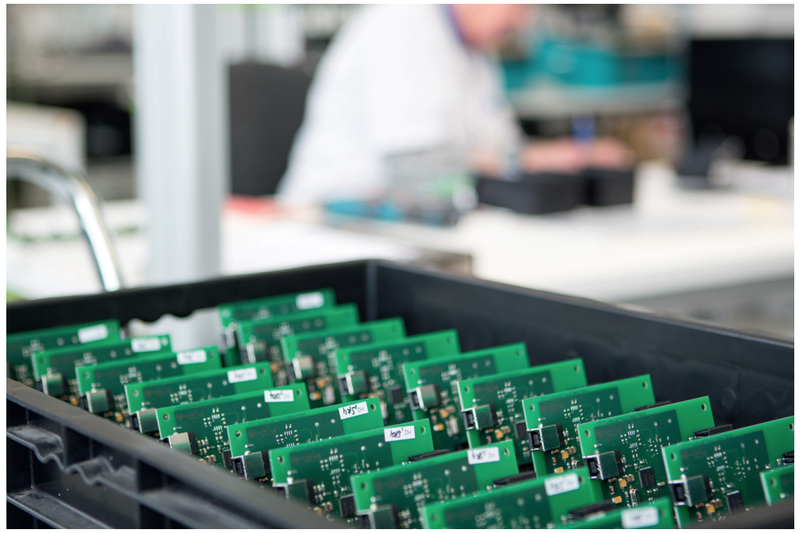
EMM-5

The BELUK EMM-5. It does not miss the slightest deviation. Precise and reliable.

The EMM-5 is a power analyzer, monitoring various trigger values in a network and counting active and reactive power per phase. The operator can choose an exceeding or shortfall of 52 different measuring values. This can be used to program a total of 32 protection settings.



Models:

MB	RS485 Modbus RTU
DM	RS485 Modbus RTU, data recorder, event recorder, real time clock, digital input

Options:

m	2 c/o contacts
am	2 c/o contacts 4 c/o contacts
Im	2 c/o contacts 4 impulse outputs

Complex Measurement – Easy Operation

The EMM-5 power analyzer has been designed to provide a great variety of information from the power distribution system it supervises. It contains a powerful measurement system, that is able to provide high precision values from 3-phase systems.
A large liquid crystal display with backlight provides a good visibility even in poor light conditions.
Four adaptive soft-keys provide easy and intuitive usage also in complex situations.
All measurement values of the EMM-5 are arranged on several pages of the display. Using the "auto roll" function, the power analyzer will scroll through all pages in 10 second intervals. This way the information is presented in a very clear and orderly way, without any action from the operator.

Variable Output System

Next to Alarm messages on the display of the device, alarms can also be used for an external alarm using the relay outputs on the EMM-5. External counters for both active and reactive power can be adressed using the 4 output relays. Of course a Modbus Interface is available, same as a Data Memory.

Counter System with 32 Counters

The EMM-5 can handle two tariffs optionally. Either each day at the same time tariffs will be switched or by means of an external signal which is connected to the digital input. Per tariff following counters are available:
Active Ppower Import (L1, L2, L3, total)
Active Power Export (L1, L2, L3, total)
Reactive Power Inductive (L1, L2, L3, total)
Reactive Power Capacitive (L1, L2, L3, total)
All phases are displayed separately, therefore the EMM-5 has 32 counters available.

Multi Source and Multi Target Alarms

A single relay can be actuated by one, but also from more alarm situations (multi source). In the later case, the conditions are linked by "or" disjunction: Only one signal is enough to trigger the alarm.
Same way one alarm condition can also have more than one relay as target (multi target). If the alarm condition is reached, all relays assigned are operated.

Technical Data	
Supply Voltage	207 - 253V, 45 - 65Hz, max. fuse 6A, Voltage measurment L-N 55V .. 318V, L-L 95V .. 550V, 45 – 65Hz, Vt factor:
	1 - 4000
Current measurment	0 – 5A, minimum 50mA, Power consumption < 1VA CT required, Ct ratio: 1 - 10000,
	Current overload 20% continuous, 50A for 1 sec.
Current measurment	Option –E: 200A for 1 sec
Relay outputs	4 n/o, voltfree, max. fuse 6A,
	2 c/o, voltfree, max. fuse 6A
Breaking capacity	250V AC / 5A, 30V DC / 5A (ohmic), 110V DC / 0,4A (ohmic), 110V DC / 0,3A (inductive)
Impulse outputs (optional)	Transistor outputs, galvanic isolation by opto-coupler, Switching voltage: max. 250V DC, switching current max.
	100mA, Switching frequency: max. 4Hz, tON ≥ 50ms / tOFF ≥ 50ms
Digital Input	on request
Fan control	temperature measurement on rear of device programming of relay outputs for fan control possible