

DATA SHEET

GEN series KAB2139 Shielded 3-Wire 1.5 kV Cable

SPECIAL FEATURES

- 1500 V DC CAT III
- 1000 V CAT IV
- High voltage rating
- 3-wire shielded cable
- 4 mm shrouded banana plugs
- Shield connection on both sides
- 4 mm cable lug adapter

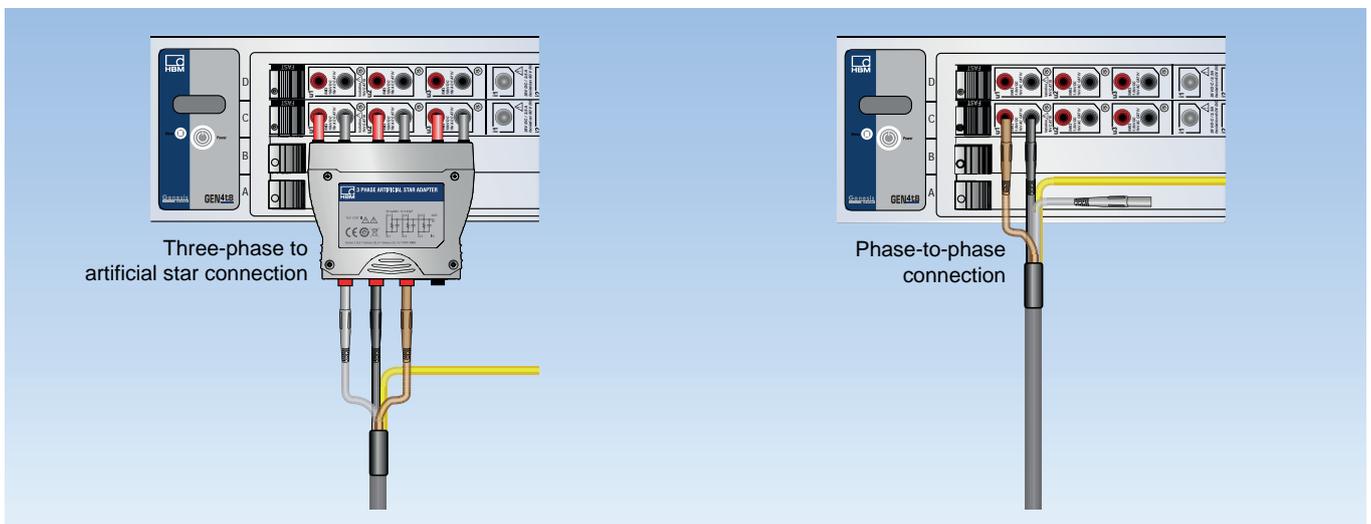


KAB2139 FUNCTIONS AND BENEFITS / INSTALLATION EXAMPLE

KAB2139 cables are tested according to EN 61010-031:2016 with voltages up to 1500 V DC CAT III and/or 1000 V CAT IV. The cables are designed to match the voltage and safety ratings of the GN310B/ GN311B input card and exceeds the ratings of the GN610B/ GN611B input card.

KAB2139 cables can be used both as three-phase to artificial star connections (using the three-phase artificial star adapter) as well as a 2-wire phase-to-phase connection.

The identical cable impedance on each wire of the cable together with the balanced input of both the GN31xB as well as GN61xB cards creates an optimum common mode rejection ratio to maximize the signal to noise ratio.



KAB2139: Shielded 3-Wire 1000 V CAT IV and 1500 V DC CAT III

This cable is specially designed to be used with the GN310B/GN311B/GN610B and GN611B cards. KAB2139-xx significantly reduces signal disturbance pickup by using three identical signal wires with earthed shield.

Cable setup 3-wires with shield and isolation.
Signal wires terminated on both sides using (brown, grey, black) shrouded banana plugs.
Shield connected on both sides using (yellow) shrouded plugs.

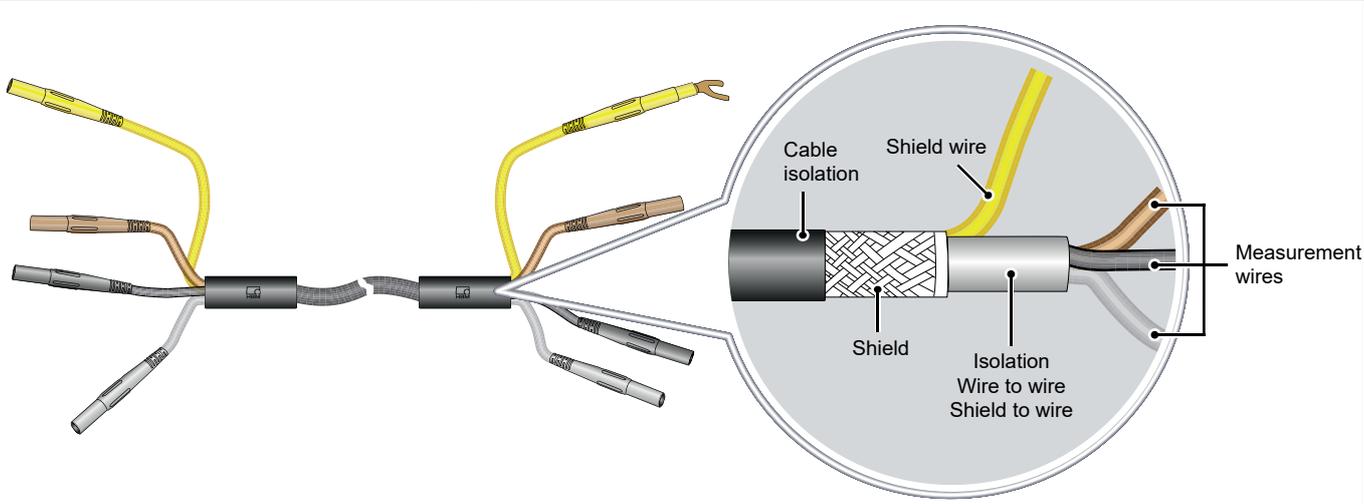


Figure 1: Three wire shielded cable setup

Maximum current 5 A

4 mm cable lug adapter Adapter LD-024-1001712

Wire

Type	Cu-ETP1 to DIN EN 13602; approximately 24 x 0.20 mm blank
Diameter	3 x 0.75 mm ² (copper) Diameter 0.9 mm wire only 2.9 mm (with isolation)
Isolation	PE, halogen free
Maximum wire resistance	26 mΩ/m (7.9 mΩ/ft)
Minimum bend radius	10 times that of the cable diameter
Shielding	Cu-braided tin plated, approximately 85% optical density
Cable jacket	PVC-TM2 Self-extinguishing and flame retardant (according to DIN VDE 0482) 265-2-1/EN 50265-2-1/IEC 60332-1
Isolation voltage	1000 V CAT IV and 1500 V DC CAT III; wire to wire, wire to shield, shield to outside

Capacitance

Wire to wire	10 pF + 56 pF/m (17 pF/ft) ±10%
Wire to shield	10 pF + 96 pF/m (30 pF/ft) ±10%

Temperature range

Operational	-5 °C to +70 °C (23 °F to +158 °F)
Non-operational (storage)	-40 °C to +80 °C (-40 °F to +176 °F)

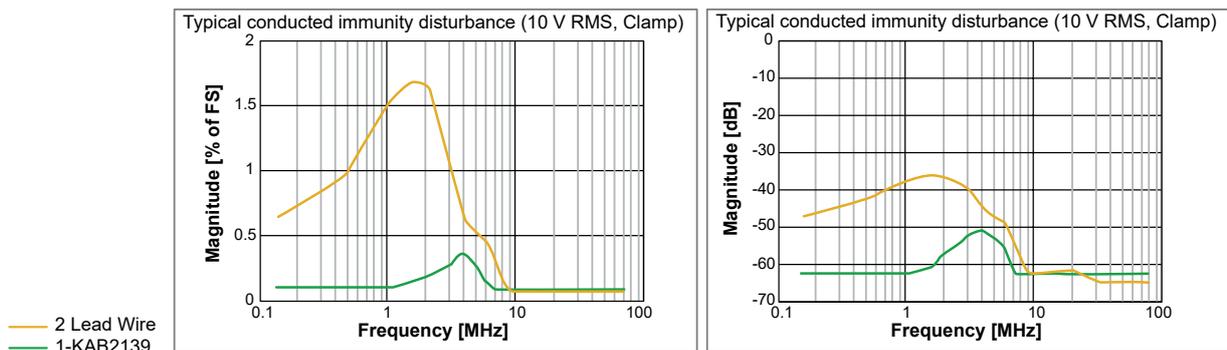


Figure 2: Typical conducted immunity, tested using ± 10 V range

Physical, Weight and Dimensions

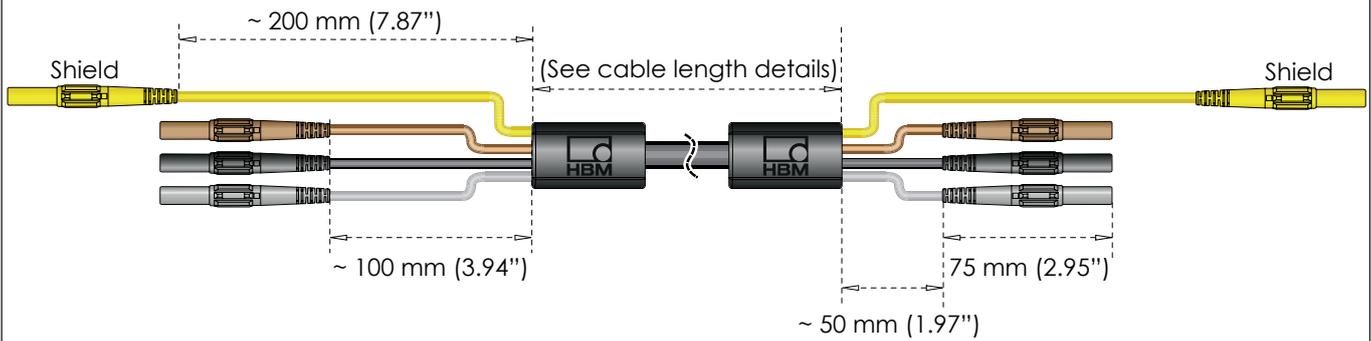


Figure 3: Dimensions

Weight	Approximately 155 g/m (1.67 oz/ft)
Outside cable diameter	Approximately 10.5 mm (0.41 inch)
Lengths / Part numbers	
Available lengths	1.5 m (4.92 ft), 3.0 m (9.84 ft), 6.0 m (19.7 ft), 12 m (39.4 ft), 20 m (65.6 ft)
Part number:	Length:
1-KAB2139-1.5	~1.5 m (59.06")
1-KAB2139-3	~3.0 m (118.11")
1-KAB2139-6	~6.0 m (236.22")
1-KAB2139-12	~12.0 m (472.44")
1-KAB2139-20	~20.0 m (65.6")

Ordering Information

Article	Description	Order No.
1000 V CAT IV / 1500 V DC CAT III 3-wire Isolated shielded test leads	 <p>The cable uses safety-shrouded banana plugs for:</p> <ul style="list-style-type: none"> 3-phase measurement (Black/Brown/Grey) or single-phase neutral to line Shield connector (Yellow) <p>The cable is shielded to minimize the typical impact of electromagnetic disturbance generated by high-power inverters, as well as to minimize emissions from the rise times of the switching inverter voltages measured with this cable.</p> <p>Available lengths: 1.5 m (4.92 ft), 3.0 m (9.84 ft), 6.0 m (19.7 ft), 12 m (39.4 ft), 20 m (65.6 ft)</p>	1-KAB2139-1.5 1-KAB2139-3 1-KAB2139-6 1-KAB2139-12 1-KAB2139-20

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They are not to be understood as a guarantee of quality or durability.