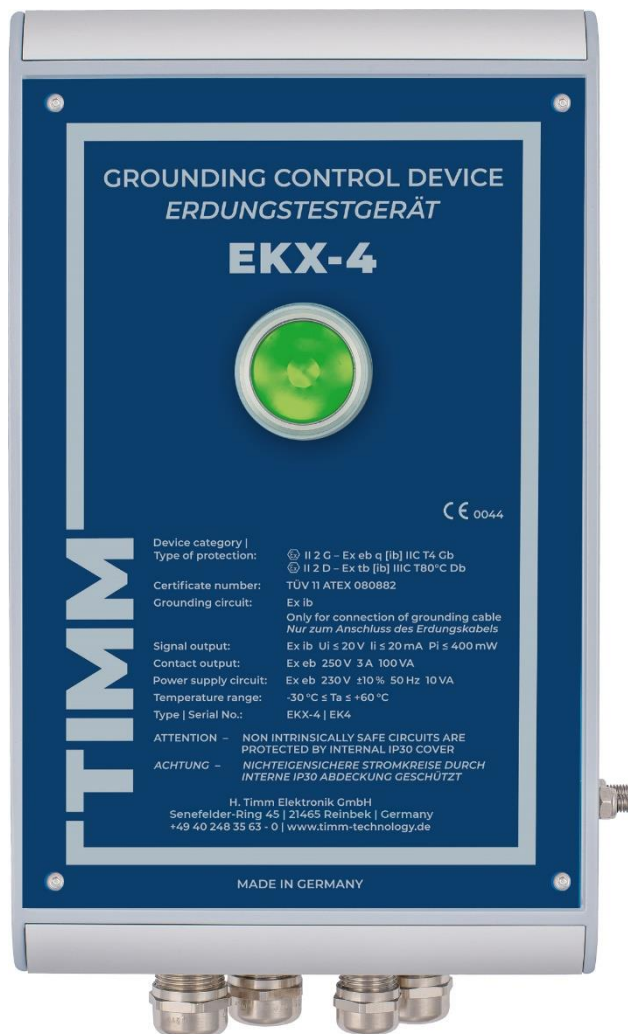


GROUNDING CONTROL DEVICE EKX-4

TECHNICAL SPECIFICATIONS



GROUNDING CONTROL DEVICE
ERDUNGSTESTGERÄT

EKX-4

CE 0044

TIMM

Device category | Type of protection: Ⓜ II 2 G – Ex eb q [Ib] IIC T4 Gb
Ⓜ II 2 D – Ex tb [Ib] IIC T80°C Db
Certificate number: TÜV 11 ATEX 080882
Grounding circuit: Ex Ib
Only for connection of grounding cable
Nur zum Anschluss des Erdungskabels
Signal output: Ex Ib U_I ≤ 20 V I_I ≤ 20 mA P_I ≤ 400 mW
Contact output: Ex eb 250 V 3 A 100 VA
Power supply circuit: Ex eb 230 V ±10 % 50 Hz 10 VA
Temperature range: -30 °C ≤ T_a ≤ +60 °C
Type | Serial No.: EKX-4 | EK4

ATTENTION – NON INTRINSICALLY SAFE CIRCUITS ARE PROTECTED BY INTERNAL IP30 COVER
ACHTUNG – NICHTEIGENSICHERE STROMKREISE DURCH INTERNE IP30 ABDECKUNG GESCHÜTZT

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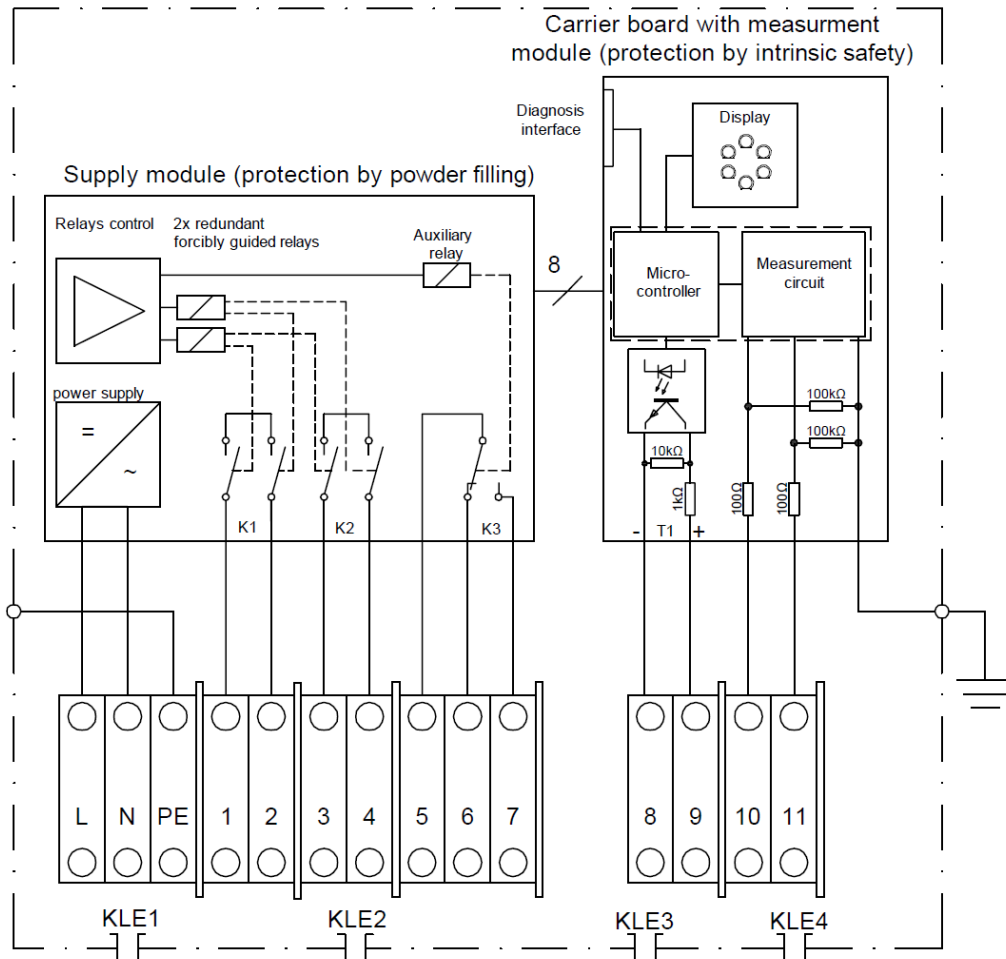
MADE IN GERMANY

1. Technical Data

Type of Protection	<p>According to ATEX-directive 2014/34/EU:</p> <p>⊕ II 2 G – Ex eb q [ib] IIC T4 Gb</p> <p>⊕ II 2 D – Ex tb [ib] IIIC T80°C Db</p>
EC Type Examination	TÜV 11 ATEX 080882
Power Supply	<p>230 V AC ± 10 %, 50 Hz, ca. 10 VA</p> <p>type of protection “increased safety“ Ex eb</p>
Measuring Circuit	<p>Max. $U_o = 6,7$ V; $I_o = 68$ mA; $P_o = 114$ mW</p> <p>Max. 50 m (ex related specification, functional limitations must be observed)</p> <p>Type of protection Ex ib / ibD</p> <p>Only for connection of the grounding cable</p> <p>The measuring circuit is grounded</p>
Contact Release Output	<p>Switching power max 250 VAC 3 A 100 VA</p> <p>Type of protection “increased safety“ Ex eb</p> <p>2 voltage free closing contact, internal monitored</p>
Auxiliary Output	<p>Switching power max. 250 VAC 3 A 100 VA</p> <p>Type of protection “increased safety“ Ex eb</p> <p>voltage free changeover contact, not monitored</p>
Electronic Release Output	<p>Max. $U_i = 20$ V $I_i = 20$ mA $P_i = 400$ mW</p> <p>Inner capacitances C_i negligibly small</p> <p>Inner inductances L_i negligibly small</p> <p>Type of protection “intrinsic safety“ Ex ib</p> <p>1 NAMUR-compatible transistor output</p> <p>Internal resistance: 1 kΩ or 11 kΩ</p> <p>Modulation: 10 Hz, duty factor 1:1</p>
Protection of Enclosure	IP65
Operating Temperature	- 30 °C / + 60°C
Dimensions (W x L x H)	170 mm x 306 mm x 110 mm
Weight	approx. 4,5 kg



2. Connecting Diagram

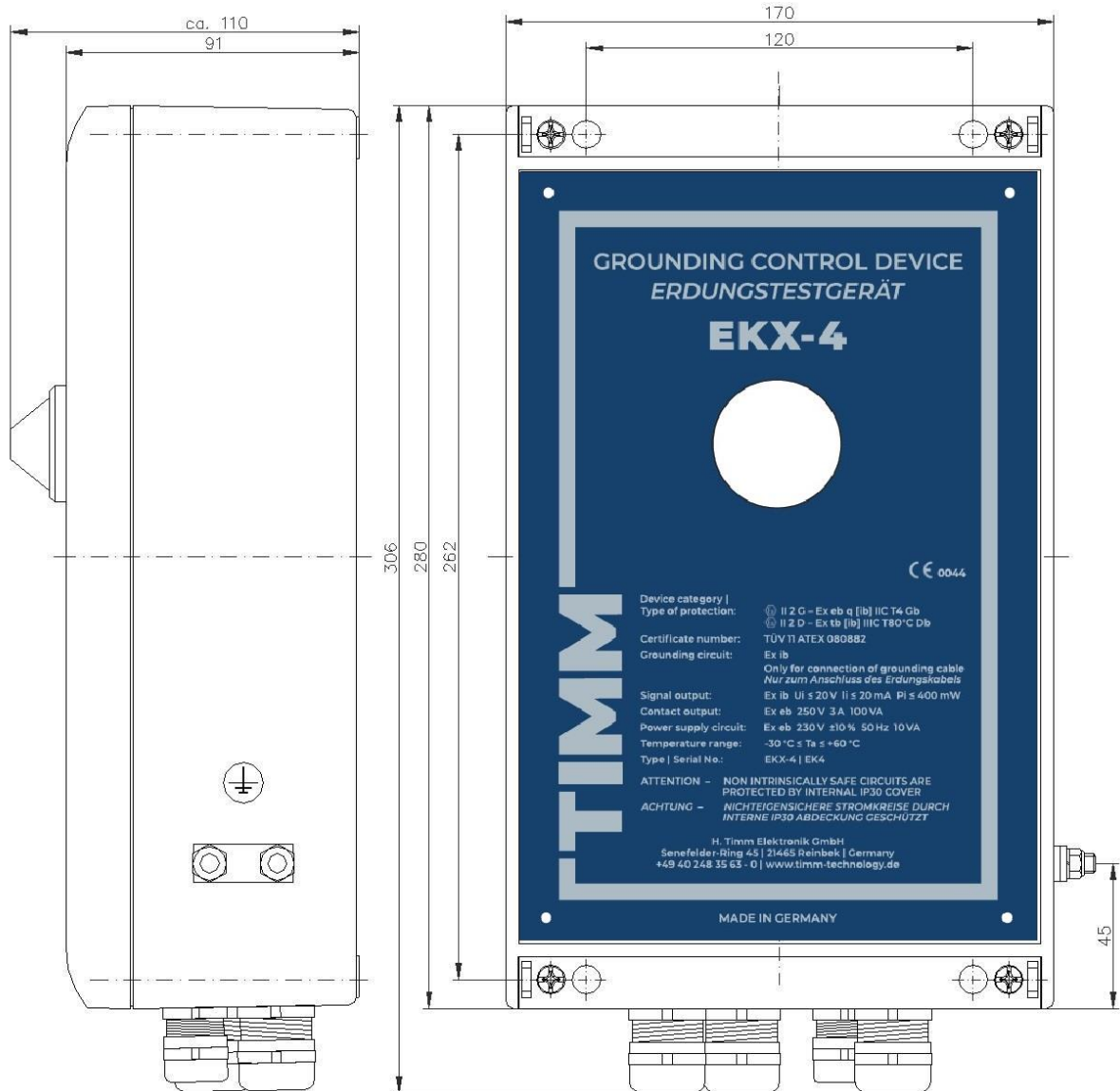


- L, N, PE: Power supply 230V ($\pm 10\%$) 50Hz, ca. 10VA
- 1 - 2: Potential-free relays-contacts 1: N/O (internally monitored output)
- 3 - 4: Potential-free relays-contacts 2: N/O (internally monitored output)
- 5 - 7: Potential-free relays-contacts 3 (auxiliary relay)
- 8 - 9: Potential-free Ex-i transistor output, NAMUR-compatibel
Maximum values: $U_i=20V$, $I_i=20mA$, $P_i=400mW$
- 10: Grounding cable connection terminal No.10
- 11: Grounding cable compensation terminal No.11
Use only cables with a wire diameter of 0.5 - 2.5 mm² (AWG 20 to 12)

Cable and cabel glands:

- KLE1 (M20) Power supply cable diameter 7-13mm
- KLE2 (M20) Contact outputs cable diameter 7-13mm
- KLE3 (M16) NAMUR transistor output cable diameter 4.5-10mm
- KLE4 (M20) Grounding cable diameter 7-13mm

3. Dimensional Drawing



Secured with 5mm Ø screws