



## EL3433 | 3-phase power measurement terminal 500 V AC, 10 A

The EL3433 EtherCAT power measurement terminal is a further development of the EL3403. Currents of up to 10 A can be directly measured with the internal current transformers. This way, there are no additional costs for external current transformers. The external bridges 5 & 1', 6 & 2', and 7 & 3' are already pre-wired. As a result, it is possible to directly connect the supply voltage (5', 6', and 7') and the consumer (1, 2 and 3). The EL3433 can deal with simple grid analysis up to the 21<sup>st</sup> harmonic analysis. Like all measured terminal data, the harmonic content can be read via the process data.

The EL3433 power measurement terminal has neutral conductor current measurement as standard since the 3<sup>rd</sup> quarter of 2015. At no additional cost to the end user, the terminal features a shunt between pin 4 and pin 8, in order to enable direct neutral conductor analysis.

Technical data	EL3433
Number of inputs	4 x current, 3 x voltage
Technology	3-phase power measurement for alternating voltages
Oversampling factor	–
Distributed clocks	–
Conversion time	mains-synchronous
Measured values	current (I1, I2, I3, In), voltage, effective power, reactive power, apparent power, energy, $\cos \phi$ , frequency, harmonic
Measuring voltage	max. 500 V AC 3~ (ULx-N: max. 288 V AC)
Measuring current	max. 10 A (AC)
Resolution	1 $\mu$ A, 0.1 mV, 10 mW
Measuring error	0.5 % relative to full scale value (U/I), 1 % calculated value
Electrical isolation	4500 V
Current consumption power contacts	–
Current consumption E-bus	typ. 200 mA
Special features	direct current measurement, current measurement, harmonic analysis, single-phase operation also possible
Weight	approx. 100 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
Approvals	CE, UL

Related products	
<b>EL3403</b>	3-phase power measurement terminal up to 500 V