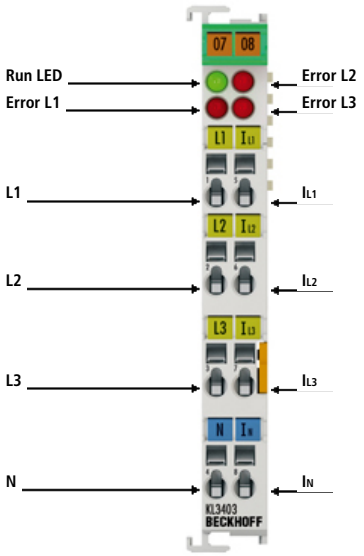
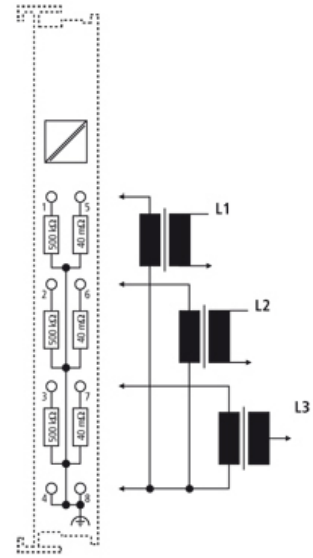


Top view



Contact assembly

KL3403 | 3-phase power measurement terminal

The KL3403 Bus Terminal enables the measurement of all relevant electrical data of the supply network. The voltage is measured via the direct connection of L1, L2, L3 and N. The current of the three phases L1, L2 and L3 is fed via simple current transformers. All measured currents and voltages are available as root-mean-square values. In the KL3403 version, the effective power and the energy consumption for each phase are calculated. Through the relationship of the root-mean-square values of voltage U * current I and the effective power P, all other information such as the apparent power S or the phase shift angle cos can be derived. For each fieldbus, KL3403 provides a comprehensive network analysis and an energy management option.

Technical data	KL3403 | KS3403
Number of inputs	3 phases + N
Technology	3-phase connection technique
Measured values	current, voltage, effective power, energy, cos , peak values U, I and P, frequency
Measuring voltage	max. 500 V AC 3~ (ULx-N: max. 288 V AC)
Resolution	16 bit (21 bit, internal)
Measuring current	max. 1 A, via measuring transformers x A/1 A
Measuring error	0.5 % relative to full scale value (U, I), 1 % calculated value
Measuring procedure	true RMS with 64,000 samples/s
Update time	50 ms per measured value preset, free configurable
Electrical isolation	1,500 V (K-bus/field potential)
Current consumption power contacts	– (no power contacts)
Current consumpt. K-bus	typ. 115 mA
Bit width in the process image	input/output: 3 x 16 bit data, 3 x 8 bit control/status
Special features	energy meter, power measurement, True RMS
Weight	approx. 75 g
Operating/storage temperature	-25…+60 °C/-40…+85 °C
Relative humidity	95 %, no condensation
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protect. class/installation pos.	IP 20/variable
Pluggable wiring	for all KSxxxx Bus Terminals
Approvals	CE, UL

Special terminals	
KL3403-0010	3-phase power measurement terminal, current path designed for 5 A transducer (1 % measuring accuracy I), operating/storage temperature: -25…+60 °C/-40…+85 °C
KL3403-0020	3-phase power measurement terminal, current path designed for 20 mA, optimised for electronic current transformer, operating/storage temperature: 0…+55 °C/-25…+85 °C
KL3403-0022	3-phase power measurement terminal, current path and voltage input designed for 20 mA, operating/storage temperature: 0…+55 °C/-25…+85 °C
KL3403-0333	3-phase power measurement terminal, 500 V AC, 333 mV AC, operating/storage temperature: 0…+55 °C/-25…+85 °C