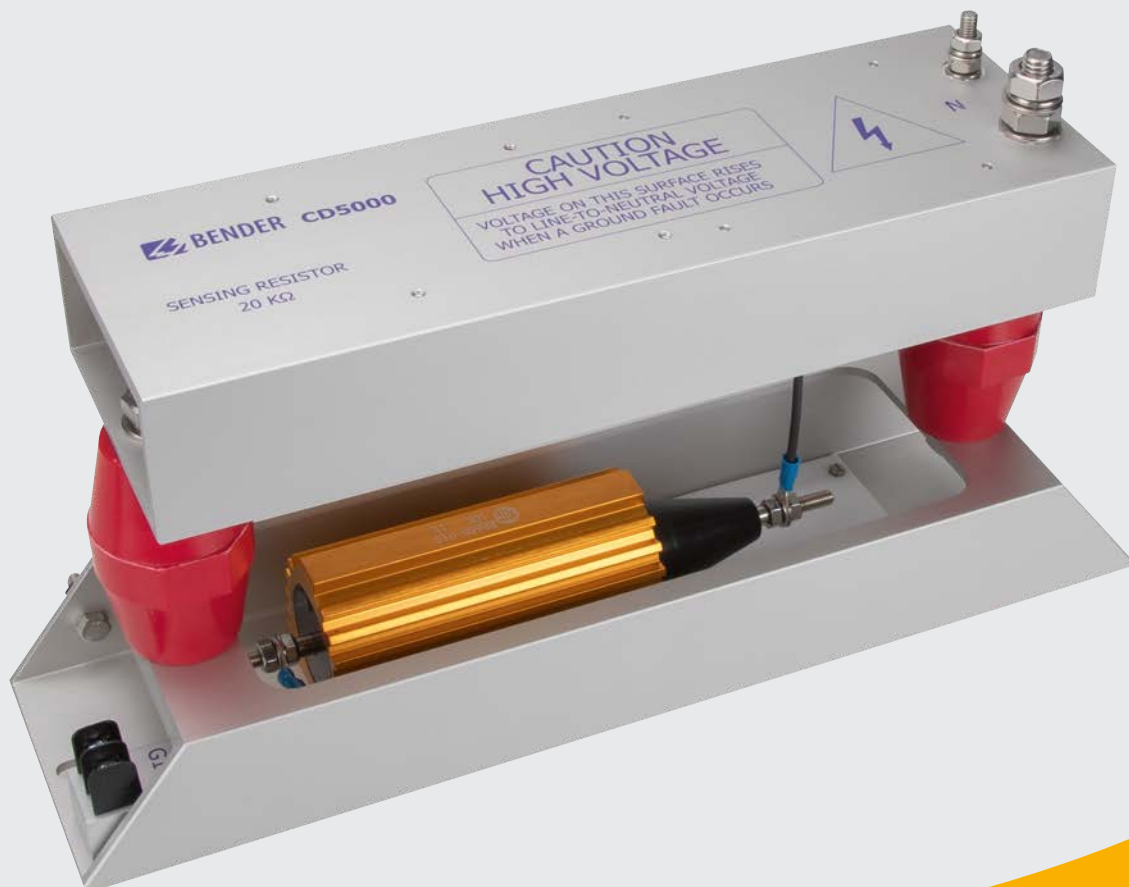




Coupling device CD5000



Coupling device CD5000



Coupling device CD5000

Device features

- Coupling device for NGRM
- Range of use up to AC 4300 V/DC 2500 V system voltage
- Range of use up to 5000 m

Certifications



Product description

The CD5000 can be used with an NGR monitor in HRG systems with a system voltage U_{LL} up to 4300 V ($U_{NGR} \leq 2500$ V).

The maximum operating altitude is 5000 m above mean sea level.

Application

- The coupling device is suitable for HRG applications up to AC 4300 V and/or DC 2500 V.

Function

The duty time is unlimited. To provide the necessary cooling, the CD5000 must be mounted on a grounded metal plate of at least 600 x 300 mm.

Ordering details

Nominal system voltage U_n	Type	Art. No.
Up to $U_{LL} = 4300$ V ($U_{NGR} = 2500$ V)	CD5000	B98039011

Technical data

Insulation coordination DIN EN 50178:1997

Definition	
Measuring circuit (IC1)	N
Output circuit (IC2)	G1
Protective circuit (IC3)	G, PE
Rated voltage	3 kV
Overtoltage category	III
Pollution degree	2
Rated insulation voltage	
no galvanic separation between the circuits!	
IC1/(IC2 – IC3)	3 kV
IC2/IC3	50 V

Voltage range

U_n	DC / 50/60 Hz / 50...3200 Hz 2500 V
I_n	125 mA
Overload capacity	1.15 x U_n for < 5 minutes

Resistance

20 k Ω	± 1 %
Temperature coefficient	20 ppm/K

Environment

Ambient temperature	-40...+70 °C
Ambient temperature for U_L	-40...+60 °C
Humidity	≤ 98 %

Classification of climatic conditions acc. to IEC 60721

(except condensation and formation of ice)

Stationary use (IEC 60721-3-3)	3K23
Transport (IEC 60721-3-2)	2K11 (-40...+85 °C)
Long-term storage (IEC 60721-3-1)	1K22 (-40...+70 °C)

Classification of mechanical conditions acc. to IEC 60721

Stationary use	3M12
Transport	2M4
Long-term storage	1M12

Connection

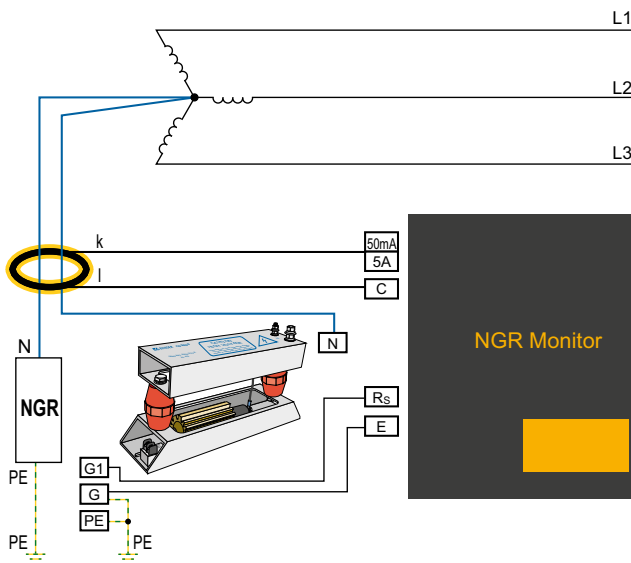
Tightening torque G1 and G	0.5...0.6 Nm (5...7 lb-in)
Conductor sizes	AWG 24-12
Connection G1 and G	cable lug
Conductor	≥ 1.5 mm ²
Connection PE	cable lug M6
Conductor	≥ 2.5 mm ²
Connection N (use minimum 110 °C conductor)	cable lug M6, M10

Other

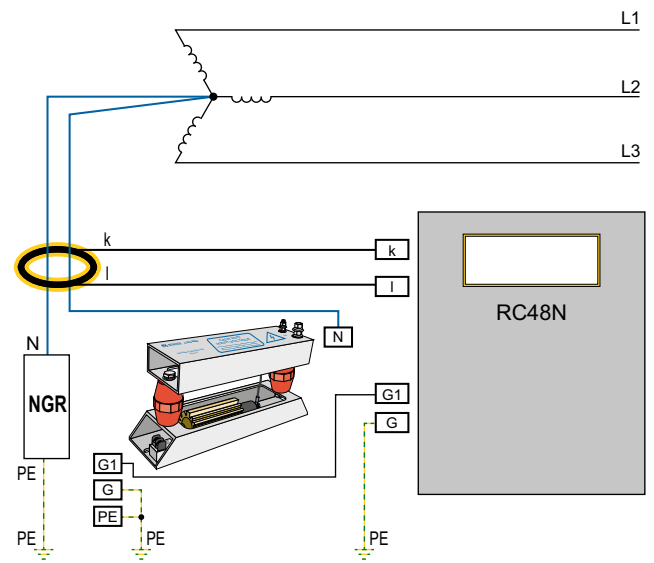
Operating mode	continuous operation
Mounting	any position
Operating altitude	up to 5000 m AMSL
Degree of protection, internal components (DIN EN 60529)	IPO
Flammability class	UL 94V-0
Documentation number	D00398
Weight	< 3800 g

Wiring diagrams

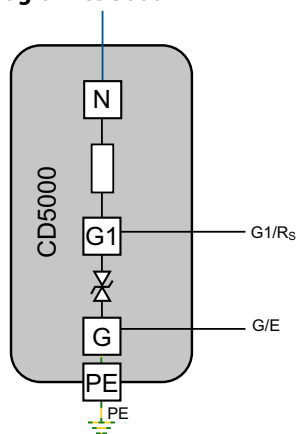
NGR monitor



RC48N



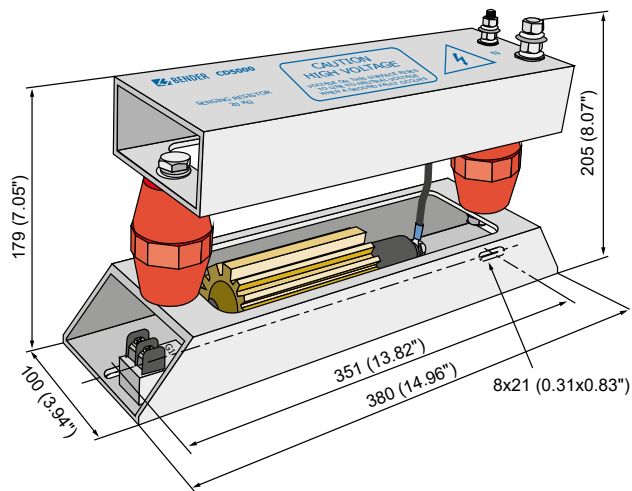
Internal wiring diagram CD5000



Terminal	Use	Connecting cable	
		Metrical	Imperial
N	Connection to the star point of the HRG system	via cable lug M6 or M10	
G1	Connection to R_s of the NGRM...	1.5 mm ²	AWG16
G	Connection to E of the NGRM... (internally connected to PE, see internal wiring diagram)		
PE to enclosure	Connection to the protective conductor (internally connected to E, see internal wiring diagram)	≥ 1.5 mm ²	AWG16 or greater

Dimension diagram

Dimensions in mm (inches)



Bender GmbH & Co. KG

P.O. Box 1161 • 35301 Grünberg • Germany

Londorfer Straße 65 • 35305 Grünberg • Germany

Tel.: +49 6401 807-0 • Fax: +49 6401 807-259

E-mail: info@bender.de • www.bender.de



BENDER Group