Han A®

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Han® 3 A / Han® 4 A

Features

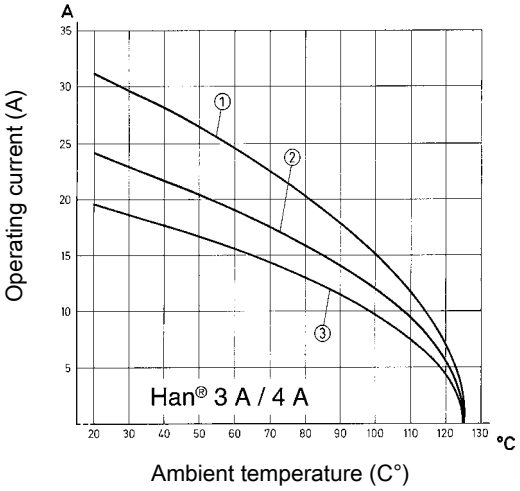
- Innovative Han-Quick Lock® termination technology with reduced wiring times
- No special tools required
- Insert suitable for all metal and plastic hoods and housings of the sizes Han® 3 A
- For currents up to 10 A

Derating

Current carrying capacity

The current carrying capacity of the connectors is limited by the thermal load capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (non-intermittent) through each contact element of the connector evenly, without exceeding the allowed maximum temperature.

Measuring and testing techniques acc. to IEC 60512-5-2



① Wire cross section 2.5 mm²
② Wire cross section 1.5 mm²
③ Wire cross section 1 mm²

Technical characteristics

Contacts	3, 4
Electrical data acc. to IEC 61984	**10 A 230/400 V 4 kV 3**
Rated current	10 A
Rated voltage conductor - ground	230 V
Rated voltage conductor - conductor	400 V
Rated impulse voltage	4 kV
Pollution degree	3
alternative electrical data	**10 A 250 V 4 kV 3**
Rated voltage acc. to UL	600 V
Insulation resistance	≥10^{10} Ohm
Limiting temperatures	-40 °C ... 125 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Tightening torque	0.25 Nm
Flammability (seal) acc. to UL 94	V 0
Degree of protection acc. to IEC 60529	IP65 / IP67
Material (insert)	polycarbonate
Colour (insert)	RAL 7032 (light grey)

Specifications and approvals

IEC 60664-1
IEC 61984

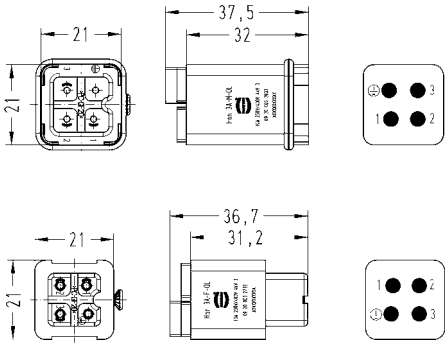
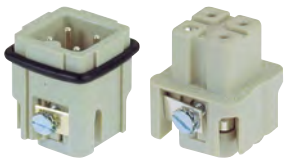
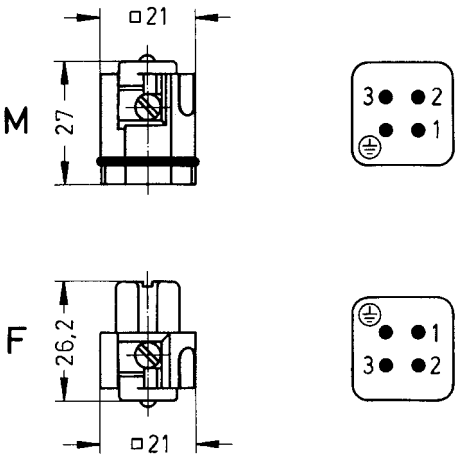
Han® 3 A

Size 3 A

Number of contacts

3+ ⏚

230/400 V
10 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Quick Lock® Han A® , Han-Quick Lock® termination  Blue slide	0.5 – 2.5	09 20 003 2633	09 20 003 2733	
Han-Quick Lock® Han A® , Han-Quick Lock® termination  Black slide	0.25 – 1.5	09 20 003 2634	09 20 003 2734	
Han A® , Screw terminal 	0.75 – 1.5	09 20 003 2611	09 20 003 2711	 Contact arrangement (view from termination side)

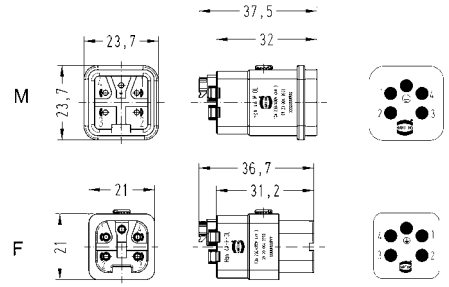
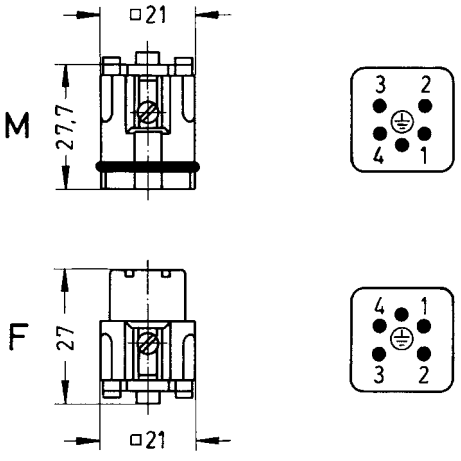
Han® 4 A

Size 3 A

Number of contacts

4+ ⏚

230/400 V
10 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han-Quick Lock® Han A® , Han-Quick Lock® termination  Blue slide	0.5 – 2.5	09 20 004 2633	09 20 004 2733	 Contact arrangement (view from termination side)
Han-Quick Lock® Han A® , Han-Quick Lock® termination  Black slide	0.25 – 1.5	09 20 004 2634	09 20 004 2734	
Han A® , Screw terminal 	0.75 – 1.5	09 20 004 2611	09 20 004 2711	 Contact arrangement (view from termination side)

Han® 10 A / Han® 16 A / Han® 32 A

Features

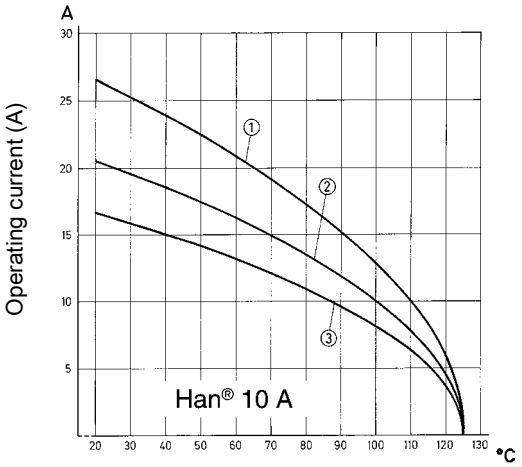
- Small size
- Available in crimp and screw termination
- Screw termination also available with wire protection

Derating

Current carrying capacity

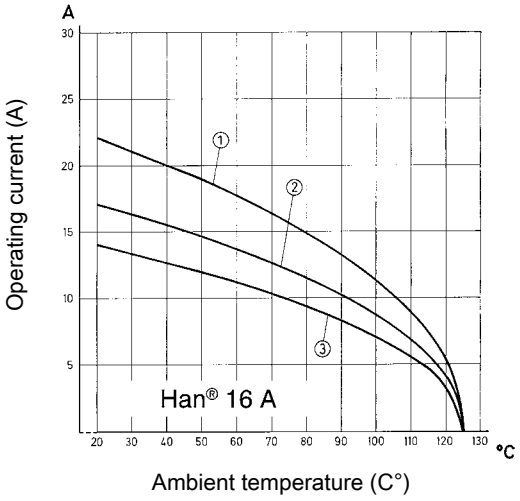
The current carrying capacity of the connectors is limited by the thermal load capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (non-intermittent) through each contact element of the connector evenly, without exceeding the allowed maximum temperature.

Measuring and testing techniques acc. to IEC 60512-5-2



① Wire cross section 2.5 mm²
② Wire cross section 1.5 mm²
③ Wire cross section 1 mm²

Derating



① Wire cross section 2.5 mm²
② Wire cross section 1.5 mm²
③ Wire cross section 1 mm²

Technical characteristics

Contacts	10, 16, 32
Electrical data acc. to IEC 61984	**16 A 250 V 4 kV 3**
Rated current	16 A
Rated voltage	250 V
Rated impulse voltage	4 kV
Pollution degree	3
Rated voltage acc. to UL	600 V
Insulation resistance	≥10^{10} Ohm
Limiting temperatures	-40 °C ... 125 °C
Flammability (insert) acc. to UL 94	V 0
Mating cycles	≥500
Tightening torque	0.5 Nm
Material (insert)	polycarbonate
Colour (insert)	RAL 7032 (light grey)
Material (contact)	copper alloy

Specifications and approvals

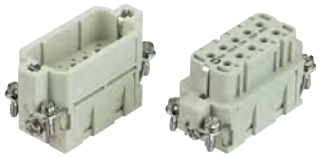
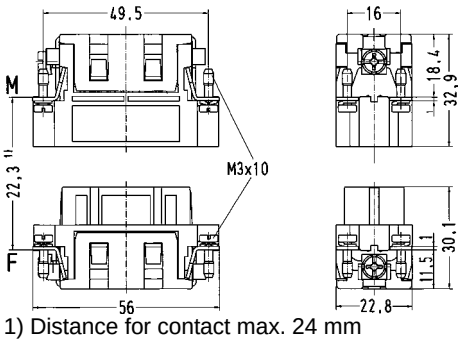
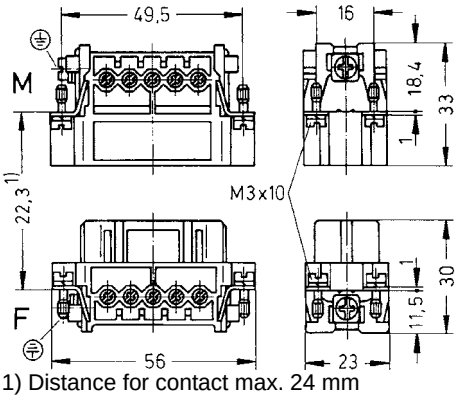
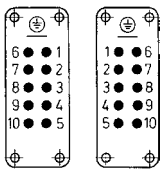
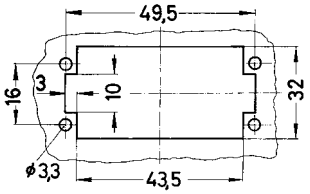
IEC 60664-1
IEC 61984

Han A

Number of contacts

10+ ⏚

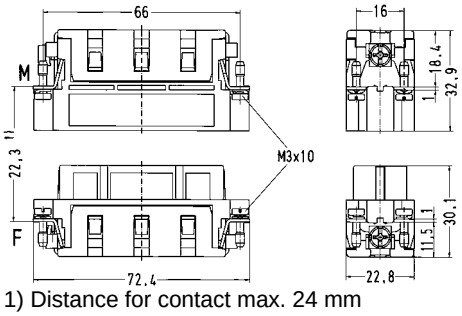
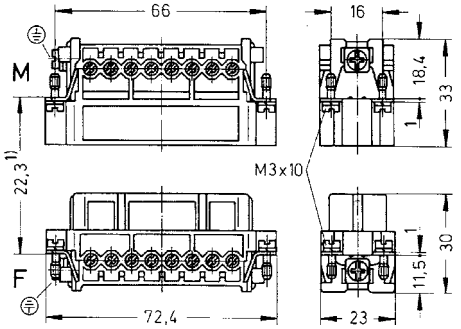
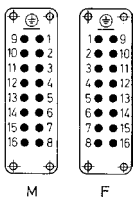
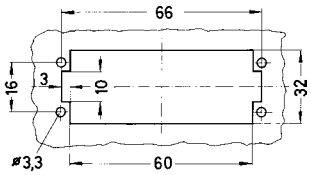
250 V
16 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han A® , Crimp terminal  Please order crimp contacts separately.		09 20 010 3001	09 20 010 3101	 1) Distance for contact max. 24 mm
Han A® , Screw terminal 	0.75 – 2.5	09 20 010 2612	09 20 010 2812	 1) Distance for contact max. 24 mm
Han A® , Screw terminal, with wire protection 	0.75 – 2.5	09 20 010 2614	09 20 010 2814	 Contact arrangement (view from termination side)  Panel cut out for inserts for use without hoods/housings

Number of contacts

16+ ⏚

250 V
16 A

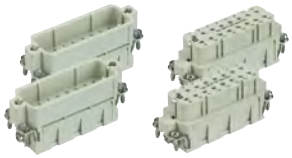
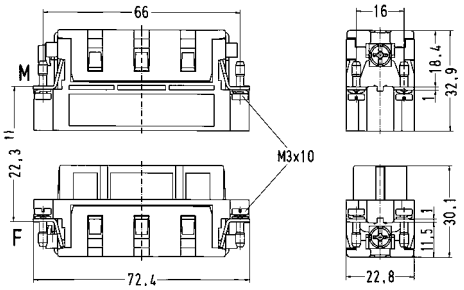
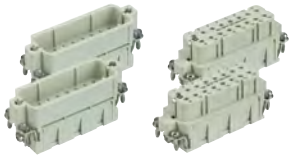
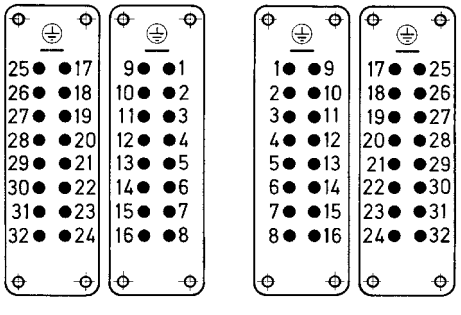
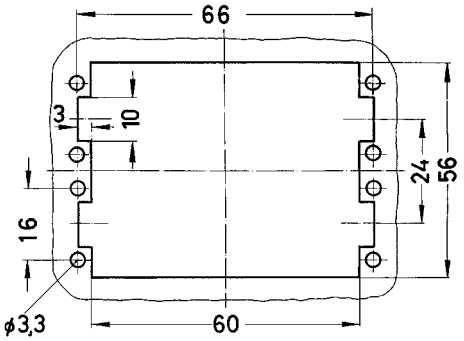
Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han A® , Crimp terminal  Please order crimp contacts separately.		09 20 016 3001	09 20 016 3101	 1) Distance for contact max. 24 mm
Han A® , Screw terminal 	0.75 – 2.5	09 20 016 2612	09 20 016 2812	 1) Distance for contact max. 24 mm
Han A® , Screw terminal, with wire protection 	0.75 – 2.5	09 20 016 2614	09 20 016 2814	 Contact arrangement (view from termination side)  Panel cut out for inserts for use without hoods/housings

Han A

Number of contacts

32+ ⏚

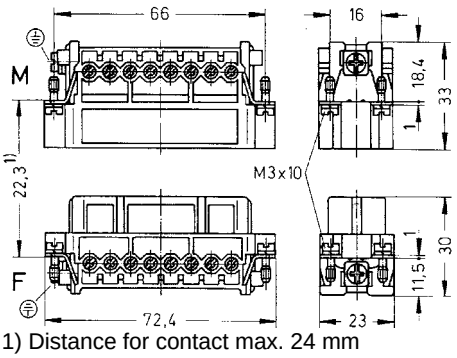
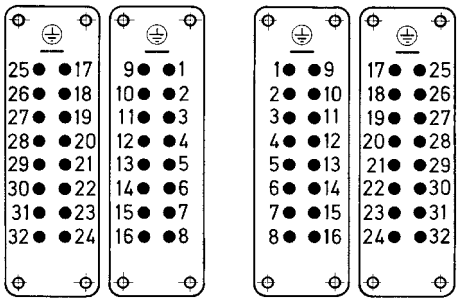
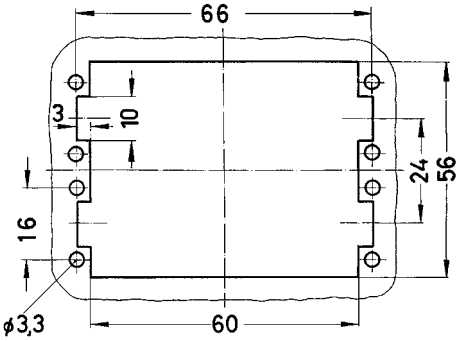
250 V
16 A

Identification	Part number male	Part number female	Drawing Dimensions in mm
Han A® , Crimp terminal, 1 - 16  Please order crimp contacts separately. Please order two inserts for a complete assembly!	09 20 016 3001	09 20 016 3101	 1) Distance for contact max. 24 mm
Han A® , Crimp terminal, 17 - 32  Please order crimp contacts separately. Please order two inserts for a complete assembly!	09 20 016 3011	09 20 016 3111	 Contact arrangement (view from termination side)  Panel cut out for inserts for use without hoods/housings

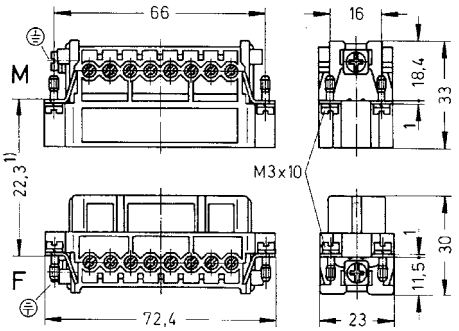
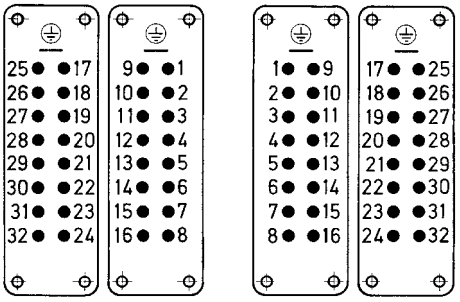
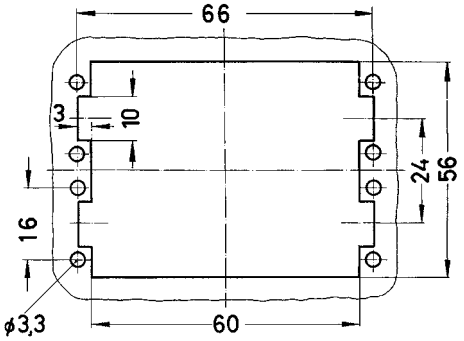
Number of contacts

32+ ⏚

250 V
16 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han A® , Screw terminal, 1 - 16, contact resistance ≤1 mOhm  Please order two inserts for a complete assembly!	0.75 – 2.5	09 20 016 2612	09 20 016 2812	 1) Distance for contact max. 24 mm
Han A® , Screw terminal, 17 - 32, contact resistance ≤1 mOhm  Please order two inserts for a complete assembly!	0.75 – 2.5	09 20 016 2613	09 20 016 2813	 M F Contact arrangement (view from termination side)  Panel cut out for inserts for use without hoods/housings

Han® 32 A — Size 32 A

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han A® , Screw terminal, 1 - 16, with wire protection, contact resistance ≤1 mOhm  Please order two inserts for a complete assembly!	0.75 – 2.5	09 20 016 2614	09 20 016 2814	 1) Distance for contact max. 24 mm
Han A® , Screw terminal, 17 - 32, with wire protection, contact resistance ≤1 mOhm  Please order two inserts for a complete assembly!	0.75 – 2.5	09 20 016 2615	09 20 016 2815	 Contact arrangement (view from termination side)  Panel cut out for inserts for use without hoods/housings

Technical characteristics

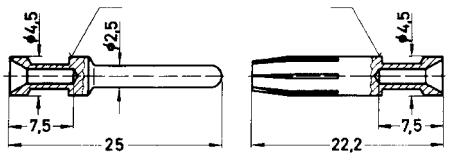
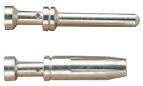
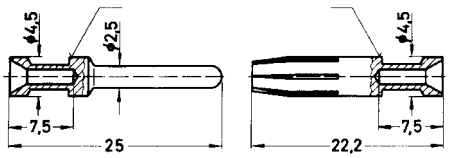
Material (contact)	copper alloy

Details

Crimping tools see chapter 90

Remarks on the crimp technique

The wire gauges mentioned in the catalogue refer to geometric wire gauges of cables.

Identification	Wire cross section (mm²)	Part number male	Part number female	Drawing Dimensions in mm
Han E®, Crimp contact, gold plated contacts, contact resistance ≤1 mOhm 	0.14 – 0.37 0.5 0.75 1 1.5 2.5 4	09 33 000 6117 09 33 000 6122 09 33 000 6115 09 33 000 6118 09 33 000 6116 09 33 000 6123 09 33 000 6119	09 33 000 6217 09 33 000 6222 09 33 000 6215 09 33 000 6218 09 33 000 6216 09 33 000 6223 09 33 000 6221	
Han E®, Crimp contact, silver plated contacts, contact resistance ≤1 mOhm 	0.14 – 0.37 0.5 0.75 1 1.5 2.5 3 4	09 33 000 6127 09 33 000 6121 09 33 000 6114 09 33 000 6105 09 33 000 6104 09 33 000 6102 09 33 000 6106 09 33 000 6107	09 33 000 6227 09 33 000 6220 09 33 000 6214 09 33 000 6205 09 33 000 6204 09 33 000 6202 09 33 000 6206 09 33 000 6207	

Identification	Wire gauge		Stripping length
no groove	0.14-0.37 mm²	AWG 26-22	7.5 mm
no groove	0.5 mm²	AWG 20	7.5 mm
1 groove*	0.75 mm²	AWG 18	7.5 mm
1 groove	1 mm²	AWG 18	7.5 mm
2 grooves	1.5 mm²	AWG 16	7.5 mm
3 grooves	2.5 mm²	AWG 14	7.5 mm
wide groove	3 mm²	AWG 12	7.5 mm
no groove	4 mm²	AWG 12	7.5 mm

* on the back crimp collar

Identification	Wire gauge		Stripping length
no groove	0.14-0.37 mm²	AWG 26-22	7.5 mm
no groove	0.5 mm²	AWG 20	7.5 mm
1 groove*	0.75 mm²	AWG 18	7.5 mm
1 groove	1 mm²	AWG 18	7.5 mm
2 grooves	1.5 mm²	AWG 16	7.5 mm
3 grooves	2.5 mm²	AWG 14	7.5 mm
wide groove	3 mm²	AWG 12	7.5 mm
no groove	4 mm²	AWG 12	7.5 mm

* on the back crimp collar

Application

Wind turbine by ENERCON with Han® 3 A – for a fast and reliable installation.