

HAKEL ISOLGUARD HIG-MT

The range of HIG-MT current measuring transformers is primarily used to sense the current load of a medical insulated power supply system, which is monitored by the insulation monitoring device from HAKEL. Measuring transformers are available in the range of primary current 25 A to 100 A, secondary current 5 A. The type of construction is pluggable. Transformers are supplied in two dimensional versions, depending on the primary current.

HIG-MT transformers are designed for installation in a switchboard, they can be mounted to the distribution board using reduction brackets (included), or using a DIN rail bracket (must be purchased separately). Alternatively, the transformer can be mounted directly on the copper profile, up to a maximum size of 20 x 10 mm.

The HIG-MT range is designed to work reliably with HAKEL HIG95-DELTA and HIG95+ insulation monitoring devices.



The HIG-MT range meets the standards:

- EN 61869-1 (IEC 61869-1:2007) - Instrument transformers - General requirements
- EN 61869 -2 (IEC 61869 -2:2012) - Instrument transformers - Additional requirements for current transformers

Types of current measuring transformers HIG-MT

Type	Article number	Primary current [A]	Sec. current [A]	Power [VA]	Accuracy class	Overcurrent number (FS)	Mechanical construction	Article number of DIN rail bracket	Weight [g]
HIG-MT 25/5 A	71 530	25	5	1	3	5	CLB.65	71 541	660
HIG-MT 30/5 A	71 531	30		1,5	3	5	CLB.65	71 541	660
HIG-MT 40/5 A	71 532	40		1	1	10	CLB.65	71 541	660
HIG-MT 50/5 A	71 533	50		1	1	10	CLB.65	71 541	660
HIG-MT 60/5 A	71 534	60		2,5	1	5	CLB.65	71 541	660
HIG-MT 80/5 A	71 535	80		2,5	1	5	CLB.64	71 540	520
HIG-MT 100/5 A	71 536	100		5	1	5	CLB.64	71 540	520

Technical data of HIG-MT (applies to the whole range)

Transformer construction		Pluggable (without interrupting the primary conductor)
Maximum continuous overload		120 %
Hole for primary conductor (round)		20 mm
Hole for primary conductor (rectangle)		20 x 10 mm
Highest allowed voltage of the monitored system		0,72 kV
Testing voltage		3 kV AC
Working frequency	f	50 / 60 Hz
Housing material		Self-extinguishing
Winding insulation class		Class E, maximum temperature 120 °C
Rated short-time thermal current ¹	I _{th}	60 x primary current
Rated peak withstand current ²	I _{dyn}	150 x secondary current
Recomm. cross-section of secondary conductors	s	2,5 mm ²
Operating position		Arbitrary
Operating temperature		-25 °C ÷ +40 °C

Technical data of HIG-MT DIN CLIP

Type	HIG-MT DIN CLIP 65	HIG-MT DIN CLIP 64
Specification	DIN rail bracket for transformer range HIG-MT	
Intended for mechanical construction	CLB.65	CLB.64
Weight	11 g	10 g
Article number	71 541	71 540

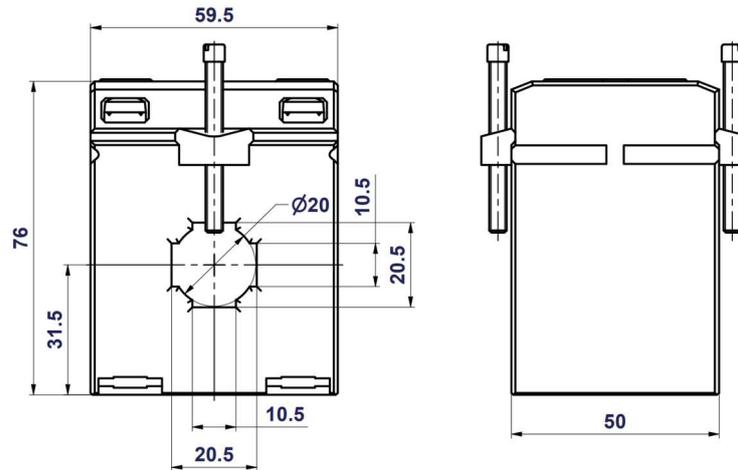
¹ The effective value of the primary current, which the transformer can withstand for 1 s without damaging the transformer.

² The peak value of the highest amplitude of the primary dynamic current, which the transformer can withstand without electrical or mechanical damage by electrodynamic forces, when the secondary winding is short-circuited.

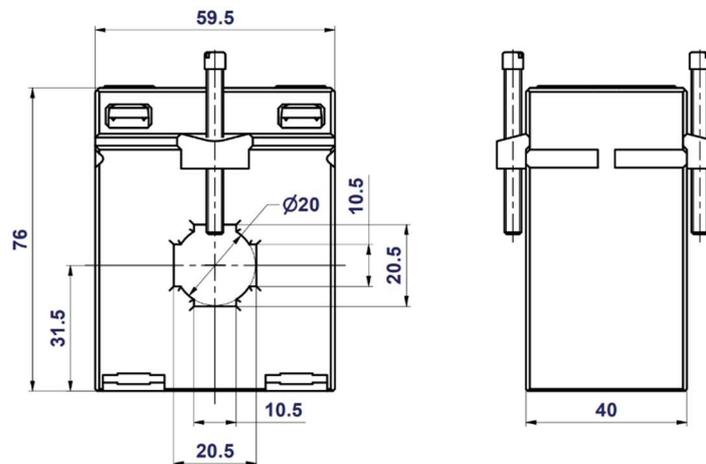
Recommended max. cable lengths for connecting the transformer with the HAKEL HIG insulation monitoring device

Type	Article number	The recommended max. cable length	
		Cable CU, cross-section 2,5 mm ²	Cable CU, cross-section 1,5 mm ²
HIG-MT 25/5 A	71 530	2,25 m (4,5 m complete sec. loop)	1,35 m (2,75 m complete sec. loop)
HIG-MT 30/5 A	71 531	3,75 m (7,5 m complete sec. loop)	2,25 m (4,5 m complete sec. loop)
HIG-MT 40/5 A	71 532	2,25 m (4,5 m complete sec. loop)	1,35 m (2,75 m complete sec. loop)
HIG-MT 50/5 A	71 533	2,25 m (4,5 m complete sec. loop)	1,35 m (2,75 m complete sec. loop)
HIG-MT 60/5 A	71 534	6,5 m (13 m complete sec. loop)	4 m (8 m complete sec. loop)
HIG-MT 80/5 A	71 535	6,5 m (13 m complete sec. loop)	4 m (8 m complete sec. loop)
HIG-MT 100/5 A	71 536	14 m (28 m complete sec. loop)	8 m (16 m complete sec. loop)

Dimension drawing of mechanical construction CLB.65



Dimension drawing of mechanical construction CLB.64



Installation instructions



Operation, installation and maintenance of this equipment may only be performed by qualified personnel in accordance with installation and safety regulations. If the device is used in a manner not specified by the manufacturer, the protection provided by the device may be impaired.

The HIG-MT device is designed for mounting on a switchboard or DIN rail 35 mm according to EN 60715. The operating position is arbitrary.

Supplier :

The supplier of HIG-MT current measuring transformers is:

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Bratří Štefanů 980, 500 03 Hradec Králové
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