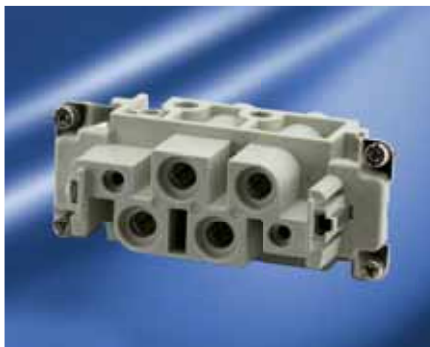




# heavy | mate<sup>®</sup> K

- Power + signal as mixed arrangement
- Rated voltage up to 830 V
- Termination: screw, crimp

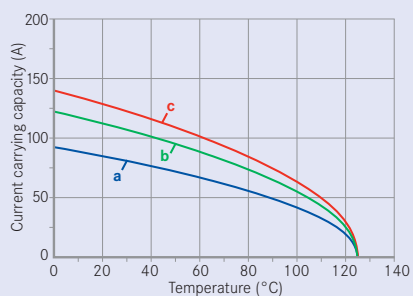


Approvals, Testhouse	Characteristics	Approval-Number
UL 	In preparation	In preparation
CSA 	In preparation	In preparation

## heavy|mate® K Characteristics contact inserts 4/0 + 4 / 2

General Characteristics	Standard	Value
Number of contacts		4 / 0 (4 Power) 4 / 2 + PE (4 Power + 2 Signal)
Termination technique		screw
Wire gauge		1.5 – 16 mm <sup>2</sup> (AWG 16-6)
Flammability	UL94	V-0
Electrical Characteristics		
Rated voltage	IEC 60664-1	830 V/400 V
Pollution degree	IEC 60664-1	3
Installation (overvoltage) category	IEC 60664-1	3
Material group	IEC 60664-1	3b
Rated impulse withstand voltage	IEC 60664-1	8.0 kV
Current carrying capacity	IEC 60512-5-2	see derating curves
Contact resistance	IEC 60512-2-1	≤ 5 mΩ
Insulation resistance	IEC 60512-3-1	≥ 10 <sup>10</sup> Ω
Climatical Characteristics		
Climatic category	IEC 60068-1	40/125/21
Upper temperature	IEC 60512-11-9	+125°C
Lower temperature	IEC 60512-11-10	-40°C
Mechanical Characteristics		
Mechanical operation	IEC 60512-9-1	≥500 mating cycles
Materials		
Insert		PC
Colour insert		grey
Contacts		Cu-alloy
Contact plating		Ag (silver)

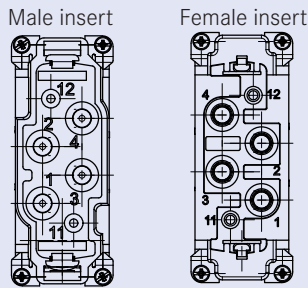
### Derating Curves



Curve	Wire gauge
a	10 mm <sup>2</sup>
b	16 mm <sup>2</sup>
c	Single con- tacts with 16 mm <sup>2</sup>

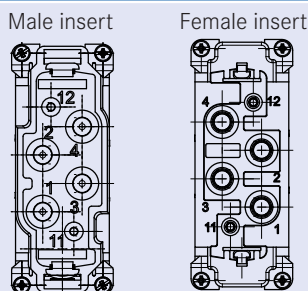
Description	Part Number	Drawing	Figure
<b>Contact insert 4/0</b>			
Male insert	C146 10A004 100 13		
Female insert	C146 10B004 100 13		

**Pin layout**



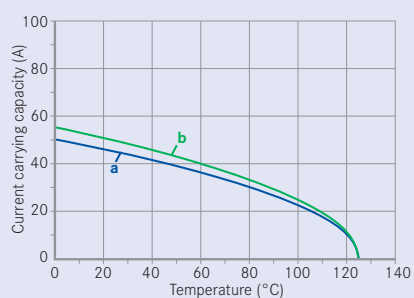
Description	Part Number	Drawing	Figure
<b>Contact insert 4+2+PE</b>			
Male insert	C146 10A006 100 13		
Female insert	C146 10B006 100 13		

**Pin layout**



General Characteristics	Standard	Value
Number of contacts		6/36 + PE
Termination technique		crimp
Wire gauge		1.5 – 6.0mm <sup>2</sup> (AWG 16-10) 0.14 – 2.5mm <sup>2</sup> (AWG 26-14)
Flammability	UL94	V-0
Electrical Characteristics		
Rated voltage	IEC 60664-1	690 / 160V
Pollution degree	IEC 60664-1	3
Installation (overvoltage) category	IEC 60664-1	3
Material group	IEC 60664-1	3b
Rated impulse withstand voltage	IEC 60664-1	8.0 / 2.5 kV
Current carrying capacity	IEC 60512-5-2	see derating curves
Contact resistance	IEC 60512-2-1	≤ 5 mΩ
Insulation resistance	IEC 60512-3-1	≥ 10 <sup>10</sup> Ω
Climatical Characteristics		
Climatic category	IEC 60068-1	40 / 125 / 21
Upper temperature	IEC 60512-11-9	125°C
Lower temperature	IEC 60512-11-10	-40°C
Mechanical Characteristics		
Mechanical operation	IEC 60512-9-1	≥500 mating cycles
Materials		
Insert		PC
Colour insert		grey
Contacts		Cu-alloy
Contact plating		Ag (silver) /Au (gold)

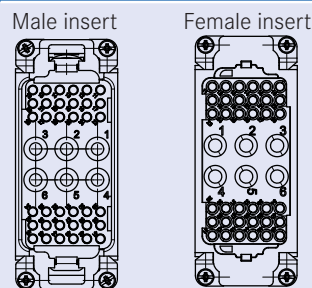
**Derating Curves**



Curve	Wire gauge
a	16 mm <sup>2</sup> with signal- contacts 1.5 mm <sup>2</sup>
b	6 mm <sup>2</sup>

Description	Part Number	Drawing	Figure
<b>Contact insert 6 / 36 + PE (Please order contacts separately)</b>			
Male insert	C146 10A042 500 13		
Female insert	C146 10B042 500 13		

**Pin layout**



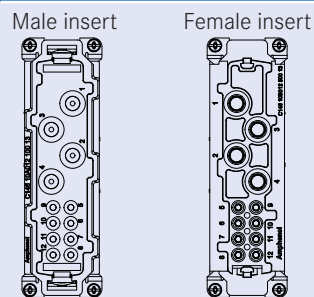
Supplied as	for wire gauge	AWG	Pieces	Part Number		Figure
				Male contact	Female contact	
<b>Turned 4 mm crimp contacts single contact</b>						
silver plating	1.5 mm <sup>2</sup>	16	100	VN01 040 0010 1C	VN02 040 0010 1C	
	2.5 mm <sup>2</sup>	14	100	VN01 040 0011 1C	VN02 040 0011 1C	
	4 mm <sup>2</sup>	12	100	VN01 040 0012 1C	VN02 040 0012 1C	
	6 mm <sup>2</sup>	10	100	VN01 040 0013 1C	VN02 040 0013 1C	
<b>Turned 1.6 mm crimp contacts single contact</b>						
silver plating	0.14 - 0.37 mm <sup>2</sup>	26-22	100	VN01 016 0024 1C	VN02 016 0024 1C	
	0.5 mm <sup>2</sup>	20	100	VN01 016 0025 1C	VN02 016 0025 1C	
	0.75 - 1.0 mm <sup>2</sup>	20-16	100	VN01 016 0026 1C	VN02 016 0026 1C	
	1.5 mm <sup>2</sup>	16-15	100	VN01 016 0027 1C	VN02 016 0027 1C	
	2.5 mm <sup>2</sup>	14	100	VN01 016 0028 1C	VN02 016 0028 1C	

## heavy|mate® K Characteristics contact inserts 4 / 8 + PE

General Characteristics	Standard	Value
Number of contacts		4/8 + PE
Termination technique		schrauben
Wire gauge		1.5 – 16mm <sup>2</sup> (AWG 16-6)
Flammability	UL94	V-0
Electrical Characteristics		
Rated voltage	IEC 60664-1	400V / 400V
Pollution degree	IEC 60664-1	3
Installation (overvoltage) category	IEC 60664-1	3
Material group	IEC 60664-1	3b
Rated impulse withstand voltage	IEC 60664-1	8,0 kV
Current carrying capacity	IEC 60512-5-2	see derating curves
Contact resistance	IEC 60512-2-1	≤ 5 mΩ
Insulation resistance	IEC 60512-3-1	≥ 10 <sup>12</sup> Ω
Climatical Characteristics		
Climatic category	IEC 60068-1	40 / 125 / 21
Upper temperature	IEC 60512-11-9	125°C
Lower temperature	IEC 60512-11-10	-40°C
Mechanical Characteristics		
Mechanical operation	IEC 60512-9-1	≥500 mating cycles
Materials		
Insert		PC
Colour insert		grey
Contacts		Cu-alloy
Contact plating		Ag (silver)
Derating Curves		
In preparation		

Description	Part Number	Drawing	Figure
<b>Contact insert 4/8 + PE</b>			
Male insert	C146 10A012 100 13		
Female insert	C146 10B012 100 13		

**Pin layout**



**AVAILABLE  
FROM Q3/2013**