ENERGY ANALYSER D550

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
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Germany
Fon: +49 5231 14-0
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Increasingly non-linear loads and system components are entering production facilities. They influence the mains frequency, phase shift and the amplitudes of the phases. This has an influence on the quality of the electrical energy and therefore on system availability. Energy analysers, such as the Energy Analyser, measure all quality parameters of the electrical supply network: from the symmetry parameters through to the transients - and many more parameters besides.
With the Energy Analyser you comprehensively test the quality of the electrical energy in your production facility and introduce optimisation steps to maximise the effectiveness and availability of your system.

General ordering data

Type	ENERGY ANALYSER D550
Order No.	2425510000
GTIN (EAN)	4050118433487
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Width	107.5 mm	Width (inches)	4.232 inch
Height	90 mm	Height (inches)	3.543 inch
Depth	46 mm	Depth (inches)	1.811 inch
Net weight	350 g		

Temperatures

Humidity at operating temperature	5...95 % RH	Operating temperature, max.	55 °C
Operating temperature, min.	-10 °C	Storage temperature, max.	70 °C
Storage temperature, min.	-25 °C	Operating temperature	-10 °C...55 °C
Storage temperature	-25 °C...70 °C		

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1

Measuring current input

Current-measuring channels	4	Distortion factor THD-I in %	Yes
Harmonics, per order / current	1.-40.	Measuring accuracy for current	0.25 %
Rated current	1 / 5 A	Residual current measuring	No

Measuring voltage input

Distortion factor THD-U in %	Yes	Four-wire system	Yes
Harmonics, per order / voltage	1.-40.	Measurement range, voltage L-L, AC	480 V
Measurement range, voltage L-N, AC	277 V	Measuring accuracy for voltage	0.2 %
Quadrants	4	Three-wire system	Yes

Communication

Interface	RS232: 9.6 – 115.2 kbps, RS485: 9.6 – 921.6 kbps, Ethernet, Web server/e-mail	Protocol	Modbus RTU, Modbus-Gateway, Modbus TCP/IP, Modbus RTU over Ethernet, SNMP, BACnet (optional)

Inputs/outputs

Number of digital inputs	2	Number of digital outputs	2
Number of pulse outputs	2	Temperature input	Yes

Measurement data recording

Memory; minimum and maximum values	Yes	Memory size	128 MB
Number of memory values	5,000 k	Update interval register	200 ms
Min. memory recording interval	60 s	Software	ecoExplorer go®
Integrated logic	Yes		

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Standards	DIN EN 61000-4-2, DIN EN 61000-4-3, DIN EN 61000-4-4, DIN EN 61000-4-5, DIN EN 61000-4-6, DIN EN 61000-4-8, DIN EN 61326-1, EN 61000-4-11, EN 55011, IEC 61010-1, IEC 61010-2-030	Measurement range, voltage L-N, AC	277 V
Measurement range, voltage L-L, AC	480 V	Input frequency	< 20 Hz
Surge voltage category	300 V CAT III	Voltage supply	95 - 240 V AC, 135 - 340 V DC
Three-wire system	Yes	Four-wire system	Yes
Quadrants	4	Sampling frequency 50/60 Hz	20 kHz
Continuous measurements	Yes	Effective value from the period (50/60 Hz)	10 / 12
Measurement result per second	5	Residual current measuring	No
Measuring accuracy for voltage	0.2 %	Measuring accuracy for current	0.25 %
Measurement accuracy for active energy (kWh, .../5 A)	Class 0.5S	Operating-hours counter	Yes
Weekly time switch	Yes	Current-measuring channels	4
Clock	Yes	Bimetal function	Yes
Peak load optimisation	Yes		

Voltage quality measurement

Harmonics, per order / voltage	1.-40.	Harmonics, per order / current	1.-40.
Distortion factor THD-U in %	Yes	Distortion factor THD-I in %	Yes
Unbalanced	Yes	Positive, negative and zero system	Yes
Brief interruptions	Yes	Sequence-of-events recorder function	Yes

Insulation coordination

Surge voltage category	300 V CAT III

Classifications

ETIM 6.0	EC002301	ETIM 7.0	EC002301
eClass 9.0	27-14-23-30	eClass 9.1	27-21-03-01
eClass 10.0	27-14-23-30	UNSPSC	39-12-15-35

Approvals

Approvals	
ROHS	Conform

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Downloads

Approval/Certificate/Document of Conformity	EU-Declaration of Conformity
Software	MODBUS Adressenliste
User Documentation	Manual Energy Analyser D550 German/Englisch Quick Guide German/English Manual ECOEXPLORER GO English

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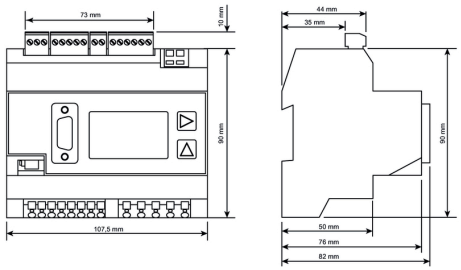
Drawings



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Accessories

Plug-on current transformer

The pluggable current transformers are particularly suitable for installation on the busbar.
Advantages:
- Screwless connection system with tension-clamp terminal.
- Time-saving connection option for solid and flexible conductors.
- Shock-proof and resistant to vibration, high mechanical retention forces.
- High current resistance

General ordering data

Type	CMA-31-100-5A-2,5VA-1	Version
Order No.	1482030000	Primary current: 100 A, Secondary current max.: 5 A, Load: 2.5 VA,
GTIN (EAN)	4050118290943	Tolerance class: 1, closed current transformer
Qty.	1 pc(s).	