



Coupling device CD1000



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Device features

- Coupling device for NGRM
- Range of use up to AC 690 V/DC 400 V system voltage
- Range of use up to 2000 m

Certifications



Technical data

Insulation coordination DIN EN 50178:1997

Definition	
Measuring circuit (IC1)	N
Output circuit (IC2)	G1
Protective circuit (IC3)	G, PE
Rated voltage	400 V
Overtoltage category	III
Pollution degree	2
Rated insulation voltage	
no galvanic separation between the circuits!	
IC1/(IC2 – IC3)	400 V
IC2/IC3	50 V

Voltage range

U_n	DC / 50/60 Hz / 50...3200 Hz 400 V
I_n	30 mA
Overload capacity	1.15 x U_n for < 30 minutes

Resistance

20 k Ω	$\pm 5\%$
Temperature coefficient	25 ppm/K

Environment

Ambient temperature	-40...+70 °C
Ambient temperature for UL	-40...+60 °C
Humidity	$\leq 98\%$

Classification of climatic conditions acc. to IEC 60721

(except condensation and formation of ice)

Stationary use (IEC 60721-3-3)	3K5
Transport (IEC 60721-3-2)	2K3 (-40...+85 °C)
Long-term storage (IEC 60721-3-1)	1K4 (-40...+70 °C)

Product description

The CD1000 can be used with an NGR monitor in HRG systems with a system voltage U_{LL} up to 690 V ($U_{NGR} \leq 400$ V).

The maximum operating altitude is 2000 m above mean sea level.

Application

- The coupling device is suitable for HRG applications up to AC 690 V and/or DC 400 V.

Function

The duty time is unlimited. To provide the necessary cooling at a voltage of $U_{LL} = 690$ V ($U_{NGR} = 400$ V), the CD1000 must be mounted on a grounded metal plate of at least 300 x 300 mm.

Ordering details

Nominal system voltage U_n	Type	Art. No.
Up to $U_{LL} = 690$ V ($U_{NGR} = 400$ V)	CD1000	B98039010

Classification of mechanical conditions acc. to IEC 60721

Stationary use	3M7
Transport	2M2
Long-term storage	1M3

Connection

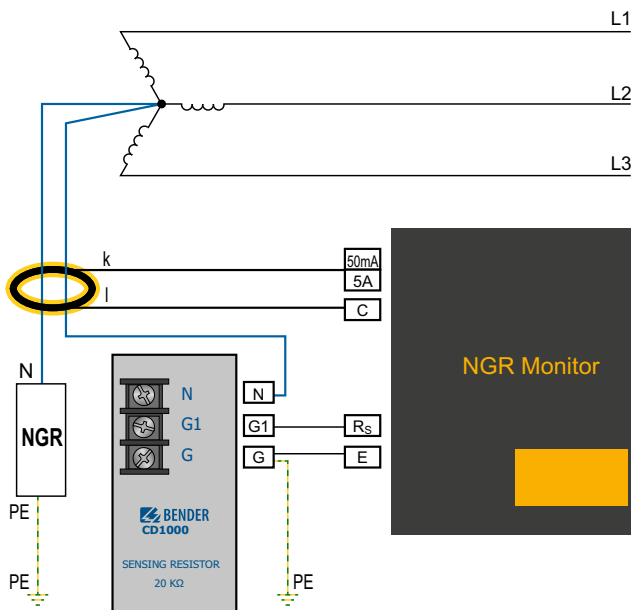
Tightening torque	0.5...0.6 Nm (5...7 lb-in)
Conductor sizes	AWG 24-12
Stripping length	7 mm
Conductor, rigid	0.2...4 mm ²
Conductor, flexible	0.2...2.5 mm ²
Multiple conductor, flexible with ring cable lug	
without plastic sleeve	0.25...1.5 mm ²
with plastic sleeve	0.25...2.5 mm ²

Other

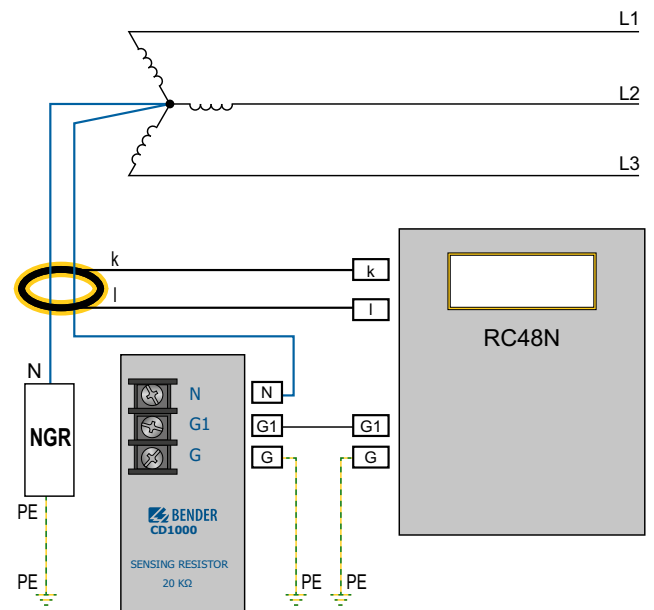
Tightening torque mountings screws (M4x30)	2.5 Nm (22.1 lb-in)
Operating mode	continuous operation
Mounting	any position
Operating altitude	up to 2000 m AMSL
Degree of protection, internal components (DIN EN 60529)	IP30
Flammability class	UL94 HB
Documentation number	D00397
Weight	< 190 g

Wiring diagrams

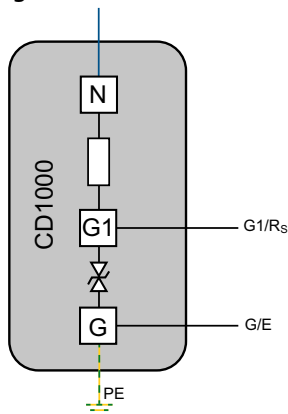
NGR monitor



RC48N



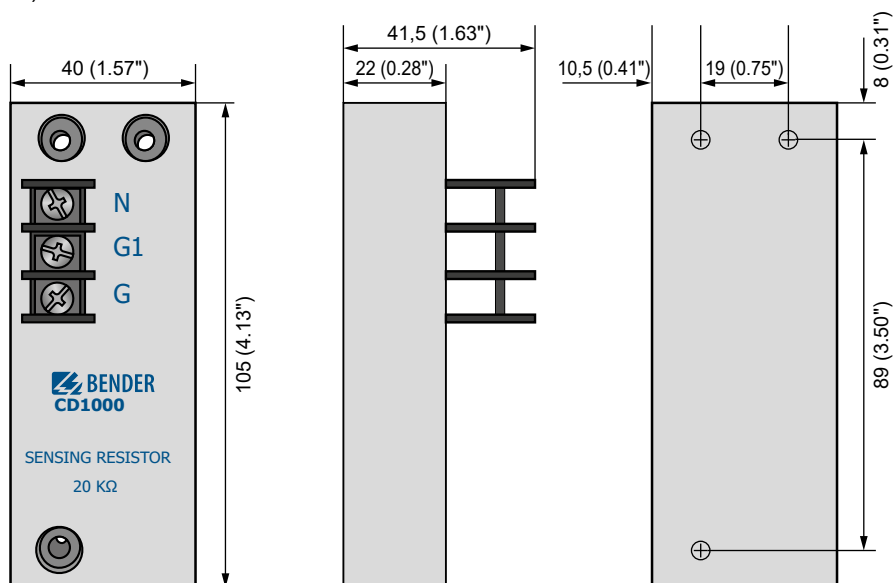
Internal wiring diagram CD1000



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

Dimension diagram

Dimensions in mm (inches)



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