

## NETWORK ANALYZER - ANG96

Programmable instrument with microprocessor and LCD display indicator for measurements and built-in keypad

- DIN 96 x 96 INSTRUMENT
- MEASUREMENT IN 4 QUADRANTS
- THREE-PHASE, 3 or 4-WIRE
- NEUTRAL CURRENT
- HARMONIC DISTORTION (THD V and I)
- MAXIMUM DEMAND, A, kW, kVA, kvar
- MAX. and MIN. VALUES
- TRUE EFFECTIVE VALUE (RMS)
- RS485 SERIAL PORTS
- 2 CONTACTS OUTPUT



### MEASURING ENVIRONMENT

ELECTRICAL PARAMETER	Symbol	L1	L2	L3	SYSTEM
Voltage (Line-to-Neutral)	V	•	•	•	
Voltage (Line-to-Line)	V	•	•	•	
Neutral current	A				•
Current	A	•	•	•	
Active power (P)	kW	•	•	•	•
Reactive power (Q)	kVAr	•	•	•	•
Apparent power (S)	kVA	•	•	•	•
Power factor (cos φ)	PF	•	•	•	•
Maximum demand (Current)	A	•	•	•	
Maximum demand (P)	kW				•
Maximum demand (Q)	kVAr				•
Maximum demand (S)	kVA				•
Frecuency	Hz				•
THD Curent	A	•	•	•	
THD Voltage	V	•	•	•	
Consumed active energy (EP+)	kW-h				•
Generated active energy (EP-)	kW-h				•
Consumed inductive reactive energy (EQC+)	kvar-h				•
Consumed capacitive reactive energy (EQC-)	kvar-h				•

### MODEL

- ANG96**      Current insulated  
Serial output RS485  
2 relays

### CONTACTS OUTPUTS

Contact outputs can be set as max. or min. alarm contacts associated to any measured parameter or as active energy (EP+) and reactive energy (EQL) pulses. They can also be set as contacts managed from the central unit.

### SETTING

- Identification code of the instrument
- Primary voltage.
- Primary current.
- Contact operating mode.
- Pulse value.
- Baud rate.

### MAXIMUM DEMAND FUNCTION

- Average values of I1, I2, I3, P, Q and S.
- Integration period: 15 or 30 minutes.
- These values can be displayed as instantaneous values or saved as maximums.

### CONTACTS OUTPUT

- Type: RS485
- Protocol: MODBUS RTU
- Baud rate: Programmable  
1200 – 19200 bauds  
Standard 9600 bauds

### LCD DISPLAY

- Height of digits: 14mm. (4 parameters per page)
- Built-in keypad (5 keys)
- Over 80 measuring parameters in different pages
- Up to 83 measuring parameters
- Selectable pages with up (↑) and down (↓)
- Back lighting

### MAX. AND MIN. VALUES

- Max. and min. values for: V1, V2, V3, V12, V23, V31, I1, I2, I3, P1, P2, P3, P, Q, S, cos φ, and Hz.

### TECHNICAL SPECIFICATIONS

#### INPUT

- 3 -Fases 3 wire, balanced or 3-phase wire, unbalanced.
- Rated voltage (Un) 400 V
- Burden 1 mA per phase
- Operating range 20-120 % Un
- Rated voltage(In) 5 A
- Burden 0,3 VA per phase
- Operating range 0- 120 % In
- Frecuency 50 or 60 Hz

### CONTACTS OUTPUT

- Number of outputs 2
- Type N.O. relay  
250 V, 3 A

### CONTACTS OUTPUT

- Type RS485
- Connection 2 wire, half duplex
- Baud rate Programmable
- Baud rate (standard) 9600 bauds
- Max. N°. of instruments per line 32
- Net maximum length per line 1250 m

### AUXILIARY VOLTAGE

- UNIVERSAL Aux. V 85/264 V A.C.; 90/300 V D.C.
- Burden 4 VA

### GENERAL FEATURES

- Case material ABS, UL94 V0
- Dimensions DIN 96 x 96 mm
- Terminals Pluggable
- Max. wire diameter 2,5 mm<sup>2</sup>
- Weight 0,4 kg
- Protection IP54 (Front)  
IP20 (Terminals)
- Electrical safety (EN 61010) Class 2  
Category III

### ACCESSORIES

- x/5 A transformers
- RS232 / RS485 converters
- RS485 amplifiers

### OPTIONAL

- Reading software (at no additional cost).
- Management software SACIgest

### ACCURACY

Parameter	Operating range	Accuracy
Voltage	20-120 %	0,3%(read.+ full scale)
Current	1-120%	0,3%(read.+ full scale)
Active power	1-120%	0,3%(read.+ full scale)
Reactive power	1-120%	0,3%(read.+ full scale)
Apparent power	1-120%	0,4%(read.+ full scale)
Power factor	-0,5/+0,5	1%(FE)
Frecuency	45-65 Hz	0,2% (FE)
Active energy	5-120%	0,5% read.
Reactive energy	5-120%	1% read.

### CONNECTIONS

