

## ELECTRICAL MULTIFUNCTION ANALYSERS FLUSH MOUNTING DIN 96 x 96 - RED LED DISPLAY

### ENVIRONMENTAL WORKING CHARACTERISTICS

Working T: -5 ÷ +50°C  
Storage T: -15 ÷ +60°C  
Humidity: 90%

### STANDARDS/ REGULATION

Safety: 61010-1:2001  
EMC: EN61000-6-2 / EN61000-6-4  
CISPR22-EN55022

### ELECTRICAL COMPATIBILITY CE

Energy: EN62053-21  
EN62053-23



EMA-96  
EMA-96 H

	EMA 96	EMA 96 H
<b>Mechanical characteristics</b>	Flush mounting DIN 96x96 mm   Depth 120 mm   Panel cut out 92x92mm   Weight 0,5 kg	
<b>Auxiliary supply</b>	85±265 V   50-60 Hz / dc	
<b>OPTION C1</b>	20±60 V   50-60 Hz / dc	
<b>Protection degree</b>	Frontal IP 52   Box IP 20 (IP65 with external cover)	
<b>Voltage inputs</b>	3 inputs 750 V max (programmable transformer ratio with external VT 0,01÷5000)	
<b>Current inputs</b>	3 isolated inputs (TA) 0,005÷5A rms (10A f.s.) with external CT ratio programmable 0,01÷5000	
<b>OPTION 1A</b>	0,001÷1 Arms TA ratio external programmable	
<b>Measured parameters</b>	V I-I V I-n A   cosφ P.F. F °T   W Var VA +kWh -kWh   +kVarh -Kvarh   +kVAh -kVAh THD	V I-I V I-n A   cosφ P.F. F °T   W Var VA +kWh -kWh   +kVarh -Kvarh   +kVAh -kVAh (subdivided in 4 time bands of 10 programmable periods) THD   HVL1 HVL2 HVL3 HA1 HA2 HA3
<b>Measuring accuracy</b>	Voltage: < 0.5%   Current: < 0.5%   Powers: < 1%   Energies: <1% class 1   EN62053-21 62053-23	
<b>Frequency measure</b>	30 ÷ 900 Hz	
<b>Serial outputs</b>	1RS485/RS232 additional   selection of communication protocol ASCII or MODBUS-RTU   baud rate progr. 1200÷19200 bps	
<b>OPTION S485/232</b>	1RS485 or RS232 additional   selection of communication protocol ASCII or MODBUS-RTU   baud rate progr. 1200÷19200 bps	
<b>OPTION PF/S</b>	Communication protocol PROFIBUS-DP baud rate   3 Mbps MAX	
<b>OPTION ETH</b>	Ethernet output RJ45 (MODBUS-TCP   FTP   HTTP   SMTP   SNMP)	
<b>Recording memory</b>	Ram 128 kb	Ram 128 kb
<b>OPTION MEM 1</b>	Ram 1 Mb	Ram 1 Mb
<b>Clock Calendar</b>	Format: day/month/year   Hour/min/sec   precision: ± 1 min./month with 25°C	
<b>Harmonic analysis</b>	-	Up to 31st harmonic of voltage and current with numeric format (graphic format with "NRG" software)
<b>Digital outputs</b>	2 photomos 10-50 Vcc-500mA or 260 Vca -100 mA max	
<b>OPTION 2DO/R</b>	2 relays outputs (5A-250V resistive load)	
<b>Digital inputs</b>	2 passive optoisolated inputs (500V) for pulse counting and synchronisation	
<b>OPTION 4DI</b>	4 passive optoisolated inputs (500V) for pulse counting and synchronisation	
<b>Analog outputs OPT.1A0</b>	1 output 0-20 / 4-20 mA fully programmable – 8 bit definition	
<b>OPTION Z3A0</b>	3 outputs 0-20 / 4-20 mA fully programmable – 16 bit definition (by external serial/ analog converter Z3A0)	
<b>Display</b>	alphanumeric red LED displays- 3 rows	