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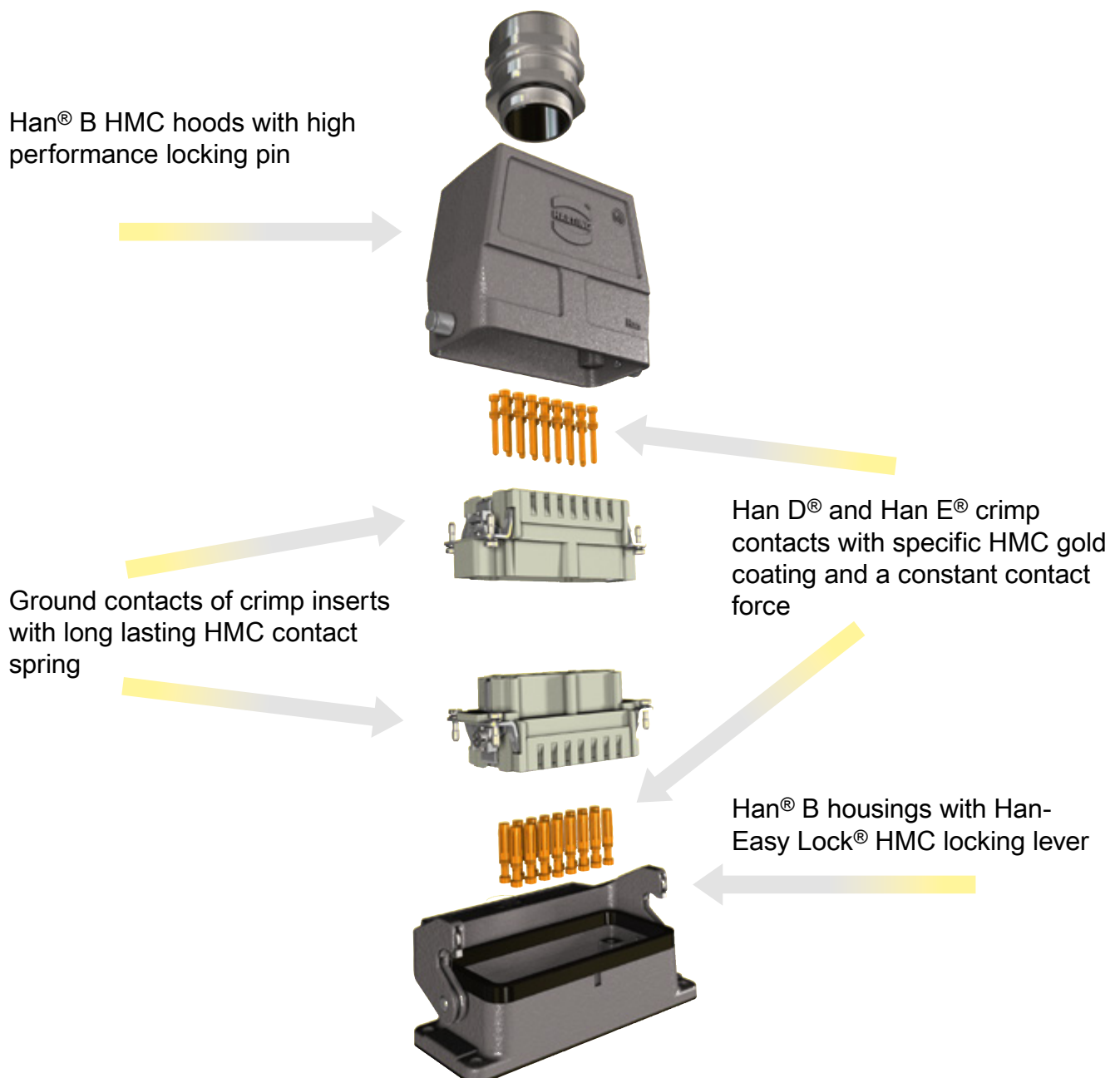
Features

This series Han® HMC (High Mating Cycles) is a connector series specifically aiming at industrial applications for 10,000 mating cycles.

Benefits:

- High mechanical robustness
- Simple and easy understandable design
- Optimized concept for signal and power transmission
- Low mating and unmating forces
- High contact density





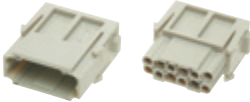






General Description



Module overview for applications with Han® HMC



Han
HMC

Series	Han E® module	Han® EE module	Han E® Protected module	Han® EEE module
Number of contacts	6	8	6	20
Modules	Crimp terminal 	Crimp terminal 	Crimp terminal 	Crimp terminal 
Rated current	16 A	16 A	16 A	16 A
Rated voltage	500 V	400 V	830 V	500 V
Wire gauge	0.14 ... 4 mm ²	0.14 ... 4 mm ²	0.14 ... 4 mm ²	0.14 ... 4 mm ²
Male insert (M)	09 14 006 3001	09 14 008 3001	09 14 006 3041	09 14 020 3001
Female insert (F)	09 14 006 3101	09 14 008 3101	09 14 006 3141	09 14 020 3101
Series	Han DD® module	Han® DDD module	Han® High Density module	
Number of contacts	12	17	25	
Modules	Crimp terminal 	Crimp terminal 	Crimp terminal 	
Rated current	10 A	10 A	4 A	
Rated voltage	250 V	160 V	50 V	
Wire gauge	0.14 ... 2.5 mm ²	0.14 ... 2.5 mm ²	0.08 ... 0.52 mm ²	
Male insert (M)	09 14 012 3001	09 14 017 3001	09 14 025 3001	
Female insert (F)	09 14 012 3101	09 14 017 3101	09 14 025 3101	
Series	Han® 40 A Crimp module	Han® C module	Han® CC Protected module	Han® CD module
Number of contacts	2	3	4	3 / 4
Modules	Crimp terminal 	Crimp terminal 	Crimp terminal 	Crimp terminal 
Rated current	40 A	40 A	40 A	40 A / 10 A
Rated voltage	1000 V	690 V	830 V	830 V / 830 V
Wire gauge	1.5 ... 10 mm ²	1.5 ... 10 mm ²	1.5 ... 6 mm ²	0.15 ... 6 mm ² / 0.14 ... 2.5 mm ²
Male insert (M)	09 14 002 3002	09 14 003 3001	09 14 004 3041	09 14 007 3001
Female insert (F)	09 14 002 3102	09 14 003 3101	09 14 004 3141	09 14 007 3101

For more technical details see chapter 06

Module overview for applications with Han® HMC



Han
HMC

Series	Han® GigaBit HMC module	Han® MegaBit HMC module	Han® MegaBit HMC module	Han® Shielded HMC module
Numbers of contacts	8	2 x 4	2 x 4	20
Termination	Crimp termination 	Crimp termination 	Crimp termination 	Crimp termination 
Wire gauge	Ethernet Cat. 6A 0.08 ... 0.52 mm ²	Ethernet Cat. 5e 0.14 ... 2.5 mm ²	Ethernet Cat. 5e 0.14 ... 2.5 mm ²	0.08 ... 0.52 mm ²
Male insert (M)	09 14 208 3011	09 14 208 3016	09 14 208 3017	09 14 220 3013
Female insert (F)	09 14 208 3111	09 14 208 3116	09 14 208 3117	09 14 220 3113
Series	Hinged frame HMC 6 B	Hinged frame HMC 10 B	Hinged frame HMC 16 B	Hinged frame HMC 24 B
Number of modules	2	3	4	6
				
Marking (A...F)	09 14 206 0303	09 14 210 0303	09 14 216 0303	09 14 224 0303
Marking (a...f)	09 14 206 0313	09 14 210 0313	09 14 216 0313	09 14 224 0313
Series	Docking frame 6 B	Docking frame 10 B	Docking frame 16 B	Docking frame 24 B
Number of modules	2	3	4	6
				
Marking (A...F)	09 14 006 1701	09 14 010 1701	09 14 016 1701	09 14 024 1701
Marking (a...f)	09 14 006 1711	09 14 010 1711	09 14 016 1711	09 14 024 1711

Features

- High density of contacts
- Time saving rapid termination by use of crimping contacts
- for requirements up to 250 V / 10 A
- for hoods/housings in the Han[®] B HMC series
- Han D[®] HMC contacts available with special HMC gold plating for 10,000 mating cycles

Technical characteristics

Number of contacts	40, 64
Electrical data acc. to IEC 61984	10 A 250 V 4 kV 3
Rated current	10 A
Rated voltage	250 V
Rated impulse voltage	4 kV
Pollution degree	3
Rated voltage acc. to UL	600 V
Rated voltage acc. to CSA	600 V
Insulation resistance	≥10 ¹⁰ Ω
Limiting temperature	-40 ... +125 °C
Mating cycles with other HMC components	≥10000
Material (insert)	Polycarbonate
Colour (insert)	RAL 7032 (pebble grey)
Material flammability class acc. to UL 94	V-0
RoHS	compliant

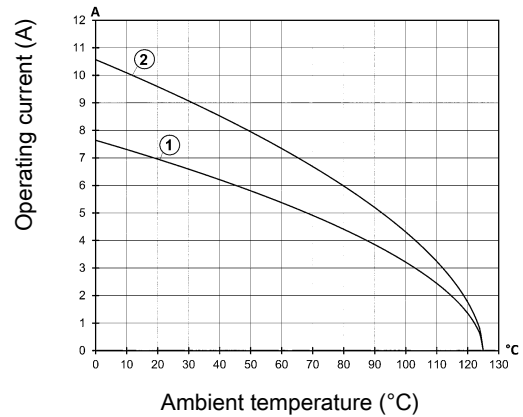
Derating

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.

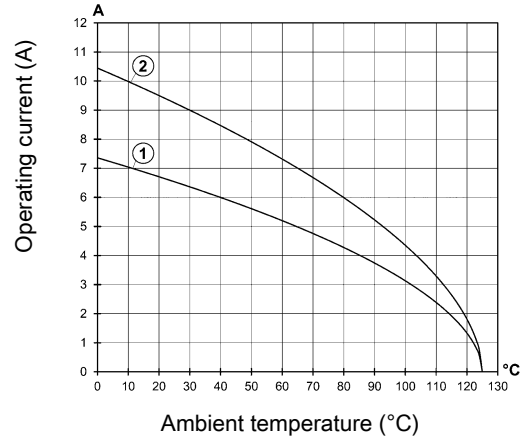
Measuring and testing techniques acc. to IEC 60512-5-2

Han[®] 40 D HMC



- ① 0.75 mm²
- ② 1.5 mm²

Han[®] 64 D HMC



- ① 0.75 mm²
- ② 1.5 mm²

Specifications and approvals


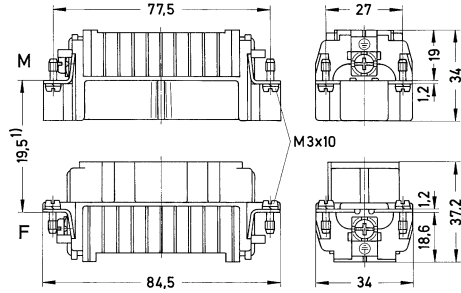
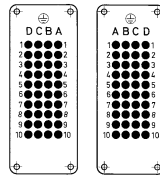
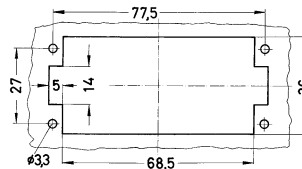
EN 60664-1
 IEC 61984
 EN 175301-801
 UL 1977 ECBT2.E235076
 CSA-C22.2 No. 182.3 ECBT8.E235076
 DNV GL

Number of contacts

40+

10 A 250 V 4 kV 3

Han
HMC

Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han D [®] HMC, Crimp termination  Please order crimp contacts separately.	0,14 ... 2,5	09 21 240 3001	09 21 240 3101	 <p>1) distance for contact max. 21 mm</p>  <p>Contact arrangement (view from termination side)</p>  <p>Panel cut out for use without Hoods/Housings</p>

Number of contacts

64+

10 A 250 V 4 kV 3

Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
<p>Han D® HMC, Crimp termination</p> <p>Please order crimp contacts separately.</p>	0,14 ... 2,5	09 21 264 3001	09 21 264 3101	<p>1) distance for contact max. 21 mm</p> <p>Contact arrangement (view from termination side)</p> <p>Panel cut out for use without Hoods/Housings</p>

Features

- High density of contacts
- Time saving rapid termination by use of crimping contacts
- for requirements up to 250 V / 10 A
- for hoods/housings in the Han[®] B HMC series
- Han D[®] HMC contacts available with special HMC gold plating for 10,000 mating cycles

Technical characteristics

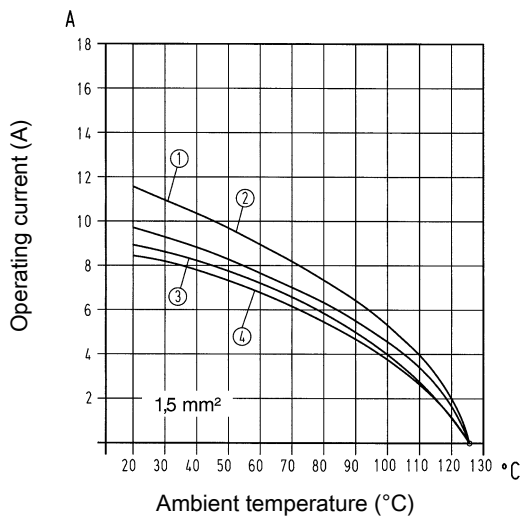
Number of contacts	24, 42, 72, 108
Electrical data acc. to IEC 61984	10 A 250 V 4 kV 3
Rated current	10 A
Rated voltage	250 V
Rated impulse voltage	4 kV
Pollution degree	3
Rated voltage acc. to UL	600 V
Rated voltage acc. to CSA	600 V
Insulation resistance	≥10 ¹⁰ Ω
Limiting temperature	-40 ... +125 °C
Mating cycles with other HMC components	≥10000
Material (insert)	Polycarbonate
Colour (insert)	RAL 7032 (pebble grey)
Material flammability class acc. to UL 94	V-0
RoHS	compliant

Derating

Current carrying capacity

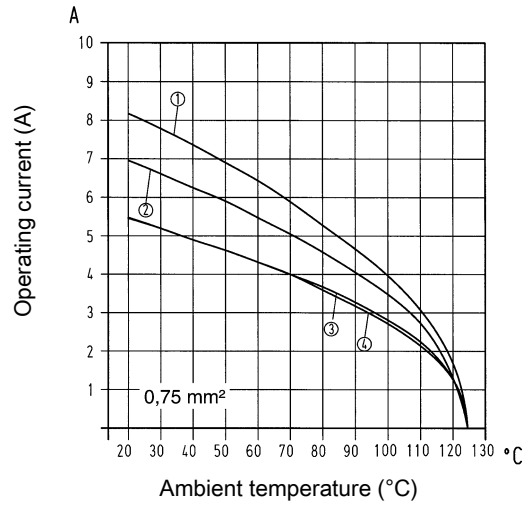
The current carrying capacity of the connectors is limited by the thermal load capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (non-intermittent) through each contact element of the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

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



- ① Han[®] 24 DD HMC
- ② Han[®] 42 DD HMC
- ③ Han[®] 72 DD HMC
- ④ Han[®] 108 DD HMC

Derating



- ① Han[®] 24 DD HMC
- ② Han[®] 42 DD HMC
- ③ Han[®] 72 DD HMC
- ④ Han[®] 108 DD HMC


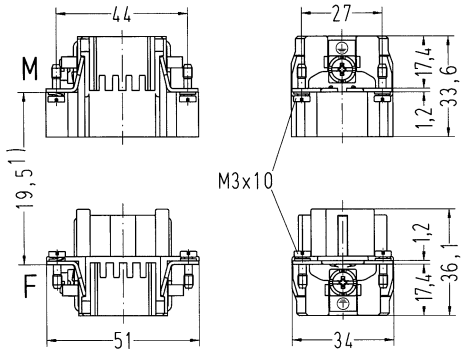
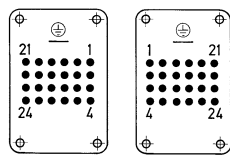
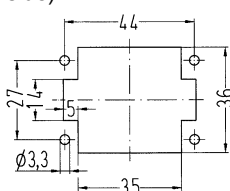
Specifications and approvals

EN 60664-1
 IEC 61984
 UL 1977 ECBT2.E235076
 CSA-C22.2 No. 182.3 ECBT8.E235076
 DNV GL

Number of contacts

24+

10 A 250 V 4 kV 3


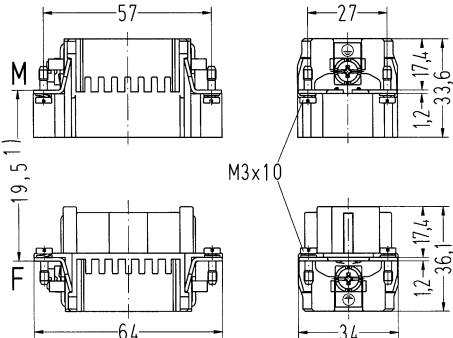
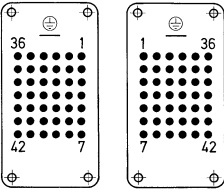
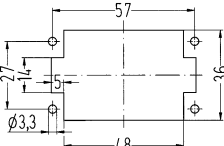
Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
<p>Han DD[®] HMC, Crimp termination</p>  <p>Please order crimp contacts separately.</p>	0,14 ... 2,5	09 16 224 3001	09 16 224 3101	 <p>1) distance for contact max. 21 mm</p>  <p>Contact arrangement (view from termination side)</p>  <p>Panel cut out for use without Hoods/Housings</p>

Number of contacts

42+

10 A 250 V 4 kV 3

Han
HMC

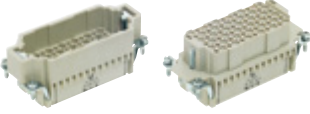
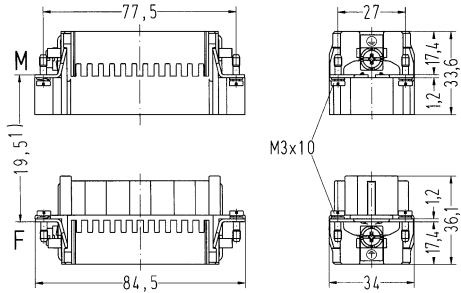
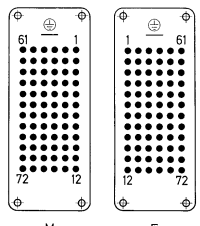
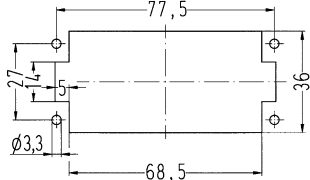
Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han DD® HMC, Crimp termination  <p>Please order crimp contacts separately.</p>	0,14 ... 2,5	09 16 242 3001	09 16 242 3101	 <p>1) distance for contact max. 21 mm</p>  <p>Contact arrangement (view from termination side)</p>  <p>Panel cut out for use without Hoods/Housings</p>

Number of contacts

72+

10 A 250 V 4 kV 3

Han
HMC


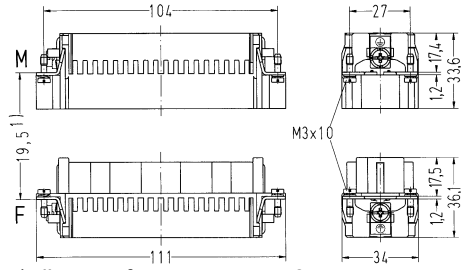
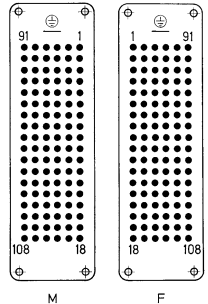
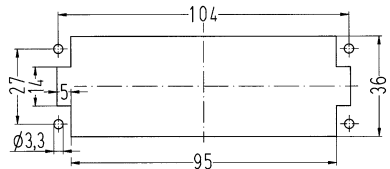
Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han DD [®] HMC, Crimp termination  Please order crimp contacts separately.	0,14 ... 2,5	09 16 272 3001	09 16 272 3101	 <p>1) distance for contact max. 21 mm</p>  <p>Contact arrangement (view from termination side)</p>  <p>Panel cut out for use without Hoods/Housings</p>

Number of contacts

108+

10 A 250 V 4 kV 3

Han
HMC

Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
<p>Han DD[®] HMC, Crimp termination</p>  <p>Please order crimp contacts separately.</p>	0,14 ... 2,5	09 16 208 3001	09 16 208 3101	 <p>1) distance for contact max. 21 mm</p>  <p>M Contact arrangement (view from termination side)</p>  <p>Panel cut out for use without Hoods/Housings</p>

Features

- Time saving rapid termination by use of crimping contacts
- for hoods/housings in the Han[®] B HMC series
- Han E[®] HMC contacts available with special HMC gold plating for 10,000 mating cycles

Technical characteristics

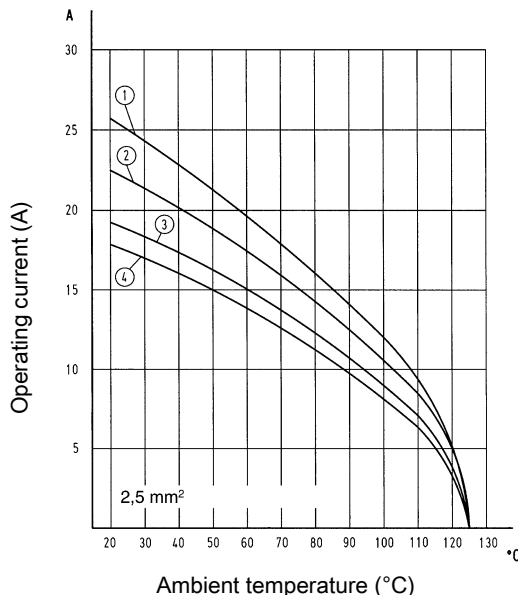
Number of contacts	6, 10, 16, 24
Electrical data acc. to IEC 61984	16 A 500 V 6 kV 3
Rated current	16 A
Rated voltage	500 V
Rated impulse voltage	6 kV
Pollution degree	3
Insulation resistance	≥10 ¹⁰ Ω
Limiting temperature	-40 ... +125 °C
Mating cycles with other HMC components	≥10000
Material (insert)	Polycarbonate
Colour (insert)	RAL 7032 (pebble grey)
RoHS	compliant

Derating

Current carrying capacity

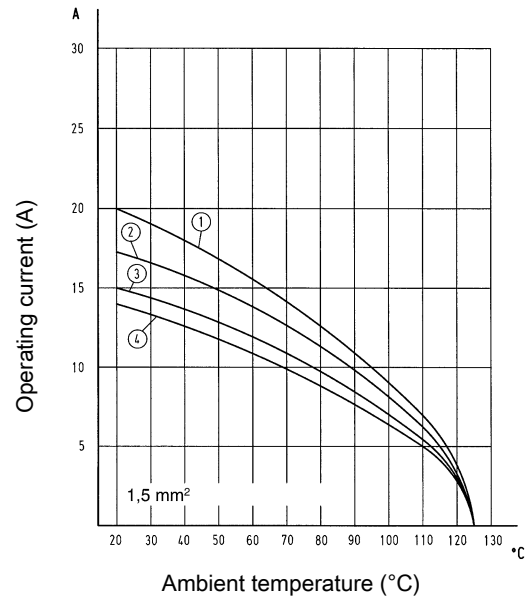
The current carrying capacity of the connectors is limited by the thermal load capability of the contact element material including the connections and the insulating parts. The derating curve is therefore valid for currents which flow constantly (non-intermittent) through each contact element of the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

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



- ① Han[®] 6 E HMC
- ② Han[®] 10 E HMC
- ③ Han[®] 16 E HMC
- ④ Han[®] 24 E HMC

Derating



- ① Han[®] 6 E HMC
- ② Han[®] 10 E HMC
- ③ Han[®] 16 E HMC
- ④ Han[®] 24 E HMC

Specifications and approvals

EN 60664-1
IEC 61984
DNV GL

Number of contacts

6+

16 A 500 V 6 kV 3


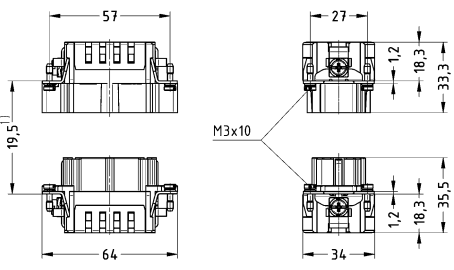
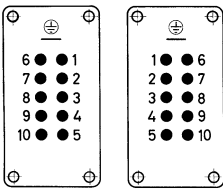
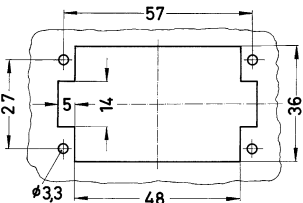
Han
HMC

Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
<p>Han E[®] HMC, Crimp termination</p> <p>Please order crimp contacts separately.</p>	0,14 ... 4	09 33 206 2602	09 33 206 2702	<p>1) distance for contact max. 21 mm</p> <p>M F</p> <p>Contact arrangement (view from termination side)</p> <p>Panel cut out</p>

Number of contacts

10+

16 A 500 V 6 kV 3


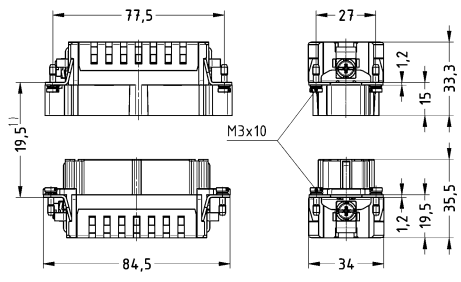
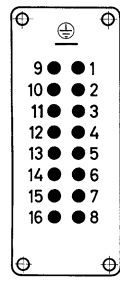
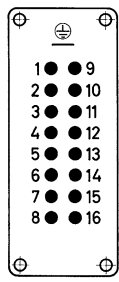
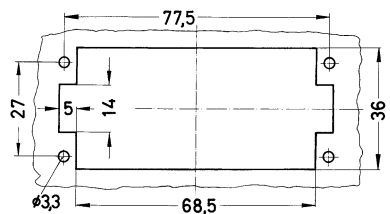
Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
<p>Han E[®] HMC, Crimp termination</p>  <p>Please order crimp contacts separately.</p>	0,14 ... 4	09 33 210 2602	09 33 210 2702	 <p>1) distance for contact max. 21 mm</p>  <p>M F</p> <p>Contact arrangement (view from termination side)</p>  <p>Panel cut out</p>

Number of contacts

16+

16 A 500 V 6 kV 3

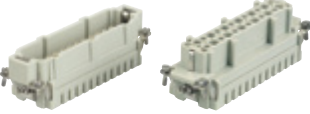
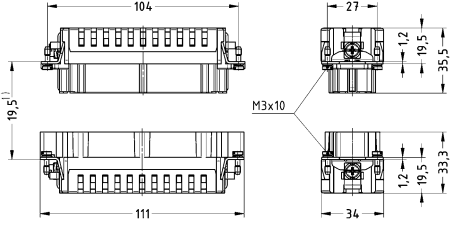
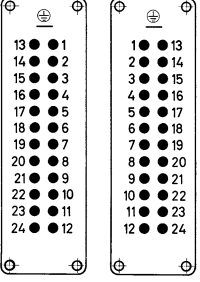
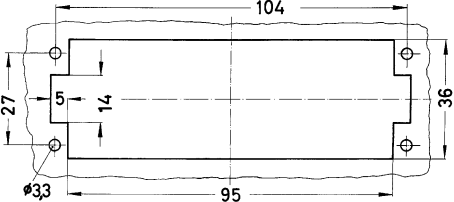
Han
HMC

Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
<p>Han E[®] HMC, Crimp termination</p>  <p>Please order crimp contacts separately.</p>	0,14 ... 4	09 33 216 2602	09 33 216 2702	 <p>1) distance for contact max. 21 mm</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>M</p> </div> <div style="text-align: center;">  <p>F</p> </div> </div> <p>Contact arrangement (view from termination side)</p>  <p>Panel cut out</p>

Number of contacts

24+

16 A 500 V 6 kV 3

Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han E® HMC, Crimp termination  <p>Please order crimp contacts separately.</p>	0,14 ... 4	09 33 224 2602	09 33 224 2702	 <p>1) distance for contact max. 21 mm</p>  <p>M Contact arrangement (view from termination side)</p>  <p>Panel cut out</p>

Technical characteristics

Number of contacts	6, 10, 16, 24
Electrical data acc. to IEC 61984	16 A 500 V 6 kV 3
Rated current	16 A
Rated voltage	500 V
Rated impulse voltage	6 kV
Pollution degree	3
Insulation resistance	$\geq 10^{10} \Omega$
Contact resistance	$\leq 3 \text{ m}\Omega$
Limiting temperature	-40 ... +125 °C
Mating cycles with other HMC components	≥ 10000
Material (insert)	Polycarbonate
Colour (insert)	RAL 7032 (pebble grey)
Material (contacts)	Copper alloy
Material flammability class acc. to UL 94	V-0

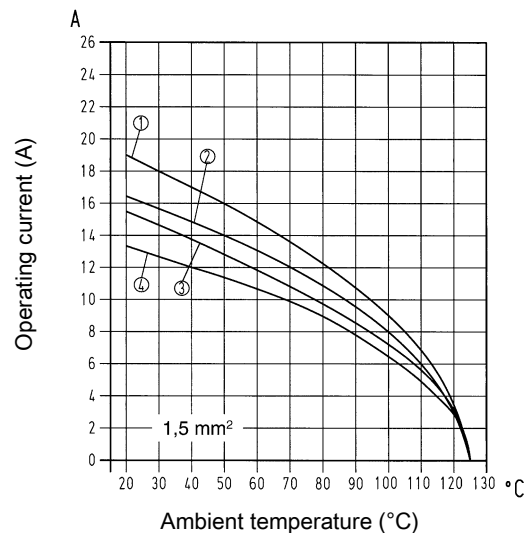
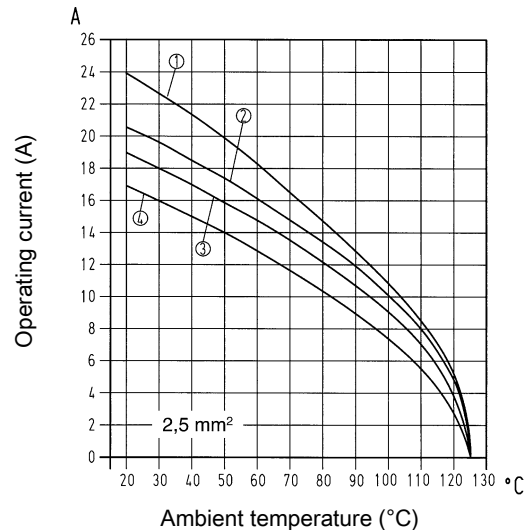
Derating

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

Han® ES Press



- ① Han® 6 ES Press
- ② Han® 10 ES Press
- ③ Han® 16 ES Press Han® 32 ES Press
- ④ Han® 24 ES Press Han® 48 ES Press

Specifications and approvals

EN 60664-1
IEC 61984
DNV GL

Number of contacts

6+

16 A 500 V 6 kV 3

Han
HMC


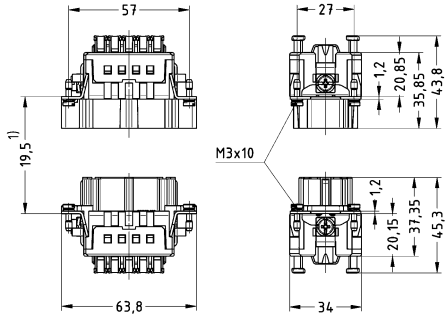
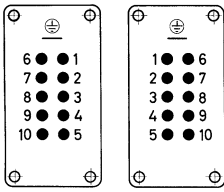
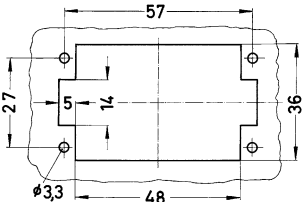
Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
<p>Han® ES Press , Cage-clamp termination, Contact surface: HMC gold plated</p> <p>for hoods/housings high construction only Blue slide</p>	0,14 ... 2,5	09 33 206 2648	09 33 206 2748	<p>Distance for contact max. 21 mm</p> <p>M Contact arrangement F (view from termination side)</p> <p>Panel cut out</p>

Number of contacts

10+

16 A 500 V 6 kV 3

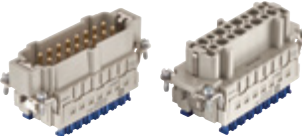
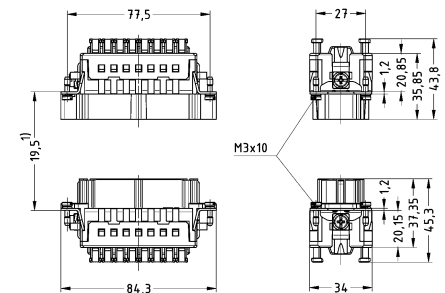
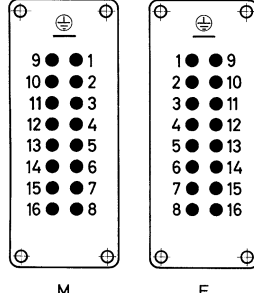
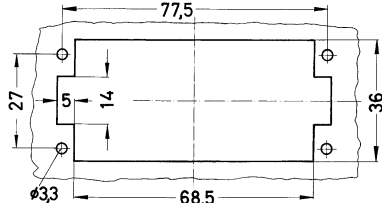
Han
HMC

Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
<p>Han® ES Press , Cage-clamp termination, Contact surface: HMC gold plated</p>  <p>for hoods/housings high construction only Blue slide</p>	0,14 ... 2,5	09 33 210 2648	09 33 210 2748	 <p>Distance for contact max. 21 mm</p>  <p>Contact arrangement (view from termination side)</p>  <p>Panel cut out</p>

Number of contacts

16+

16 A 500 V 6 kV 3

Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
<p>Han® ES Press , Cage-clamp termination, Contact surface: HMC gold plated</p>  <p>for hoods/housings high construction only Blue slide</p>	0,14 ... 2,5	09 33 216 2648	09 33 216 2748	 <p>Distance for contact max. 21 mm</p>  <p>M F</p> <p>Contact arrangement (view from termination side)</p>  <p>Panel cut out</p>

Number of contacts

24+

16 A 500 V 6 kV 3

Han
HMC

Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)																								
		Male	Female																									
<p>Han® ES Press , Cage-clamp termination, Contact surface: HMC gold plated</p> <p>for hoods/housings high construction only Blue slide</p>	0,14 ... 2,5	09 33 224 2648	09 33 224 2748	<p>Distance for contact max. 21 mm</p> <p> <table border="0"> <tr> <td>13 ● 1</td> <td>1 ● 13</td> </tr> <tr> <td>14 ● 2</td> <td>2 ● 14</td> </tr> <tr> <td>15 ● 3</td> <td>3 ● 15</td> </tr> <tr> <td>16 ● 4</td> <td>4 ● 16</td> </tr> <tr> <td>17 ● 5</td> <td>5 ● 17</td> </tr> <tr> <td>18 ● 6</td> <td>6 ● 18</td> </tr> <tr> <td>19 ● 7</td> <td>7 ● 19</td> </tr> <tr> <td>20 ● 8</td> <td>8 ● 20</td> </tr> <tr> <td>21 ● 9</td> <td>9 ● 21</td> </tr> <tr> <td>22 ● 10</td> <td>10 ● 22</td> </tr> <tr> <td>23 ● 11</td> <td>11 ● 23</td> </tr> <tr> <td>24 ● 12</td> <td>12 ● 24</td> </tr> </table> </p> <p>M F</p> <p>Contact arrangement (view from termination side)</p> <p>Panel cut out</p>	13 ● 1	1 ● 13	14 ● 2	2 ● 14	15 ● 3	3 ● 15	16 ● 4	4 ● 16	17 ● 5	5 ● 17	18 ● 6	6 ● 18	19 ● 7	7 ● 19	20 ● 8	8 ● 20	21 ● 9	9 ● 21	22 ● 10	10 ● 22	23 ● 11	11 ● 23	24 ● 12	12 ● 24
13 ● 1	1 ● 13																											
14 ● 2	2 ● 14																											
15 ● 3	3 ● 15																											
16 ● 4	4 ● 16																											
17 ● 5	5 ● 17																											
18 ● 6	6 ● 18																											
19 ● 7	7 ● 19																											
20 ● 8	8 ● 20																											
21 ● 9	9 ● 21																											
22 ● 10	10 ● 22																											
23 ● 11	11 ● 23																											
24 ● 12	12 ● 24																											

Features

- Time saving rapid termination by use of crimping contacts
- Coded insert
- for hoods/housings in the Han® B HMC series
- Han E® HMC contacts available with special HMC gold plating for 10,000 mating cycles

Technical characteristics

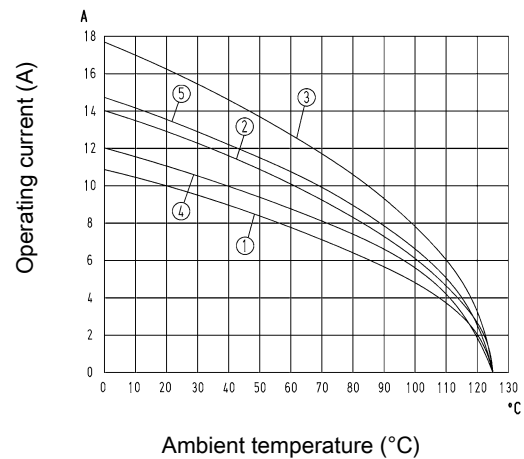
Number of contacts	40, 64
Electrical data acc. to IEC 61984	16 A 500 V 6 kV 3
Rated current	16 A
Rated voltage	500 V
Rated impulse voltage	6 kV
Pollution degree	3
Insulation resistance	$\geq 10^{10} \Omega$
Limiting temperature	-40 ... +125 °C
Mating cycles with other HMC components	≥ 10000
Material (insert)	Polycarbonate
Colour (insert)	RAL 7032 (pebble grey)
Material flammability class acc. to UL 94	V-0
RoHS	compliant

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 Han® 64 EEE HMC 1.5 mm²
- ② Han® 64 EEE HMC 2.5 mm²
- ③ Han® 64 EEE HMC 4 mm²
- ④ Han® 40 EEE HMC 1.5 mm²
- ⑤ Han® 40 EEE HMC 2.5 mm²

Specifications and approvals

EN 60664-1
IEC 61984

Number of contacts

40+

16 A 500 V 6 kV 3

Han
HMC


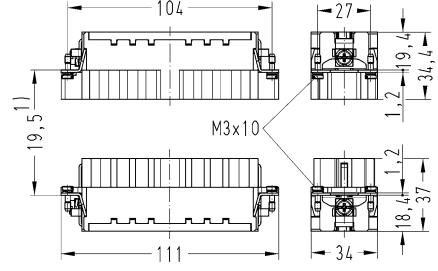
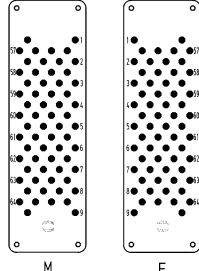
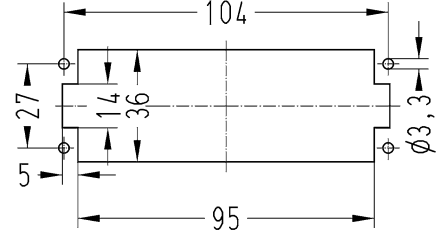
Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
<p>Han® EEE HMC, Crimp termination</p> <p>Please order crimp contacts separately.</p>	0,14 ... 4	09 32 240 3001	09 32 240 3101	<p>1) distance for contact max. 21 mm</p> <p>Contact arrangement (view from termination side)</p> <p>Panel cut out</p>

Number of contacts

64+

16 A 500 V 6 kV 3

Han
HMC

Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
<p>Han® EEE HMC, Crimp termination</p>  <p>Please order crimp contacts separately.</p>	0,14 ... 4	09 32 264 3001	09 32 264 3101	 <p>1) distance for contact max. 21 mm</p>  <p>M F</p> <p>Contact arrangement (view from termination side)</p>  <p>Panel cut out</p>

Technical characteristics

Contact resistance	≤3 mΩ
Material (contacts)	Copper alloy
Material (accessories)	Thermoplastic
RoHS	compliant with exemption, compliant
RoHS exemptions	6c: Copper alloy containing up to 4 % lead by weight

Specifications and approvals

EN 60664-1
IEC 61984

Details


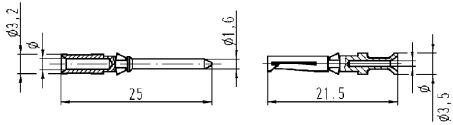

Crimping tools see chapter 90

Remarks on the crimp technique

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

Coding pin

Use of the coding pin prevents incorrect mating to other connectors of the same type. The male pin should be omitted from the opposing cavity in the male insert.

Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han D® HMC, Crimp contact, Contact surface: HMC gold plated 	0,14 ... 0,37	09 15 200 6124	09 15 200 6224	
	0,5	09 15 200 6123	09 15 200 6223	
	0,75	09 15 200 6125	09 15 200 6225	
	1	09 15 200 6122	09 15 200 6222	
	1,5	09 15 200 6121	09 15 200 6221	
	2,5	09 15 200 6126	09 15 200 6226	
Han D® Han DD®, Coding pin 			09 33 000 9915	
Only for crimp termination With loss of one contact				

Wire gauge	∅	Stripping length
0.14-0.37 mm ² AWG 26-22	0.9 mm	8 mm
0.5 mm ² AWG 20	1.1 mm	8 mm
0.75 mm ² AWG 18	1.3 mm	8 mm
1 mm ² AWG 18	1.45 mm	8 mm
1.5 mm ² AWG 16	1.75 mm	8 mm
2.5 mm ² AWG 14	2.25 mm	6 mm

Technical characteristics

Contact resistance	≤1 mΩ
Material (contacts)	Copper alloy
Material (accessories)	Thermoplastic
RoHS	compliant with exemption, compliant
RoHS exemptions	6c: Copper alloy containing up to 4 % lead by weight

Specifications and approvals

EN 60664-1
IEC 61984

Details


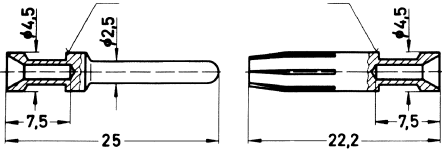

Crimping tools see chapter 90

Remarks on the crimp technique

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

Coding pin

Use of the coding pin prevents incorrect mating to other connectors of the same type. The male pin should be omitted from the opposing cavity in the male insert.

Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)
		Male	Female	
Han E [®] HMC, Crimp contact, Contact surface: HMC gold plated 	0,14 ... 0,37	09 33 200 6117	09 33 200 6217	
	0,5	09 33 200 6122	09 33 200 6222	
	0,75	09 33 200 6115	09 33 200 6215	
	1	09 33 200 6118	09 33 200 6218	
	1,5	09 33 200 6116	09 33 200 6216	
	2,5	09 33 200 6123	09 33 200 6223	
	4	09 33 200 6119	09 33 200 6221	
	Han E [®] Han [®] EE Han [®] EEE , Coding pin  for crimp inserts only With loss of one contact			

Conductor cross-section	AWG	Identification
0.14-0.37 mm ²	AWG 26-22	no groove
0.5 mm ²	AWG 20	no groove
0.75 mm ²	AWG 18	1 groove*
1 mm ²	AWG 18	1 groove
1.5 mm ²	AWG 16	2 grooves
2.5 mm ²	AWG 14	3 grooves
3 mm ²	AWG 12	wide groove
4 mm ²	AWG 12	no groove


* on the back crimp collar
Stripping length 7.5 mm

Technical characteristics

Contact resistance ≤10 mΩ
Material (contacts) Copper alloy

Technical characteristics

RoHS compliant with exemption
RoHS exemptions **6c**: Copper alloy containing up to 4 % lead by weight

Identification	Conductor cross-section (mm ²)	Part number		Drawing (dimensions in mm)												
		Male	Female													
D-Sub , Crimp contact, Straight Turned , Contact surface: HMC gold plated 	0,08 ... 0,21	09 67 000 7570	09 67 000 7470	<table border="1"> <thead> <tr> <th>Wire gauge</th> <th>∅</th> <th>Stripping length</th> </tr> </thead> <tbody> <tr> <td>0.08 - 0.21 mm²</td> <td>AWG 28-24</td> <td>4 mm</td> </tr> <tr> <td>0.13 - 0.33 mm²</td> <td>AWG 26-22</td> <td>4 mm</td> </tr> <tr> <td>0.33 - 0.52 mm²</td> <td>AWG 22-20</td> <td>4 mm</td> </tr> </tbody> </table>	Wire gauge	∅	Stripping length	0.08 - 0.21 mm ²	AWG 28-24	4 mm	0.13 - 0.33 mm ²	AWG 26-22	4 mm	0.33 - 0.52 mm ²	AWG 22-20	4 mm
	Wire gauge	∅	Stripping length													
	0.08 - 0.21 mm ²	AWG 28-24	4 mm													
	0.13 - 0.33 mm ²	AWG 26-22	4 mm													
0.33 - 0.52 mm ²	AWG 22-20	4 mm														
0,13 ... 0,33	09 67 000 5570	09 67 000 5470														
0,33 ... 0,52	09 67 000 8570	09 67 000 8470														

Features

- Metal hoods / housings
- Locking levers: Han-Easy Lock® with special locking reel
- Field of application: for excellent mechanical and electrical protection in demanding environments, for example, in the automobile and mechanical engineering industries also for process and regulation control applications
- Distinguishing feature: hoods/housings colour-coded grey (RAL 7037)

Technical characteristics


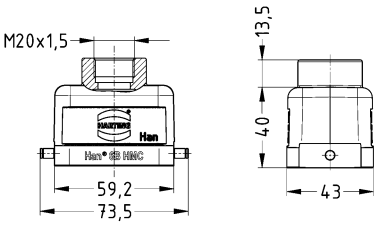
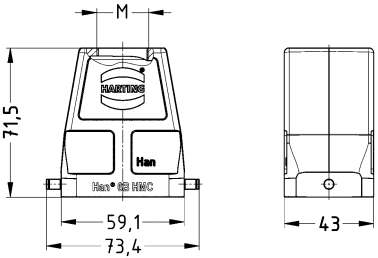

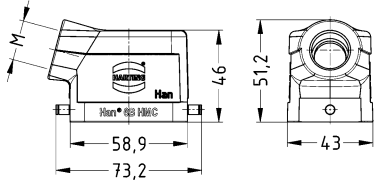
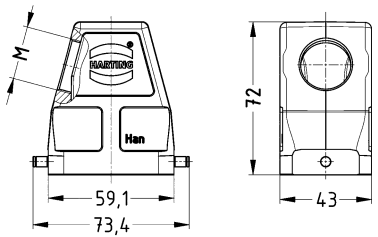

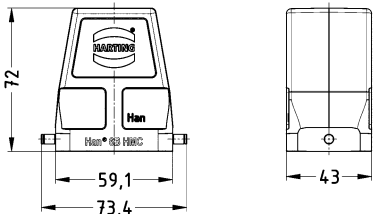
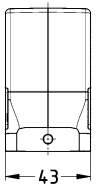
Limiting temperature	-40 ... +125 °C
Mating cycles with other HMC components	≥10000
Degree of protection acc. to IEC 60529	IP65
Type rating acc. to UL 50 / UL 50E	4, 4X, 12
Material (hood/housing)	Aluminium die-cast
Surface (hood/housing)	Powder-coated
Colour (hood/housing)	RAL 7037 (dust grey)
Material (seal)	NBR
Material (locking)	Polycarbonate, Stainless steel
Colour (locking)	RAL 7037 (dust grey)
Material flammability class acc. to UL 94 (locking levers)	V-0
RoHS	compliant

Specifications and approvals


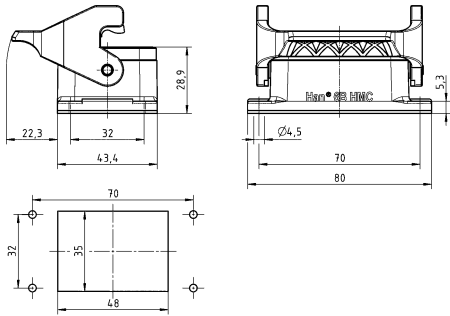

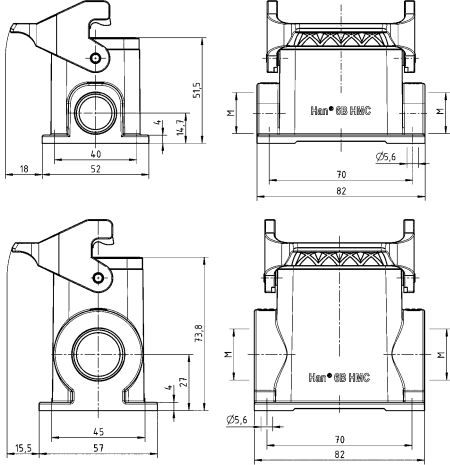

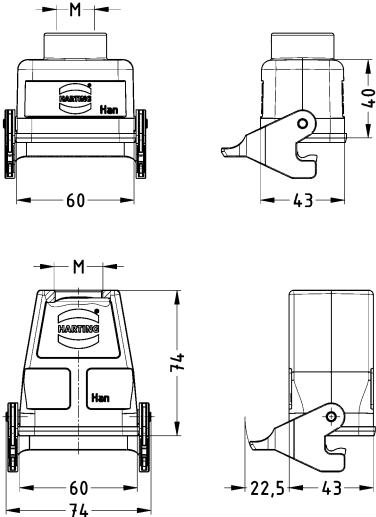
DNV GL

Special hoods and housings for high mating cycles
Single locking lever

Han
HMC


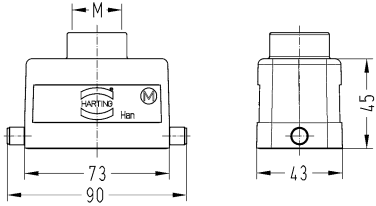
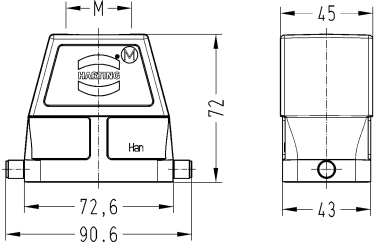

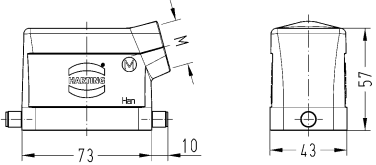
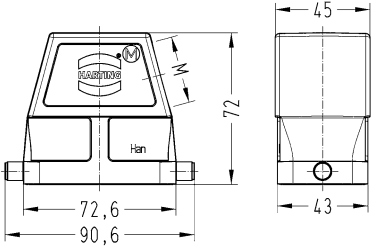

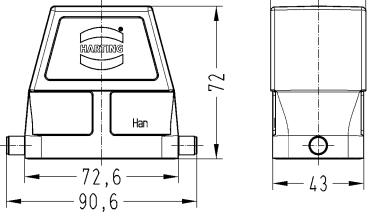
Identification	Cable entry	Part number		Drawing (dimensions in mm)	
		Low construction	High construction		
Han® HMC , Hoods, Top entry 	1x M20 1x M25 1x M32	19 30 206 1440	19 30 206 0446 19 30 206 0447		
Han® HMC , Hoods, Side entry 	1x M20 1x M25 1x M32	19 30 206 1540 19 30 206 1541	19 30 206 0546 19 30 206 0547		
Han® HMC , Hoods 			09 30 206 0801		

Han
HMC


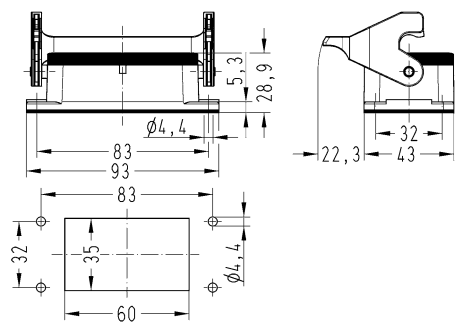

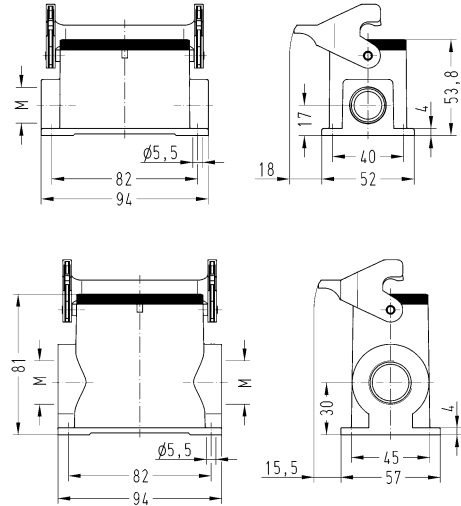

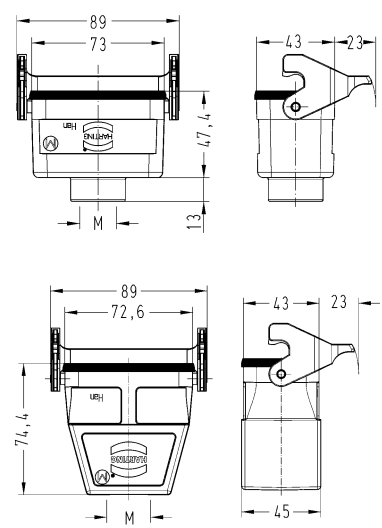
Identification	Cable entry	Part number		Drawing (dimensions in mm)
		Low construction	High construction	
Han® HMC , Bulkhead mounted housings, Han-Easy Lock® 		09 30 206 0301		 <p>Panel cut out</p>
Han® HMC , Surface mounted housing, Side entry, Han-Easy Lock® 	1x M20 2x M20 2x M25 2x M32	19 30 206 1290	19 30 206 1250 19 30 206 0291 19 30 206 0292	
Han® HMC , Cable to cable housing, Top entry, Han-Easy Lock® 	1x M20 1x M25 1x M32	19 30 206 1750	19 30 206 0756 19 30 206 0757	

Special hoods and housings for high mating cycles
Single locking lever

Han
HMC


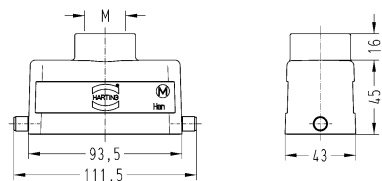
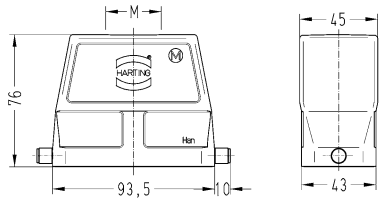

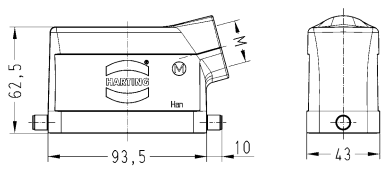
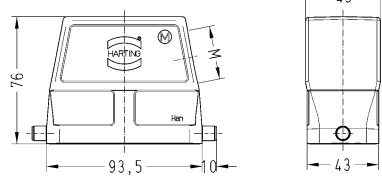

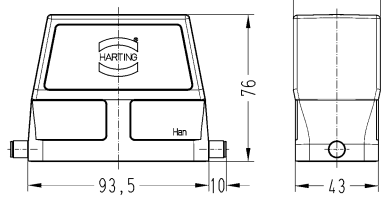
Identification	Cable entry	Part number		Drawing (dimensions in mm)
		Low construction	High construction	
Han® HMC , Hoods, Top entry 	1x M20 1x M25 1x M32	19 30 210 1440 19 30 210 1441	19 30 210 0447	 
Han® HMC , Hoods, Side entry 	1x M20 1x M25 1x M32	19 30 210 1540 19 30 210 1541	19 30 210 0547	 
Han® HMC , Hoods, Without cable entry 			09 30 210 0803	

Han
HMC


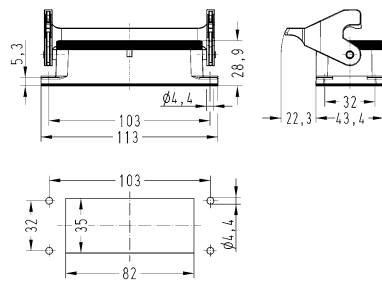

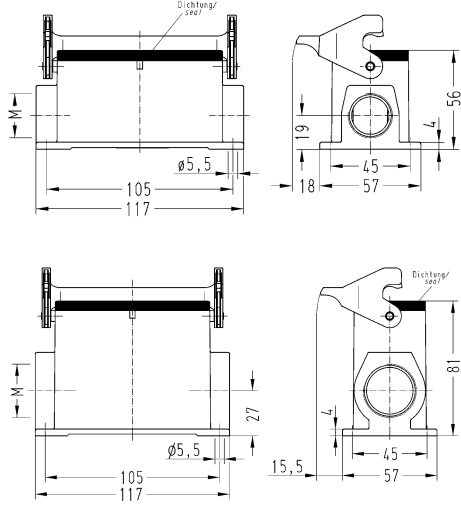

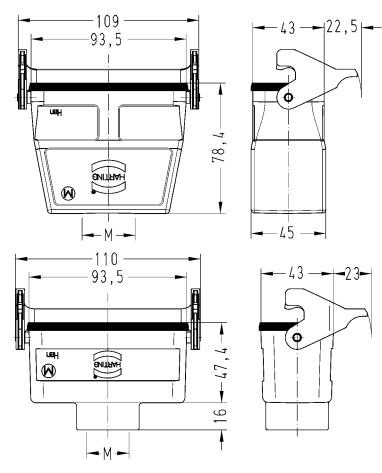
Identification	Cable entry	Part number		Drawing (dimensions in mm)
		Low construction	High construction	
Han® HMC , Bulkhead mounted housings, Han-Easy Lock® 		09 30 210 0305		 <p>Panel cut out</p>
Han® HMC , Surface mounted housing, Side entry, Han-Easy Lock® 	1x M20 2x M20 2x M25 2x M32	19 30 210 1250 19 30 210 1290	19 30 210 0291 19 30 210 0292	
Han® HMC , Cable to cable housing, Top entry, Han-Easy Lock® 	1x M20 1x M25	19 30 210 1750	19 30 210 0756	

Special hoods and housings for high mating cycles
Single locking lever

Han
HMC


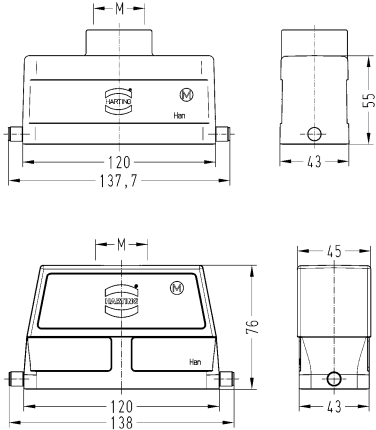

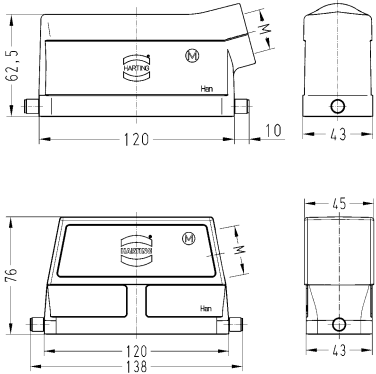

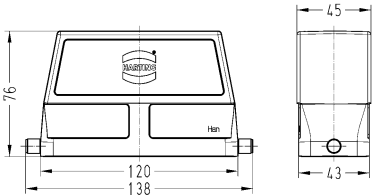
Identification	Cable entry	Part number		Drawing (dimensions in mm)	
		Low construction	High construction		
Han® HMC , Hoods, Top entry 	1x M25 1x M32 1x M40	19 30 216 1441 19 30 216 1442	19 30 216 0447 19 30 216 0448	 	
Han® HMC , Hoods, Side entry 	1x M25 1x M32 1x M40	19 30 216 1541 19 30 216 1542	19 30 216 0547 19 30 216 0548	 	
Han® HMC , Hoods, Without cable entry 			09 30 216 0803		

Han
HMC


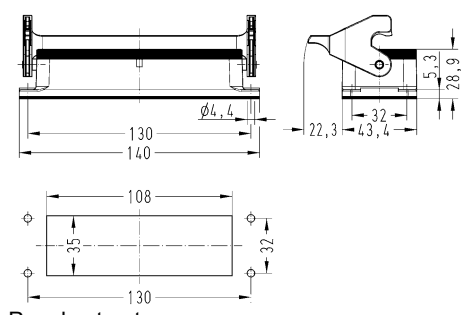

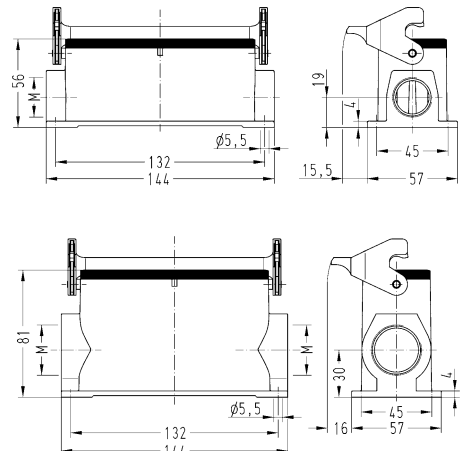

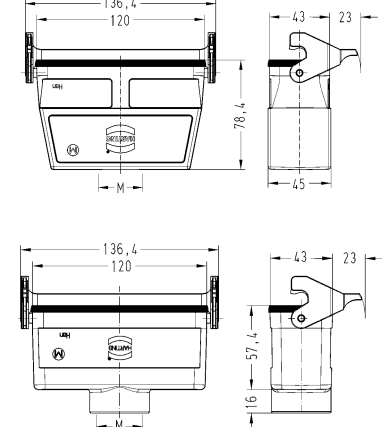
Identification	Cable entry	Part number		Drawing (dimensions in mm)
		Low construction	High construction	
Han® HMC , Bulkhead mounted housings, Han-Easy Lock® 		09 30 216 0307		 <p>Panel cut out</p>
Han® HMC , Surface mounted housing, Side entry, Han-Easy Lock® 	1x M25 1x M32 2x M25 2x M32	19 30 216 1251 19 30 216 1291	19 30 216 0252 19 30 216 0291 19 30 216 0292	
Han® HMC , Cable to cable housing, Top entry, Han-Easy Lock® 	1x M25 1x M32	19 30 216 1751 19 30 216 1752	19 30 216 0757	

Special hoods and housings for high mating cycles
Single locking lever

Han
HMC

Identification	Cable entry	Part number		Drawing (dimensions in mm)
		Low construction	High construction	
Han® HMC , Hoods, Top entry 	1x M32 1x M40	19 30 224 1442	19 30 224 0447 19 30 224 0448	
Han® HMC , Hoods, Side entry 	1x M25 1x M32 1x M40	19 30 224 1541 19 30 224 1542	19 30 224 0547 19 30 224 0548	
Han® HMC , Hoods, Without cable entry 			09 30 224 0803	

Han
HMC

Identification	Cable entry	Part number		Drawing (dimensions in mm)
		Low construction	High construction	
Han® HMC , Bulkhead mounted housings, Han-Easy Lock® 		09 30 224 0307		 <p>Panel cut out</p>
Han® HMC , Surface mounted housing, Side entry, Han-Easy Lock® 	1x M25 2x M25 2x M32	19 30 224 1251 19 30 224 1291	19 30 224 0292	
Han® HMC , Cable to cable housing, Top entry, Han-Easy Lock® 	1x M32	19 30 224 1752	19 30 224 0757	


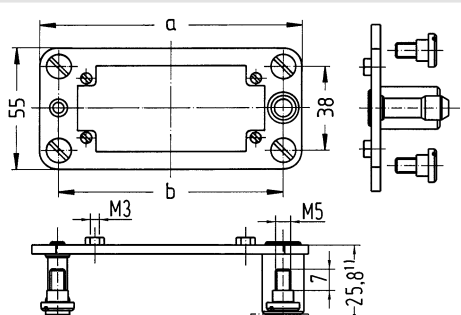
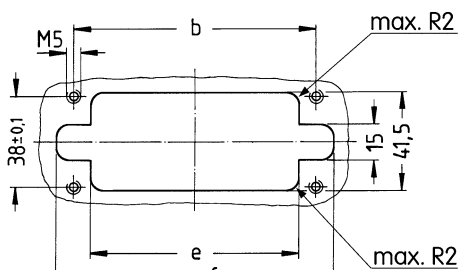


Features

- Suitable for all inserts of the series Han E[®], Han E[®] HMC, Han EE[®], Han EE[®] HMC, Han EEE[®], Han EEE[®] HMC, Han[®] ES, Han D[®] (size B), Han D[®] HMC, Han DD[®], Han DD[®] HMC, Han-Com[®], Han[®] HsB, Han-Modular[®]
- Due to the floating system of the docking frame the PE connection of the mounting base has to be installed separately.
- Inserts are protected against mechanical damage

Technical characteristics

Mating cycles	≥500
Mating cycles with other HMC components	≥10000
Material (accessories)	Stainless steel
RoHS	compliant with exemption
RoHS exemptions	6a: Lead as an alloying element in steel for machining purposes and in galvanised steel containing up to 0,35 % lead by weight

Identification	Size	Part number	Drawing (dimensions in mm)
Docking frame, Pack contents: 1 frame, 4 cheese head shoulder screws (Steel, zinc plated) to fix the docking frame  Pull-in-range x-axis: ± 1.5 mm Pull-in-range y-axis: ± 1.5 mm	06 B 10 B 16 B 24 B	09 30 006 1704 09 30 010 1704 09 30 016 1704 09 30 024 1704	 Distance for electrical and FO contacts max. 27 mm; for Han-Modular [®] series max. 26.5 mm 6 B: a=86; b=69 10 B: a=99; b=82 16 B: a= 119.5 ; b= 102.5 24 B: a=146; b=129  6 B: b= 69; e= 54.5; f= 84 10 B: b= 82; e= 67.5; f= 97 16 B: b= 102.5; e= 88; f= 117.5 24 B: b= 129; e= 114.5; f= 144