

Controls what needs to be controlled:

In times of climate change, the nuclear phase-out and a lack of resources, increasing energy efficiency is a key policy goal.

By using reactive power compensation:

- Energy losses in the electrical supply network are significantly reduced. This leads to an associated **saving in CO2 emissions**.
- Electric supply networks are used more efficiently in order to use the free capacities for the distribution of **renewable energy**.
- the accuracy in planning **future supply networks** can be increased.



Reactive power influences the voltage quality Q capacitive -> ensures a rise in voltage in the network Q inductive -> has a voltage-reducing effect in the network

As of 2020:

Reactive power compensation devices (1) Pursuant to **Section 16 (2) NAV**, connection use with a Shift factor (cos Phi) between **0.9 capacitive and 0.9 inductive**.

BLR-CM

BELUK

The intelligent control algorithm of the BLR-CM switches inductive and capacitive stages in an optimized way and thus guarantees short settling times and a reduced number of switching processes. In addition, the switching cycles are evenly distributed in order to enable the longest possible maintenance intervals.

Measurement method: True RMS

Determination of $\cos \varphi$ based on the fundamental wave

1-phase / 3-phase measurement

Voltage range: 90 - 530 V AC, 45 - 65 Hz

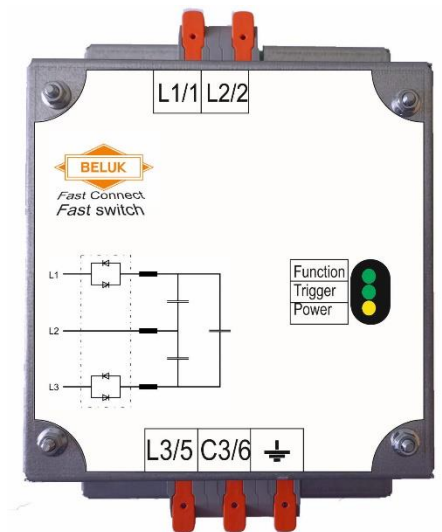
Current range: 15 mA - 5 A

Cos phi: 0.70 c - 0.60 i

Display: DE / EN / FR

Backlit graphic LCD.

Display languages: DE / EN / FR



Advantages:

The logo for BELUK is a stylized orange diamond shape with a white border. Inside the diamond, the word "BELUK" is written in a bold, orange, sans-serif font. The diamond has a slight 3D effect with a darker orange shadow on the right side.

BELUK

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- Can control inductive and capacitive stages in parallel.
 - Dynamic compensation in connection with our thyristor controllers, switching time <100ms
 - 1-phase or 3-phase measurement for asymmetrical networks
 - Simple commissioning through plain text menu guidance
 - Algorithm that protects the capacitors or ensures a longer service life through even distribution of the switching cycles and operating hours (best fit)
 - works in 4 quadrant operation (import / export)
 - Security level password protected
 - Alarm configuration for maintenance work e.g. Loss of power or exceeding of switching cycles
 - Avoidance of overcompensation through shortened shutdown
 - Defect step detection

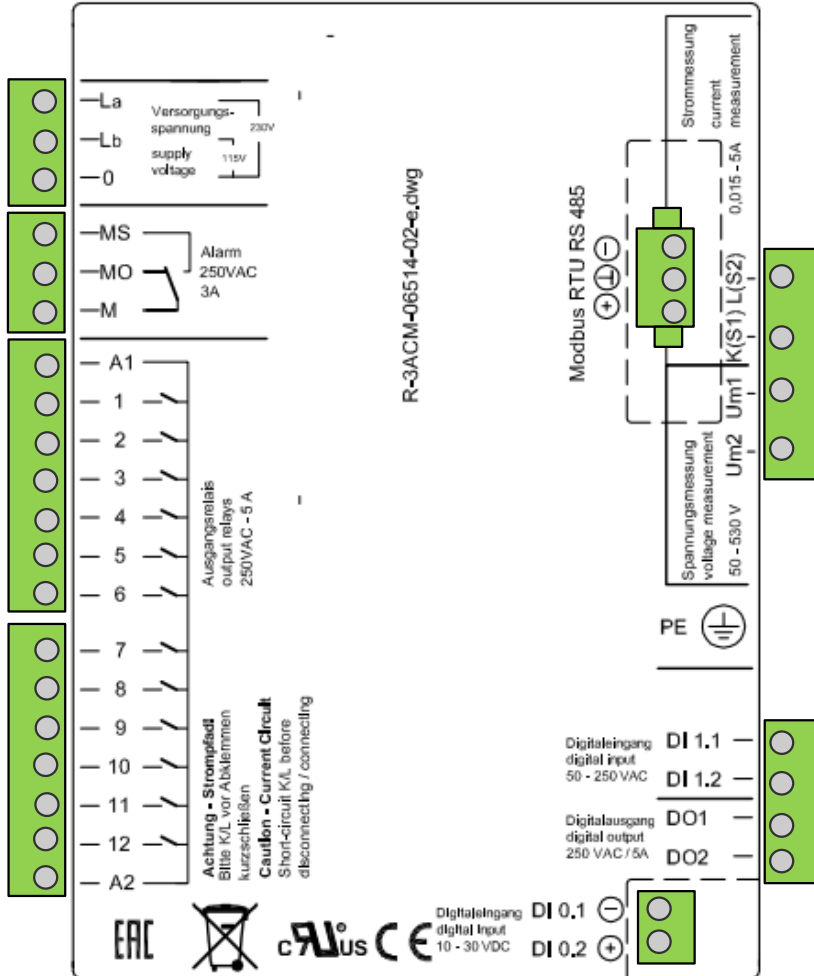
Useful information:

The logo for BELUK is an orange diamond shape with a white border. Inside the diamond, the word "BELUK" is written in a bold, orange, sans-serif font.

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- long service life of our controller (experience with over 100,000 devices worldwide)
 - Developed and manufactured in Germany
 - Optional Modbus-RTU interface RS 485 (Modbus slave) thus fulfills the open communication standard according to IEC 60870
 - Option Q (u) allows voltage-controlled compensation
 - Compensation of a transformer for which there is no fixed stage can be solved with the CM in two ways (offset reactive power or medium-voltage side current measurement)
 - It is possible to use an external signaling contact via a potential-free changeover contact (250V AC / 5A max.), E.g. for a signal light
 - Digital input (adjustable logic: HIGH or LOW active / input signal: 90 - 250V AC) for switching between target cos phi 1 and 2 or for suppressing the I low alarm (DI)
 - TÜV and UL certified
 - Dimensions / cut-out: 144 x 144 mm / 135 x 135 mm

Features:

BELUK



BLR-ACM 12 R
with Option MB

Features:

Measurement and supply voltage are separated.

Supply: 115 V AC
230 V AC

Voltage measurement: 50V - 530V (tolerance 0.5%)

Current measurement: 0.015 - 5 A (overload 20%)

Connection: Plug-in screw terminals up to 2.5mm²

1 phase measurement

Circuit breakers / relays (left) and
Thyristors (right) can be switched.

Options:

Dynamic control (option -T)

3-phase measurement (option -3A)

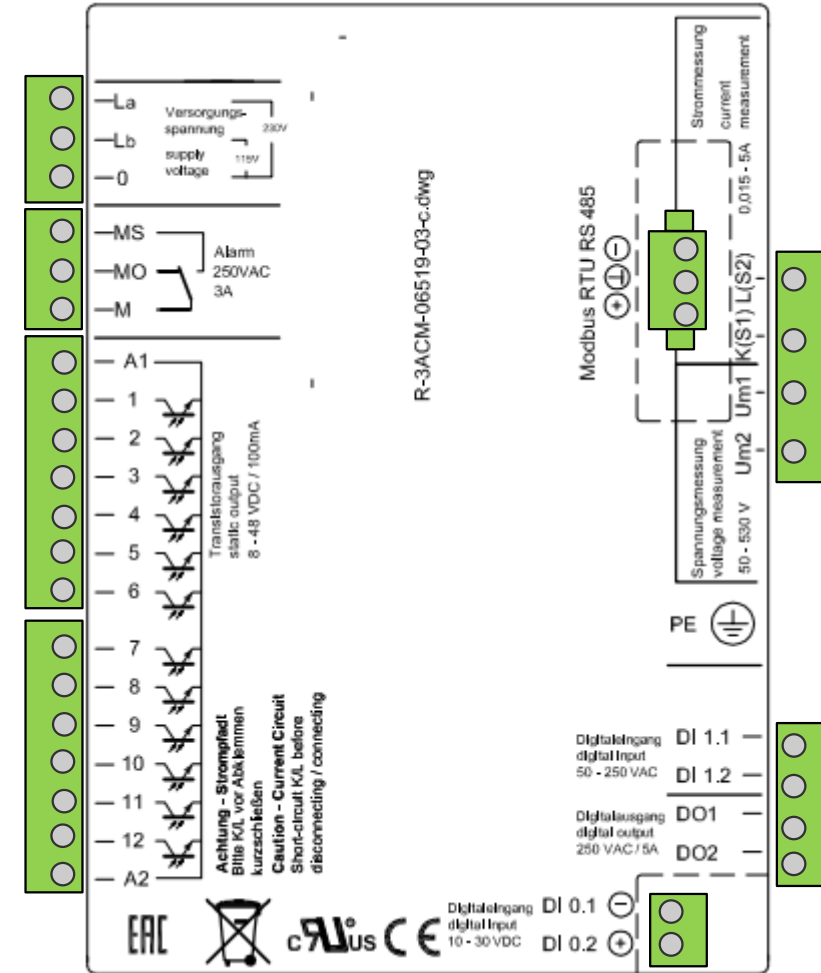
Voltage-dependent regulation (option Q (u))

High voltage algorithm (option -HV)

Data storage

Modbus

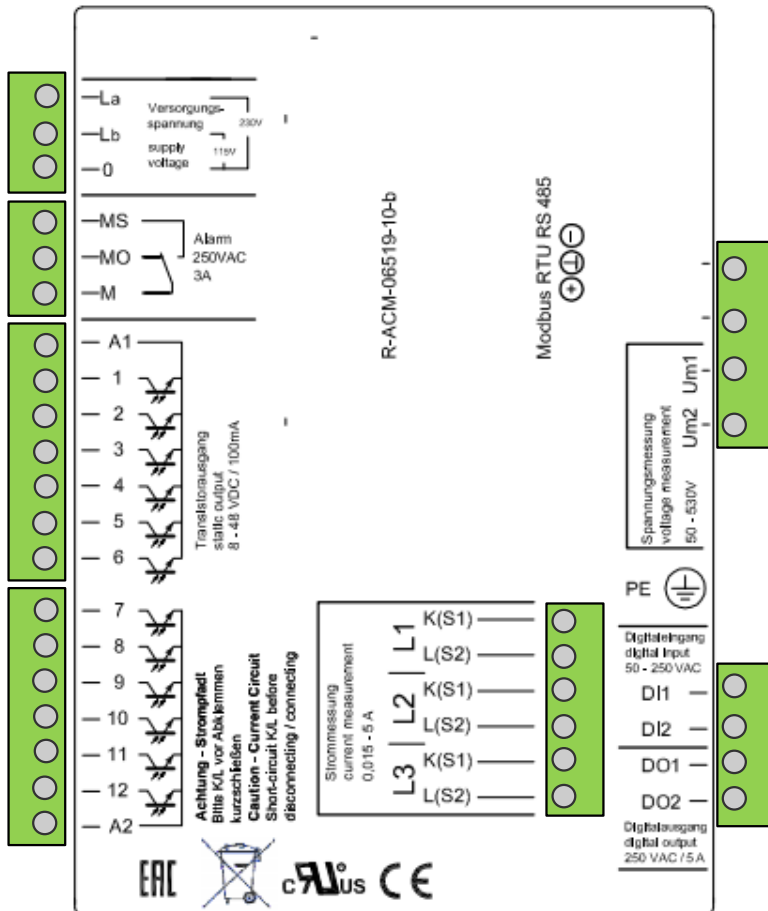
Digital input



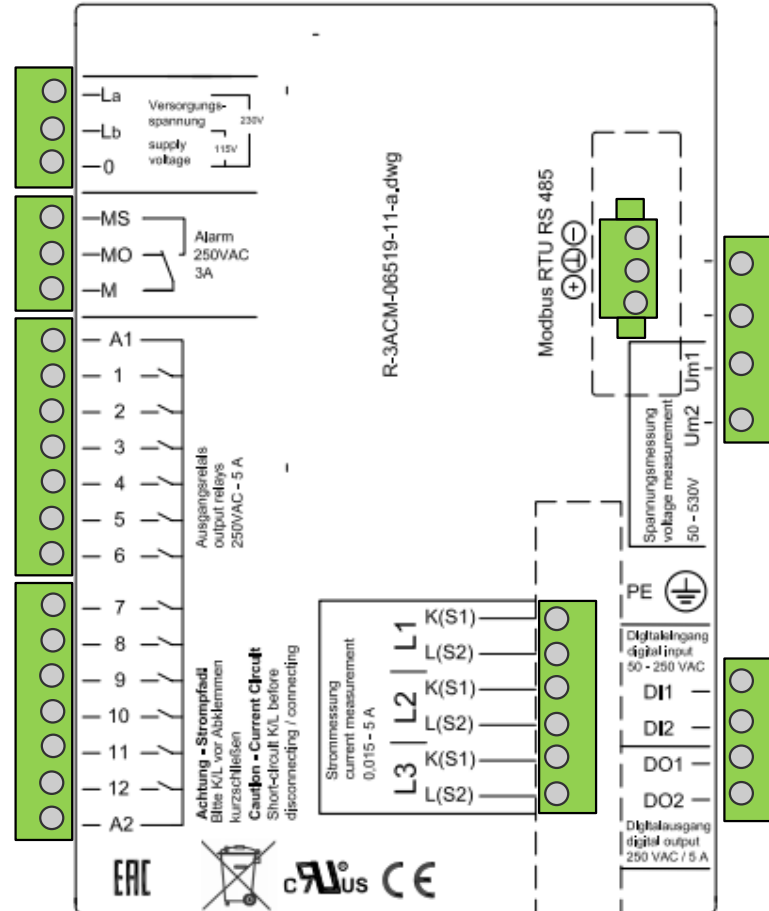
BLR-ACM 12 T
with Option MB

Features:

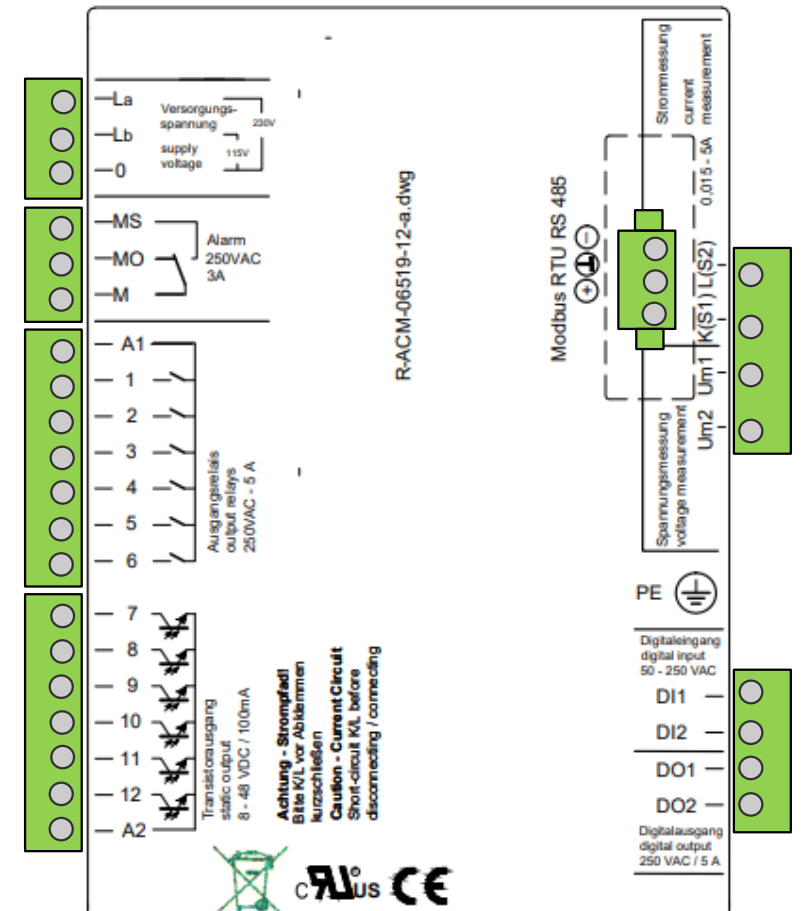
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BLR-ACM 12T
with Option 3A



BLR-ACM 12R
With Option 3A / MB



BLR-ACM 12RT
with Option MB

BLR-CXplus

The logo consists of the word "BELUK" in a bold, orange, sans-serif font, centered within a white rectangular box with a thin orange border. This box is itself centered within a larger orange diamond shape with a white border.

Taubenstraße 1
86956 Schongau

+49 8861 2332-0

<https://beluk.de/>

blr@beluk.de

Order now!

You have questions about our products, we are happy to help you.

Contact us by email
blr@beluk.de

Our team will be happy to advise you at
+ 49 8861 2332-0