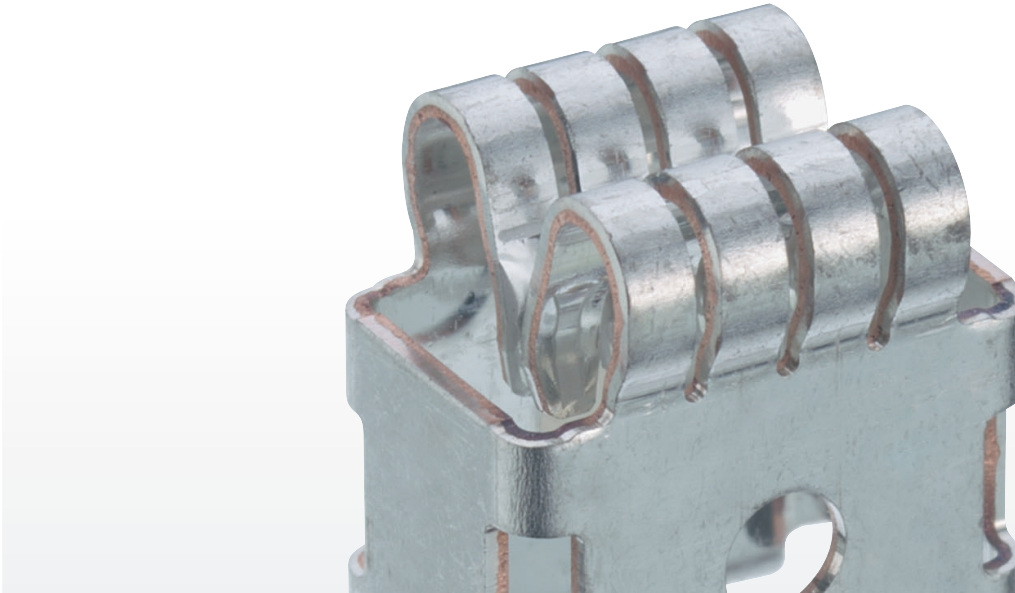
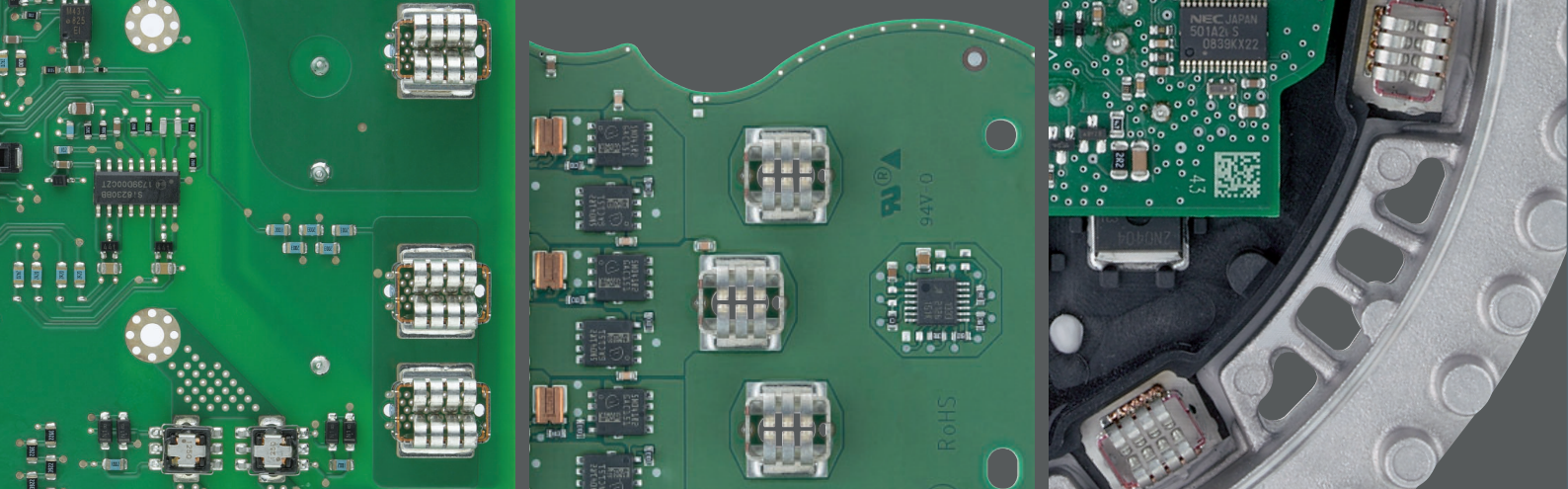




High-Current Contact Elements





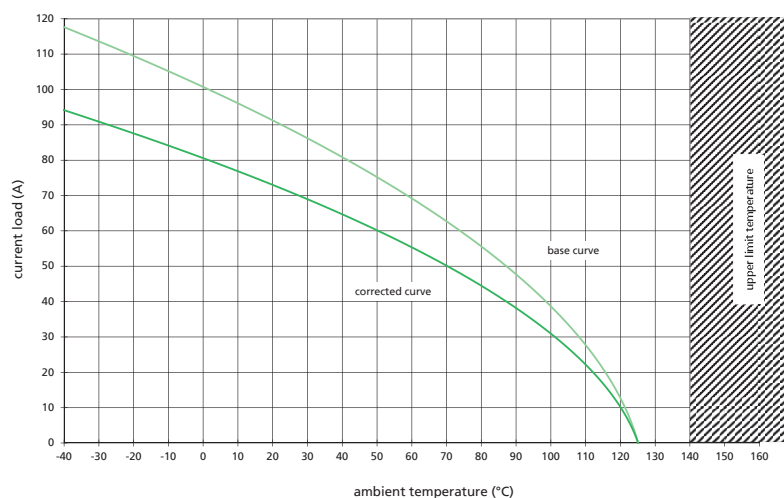
Boom for High-Current Contacts

Lumberg has been producing customized high-current contacts for automotive applications for more than 20 years. Millions of these are installed in mechatronic modules and control units in particular, especially in electric vehicles. They are also recommended for use in frequency converters for industrial electric motors.

In tight installation spaces, the versatile and robust high-current contacts – which are particularly space-saving – connect stacked PCBs optimally. The high-current contact is soldered onto the circuit board (SMT or THT) and makes vertical contact with a tab contact on the second circuit board. It can just as easily be laser-welded onto a busbar.

All high-current connectors are compatible with many commercially available tab contacts. The tab contact can be inserted from up to three directions – top, bottom, and side.

Derating curve (example 4580 04, please consult data sheet)





High-Current Contacts

- High-current contact sockets
- Power phase connectors
- For PCBs or busbars
- For load currents up to 200 A



tested acc. to LV 215 and VW 80332

4580 01 OP T0,8
4580 01 MP T0,8
4580 01 SP T0,8



LV 215 and VW 80332 under preparation

4580 03 OP T0,8
4580 03 OP T2,0
4580 03 MP T0,8
4580 03 MP T2,0



LV 215 and VW 80332 under preparation

4580 04 OP T1,0
4580 04 MP T1,0

Mating direction	top, bottom entry or sideways		top or bottom entry	top entry
Positioning pegs	without pin (OP)/ with pin (MP)		without pin (OP)/ with pin (MP)	without pin (OP)/ with pin (MP)
ENVIRONMENTAL CONDITIONS				
Temperature range	-40 °C/+120 °C		-40 °C/+120 °C	-40 °C/+120 °C
MATERIALS				
Contact	CuCr alloy, tin-plated		CuCr alloy, tin-plated	CuNiSi alloy, tin-plated
MECHANICAL DATA				
Mating with	4580 01 OP/MP T0,8 tab contact 2.8–6.8 mm x 0.8 mm (0.5 mm in preperation) 4580 01 SP T0,8 tab contact 2.8–6.8 mm x 0.8 mm OP/MP - applicable for reflow soldering on circuit board and laser welding on busbar SP - applicable for THT-soldering on circuit board		4580 03 ... T0,8 tab contact 5.3–7.2 mm x 0.8–1.5 mm 4580 03 ... T2,0 tab contact 5.3 mm x 1.5–2.0 mm - applicable for reflow soldering on circuit board and laser welding on busbar	4580 04 ... T1,0 tab contact 8.0 mm x 1.0 mm - applicable for reflow soldering on circuit board and laser welding on busbar
Insertion force	top entry side entry bottom entry	32 ± 15 N 18 ± 10 N 32 ± 15 N	4580 03 ... T0,8 tab contact 0.8 mm tab contact 1.0 mm tab contact 1.5 mm 4580 03 ... T2,0 top entry bottom entry	30 ± 10 N 22 ± 10 N 22 ± 10 N 35 ± 10 N 35 ± 10 N 50 ± 10 N
Withdrawal force	top entry side entry bottom entry	32 ± 10 N 15 ± 10 N 32 ± 10 N	6 +10/-3 N	10 ± 5 N
ELECTRICAL DATA (at T _{amb} 20 °C)				
Contact resistance	< 1 mΩ		< 0.5 mΩ	< 0.5 mΩ
Rated current ¹	≤ 56 A		≤ 60 A	75 A (up to 200 A)

¹ depending on the connection to the printed circuit board/busbar, surroundings and heat dissipation

¹ depending on the connection to the printed circuit board/busbar, surroundings and heat dissipation



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