



DIRECTIONAL SHORT-CIRCUIT AND DIRECTIONAL EARTH FAULT INDICATOR

ComPass



COMPASS



HORSTMANN – Advance by Technology

ComPass

The predominant topology for MV distribution networks in Europe is a radial (open ring) configuration. In the event of a short-circuit, faults can be located using standard faulted circuit indicators without directional indication.

However, if there is decentralised power generation, e.g. by powerful wind farms, the faulted section will be fed potentially from two directions, i.e. the substation and the decentralised power generator. In such a case directional short-circuit/earth fault indicators are required for fault location.



Short description

ComPass B

- | Directional short-circuit detection und directional earth fault detection for all networks/earth-neutral system
- | Current, voltage and load flow monitoring
- | Multilingual OLED-display
- | Remote signal via RS 485/MODBUS Interface

		ComPass B
Functionality		
	Earth fault indication	•
	Short-circuit indication	•
	Directional indication	Directional short-circuit indicator Directional earth fault indicator
Specialities		
	3-phase current monitoring	•
	Residual current/ voltage monitoring	•
	Load flow direction monitoring	•
Trip current/Response time		
Short-circuit	Trip current	50 A-2000 A
	Response time	40 ms < t < 60 s
Earth fault	Trip current (solidly grounded/low impedance network)	20 A-1000 A
	Trip current (isolated/compensated network)	5 A-200 A
	Response time	40 ms < t < 60 s
Display		
	LED	1
	OLED-Display (multilingual)	•
Signal inputs		
	Short-circuit detection by 3 single-phase current transformers	•
	Earth fault detection by 3 single-phase current transformers	•
	Earth fault detection by current transformers	optional
	Voltage interface	•
Configuration		
	Menu navigation/MODBUS interface	•
Remote signal		
	Potential-free relay contact	4
	RS485/MODBUS interface	•
Reset		
	Automatic time reset	1 min-24 h
	Via external contact	•
	Frontal	via rocker switch
Power supply		
External supply		24-230 V AC/DC
Internal supply	Lithium battery	3.6 V
	Operating time	20 years (only backup)
	Total flashing time LED	> 1000 h
	Activation of the display	1000
Housing		
Material	Glass fibre reinforced polycarbonat	•
Dimension	Width x height x depth	96 x 48 x 96 mm
Mounting	Plug-in housing	•
Characteristics		
	Operating temperature	-30° C to +75° C

Article	Order No.
Indication Unit	
ComPass B	38-4102-001
Wall mounted housing for receiving the ComPass A	Available on request
Current transformer	
Split core cable-type current transformer (15-50 mm)	49-6024-001
Closed bushing-type current transformer (Ø79,5 mm)	49-6025-000
Split core summation current transformer (40-115 mm)	49-6023-000
Split core summation current transformer (40-180 mm)	49-6023-010
Voltage interface	
System-dependent interface cable	Available on request
WEGA 1.2 C in combination with ComPass B	51-1220-001
WEGA 2.2 C in combination with ComPass B	51-2220-001

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