximum consumption in the worst case scenario (KNX Fan-In model)

INPUTS SPECIFICATIONS AND CONNECTIONS	
CONCEPT	DESCRIPTION
Number of S0 or dry inputs	4
Inputs per common	2
Operation voltage	6VDC
Connection method	Screw terminal block
Cable cross-section	0.5-2.5mm ² (IEC) / 26-12AWG (UL)
Maximum cable length	30m
Minimum pulse duration	30ms

WIRING DIAGRAMS

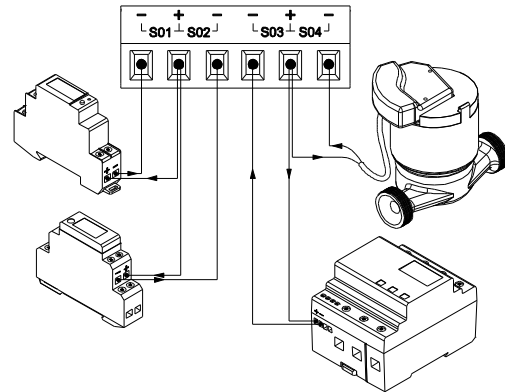
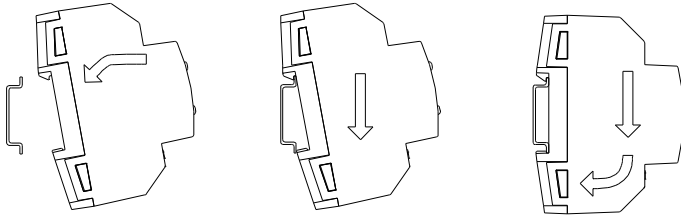


Figure 2: Example of connections with SO pulse generators

Attaching KCI to DIN rail:



Removing KCI from DIN rail:

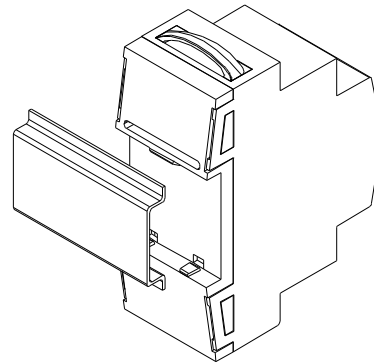
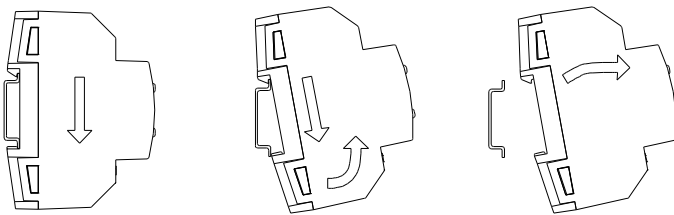
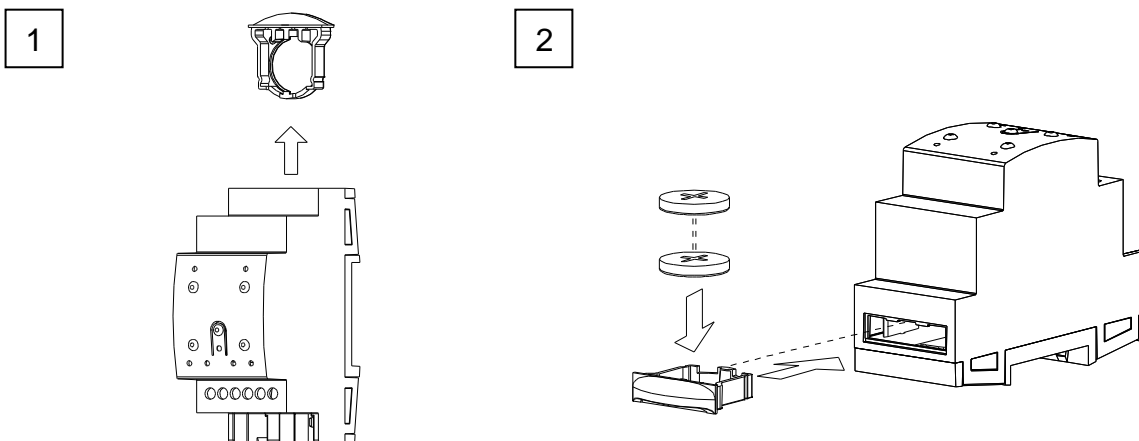


Figure 3: Mounting KCI on DIN rail

BATTERIES REPLACEMENT

1. Extract the battery holder from the upper side of KCI. It is recommended to have the bus KNX connected during this process to prevent S0 pulses loss.
2. Place the batteries in the battery holder (respecting the polarity shown) and insert it as indicated in the figure.



SAFETY INSTRUCTIONS

- Installation should only be performed by qualified professionals according to the laws and regulations applicable in each country.
- Do not connect the mains voltage nor any other external voltage to any point of the KNX bus; it would represent a risk for the entire KNX system. The facility must have enough insulation between the mains (or auxiliary) voltage and the KNX bus or the wires of other accessories, in case of being installed.
- Once the device is installed (in the panel or box), it must not be accessible from outside.
- Keep the device away from water and do not cover it with clothes, paper or any other material while in use.
- The WEEE logo means that this device contains electronic parts and it must be properly disposed of by following the instructions at <http://zennio.com/weee-regulation>.