

**Interface**

According to RN\_084-01

**Documents**

Assembly instruction MA\_HV0105  
 Process instruction (ultrasonic welding) RN\_087-01  
 Process data sheet (ultrasonic welding) RN\_087-14

**Material and plating**

**Connector parts**

Connector parts	Material	Plating / Colour
Outer contact	Brass	Ag, min. 0,5µm
Contact spring (shielding)	Copper	Ag, min. 0,5µm
Center contact	Copper	Ag, min. 3µm
Contact spring (power)	Copper	Ag, min. 3µm
Crimp sleeve	Brass	Sn, min. 3µm
Press in sleeve	Brass	Ni, min. 3µm
Insulator	PA10 GF30	red; black; waterblue
Housing	PA12 GF30	orange
Protective cover	PA12 GF30	orange
Seal (Housing)	Silicon	red, oil exudating
Seal (Cable)	Silicon	blue, oil exudating
Protective cap	EPDM	black

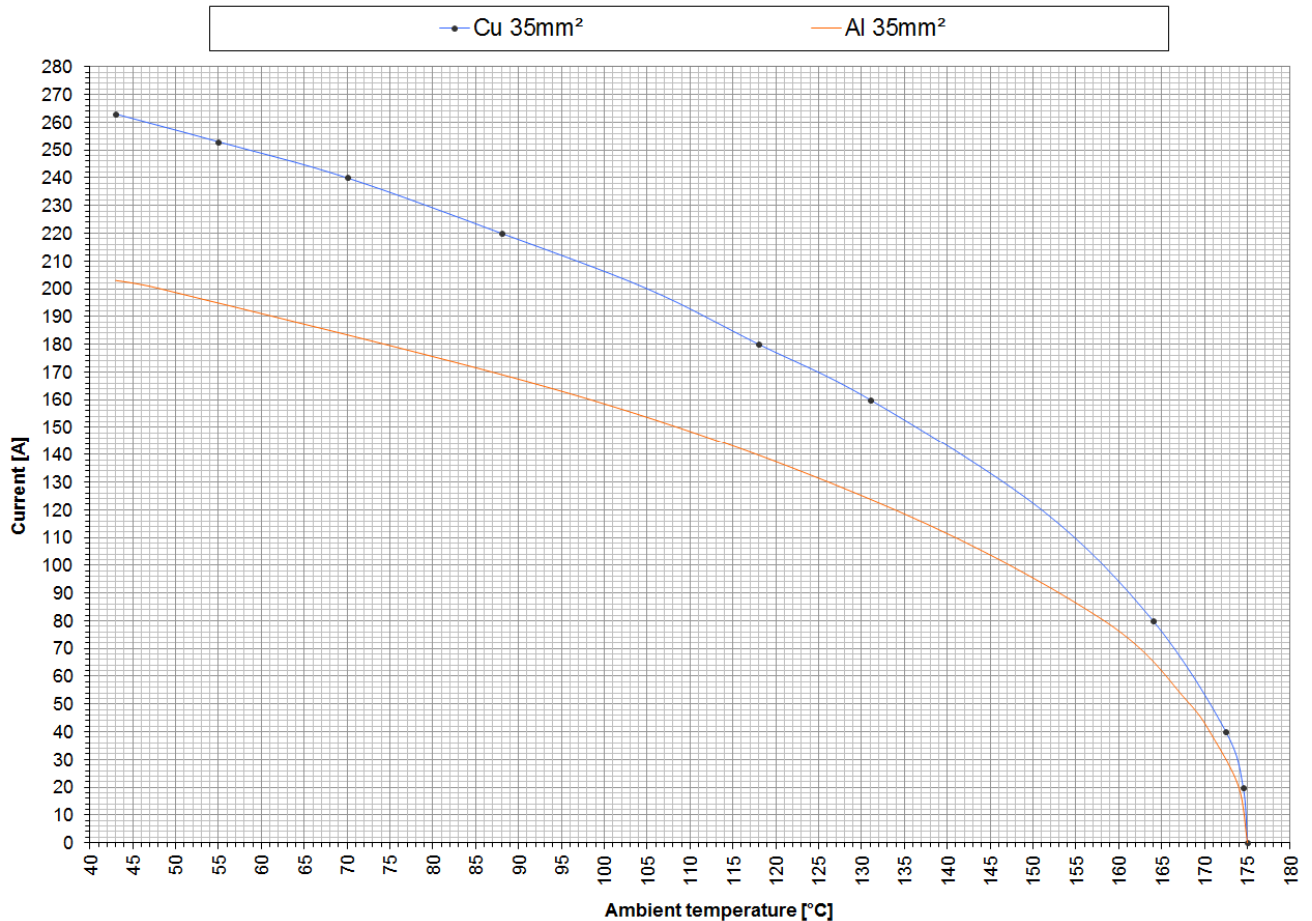
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**Electrical data**

Insulation resistance	≥ 200 MΩ / 1000 V_DC
Voltage class	B 60 V_DC < U ≤ 1500 V_DC 25 V_AC < U ≤ 1000 V_AC
Contact resistance (Current)	≤ 0,4 mΩ
Contact resistance (EMV)	≤ 1 mΩ
Design acc. to DIN EN 60664-1 (2008-1)	
Pollution degree	2
Type of isolation	Basic Isolation
Max. Altitude	5500m above sea level
Working voltage	1000 V_DC
Test voltage	3200 V_DC (at max. altitude 2000m above sea level)
Rated surge voltage	2500 V_DC
Ampacity <b>According to DINEN60512-5-2</b>	see chart

Copper & Aluminum cable 35mm<sup>2</sup> (80% Derating chart, free in air)



EMI (shielding effectiveness)	70 dB (10 kHz - 5 MHz)
	65 dB (5 MHz - 500 MHz)
High voltage interlock (HVIL)	No

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**Mechanical data**

Mating cycles	≥ 50
Engagement force	≤ 100 N
Coding efficiency	≥ 300 N
Cable connection angle	180°
IP class (mated)	IP6K9K / IPX8 / IPXXD
IP class (unmated)	IPXXB
Vibration class	LV214 (2010-04) PG17-II (Random: DIN EN 60068-2-64) (Sinus: DIN EN 60068-2-6) (Shock: DIN EN 60068-2-27)

**Environmental data**

Temperature range	-40°C to +140°C
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**Tooling**

Welding tool	see RN_087-14
Crimping tool	see MA_HV0105

**Suitable cables**

Cable type	35 mm <sup>2</sup> (LV 216-2)
Validated cables	<b>Coroplast:</b> Part No.: 9-2611 / 35mm <sup>2</sup> Type: FHLR2GCB2G, 35mm <sup>2</sup>
	<b>Leoni:</b> Part No.: FHLR2GCB2G00009 Type: FHLR2GCB2G, 35mm <sup>2</sup>
	<b>Kromberg &amp; Schubert:</b> Part No.: 64996018 Type: FHLALR2GCB2G, 35mm <sup>2</sup>

**Packing**

Standard	for packing details see data sheets of piece parts
Weight	194,5 g/pcs

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**Coding**

Housing coding	Connector	Plug coding	Plug	Plug Colour	RAL	Part-Number
B		B		black	sim. 9004	H4K137-W20035B1-BBA
		A		red	sim. 3001	
C		B		black	sim. 9004	H4K137-W20035B1-CBC
		C		waterblue	sim. 5021	

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Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
A. Koleber	09.06.17	A. Koleber	12.08.19	a00	19-s204	T_Pscheiden	12.08.19

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