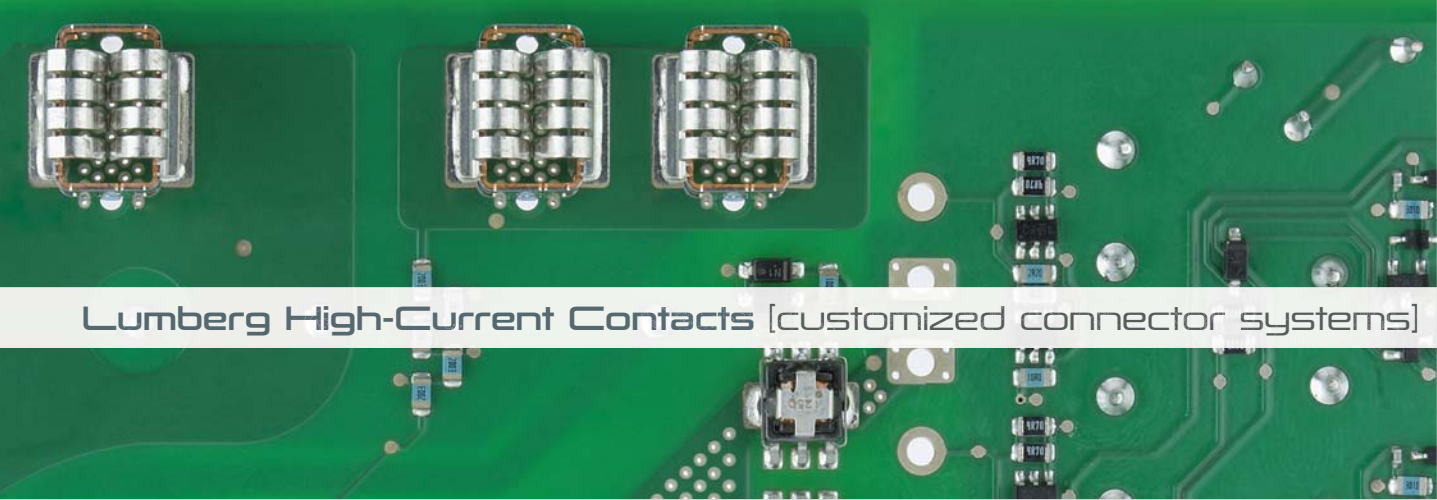


High-Current Contact Elements





Lumberg High-Current Contacts [customized connector systems]

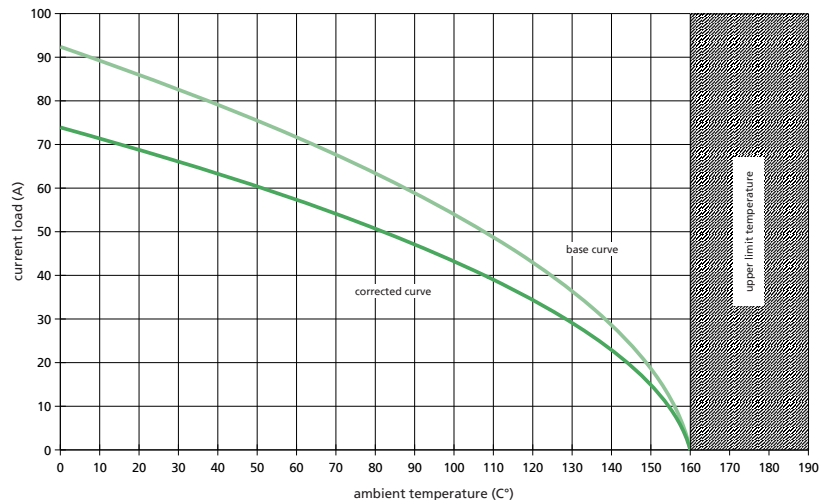
Boom for High-Current Contact Elements

Lumberg has been producing customer-specific high-current contact elements for automotive applications for more than 15 years. These are installed in millions of mechatronic modules and control units, especially in electric vehicles. They are also recommended for use in frequency converters of industrial electric motors.

Particularly in tight installation spaces, these phase contacts optimally connect printed circuit boards lying one above the other. The phase contact soldered to the circuit board – it can just as well be laser-welded to a lead frame – makes vertical contact with a tab contact on the second circuit board.

Our phase contacts with contact surfaces open on both sides are a special feature: Here the tab contact can be plugged either from above – or through the PCB – also from below.

Derating curve (example)





High-Current Contacts

- high-current contact sockets
- power phase connectors
- for PCBs or lead frames



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

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

4580 04 OP T1,0

4580 04 MP T1,0

Mating direction	top or bottom entry	top or bottom entry	top entry	top entry
Positioning pegs	without pin (OP)	with pin (MP)	without pin (OP)	
ENVIRONMENTAL CONDITIONS				
Temperature range	-40 °C/+120 °C	-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	CuNiSi alloy, tin-plated
MECHANICAL DATA				
Mating with	4580...T0,8: tab contact 5.3 mm x 0.8–1.0 mm 4580...T2,0: tab contact 5.3 mm x 2.0 mm - applicable for reflow soldering on circuit board - applicable for laser welding on lead frame		4580...T1,0: tab contact 8.0 mm x 1.0 mm - applicable for reflow soldering on circuit board - applicable for laser welding on lead frame	
Insertion force	4580...T0,8: tab contact 0.8 mm 22 ± 10 N tab contact 1.0 mm 25 ± 5 N 4580...T2,0: top entry 35 ± 10 N bottom entry 50 ± 10 N		≤ 35 N	≤ 35 N
Withdrawal force	6 +10/-3 N	6 +10/-3 N	≥ 5 N	≥ 5 N
ELECTRICAL DATA (at T_{amb} 20 °C)				
Contact resistance	< 0.5 mΩ	< 0.5 mΩ	< 1 mΩ	< 1 mΩ
Rated current ¹	60 A	60 A	80 A	80 A

¹ depending on connection to the printed circuit board/to the lead frame

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