

## dimmer



### Universal dimming actuator 4 x 2.5A/ 570W

RU	type	order-no.	Pg
12	DIM4FU-2-FW	87601	2

The 4-gang universal dimmer can be used for all common dimmable light sources. It provides four separated dimmer inputs and outputs, each connectable to 2.5 A / 570W. The control circuits automatically detect the connected load, switch from leading-edge to trailing-edge operation depending upon the load and control the light output using the most suitable control characteristic (Ueff). For known light sources, the optimal dimming method can also be set by means of DIP switches. Suitable for dimmable energy saving and LED retrofit lamps as well as incandescent lamps, high-voltage halogen lamps and low-voltage halogen lamps with magnetic and electronic transformers.

- 100% short-circuit proof
- Special dimming curves
- Suitable for dimmable LED retrofit lamps
- Suitable for dimmable energy saving lamps
- Flicker-free dimming range 0-100%
- Separate consumption metering for each channel
- Voltage, current, power and active energy for each channel
- 32 scenes for each channel
- Maximum current logging

## dimmer supplementary modul



### Supplementary module for LED retrofit lamps and energy saving lamps

1	ZSL-REG	87610	2
	ZSL-UP	87611	2

The supplementary circuit for energy saving lamps and LED lamps improves the dimming behaviour of ESL and retrofit LED lamps. (LED lamps that can replace conventional incandescent lamps with identical base). Energy saving lamps and LED lamps have an electric ballast integrated in their base that limits the mains voltage to a level suitable for lamp operation. This electric ballast may prevent the detection of the main voltage zero crossing that is required for proper dimming operation, with the result that the lamp may start flickering.

- Simple parallel connection to the load (neutral conductor N and dimming phase LD can be connected either way, reverse connection impossible)
- Suitable for 230 VAC
- Operation independent of the load quantity
- Maximum power dissipation during dimming 1.7W, no stand-by losses
- Snap-on DIN rail housing with practical double terminals (ZSL-REG only)
- Range: from minimum load to maximum dimmer current

## EHZ KNX interface



### EHZ KNX interface

3	EHZ-FW-REG	87798	4
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The EHZ KNX interface consists of the optical reading head with RS232 connector and a 3 RU DIN rail unit with KNX terminal housing. The various protocols of the EHZ manufacturers are read via the optical customer interface on the unit front. Depending on the protocol provided by the manufacturer, meter readings such as T1/T2 values, A+ / A- values and power, voltage and current values can be read out. The KNX/EIB module stores the measured data at 15-minute intervals over a period of one year and provides full FacilityWeb capability. Every meter has its own web page.

- Complete Facility Web functionality
- Low energy consumption
- Integrated data logger with storage capacity for one year's consumption data, ETS configurable
- HTTP protocol

## Electrical energy meters



EZALD1-C1-FW-REG



EZ7E56-C1-FW-REG

	RU type	order-no.	Pg
energy meter / direct measuring	3 EZALD1-C1-FW-REG	87761	4
single phase DIN rail unit (1-ph.), 5 (32)A	3 EZ7E23-C1-FW-REG	87763	4
energy meter / direct measuring	6 EZALE3-C1-FW-REG	87762	4
three phase DIN rail unit (3-ph.), 10 (65)A	6 EZ7E46-C1-FW-REG	87764	4
energy meter / transformer connection	6 EZAWD3-C1-FW-REG	87771	4
three phase DIN rail unit (3-ph.), (possible conversion factors 5: /50: /100: /150: /200: /250: /300: /400: /500: / 600: /750 /1000: /1250: /1500:	6 EZ7E56-C1-FW-REG	87772	4

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## Heat meters



### Hydrometer Sharky Heat

QN0,6/DN15/length110mm/G3/4 B	84001	5
QN1,5/DN15/length110mm/G3/4 B	84002	5
QN2,5/DN20/length130mm/G1 B	84003	5

### Engelmann Sensostar 2

QN0,6/DN15/length110mm/G3/4 B	84301	5
QN1,5/DN15/length110mm/G3/4 B	84302	5
QN2,5/DN20/length130mm/G1 B	84303	5

### Engelmann Sensostar 2C

QN0,6/DN15/length110mm/G3/4 B	84304	5
QN1,5/DN15/length110mm/G3/4 B	84305	5
QN2,5/DN20/length130mm/G1 B	84306	5

### Molline Kamstrup 602 Solar

Kamstrup Multical 602 energy counter for heat energy + SOLAR-pulse encoder for glycol, observe correction value, suitable for 230 VAC

QN0,6/DN15/length110mm/G3/4 B	84401	5
QN1,5/DN15/length110mm/G3/4 B	84402	5
QN2,5/DN20/length130mm/G1 B	84403	5

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## Cold / hot water meters



### Hydrometer Hydrus

QN2,5/DN20/length130mm/G1 B	85001	5
QN2,5/DN20/length190mm/G1 B	85002	5

### Engelmann (electronic)

QN1,6/DN15/length80mm/G3/4 B/30°C	85301	5
QN1,6/DN15/length80mm/G3/4 B/90°C	85302	5
QN1,6/DN15/length110mm/G3/4 B/30°C	85303	5
QN1,6/DN15/length110mm/G3/4 B/90°C	85304	5
QN1,6/DN15/length130mm/G3/4 B/30°C	85305	5
QN1,6/DN15/length130mm/G3/4 B/90°C	85306	5
QN2,5/DN15/length80mm/G3/4 B/30°C	85311	5
QN2,5/DN15/length80mm/G3/4 B/90°C	85312	5
QN2,5/DN15/length110mm/G3/4 B/30°C	85313	5
QN2,5/DN15/length110mm/G3/4 B/90°C	85314	5
QN2,5/DN15/length130mm/G3/4 B/30°C	85315	5
QN2,5/DN15/length130mm/G3/4 B/90°C	85316	5

### Kamstrup Multical 61 (electronic)

QN1,6/DN15/length110mm/G3/4 B	85941	5
QN1,6/DN20/length110mm/G1 B	85942	5
QN1,6/DN20/length190mm/G1 B	85943	5
QN2,5/DN20/length190mm/G1 B	85944	5
QN4,0/DN25/length260mm/G5/4 B	85945	5
QN6,3/DN25/length260mm/G5/4 B	85946	5

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