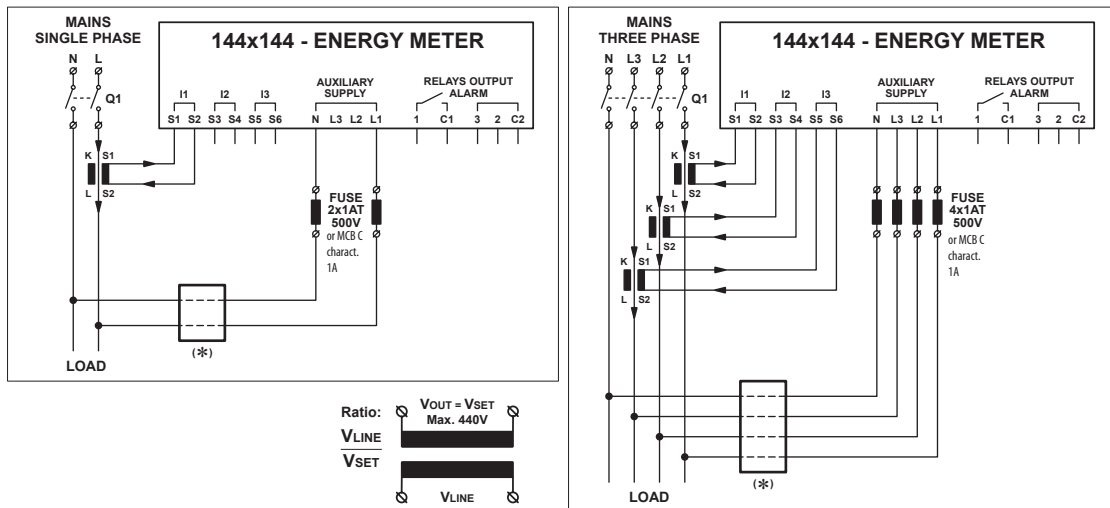
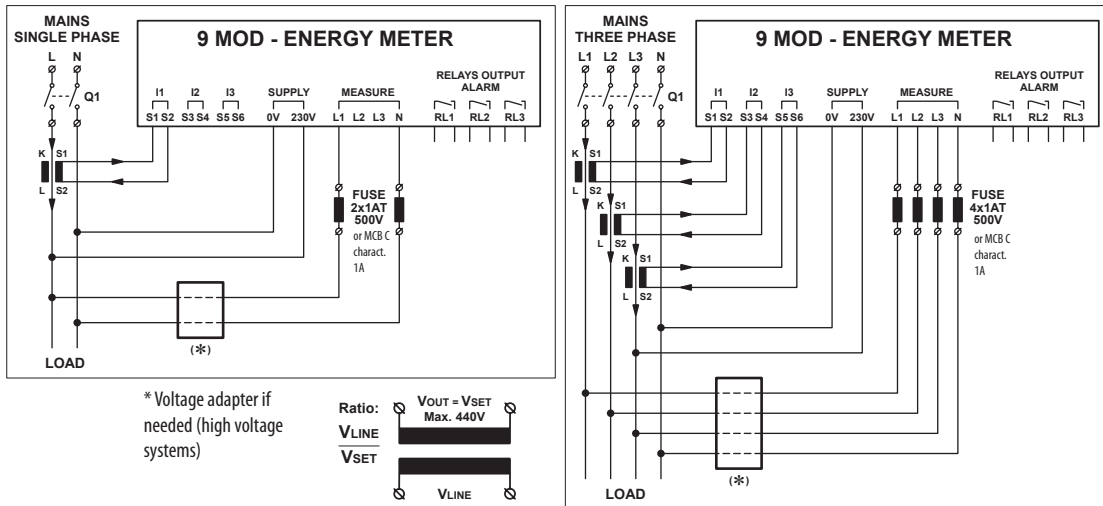


Three Phase Network Analyzer (ENA3, ENA3D)

Technical data		ENA3	ENA3D
Supply voltage AC ±10%	V ~	3x400 + N	230 L/N
Nominal Frequency	Hz	50 - 60 (45 - 65)	
Power consumption (max. AC)	VA	4	
Rated Current (CT)	A	5/1...50000	
Immunity Time For Microbreakings	ms	< 50ms	
Display Type	-	3 Display - 4 Digit - 7 Segment	
Measuring Type	-	True RMS	
Cosφ (L/L)	-	0.00 ... 1.00 ±1%	
Voltage (N/Lx)	VA ~	100 ... 280 ±1%	
Voltage (L/L)	VA ~	180 ... 490 ±1%	
Current (CT)	A	0.05 ... 5.5 ± 0.5%	
Active Power (Lx)	W	Class 1	
Reactive Power (Lx)	VAR	Class 1	
Apparent Power (Lx)	VA	Class 1	
THD of Volt or Current	%	0 ... 255	
Work Hours	h	0 to 9999 (with multiplier)	
Ambient Temperature	°C	0°C...+60°C (/ °F)	
Working temperature	°C	-20 ... +60	
Storage temperature	°C	-30 ... +70	
Electrical Insulation	kV	4	
Overvoltage Category	-	II	
Protection degree	IP	41 Front Cover - 20 Terminal Block	
Pollution degree	-	2	
Relative Humidity w/o cond.	%	95	
Altitude up to	m	2000	
Weight	g	680	550
Dimensions	mm	149 x 149 x 60	157 x 89 x 60
Standards	-	2006/95/EC - Low Voltage, 2004/108/EC - EMC	

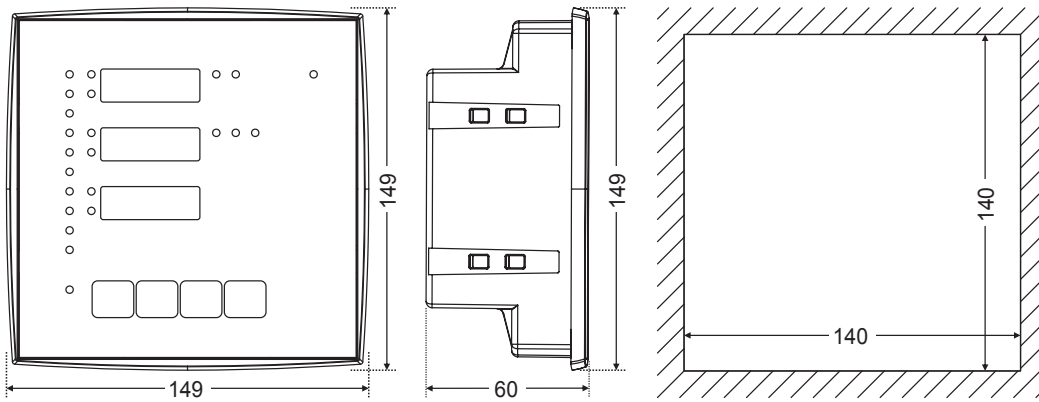
Wiring Diagrams



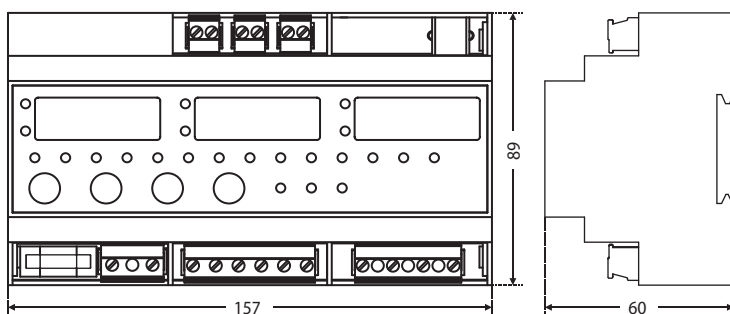


Dimensions

144x144 (mm)



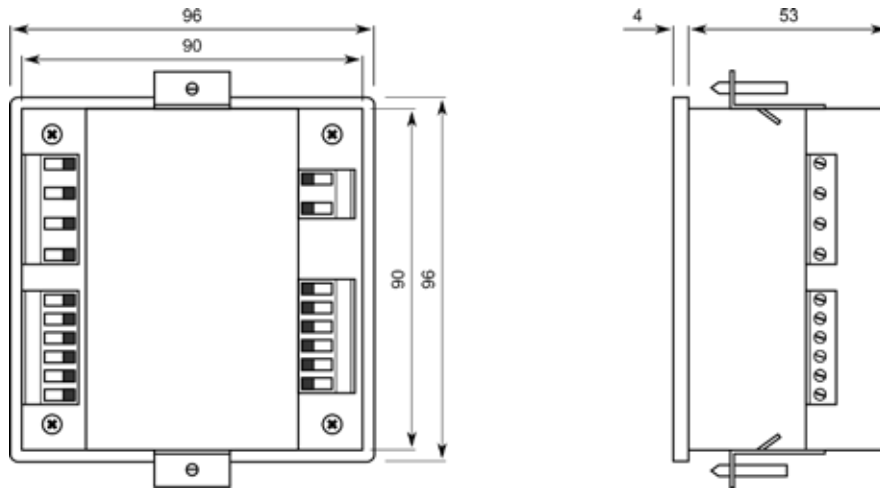
9 MOD (mm)



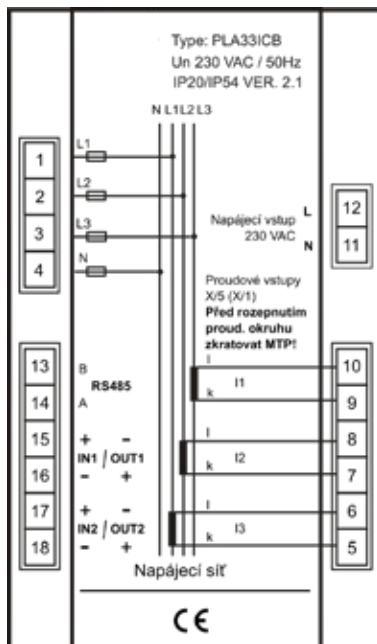
Measured parameters

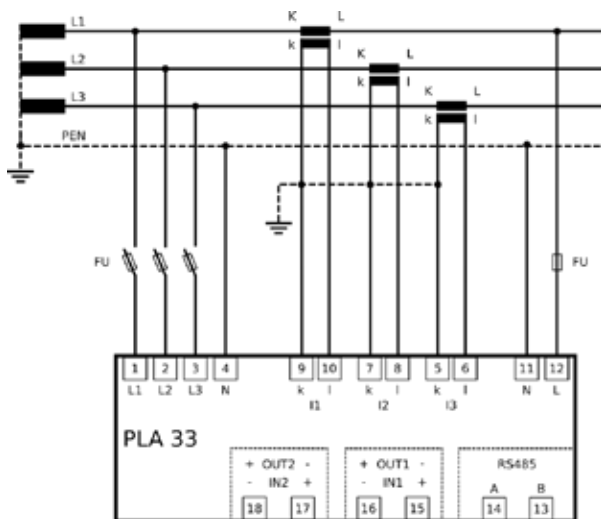
Parameter	L1	L2	L3	N	L1-2	L2-3	L3-1	Σ L1-3	AVG	AVG _{max}	AVG _{min}	Measuring range	Displayed range	Accuracy
Phase voltage (L-N)	•	•	•						•	•	•	10 ... 300 V	0 V ... 180 kV	±0.5 %
Line voltage (L-L)					•	•	•		•	•	•	10 ... 520 V	0 V ... 312 kV	±0.5 %
Frequency	•								•	•	•	40 ... 70 Hz	40 ... 70 Hz	±50 mHz
Current	•	•	•						•	•	•	0.01 ... 6 A	0 ... 7.5 kA	±0.5 %
Current in neutral calculated				•					•	•	•	-	0 ... 7.5 kA	±0.5 %
Cosφ	•	•	•						•	•	•	0.01 _L ... 0.01 _C	0.01 _L ... 0.01 _C	±1 %
Power factor								•	•	•	•	0.01 _L ... 0.01 _C	0.01 _L ... 0.01 _C	±1 %
Voltage THD (THDU L-N)	•	•	•						•	•	•	0 ... 99.9 %	0 ... 99.9 %	±5 %
Current THD (THDI)	•	•	•						•	•	•	0 ... 99.9 %	0 ... 99.9 %	±5 %
Harmonics U, odd up to 19 th	•	•	•						•	•	•	0 ... 99.9 %	0 ... 99.9 %	±5 %
Harmonics I, odd up to 19 th	•	•	•						•	•	•	0 ... 99.9 %	0 ... 99.9 %	±5 %
Apparent power (S)	•	•	•					•	•	•	•	0 ... 5.4 kVA	0 ... 999 MVA	±0.8 %
Active power (P _{+,/-})	•	•	•					•	•	•	•	0 ... 5.4 kW	0 ... 999 MW	±0.8 %
Reactive power (Q _{+,/-})	•	•	•					•	•	•	•	0 ... 5.4 kVAr	0 ... 999 kVAr	±1 %
Active energy +/-								•				0 ... 9 999 999 kWh	0 ... 9 999 999 kWh	class 1
Inductive energy +/-								•				0 ... 9 999 999 kVArh	0 ... 9 999 999 kVArh	class 1*
Capacitive energy +/-								•				0 ... 9 999 999 kVArh	0 ... 9 999 999 kVArh	class 1*
Supply voltage interruptions												< 1 s	< 1 s	
Operating hour counter														

Dimensions

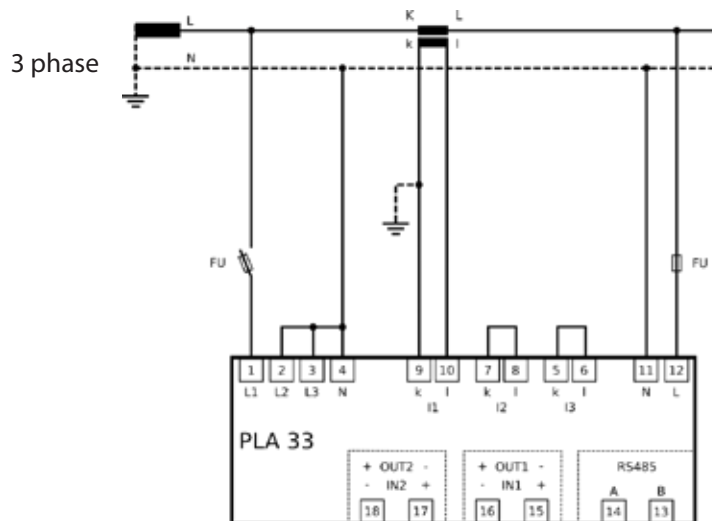


Wiring Diagrams





1 phase



3 phase