

# HSB series – the heavy-duty connectors

The HSB series provides users with 35 A via each contact with screw connections for a safe and reliable connection.

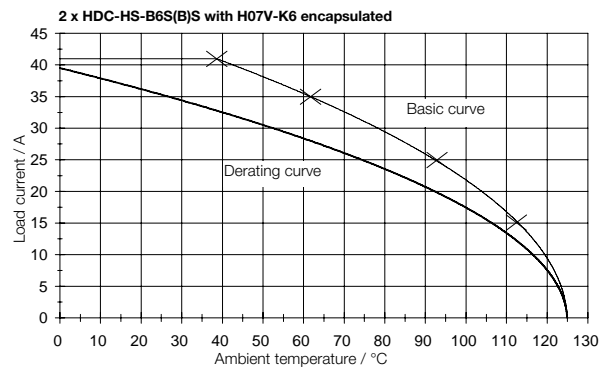


## Technical data

Standards / approvals	
Standards	DIN EN 61984 DIN EN 60664-1
Approvals	UL/CSA
Inserts	
No. of poles	6, 12
Rated voltage	400 V
Rated voltage to UL/CSA	600 V
Rated current	35 A
Rated impulse withstand voltage	6 kV
Pollution severity	3
Insulation resistance	$\geq 10^{10} \Omega$
Material	Glass-fibre reinforced PC (in UL list and approved for railway applications)
Temperature range	-40 °C ... +125 °C
Flammability to UL 94	V-0
Mechanical service life	
- Plugging cycles Ag - Surface	$\geq 500$
- Plugging cycles Au - Surface	$\geq 500$
Contact resistance	
Screw connection	$\leq 2 \text{ m}\Omega$
Contacts / Material	
Sockets and plug-in contact	Copper alloy
Surface	Passivated silver or 0.8 $\mu\text{m}$ gold on 2 $\mu\text{m}$ Ni
Clamping unit / Screw connection	Copper alloy / Passivated silver
Screw connection	
- Clamping range	0.5 – 6 mm <sup>2</sup> (AWG 20 ... 10)
- Stripping length	11 mm
- flex. with wire end ferrule to DIN 46228 Part 1:	4 mm <sup>2</sup>
Clamping torque	
- Screw connection	1.2 ... 1.5 Nm
SD blades	0.6 x 3.5 or 0.8 x 4 mm
PE connection	
- Clamping range	0.5 ... 6 mm <sup>2</sup>
- solid / stranded	0.5 ... 6 mm <sup>2</sup> / 0.5 ... 6 mm <sup>2</sup>
- flexible / flexible with wire end ferrule, DIN 46228 pt. 1	0.5 ... 6 mm <sup>2</sup> / 0.5 ... 6 mm <sup>2</sup>
- AWG conductor	AWG 20 .. 12
- Stripping length	10 mm
- Clamping torque	2 ... 2.5 Nm
- Blade dimensions	SD 1 x 5.5 mm or PH 2

**Note:** Switch off power supply before handling plug-in connectors.  
When connecting flexible conductors using screws, wire end ferrules to DIN 46228 Part 1 must be used.

## Derating curves



HSB series - the heavy-duty connectors

400 V, 35 A, Size 6

6 + ⊕

Inserts

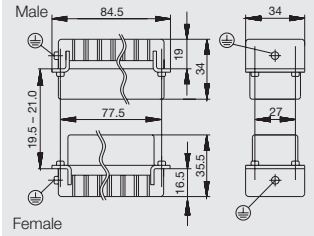


Screw connection

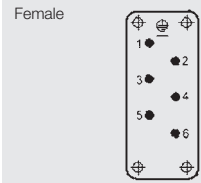
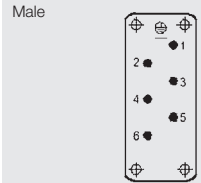


Insert	Designation	Order No.
Male	HDC HSB 6 MS	1498700000
Female	HDC HSB 6 FS	1498900000

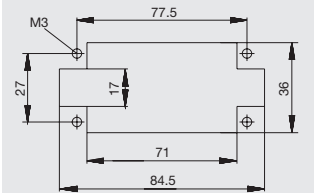
Dimensions



Arrangement of contacts



Mounting cut-out



**Selection of Housings RockStar® IP65  
Size 6**

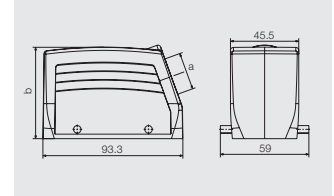


**Hood**

**Hood, Cable Entry sideways**



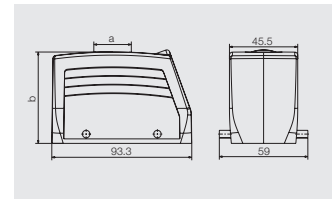
a	Version	Cover	b (mm)	Designation	Order No.
M 25	with thread		61	HDC 16B TSBU 1M25G	1788180000
M 25	with thread		76	HDC 40D TSBU 1M25G	1787010000
M 32	with thread		76	HDC 40D TSBU 1M32G	1787000000



**Hood, Cable Entry at top**



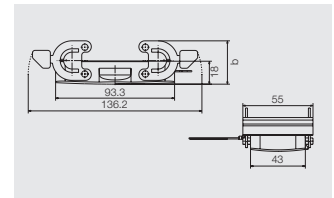
a	Version	Cover	b (mm)	Designation	Order No.
M 25	with thread		61	HDC 16B TOBU 1M25G	1788210000
M 25	with thread		76	HDC 40D TOBU 1M25G	1787070000
M 32	with thread		76	HDC 40D TOBU 1M32G	1787060000



**Cover**



Version	Designation	Order No.
for hoods	HDC 16B DMDQ 2QB	1665270000

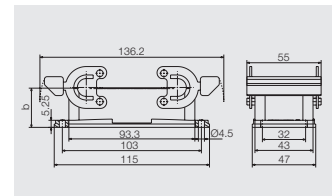


**Base**

**Bulkhead housing**



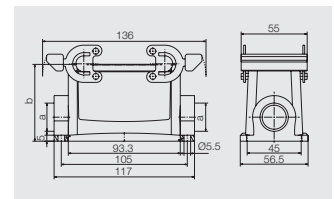
Version	Cover	b (mm)	Designation	Order No.
		29	HDC 16B ABU	1208600000



**Base housing**



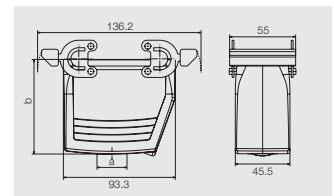
a	Version	Cover	b (mm)	Designation	Order No.
M 25	with thread		64	HDC 16B SBU 2M25G	1788240000
M 25	with thread		84	HDC 40D SBU 2M25G	1787120000
M 32	with thread		84	HDC 40D SBU 2M32G	1787110000



**Coupling hood**



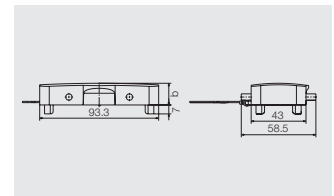
a	Version	Cover	b (mm)	Designation	Order No.
M 25	with thread		79	HDC 40D KBU 1M25G	1787200000
M 32	with thread		79	HDC 40D KBU 1M32G	1787190000



**Cover**



Version	Designation	Order No.
for bases	HDC 16B DODQ 4BO	1665260000



HSB series - the heavy-duty connectors

400 V, 35 A, Size 10

12 + ⊕

Inserts

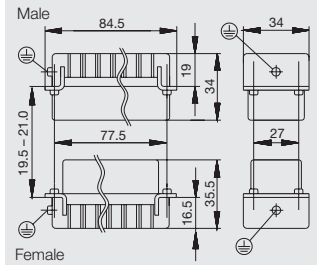


Screw connection

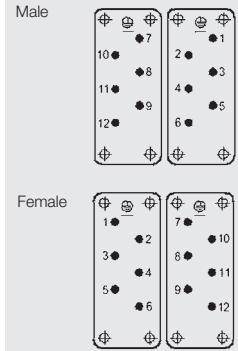


Insert	Designation	Order No.
Male	HDC HSB 6 MS	1498700000
Female	HDC HSB 6 FS	1498900000
Male	HDC HSB 6 MS 7 - 12	1498800000
Female	HDC HSB 6 FS 7 - 12	1499000000

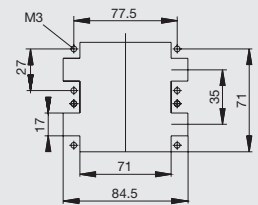
Dimensions



Arrangement of contacts



Mounting cut-out



Selection of Housings RockStar® IP65  
Size 10

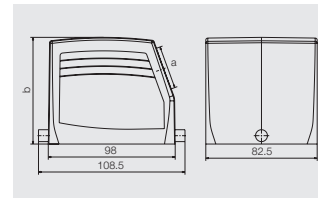


Hood

Hood, Cable Entry sideways



a	Version	Cover	b (mm)	Designation	Order No.
M 32	with thread		79	HDC 32B TSLU 1M32G	1788420000

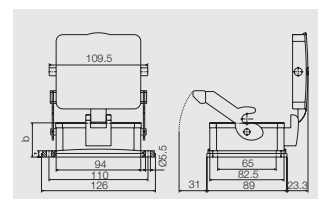


Base

Bulkhead housing



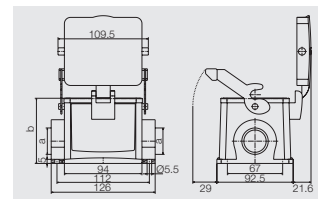
Version	Cover	b (mm)	Designation	Order No.
	with cover	55	HDC 32B ADLU	1219800000
		38	HDC 32B ALU	1219500000



Base housing



a	Version	Cover	b (mm)	Designation	Order No.
M 32	with thread	with cover	96	HDC 32B SDLU 2M32G	1788490000
M 32	with thread		79	HDC 32B SLU 2M32G	1788470000



Coupling hood



a	Version	Cover	b (mm)	Designation	Order No.
M 32	with thread		83	HDC 32B KLU 1M32G	1788500000

