Charging interface

With and without protection against contact

BY HIRSCHMANN AUTOMOTIVE

General Characteristics			
Product describtion	The interface is used to connect a battery to a charger. It includes a built-in connector (female) to be mounted on the device to be charged and a wiring harness (male) which maps the connection to the charger.		
Basic standards		DIN EN 61984 DIN EN 50604-1 IEC 62133 partly UN 38.8 DIN EN 60335-1 DIN EN 60335-29 cULus	Valide for male and female side Valide for female side Valide for female side Valide for female side Valide for male side Valide for male side upon request
Approval / Conformity	**Standards**	**Testing standard/ requirement**	
Protection class not mated		IEC 60529/ IP67	Valide for female side
Protection class mated		IEC 60529/ IPX5	
Overvoltage categorie		DIN EN 60664-1/ II	
Pollution degree		DIN EN 60664-1/ 3	
Protection against contact with live Parts	DIN EN 60335-1	IEC 60529 / IPXXB	For Variants >42V
Vibration	DIN EN 50604-1	7-200Hz 3h/Axis	Valide for female side
Shock resistance	DIN EN 50604-1	150g 3 shocks/direction	Valide for female side
Environmental Simulation	DIN EN 61984	+85/168h and -40/48h	
Corrosion test	DIN EN 61984	ISO 6988/ 24h	
Coastal climate load		DIN EN 60068-2-52/ Cyclic, Severity 3	
Glow Wire Flammability Testing	DIN EN 60335-1	DIN EN 60695-2-12 GWFI>850°C and GWIT>775°C	
Temprature rise	DIN EN 60335-1	10,1/3h uninterrupted	Grip and Cable (see diagrams)
Housing influence on the derating	DIN EN 61984	DIN EN 605012-5-2	see diagrams
Proof voltage	DIN EN 60335-1	3000V	
Ball pressure test	DIN EN 60335-1	DIN EN 60695-10-2/125°C	Material certified for ≥200°C
Electrical Characteristics			
Rated voltage Power Pins		25 / 36 / 48 / 50V	DC
Rated voltage Signal Pins		12V	DC
max. current load Power Pins	correlating to wire cross section	5 / 7 / 10 / 14A	
max. current load Signal Pins		2A	
Mechanical Characteristics			
Contact System Power Pins		2x Ø1mm round contact	pre contacting
Contact System Signal Pins		4x Ø1mm round contact	
Power pin wire cross section		0,5 / 0,75 / 1mm²	
Signal pin wire cross section		0,35mm²	
Codings		A / B / C / D / E / F	
Twist protection		yes	
Material contact carriers		PA66+PA6 GF25	
Material overmouldings		TPU Shore A85	
Pull relief		yes	Overmolding
Mating cycle frequency		≥ 1000	
Connector locking		by force	no mechanical locking
Mating force		ca.22N	
Mounting screw distance		17,5mm x 17,5mm	
Mounting torque screws	Built-in Connector	1,1Nm	
min. operating temperature		-40°C	
max. operating temperature		85°C	

Additional Information

Drawings:

-Built-in Connector

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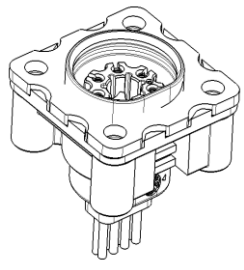
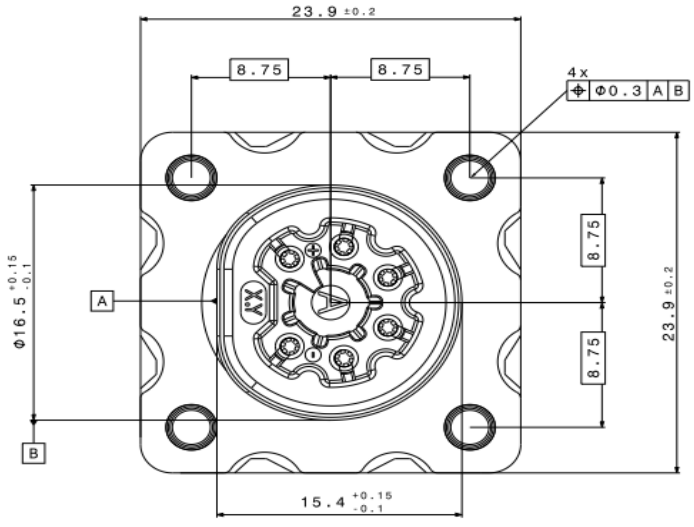
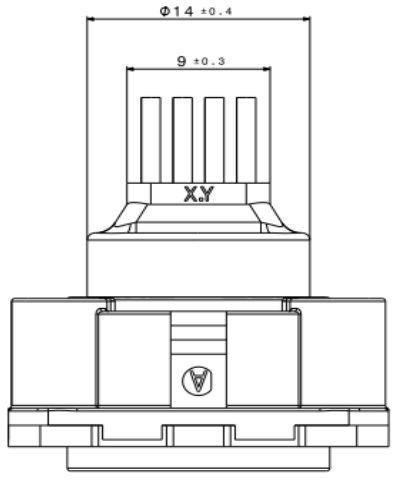
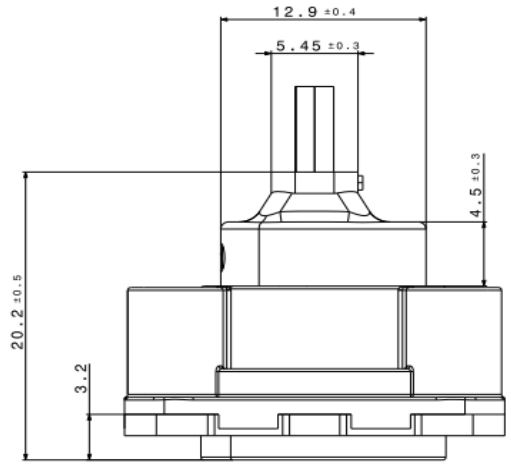
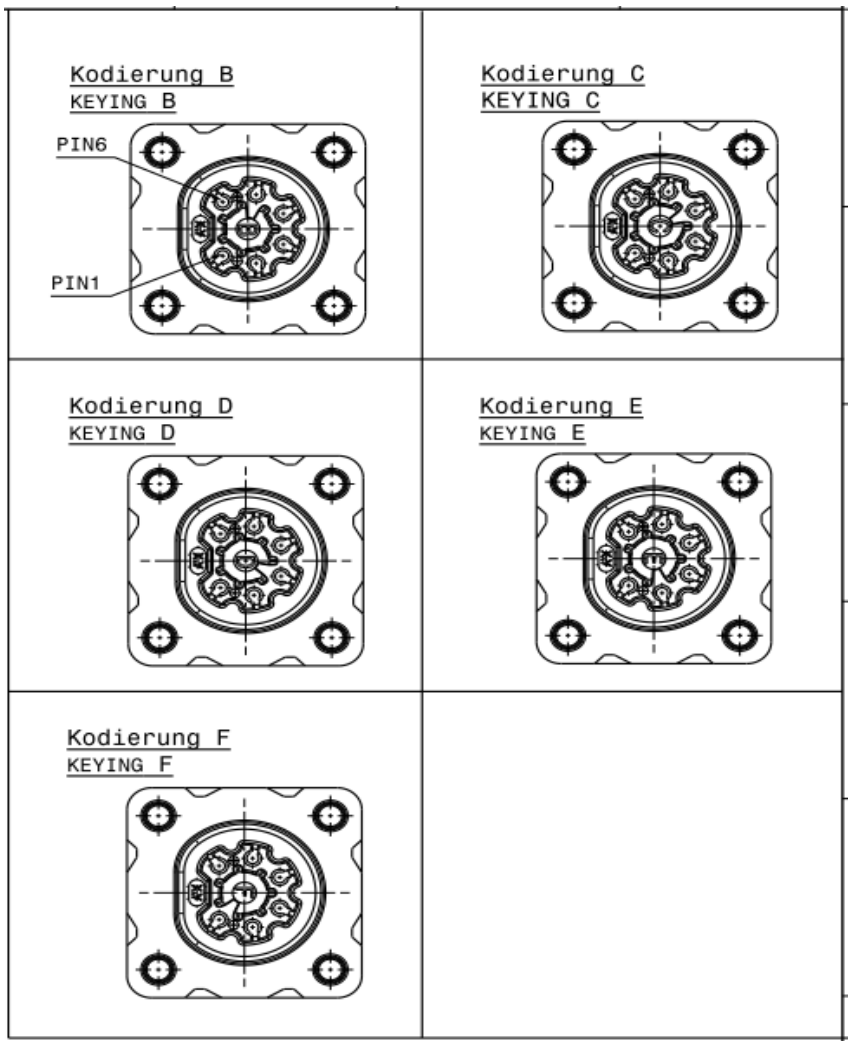




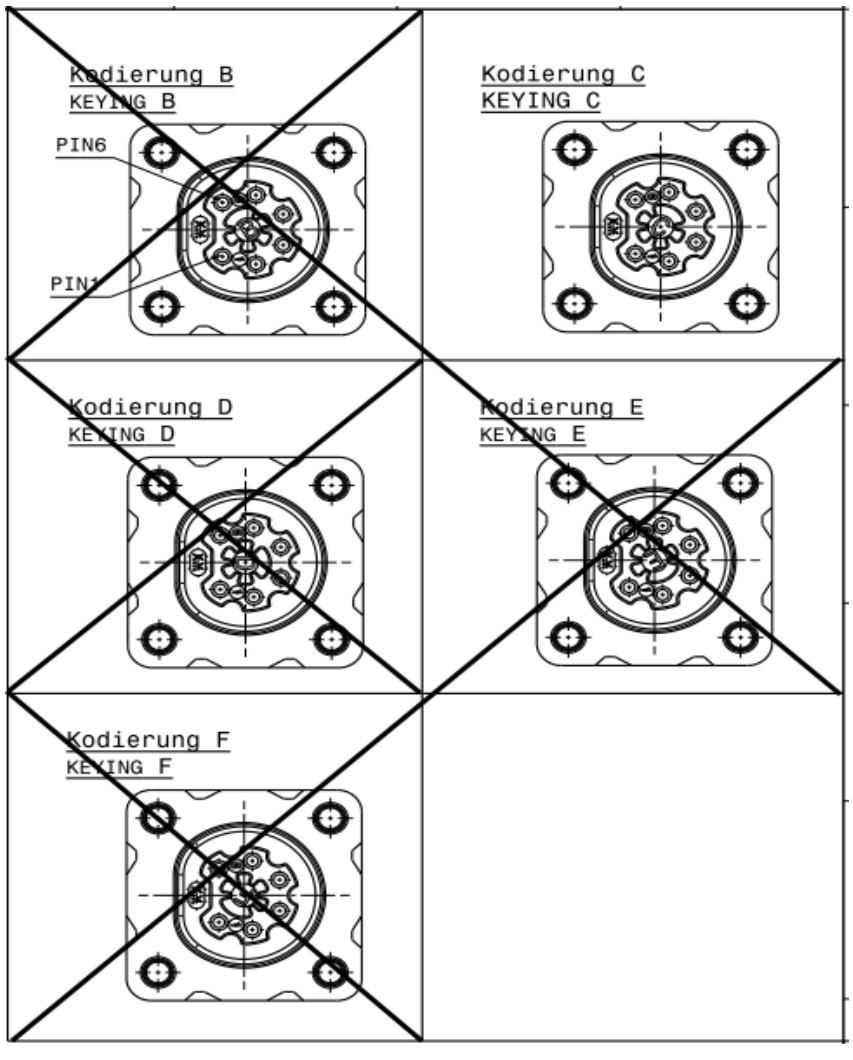




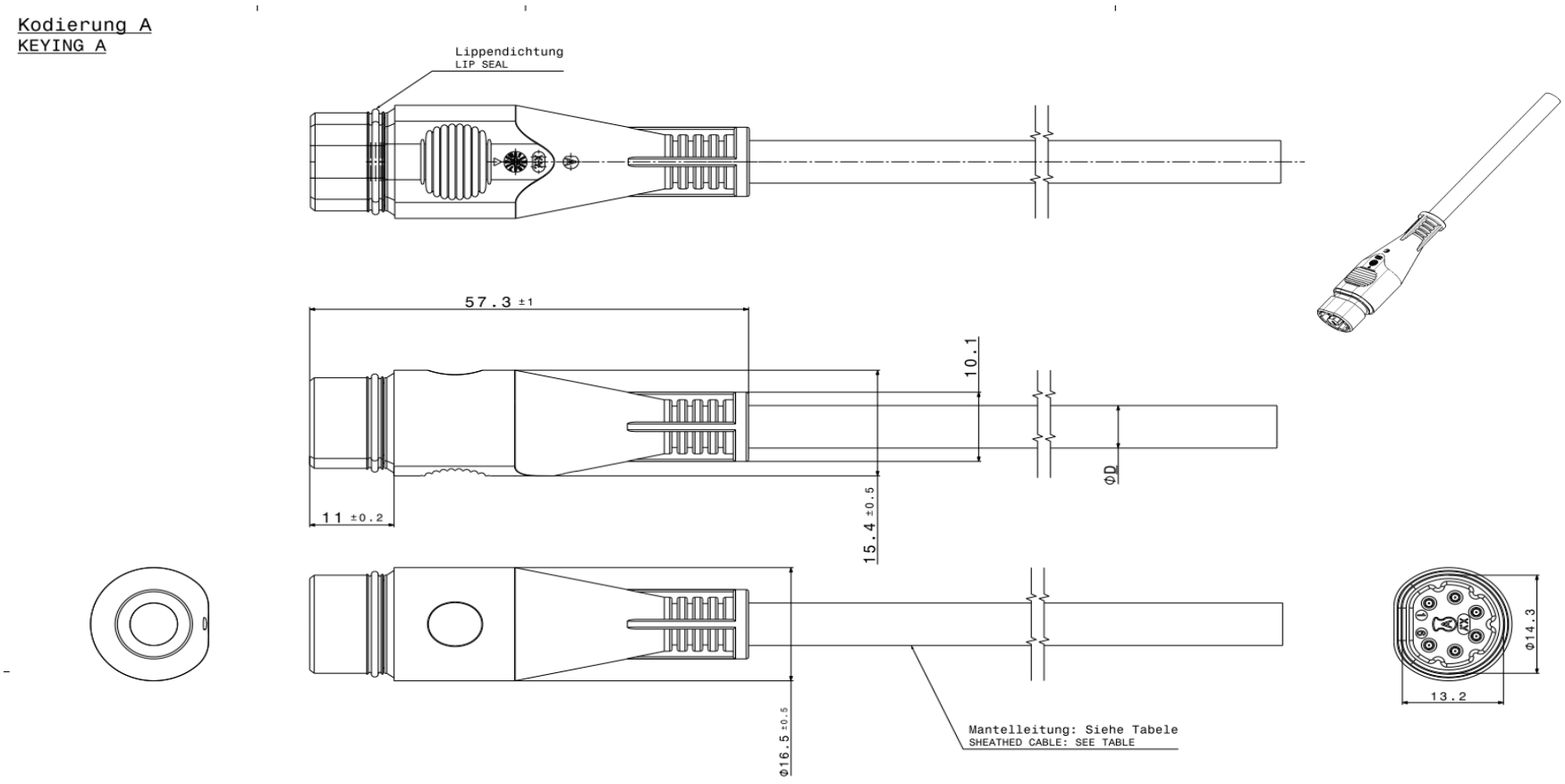
For Tension >42V



For Tension <42V

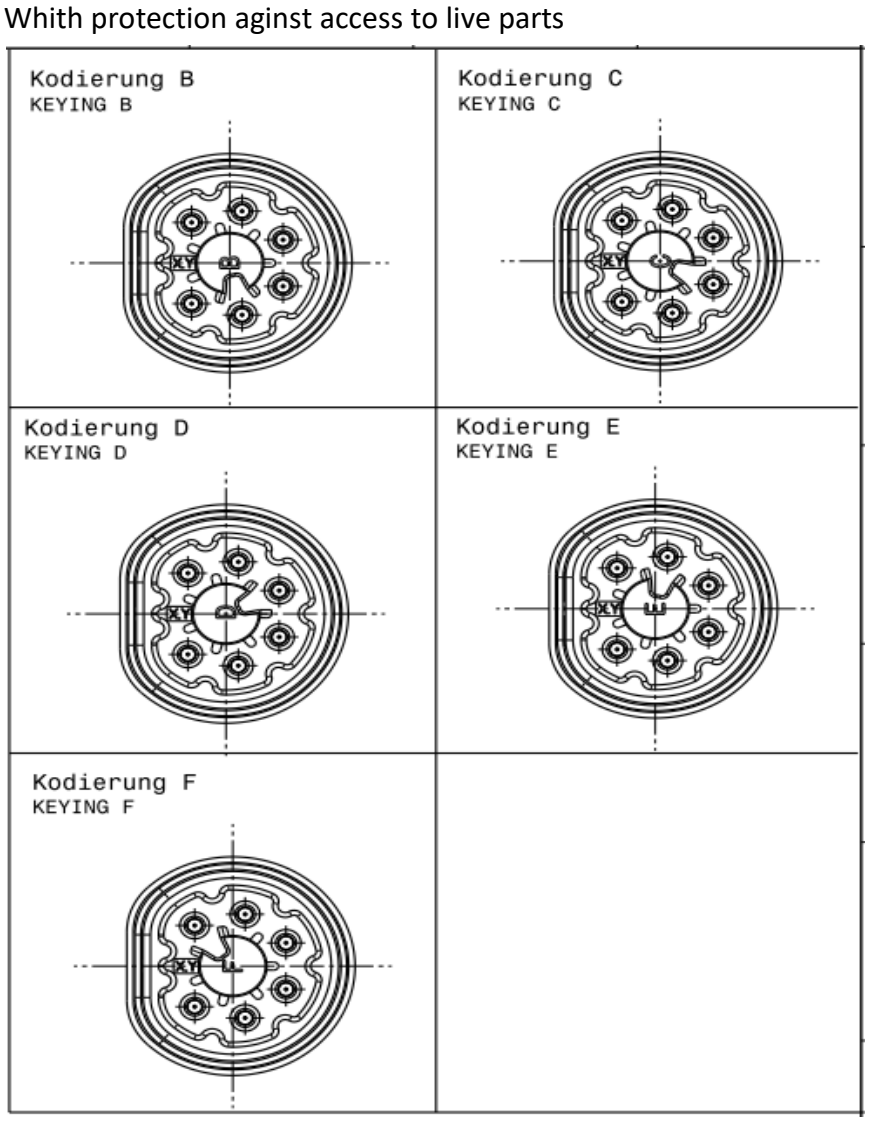


-Charger Connector



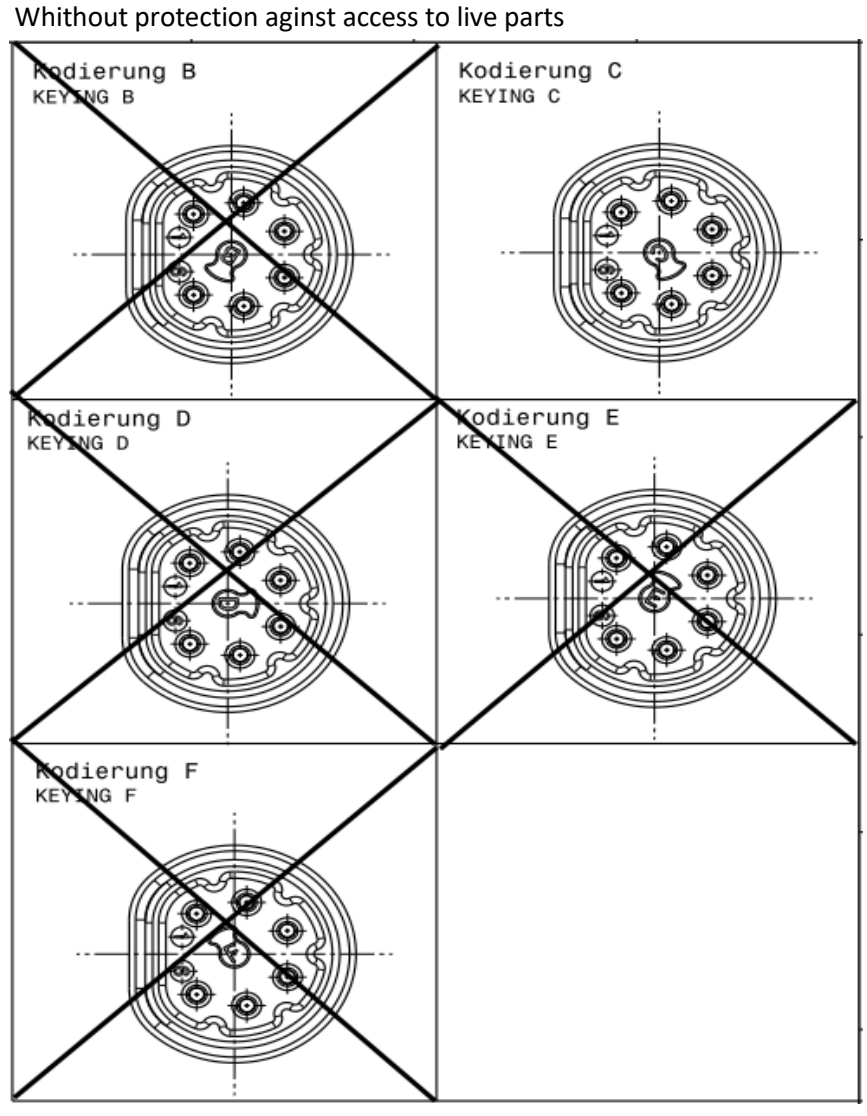
For Tension >42V

Whith protection aginst access to live parts



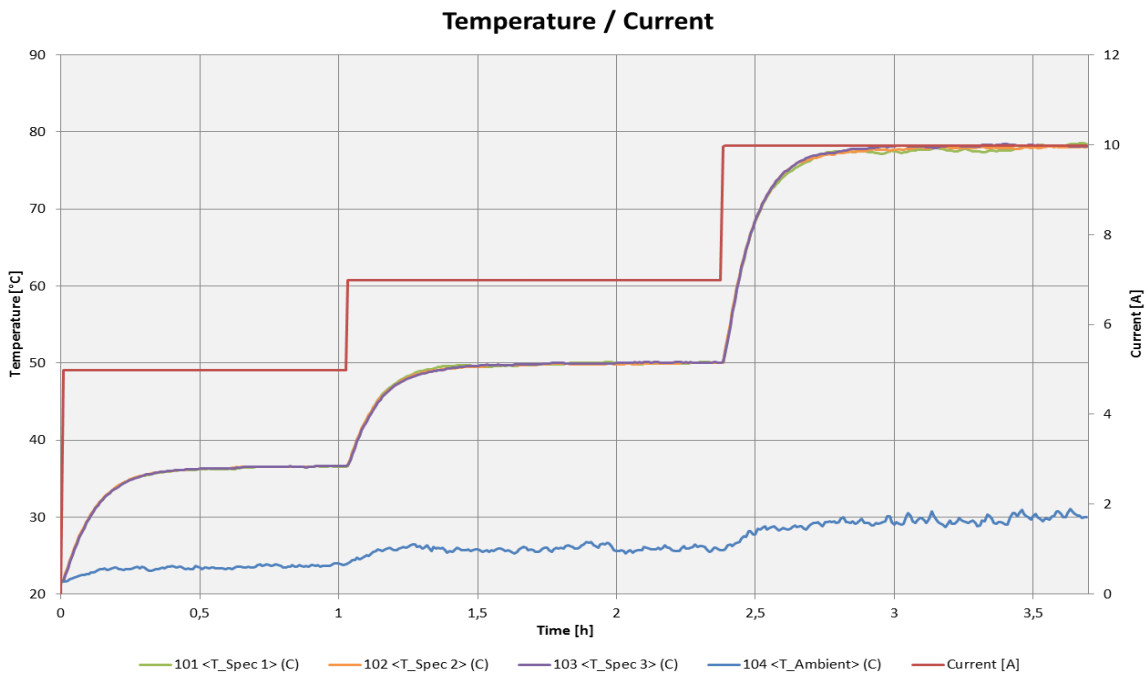
For Tension <42V

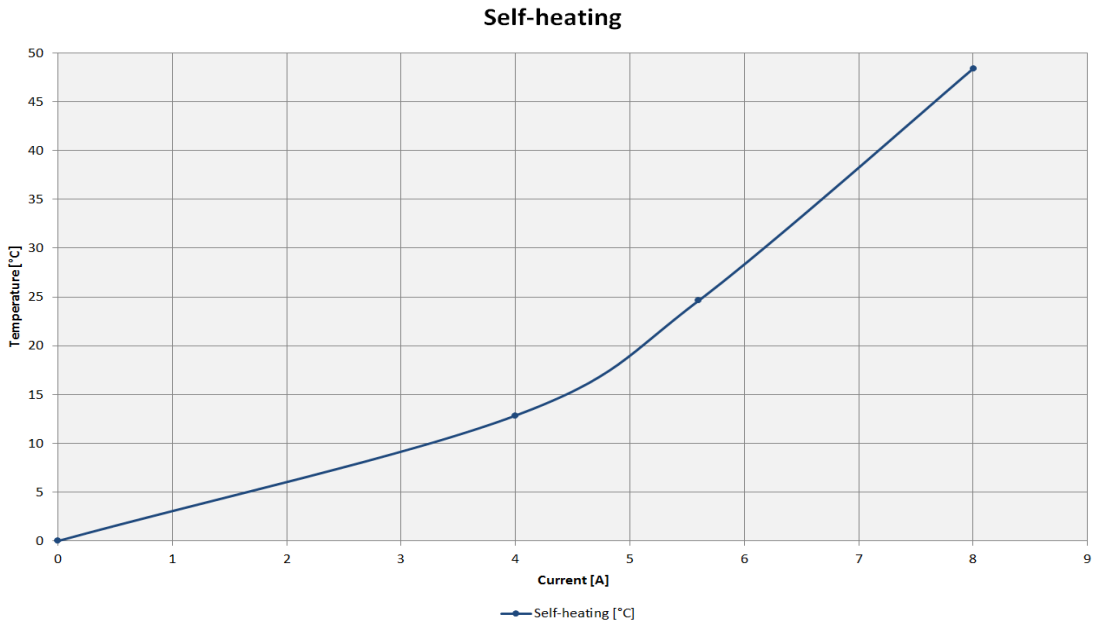
Whithout protection aginst access to live parts

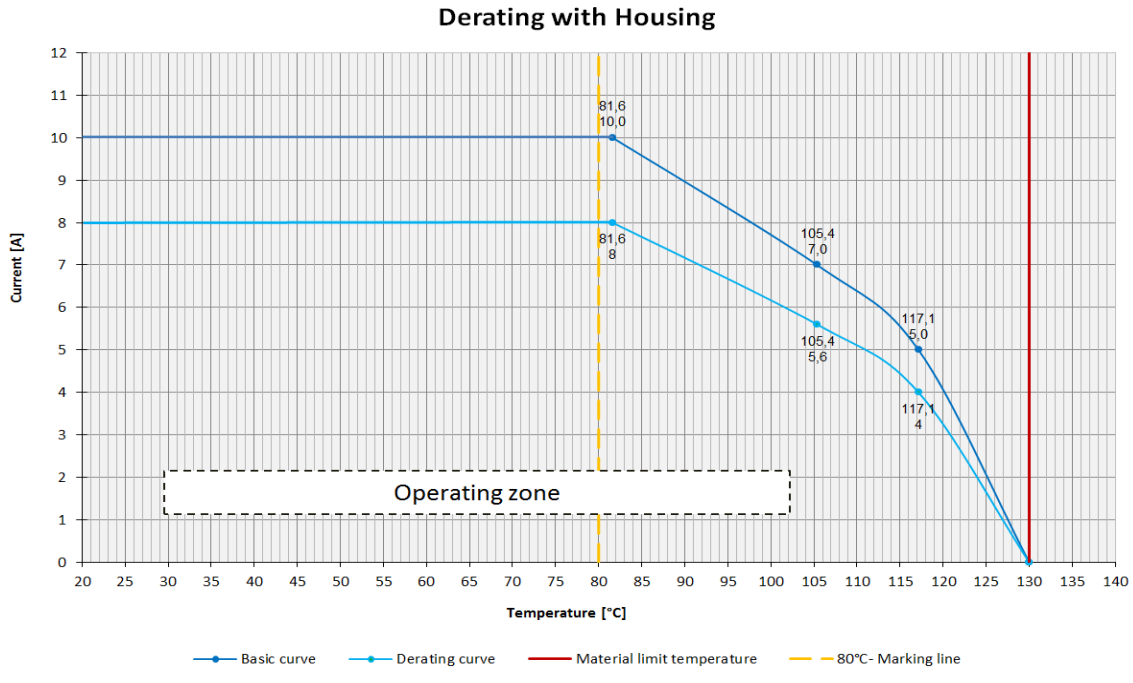


Diagrams:

Housing influence on the derating







Temprature rise