

Coupling device CD25000



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Product description

The CD25000 is intended for use with an NGRM... NGR monitor only. The CD25000 can be used in HRG systems with a system voltage up to $U_{LL} = 25 \text{ kV}$ ($U_{NGR} = 14.5 \text{ kV}$). The maximum operating altitude is 5000 m above mean sea level.

Application

- The coupling device is suitable for HRG applications up to AC 25 kV and/or DC 14.5 kV.

Function

The combination of an NGRM... and a coupling device extends the range of application of the neutral grounding resistor monitor up to a system voltage of 25 kV. The duty time is limited to 10 s (minute), the cool-down period is 120 minutes.

Device features

- Coupling device for NGRM
- Range of use up to AC 25 kV/DC 14.5 kV system voltage
- Application up to 5000 m

Ordering details

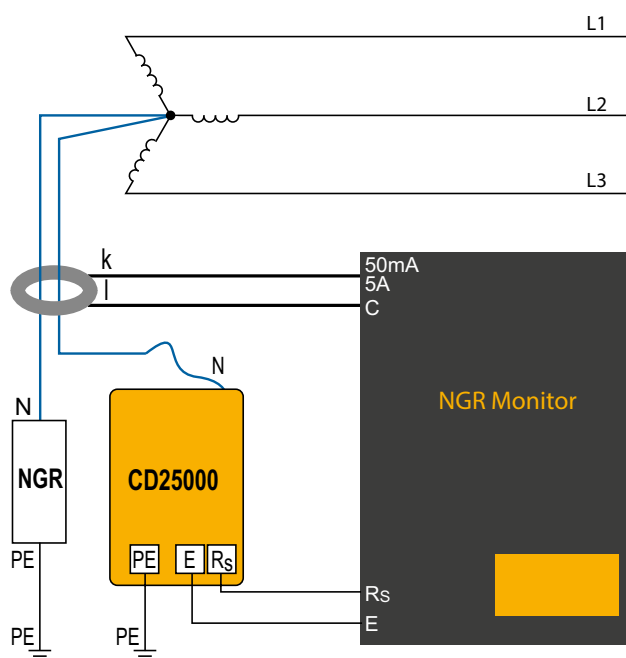
Nominal system voltage U_n	Type	Art. No.
Up to $U_{LL} = 25 \text{ kV}$ ($U_{NGR} = 14.5 \text{ kV}$)	CD25000	B98039055

Certifications

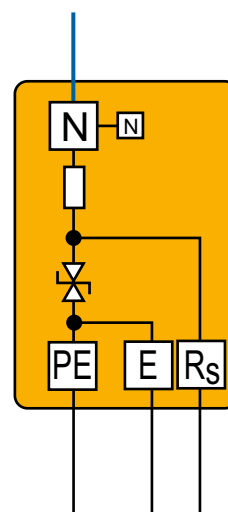


Wiring diagrams

Wiring diagram



Internal wiring diagram CD25000



Terminal	Use	Connecting cable	
		Metrical	Imperial
R_S	Connection to R_S of the NGRM...	1.5 mm ²	AWG16
E	Connection to E of the NGRM... (internally connected to PE, see internal wiring diagram)		
N	Connection to the star point of the HRG system (cable lug M5 or M10)	≥ 1.5 mm ²	AWG16 or greater
PE	Connection to the protective conductor (internally connected to E, cable lug M5)		

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	14500 V
Overvoltage category	III
Pollution degree	2
Rated insulation voltage	
no galvanic separation between the circuits!	
IC1/(IC2 – IC3)	14500 V
IC2/IC3	50 V

Voltage range

U _n	DC / 50/60 Hz / 50...3200 Hz	14500 V
I _n		145 mA

Operating time

without ground fault (2800 V)	unlimited
with ground fault (14500 V)	10 seconds
Cool-down period	120 minutes
Overload capacity	1.15 x U _n for < 10 seconds

Resistance

100 kΩ	±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

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

Classification of mechanical conditions acc. to IEC 60721 / IEC 60255-21 / DIN EN 60068-2-6

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

Connection

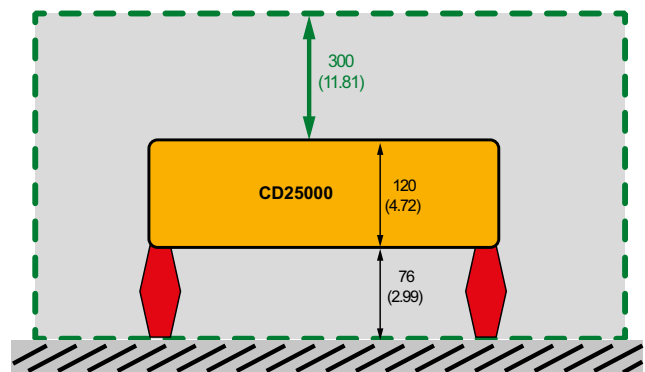
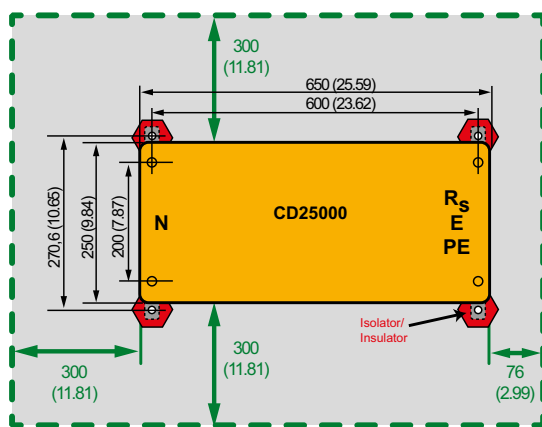
Connection R _S and E	
Tightening torque	0.5...0.6 Nm (4.4...5.3 lb-in)
Conductor sizes	AWG 24-12
Stripping length	7 mm
Conductor, rigid	0.2...4 mm ²
Conductor, flexible	0.2...2.5 mm ²
Multiple conductor, flexible with ferrule without plastic sleeve	0.25...1.5 mm ²
Multiple conductor, flexible with ferrule with plastic sleeve	0.25...2.5 mm ²
Multiple conductor, flexible with TWIN ferrule with plastic sleeve	0.5...1.5 mm ²
Connection PE for cable lug	
Tightening torque cable lug M5	2.2 Nm (19.5 lb-in)
Connection N	
Connection via HV line with open end	cable lug provided by the customer

Other

Operating mode	in case of a ground fault maximum 10 s
Mounting	any position
Operating altitude (when mounted on insulators)	up to 5000 m AMSL
Degree of protection, internal components (DIN EN 60529)	IP54
Flammability class	UL 94V-0
Documentation number	D00347
Weight	< 11 kg
Tightening torque cover screws	2.5 Nm (22.1 lb-in)

Dimension diagram

Dimensions in mm (in)



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