

Connection box for high voltage (HV) modules

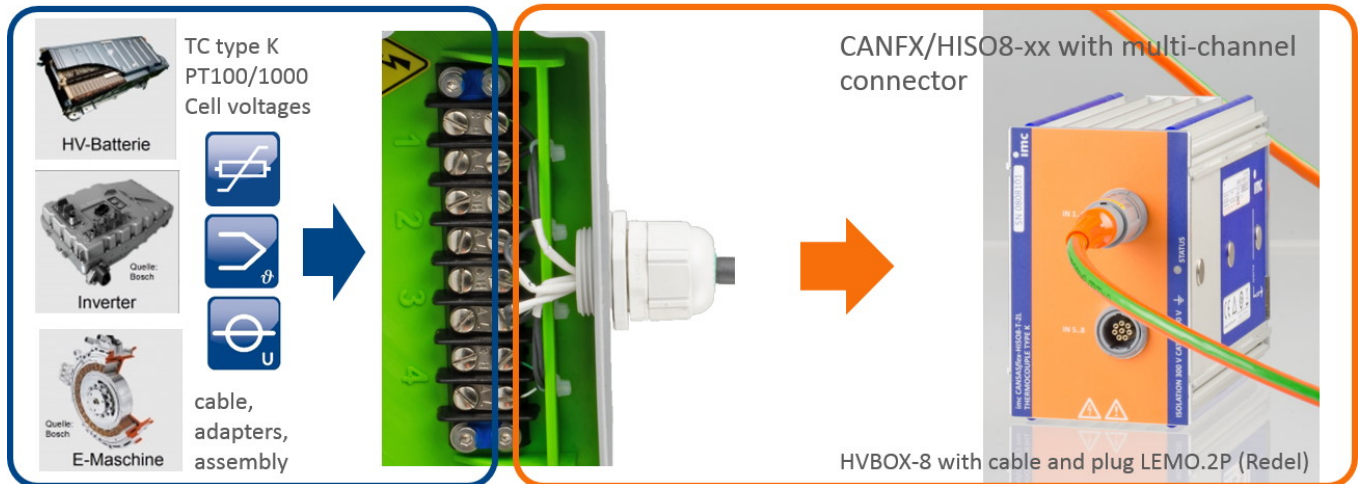


External HV connection box

- with 10 m special HV cable via LEMO.2P (Redel)
- isolated screw terminals in polymer box
- sensor cable entry via cable gland (PG)
- serves as flexible and safe cabling interface to any arbitrary user cable
- clear division between fully specified, HV-rated measurement module and suited HV-rated connectors on one side – and custom and application specific cables and sensors on the other side - that might comply with differing rules or regulations, under exclusive responsibility of the user

Specimen and special sensors

HV-rated safe measurement system/connection scheme



Connection box for high voltage (HV) modules

Technical Data Sheet



Overview of the available variants

Order Code	LEMO.2P connection box for high voltage (HV) modules	article no.
ACC/HVBOX-8-T-10M	4-channel HV connection box for thermocouple type K high isolating box with 8 screw terminals, for four thermocouples with 10 m HV compatible cable and plug LEMO.2P (Redel) 8-pin, e.g. for CRFX/HISO-8-T-2L, CANFX/HISO8-T-2L	13500353
ACC/HVBOX-8-10M	2-channel HV-connection box for voltage or PT100/PT1000 high isolating box with 8 screw terminals, for e.g. two PT100 sensors with 10 m HV compatible cable and plug LEMO.2P (Redel) 8-pin, e.g. for CANFX/HISO8-4L modules	13500354

Technical Specs

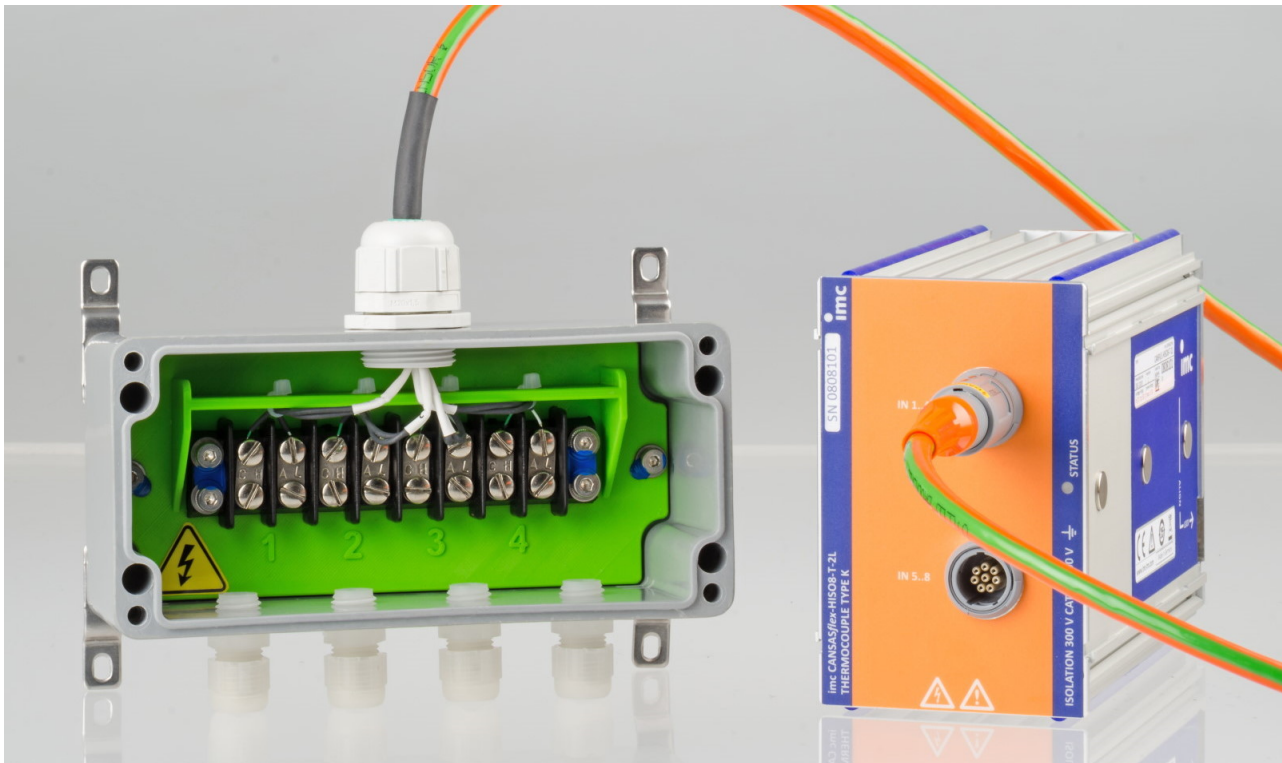
Input / Output		
Parameter	Value	Remarks
Inputs HVBOX-8-10M	terminals (Cu) for two sensors (PT100/1000) or voltage signals	cable gland input 2 and 4 ex factory with blanking plug
Inputs HVBOX-8-T-10M	terminals for 4 thermocouple type K	labeling in the box: CH = green wire = + AL = white wire = -
Output Connector plug	1x 8-pin LEMO.2P (Redel)	for CRFX/HISO-8-T-2L, CANFX/HISO8-T-2L, CANFX/HISO8-4L
Cable length	10 m	HV rated

Isolation		
Parameter	Value	Remarks
Isolation against accessible parts (case)	300 V CAT II 800 V CAT 0	reinforced isolation
Isolation of the measurement channels against each other (sensors)	300 V CAT II 800 V CAT 0	basic isolation
Isolation test voltage	AC 3000 V	1 min.
Operating temperature range	-20 °C to +80 °C	
Ingress protection class	IP65	only when the box is closed and when all gable glands properly sealed with cables

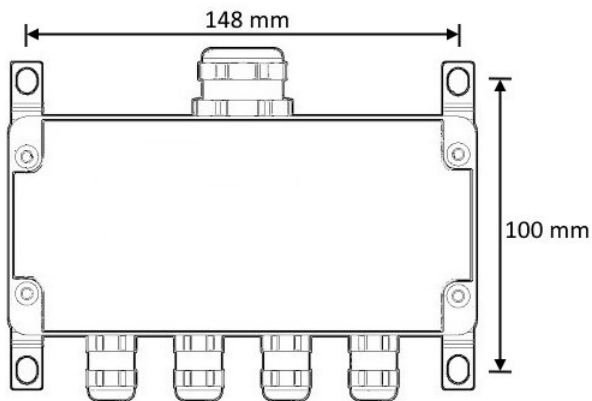
Dimensions, Weight		
Parameter	Value	Remarks
External dimensions, W x H x D	160 x 75 x 77 mm	w/o screwings, w/o cable
Weight	1.2 kg	

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Mechanical drawings with dimensions



Symbols

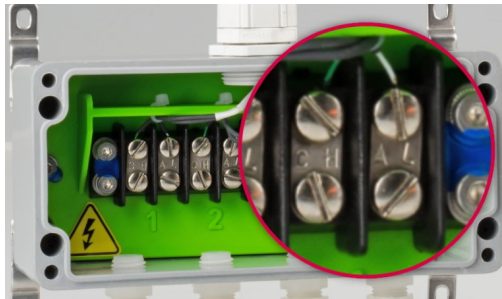


Attention! Risk of electric shock. Dangerous voltages from the measuring sources may be applied to the terminals (HV on-board). Please observe the rated values!

Clamp configuration of the 2-channel HV-connection box: HVBOX-8-10M

Channel	Pin	Signal	cable coding single wire
1	1	+IN1	ws
	2	-IN1	bn
	3	+I1	gn
	4	-I1	ge
2	5	+IN2	gr
	6	-IN2	rs
	7	+I2	bl
	8	-I2	rt

Clamp configuration of the 4-channel thermo variant: HVBOX-8-T-10M



interior view

as an example, two wires are enlarged (+) left and (-) right for the fourth thermocouple

Terminal		Cable (Color Code)	
Signal / Material	Label	IEC 585-3	ANSI
(+) Ni-Cr	CH	green	yellow
(-) Ni or Ni-Al	AL	white	red



An Axiometrix Solutions Brand

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imc ACADEMY - Training center

The safe handling of measurement devices requires a good knowledge of the system. At our training center, experienced specialists are here to share their knowledge.

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