

HIG99

- The HIG99 line of insulation monitoring devices is designed for monitoring DC, AC and combined IT systems.
- The devices monitor the insulation resistance in the range from 1 kΩ to 10 MΩ and are equipped with two output relays, for signaling the failure of two independent levels of insulation resistance.
- The IMDs are powered by an independent low voltage source and have an integrated function of monitoring the correct voltage value of the isolated system.
- The devices are designed for primary supervision of IT systems in industry and traction systems, both on stationary and mobile parts.
- The HIG99 series is designed and tested according to the standards of the EN 50155 series.
- Communication with HIG99 is possible using modern digital buses, using expansion communication modules for the HIG99 KM series.
- The maximum operating voltage of the monitored IT network can be increased by using specific coupling units from the HIG-CD series.

Type		HIG99
Monitored IT power supply system type according to IEC 61557-8		AC, DC, AC/DC
Measuring range of insulation resistance	R_F	1 ÷ 10 000 kΩ
Adjustable range of critical insulation resistance	R_{an}	1 ÷ 2 500 kΩ
Number of insulation resistance fault levels (R_{an})		2
Rated voltage of monitored IT system (DC)	U_n	1 000 V
Rated voltage of monitored IT system (AC)	U_n	710 V
IMD power supply		From independent power source
Nominal supply voltage DC	U_s	24 V
Supply voltage range		9 ÷ 36 V
Power consumption	P	8 VA
Measuring voltage	U_m	40 V
Measuring current	I_m	< 0.5 mA
Measuring input's internal impedance	Z_i	> 1 000 kΩ
Internal DC resistance	R_i	> 1 000 kΩ
System leakage capacitance	C_e	10 μF
Measuring accuracy		± 15 %
Electrical strength against internal circuits		3 000 V
Supported module of distant signalisation (MDS)		None
Communication interface for user		Using communication modules of the HIG99 KM series
Usable with coupling units		HIG-CD 1k8
Housing material		Polyamid PA6, UL94 V-0
Degree of protection of front panel		IP40
Degree of protection except the front panel		IP20
Operating temperature	θ	-40 ÷ 70 °C
Protection class according to IEC 61140		II

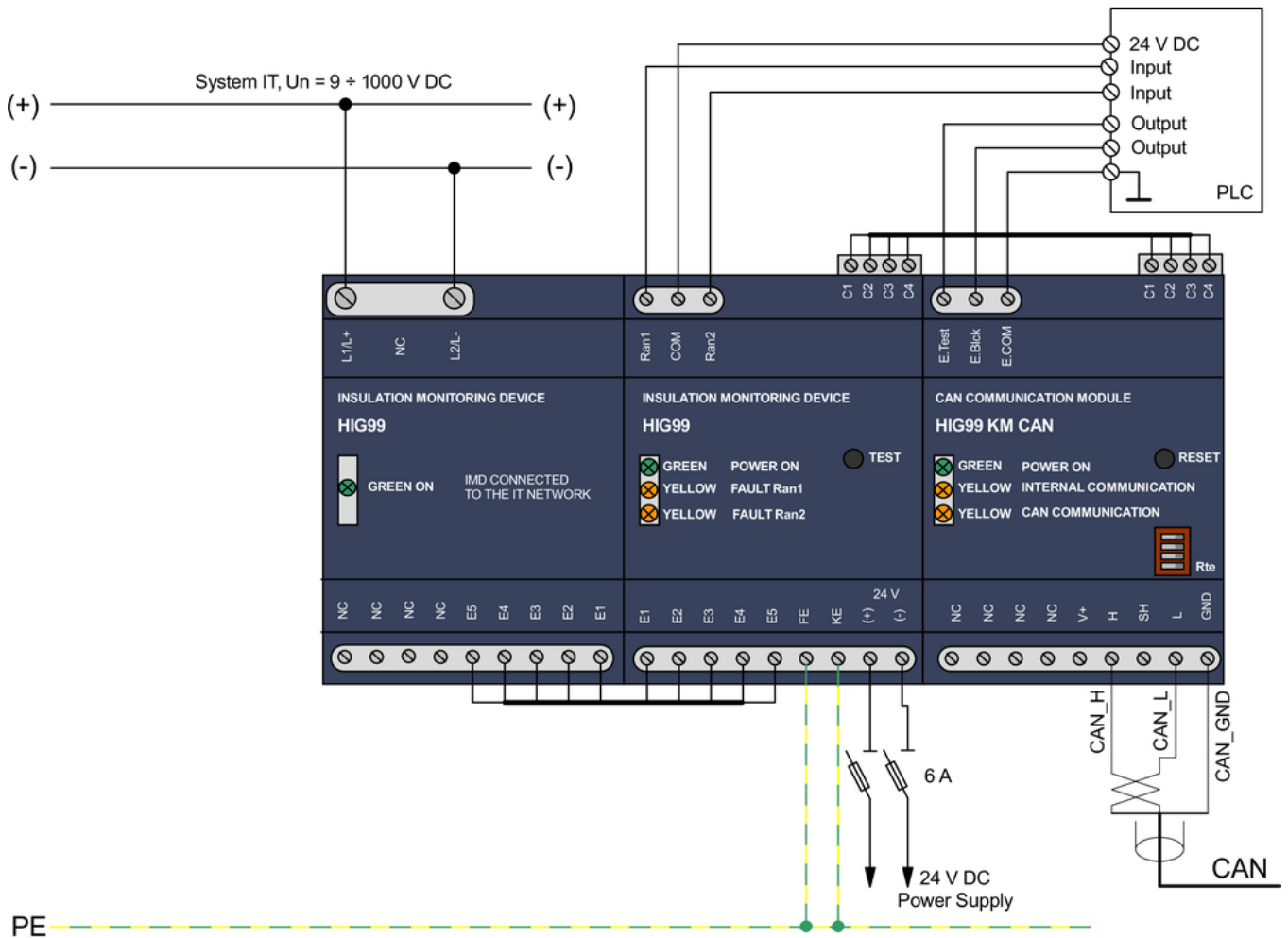
Type		HIG99
Recommended cross-section of connected conductors	S	1 mm ²
Installation		On DIN rail 35 mm
Modular width		6 TE
Use for traction		Yes
Recommended back-up fuse		6 A/gG
Operating position		Any
Operation type		Permanent
Designed according to standards		
Insulation monitoring devices for IT systems		IEC 61557-8:2014
Equipment for testing, measuring or monitoring of protective measures		IEC 61557-1:2007
Insulation coordination for equipment within low-voltage systems		IEC 60664-1:2007
Railway applications – Rolling stock – Electronic equipment		EN 50155:2017
Railway applications – Fire protection on railway vehicles		EN 45545-2:2013
Railway applications – Electromagnetic compatibility		EN 50121-3-2:2016
Railway applications – Environmental conditions for equipment		EN 50125-1:2014
Railway applications – Rolling stock equipment – Shock and vibration tests		IEC 61373:2010
Application standards		
Low-voltage electrical installations – Protection against electric shock		HD 60364-4-41:2017
Ordering, packaging and additional data		
Mass	m	222 g
Mass (including the packaging)	m	246 g
Packaging dimensions (H x W x D)		60 x 113 x 73 mm
Packaging value	V	0.5 dm ³
Customs tariff no.		90303370
EAN code		8590681163894
Art. number		70 970



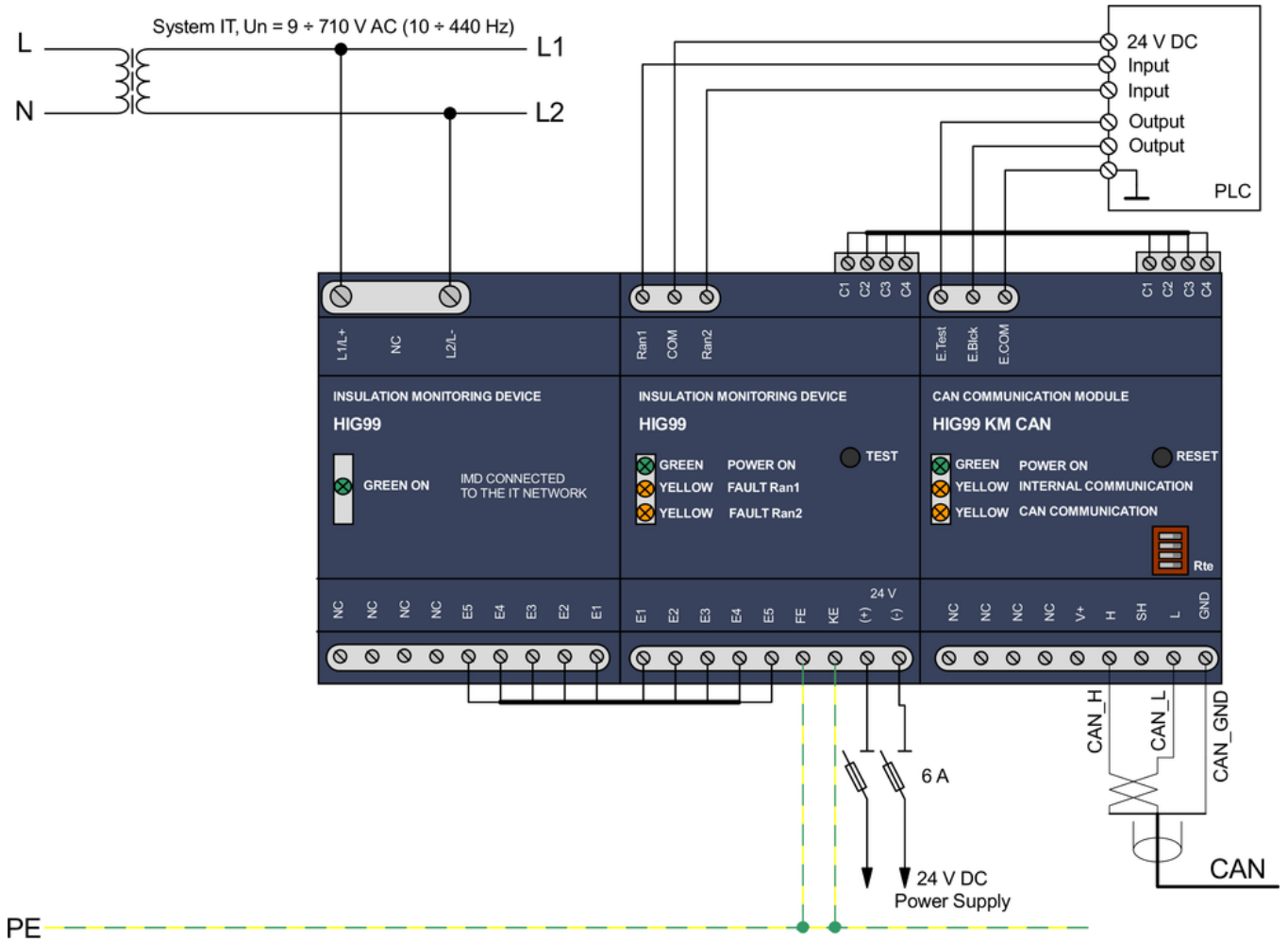
The link in the QR code leads to the online presentation of the HIG99. There, in addition to the always up-to-date data sheet, you will also find all diagrams and drawings, declarations of conformity, or 2D or 3D models and other necessary materials. For more information, visit www.hakil.com



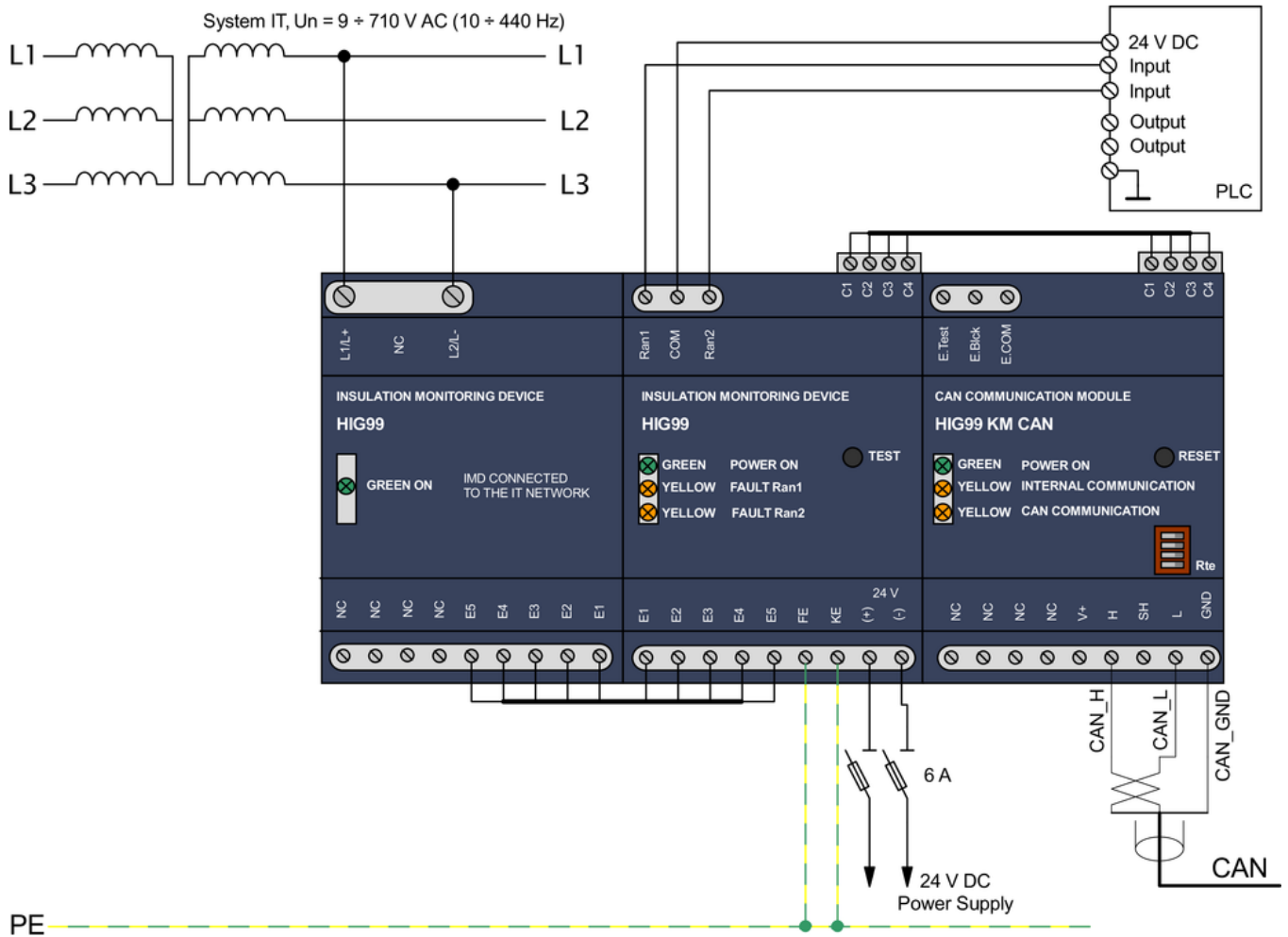
Application wiring diagram (installation) 1/4



Application wiring diagram (installation) 2/4



Application wiring diagram (installation) 3/4



Application wiring diagram (installation) 4/4

