Power Measurement

AD-LU 655 GT

Description

The AD-LU 655 GT is a digital measuring transducer for the acquisition of all measured variables in the three-phase network. Currents are detected via external folding current transformers. In addition to the fundamental oscillations, the harmonics up to the 32nd harmonic are also measured for currents and voltages. In addition to the three phase currents, the current in the neutral conductor can also be measured. Any measured variable can be assigned to each analog output. Each digital output can be assigned its own function such as limit value monitoring or pulse output for an energy meter. All measured data can be read out via the Modbus-RTU interface. With an optional display device such as the AD-MM 400 FE or the AD-MM 500 FE, the data can be displayed and the device can be configured if necessary.

Application

Transducer for a maximum of any 4 three-phase current quantities. Limiting value indicator for monitoring of a maximum of 2 three-phase current quantities. Registration of all relevant measuring quantities of the three-phase current network and supply of the measuring quantities via a modbus interface.

Business data

Order number

AD-LU 655 GT	Messumformer, externe Klappstromwandler

Accessory

USB programming adapter	VarioPass

Information

Downloads

Technical specifications

Voltage inputs L1, L2, L3 against N

Nominal voltage	230 V AC
Maximum voltage	300 V AC
Input resistance	1 MOhm
Peak load	600 V AC, 1s

Current inputs

Number	4 (L1, L2, L3 und N)
Rated current range	0 ... 33,3 mA AC
Current measurement	Externe Klappstromwandler
Input resistance	~10 Ohm

Analog outputs

Number	4
Type	Strom oder Spannung, per Software konfigurierbar

Current outputs

Maximum output range	-21 ... 21 mA
Max. burden	400 Ohm
Max. residual ripple	40 µAss

Voltage outputs

Maximum output range	-10,5 ... 10,5 V
Min. burden	10 kOhm
Max. residual ripple	20 mVss

Digital outputs

Number	3
Type	Optisch, MOS-Relais
Maximum switching voltage	60 V AC/DC
Maximum switching current	550 mA AC/DC

Accuracy

Accuracy class	0,5%
Temperature influence	< 200 ppm/K
Frequency influence	~0,2 %, 40 ... 60 Hz
Influence of phase angle	~0,2 %, 40 ... 60 Hz
Response time	~500 ms, 10 ... 90 %

Communication interface

Physical	RS-485
Parameter	19200, 8, 1 , even
Protocol	Modbus RTU

Supply

DC	21 ... 253 V DC, 3,5 W
AC	50 ... 253 V AC, 6 VA

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Technical specifications

Housing

Type of protection	IP 20
Connection method	screw clamp
Cross section fine wire	2,5 mm^2
Cross section one wire	4 mm^2
Mounting	DIN rail mounting
Weight	~400 g

Environmental conditions

Operating temperature	-10 ... 50 °C
Storage, transport	-25 ... 80 °C

Electromagnetic compatibility

Product family standard	EN 61326-1
Emission	EN 55011, CISPR11 Cl. B, Gr. 1

During an interference effect slight signal deviations are possible.

Electrical safety requirements

Product family standard	EN 60688
Overvoltage category	III
Pollution degree	2
Isolation-voltage	500 V AC
Test voltage input/output	5 kV RMS, 1 Min.
Test voltage output/supply	4 kV RMS, 1 Min.
Test voltage input/supply	5 kV RMS, 1 Min.

Block and wiring diagram

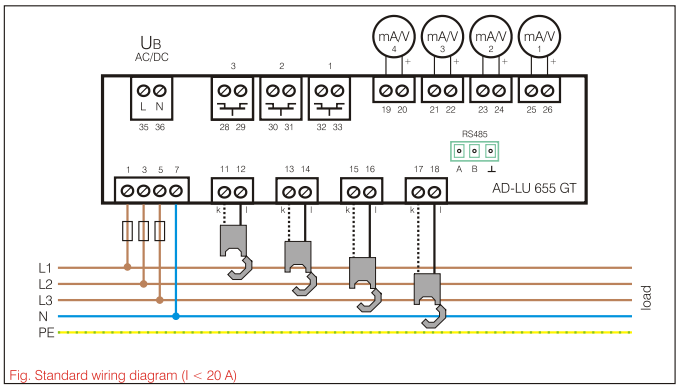

Fig. Standard wiring diagram (I < 20 A)

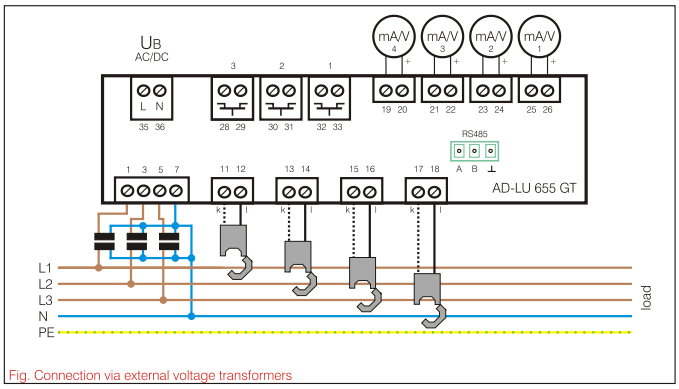

Fig. Connection via external voltage transformers

Dimensions

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