

3. Technical Specifications

3.1 General

Performance data according to IEC and VDE standards.

3.2 Current and Voltage Input

AC Current Input	Rating	1A or 5A (exact rating to be specified during order)
	Continuous Overload	20% Continuous
	Short term overload	50A for 1sec
	Short term overload Option –E	200A for 1sec
	Burden	<100 mOhm (1A type) < 30 mOhm (5A type)
	CT ratio (Max)	1:10000
AC Voltage Input	Rating	55/95V to 318/550V
	Frequency	45 – 65 Hz
	VT Ratio (Max)	1:4000
	Burden	min. 3 MOhm

3.3 Auxiliary Supply

Supply Voltage	Nominal rating	110V DC (other voltages on request)
	Operating range	80 – 132V DC
	Power Consumption	10VA

3.4 Temperature Measuring

Temperature (on the rear side)	Probe / Sensor type	NTC
	Range	30°C – 50°C



3.5 Settings

Settings (Note: Settings are done corresponding to the primary values)	$V_{\text{Line to Neutral}}$	55 – 318V +/- 0.5%
	$V_{\text{Line to Line}}$	95 – 550V +/- 0.5%
	$I_{L1}, I_{L2}, I_{L3}, I_{UB}$	0.02 - 1.0A +/- 0.5% (1A type) 0.05 - 5.0A +/- 0.5% (5A type)
	Frequency	45 – 65 Hz +/- 0.1%
	Harmonics (Voltage 2 – 63)	0 - 100%
	Harmonics (Current 2 – 63)	0 - 100%

3.6 Output Contacts

Contact Details	Changeover contacts	2 Nos. (programmable)
	Normally open contacts	4 Nos. (programmable)
	Current rating	5A continuous
	Make and Carry	5A for 4s, duty factor 10%
	Break	30Vdc, 3.0A, ohmic load 30Vdc, 2.0A, inductive load 100Vdc, 0.2A, ohmic load 250Vac, 5.0A ohmic load
	Minimum number of operation	> 100000
	Minimum recommended load	5 V / 1mA

3.7 Connections

Connections (at the rear side)	Aux. Supply	Screw type terminals max. 2.5sqmm
	Current and Voltage inputs	Screw type terminals max. 2.5sqmm
	Output Contacts	Screw type terminals max. 2.5sqmm
	Temperature sensor	Plug in type



3.8 Interface

Interface	User Interface (Local)	An HMI LCD Display
	Remote Interface	RS485 with MODBUS protocol

3.9 Environmental Withstand

Ambient Temperature	Operating range	0°C ... +70°C
	Storage range	-20°C ... +85°C

Humidity	Operating range	0% to 95% without moisture condensation
-----------------	-----------------	---

Overvoltage Category	Standards	II, pollution degree 3 (DIN VDE 0110 Teil 1 / IEC 60664-1)
-----------------------------	-----------	--

Protection Class	Front	IP 52
	Rear	IP 20

Housing	Case	Instrument casing
	Colour	RAL 7037 dusty grey

Dimensions	H x W x D	144 x 144 x 59 mm
	Cutout	138+0.5 x 138+0.5 mm

Weight	Complete case	650 g
---------------	---------------	-------

Ambient conditions according to UL approval	Ambient temperature: 0 - 40°C	
	Environment: Pollution degree 2	
	Installation location: Door installation	



3.10 Standards

Standards	IEC / DIN	DIN VDE 0110 Teil 1 (IEC 60664-1:1992) VDE 0411 Teil 1 (DIN EN 61010-1 / IEC 61010-1:2001) VDE 0843 Teil 20 (DIN EN 61326 / IEC 61326:1997 + A1:1998 + A2:2000)