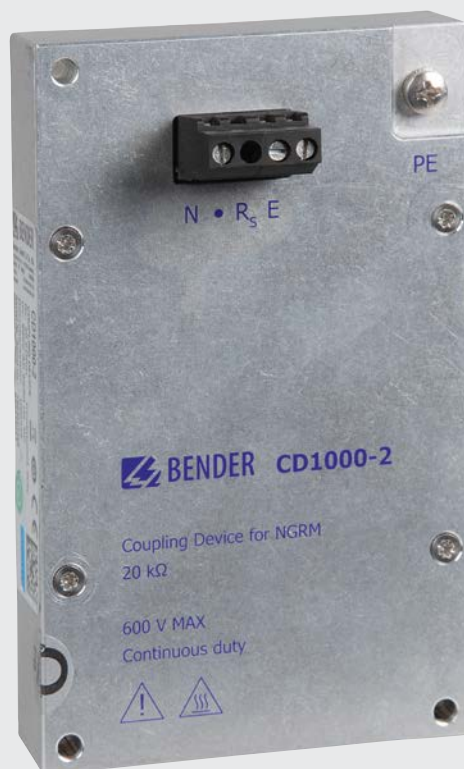


Coupling device CD1000-2



Coupling device CD1000-2



Coupling device CD1000-2

Product description

The CD1000-2 can be employed with an NGR monitor in HRG installations with a system voltage U_{LL} up to 1000 V ($U_{NGR} \leq 600$ V).

It can be used at maximally 5000 m AMSL.

Application

- The coupling device is suitable for HRG applications up to AC 1000 V and/or DC 690 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 CD1000-2 should be mounted on a grounded metal plate of at least 300 x 300 mm.

Ordering details

Type	U_{LL}	U_{NGR}	Art. No.
CD1000-2	up to 1000 V	600 V	B98039053

Device features

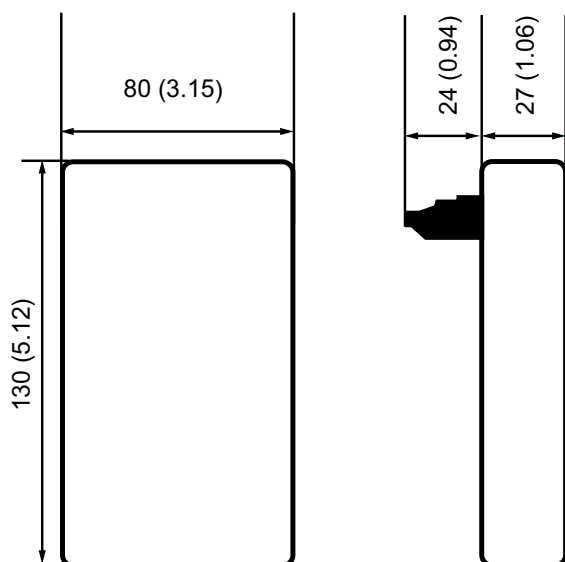
- Coupling device for NGRM
- Range of use up to AC 1000 V/DC 600 V system voltage
- Application up to 5000 m

Certifications



Dimension diagram

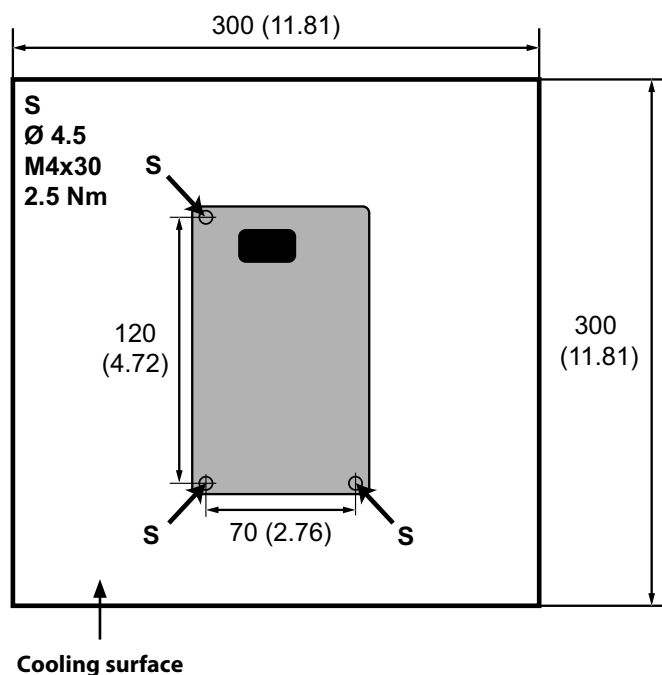
Dimensions in mm (in)



Screw mounting

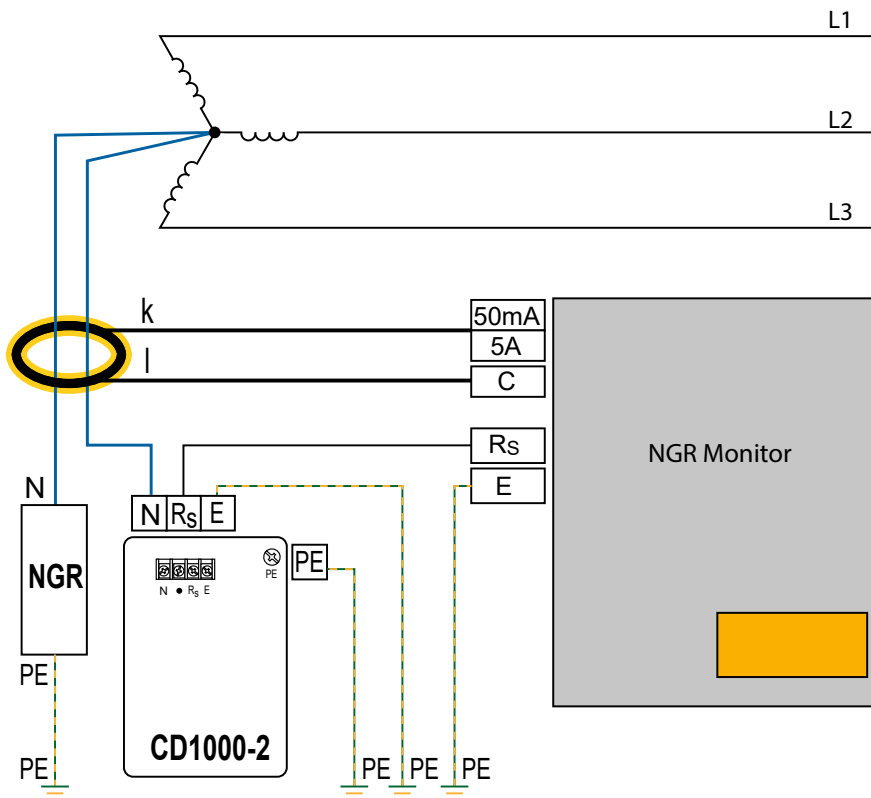
Dimensions in mm (in)

The device is suitable for screw mounting. For $U_{LL} > 690$ V, a cooling surface of 300 x 300 mm (11.81 in²) must be provided.

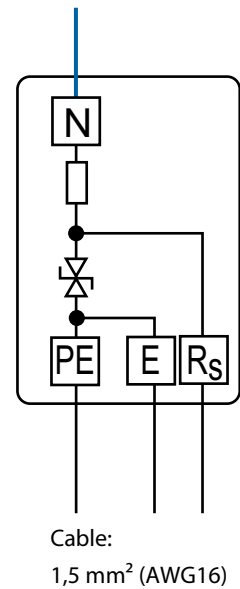


Wiring diagrams

Wiring diagram



Internal wiring diagram CD1000-2



i So that the connection between NGR and star point is also monitored, the „N“ terminal of the CD1000-2 should be connected directly to the star point of the transformer.
 A direct connection between the „N“ connections of the CD1000-2 and the NGR is not recommended, as in this case a line interruption between the star point and the NGR connection „N“ would not be monitored.

Terminal	Use	Connecting cable	
		Metrical	Imperial
N	Connection to the star point of the HRG system		
R_S	Connection to R_S of the NGRM...	1.5 mm ²	AWG16
E	Connection to protective earth conductor (internally connected to PE)		
PE	Connection to the protective conductor (internally connected to E), cable lug M4	≥ 1,5 mm ²	≥ AWG16

Technical data

Insulation coordination DIN EN 50178:1997

Definition	
Measuring circuit (IC1)	N
Output circuit (IC2)	R _s
Protective circuit (IC3)	E, PE
Rated voltage	600 V
Overvoltage category	III
Pollution degree	2
Rated insulation voltage	
No galvanic separation between the circuits!	
IC1/(IC2 – IC3)	600 V
IC2/IC3	50 V

Voltage range

U_n	DC, 50/60 Hz, 10...3200 Hz	600 V
I_n		30 mA
Overload capacity	1.15 x U_n for < 30 minutes	

Resistance

20 k Ω	± 0.5 %
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

(related to temperature and relative humidity)

Stationary use (IEC 60721-3-3)	3K22
Transport (IEC 60721-3-2)	2K11
Long-term storage (IEC 60721-3-1)	1K22

Classification of mechanical conditions acc. to IEC 60721

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

Connection

Tightening torque	0.5...0.6 Nm (4.4...5.3 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 ferrule	
without plastic sleeve	0.25...1.5 mm ²
with plastic sleeve	0.25...2.5 mm ²
Multiple conductor, flexible with TWIN ferrule	
with plastic sleeve	0.5...1.5 mm ²

Other

Operating mode	continuous operation
Mounting	any position
Screw type mounting screws	M4x30
Tightening torque mounting screws	2.5 Nm (22.1 lb-in)
Operating altitude	up to 5000 m AMSL
Degree of protection, internal components (DIN EN 60529)	IP30
Flammability class	UL 94V-0
Documentation number	D00345
Weight	< 700 g



Bender GmbH & Co. KG

Londorfer Straße 65 • 35305 Grünberg • Germany
Tel.: +49 6401 807-0 • info@bender.de • www.bender.de



BENDER Group