

Modular Mains Analyser



MGR30000

Schrack-Info

- Three-phase network 80...600 V (phase - phase)
- Single-phase network 50...350 V (phase - neutral)
- Connection with dedicated CT
- Primary CT 5...8000 A
- 41 primary currents settable
- True RMS measurement
- Display with manual or automatic scanning

Technical Data - Part 1

DISPLAY

Values	Display Voltage phase-phase and phase-N Current wire and neutral wire current Frequency Average current Maximum value of average current Working hours (hours and minutes)
Display	LCD backlit
Backlight	Turns off automatically after 20 seconds without operation
Display	10,000 points (4 digits)
Engineering units	Automatic, depending on the setting of the transformer primary current
Resolution	Automatic, with the highest possible decimal places
Reading	update 1.2 seconds
ACCURACY (OF READING)	
Voltage	± 0,5% (80...450 V Phase - Phase)
Current	± 0,5% (10...120% In)
Power	± 1,5% (10...120% Pn/qn/sn cosφ 0,5 ind...0,5cap)
Neutral wire current	± 2%
Frequency	± 0,2 Hz
CURRENT DEMAND	
Display	Current demand and max. current demand
Calculation	Average for current and power on the selected period
Averaging period	5/8/10/15/20/30/60 minutes selectable
Max. demand reset	By hand, by keyboard
PROGRAMMING	
Parameters programming	Front keyboard, 2 keys
Programming access	Key combination
Data and configuration parameters retention	Non-volatile memory (no battery)
PROGRAMMABLE PARAMETERS	
Connection	Single-phase - three-phase 3 and 4 wire
Programmable primary currents (A)	5, 10, 15, 20, 25, 30, 40, 50, 60, 70, 75, 80, 100, 120, 125, 150, 160, 200, 250, 300, 400, 500, 600, 700, 750, 800, 1000, 1200, 1250, 1500, 1600, 2000, 2500, 3000, 3200, 4000, 5000, 6000, 7000, 7500, 8000 A
Current - Power max. demand:	Averaging time, max. demand reset
Working hours	Reset

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Technical Data - Part 2

INPUT

Power system	Single-phase and three-phase 4-wire network
Three-phase voltage	80...600V (phase-phase)
Single-phase voltage	50...350V
Current rating I_n	I_n 5A
Continuous overload:	1,2 I_n
Instantaneous overload	20 I_n /0,5 seconds
Connection	with external dedicated current transformer Inputs have a common point (terminals 3 - 6 - 9)
Frequency rating f_n	50Hz
Tolerance:	47...63Hz
Type of measurement	True RMS
Harmonic content	Up to the 16th harmonic
Voltage rated burden	$\leq 1VA$ (each phase)
Current rated burden	$\leq 0,5VA$ (each phase)

AUXILIARY SUPPLY

Supply	U_{aux} 115 - 230 / 240 - 400V
Tolerance	0,85...1,1 U_{aux}
Rated frequency	50Hz
Working frequency	47...63Hz
Rated burden	$\leq 5VA - 2,5W$

INSULATION

Installation category	III
Pollution degree	2
Insulation voltage rating	660V
Voltage test	A.C. voltage test 4kV r.m.s. value 50Hz/1 min
Considered circuits	All circuits and earth

TESTS FOR ELECTROMAGNETIC COMPATIBILITY

Emission tests	according to EN 61000-6-3
Immunity tests	according to EN 61000-6-2

ENVIRONMENTAL CONDITIONS

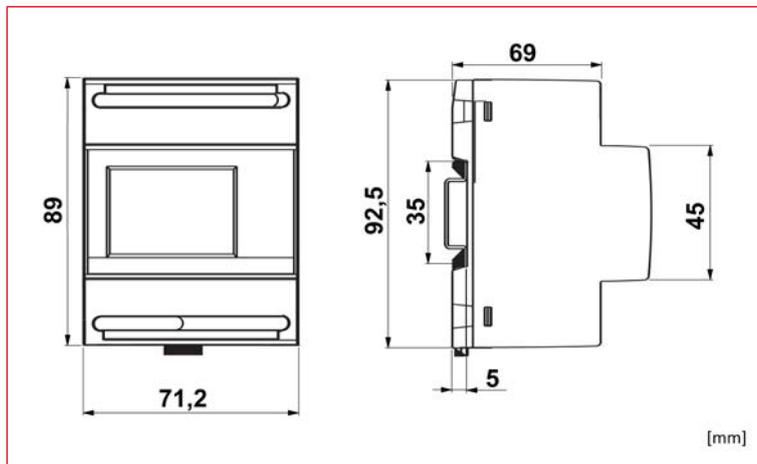
Reference temperature	23°C \pm 2°C
Specified operating range	-5...55°C
Limit range for storage and transport	-25...70°C
Variation of the class index	$\leq 0,1\%$ /°C
Max. power dissipation for switchboard thermal calculation	$\leq 6,8W$

HOUSING

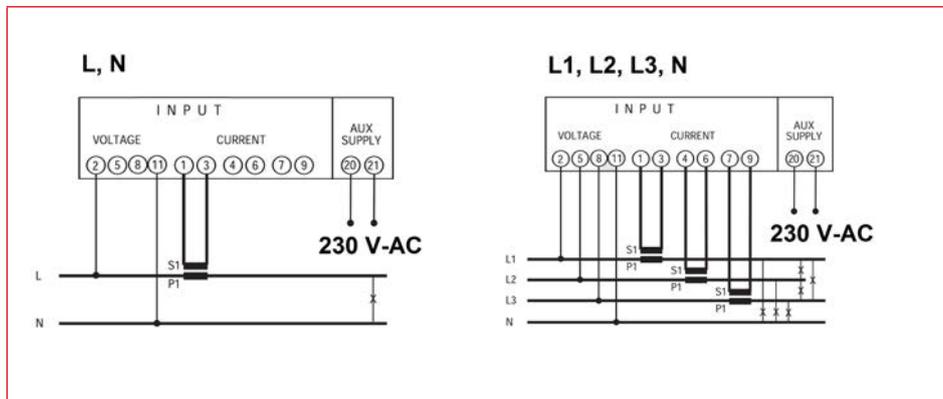
Custodia	4 moduli DIN 43880
Connections	Screw terminals
Ammetric terminals range	Rigid cable min.0,05mm ² / max. 4mm ² Flexible cable min.0,05mm ² / max. 2,5mm ²
Volmetric terminals range	Rigid cable min. 0,05mm ² / max. 4mm ² Flexible cable min.0,05mm ² / max. 2,5mm ²
Mounting	Snap-on 35mm rail
Rail type	Top hat TH35-15 (EN60715)
Housing material	self-extinguishing polycarbonate
Protection degree (EN60529)	IP54 front frame, IP20 terminals
Weight	260 grams

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MGR30000 Dimensions



MGR30000 Wiring Diagram



DESCRIPTION	AVAILABLE	ORDER NO.
Modular netanalyser MF7-45 for current transformer		MGR30000