

CompRite™ e-Compressor Terminals

Standard Designs

Setting the standard in e-Compressor Terminals with the most efficient and advanced designs

Why are high quality e-Compressor Terminals so important?

Electric compressors are hermetically sealed and function with their own motor inside, so their compressor terminals are used for power transfer. These compressor terminals must reliably prevent leakage of the refrigerant and enable the transfer of large amounts of energy from the battery to the air conditioning compressor in electric and hybrid electric vehicles.

Utilizing decades of industry expertise, CompRite™ e-Compressor terminals are manufactured using proven hermetic compression Glass-to-Metal Sealing technology. They deliver high performance and excellent durability, even in harsh operating conditions such as extreme temperature, pressure, humidity, and vibration over long periods of time. SCHOTT uses glass, rubber, and / or ceramic as insulation materials to enable superior electric insulation under adverse conditions. High manufacturing accuracy also helps to reliably prevent refrigerant leakage.

Supporting next-generation e-Compressor requirements

SCHOTT's CompRite™ e-Compressor Terminal product range includes fully optimized standard designs for 200 – 500 V, typically used in electric vehicles. In addition, SCHOTT offers e-Compressor Terminals with superior insulation resistance, ideal for high voltage (800 V or more) requirements to enable quick charging technology. Thanks to high current capabilities up to 150 A, our terminals also support 48 V battery systems. Furthermore, SCHOTT can optimize terminal designs to support R744 (CO₂) refrigerants, which require high pressure resistance.

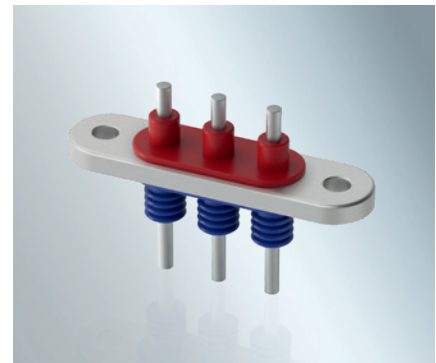
SCHOTT also offers standard solutions or can design and manufacture customized options to meet specific requirements. Our CompRite™ e-Compressor Terminals production facilities are IATF (TS 16949) certified.



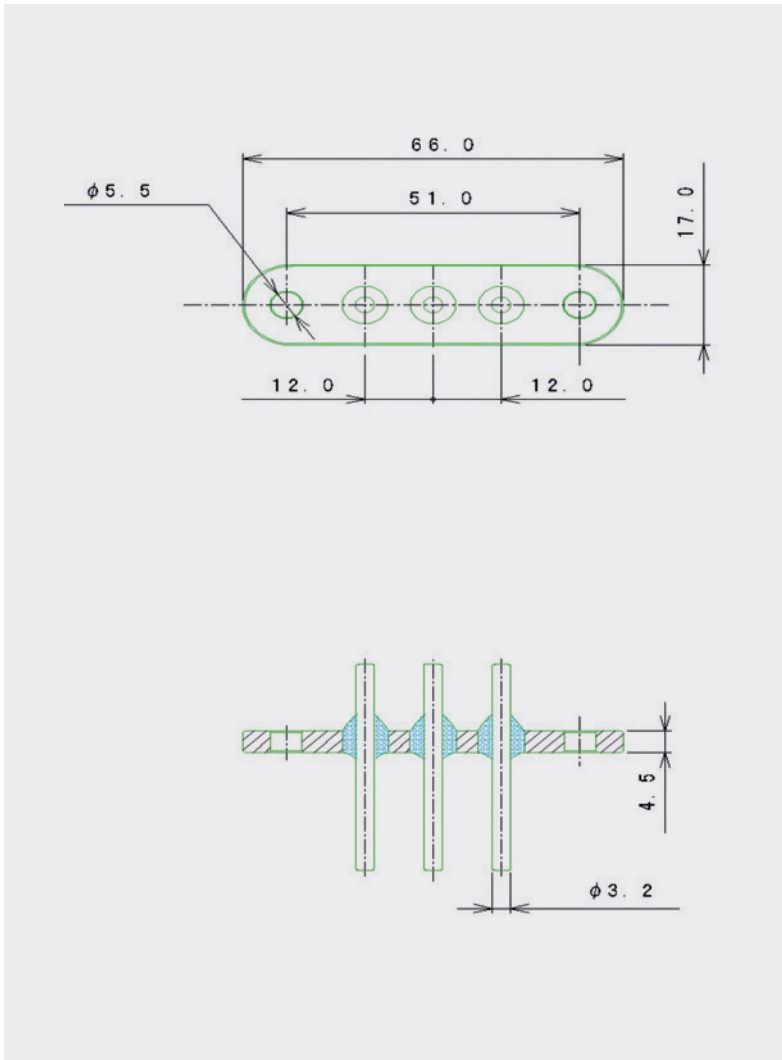
For 24 – 48 V applications
requiring higher currents



For 200 – 500 V applications



For 800 V+ applications



This drawing is for 200 – 500 V.

Typical properties

- Insulation Resistance: 1000 MΩ min. at DC 500 V
- Pressure Resistance (air): 4.0 MPa
- Control of eyelet surface roughness: Ra 1.6, Rz 12.5

Materials

- Pin: Fe-Cr, Cr-Cu, Cu cored Fe-Cr
- Eyelet: Fe
- Glass: Soda barium
- Insulation Material: Glass, Rubber, Ceramic

Advantages



High voltage capability
800 V+



High current capability
30 A – 150 A

Typical Configurations

Voltage	Electric Current	Pin Material	Pin Diameter (mm)	Insulation material Rubber/Ceramic
24 V – 48 V	80 A – 150 A	Cr-Cu	4.0 – 6.0	Optional
200 V – 500 V	Up to 30 A	Fe-Cr	3.2	Optional
	30 A – 50 A	Cu cored Fe-Cr	3.2	Optional
800 V or more	Up to 30 A	Fe-Cr	3.2	Yes
	30 A – 50 A	Cu cored Fe-Cr	3.2	Yes

SCHOTT offers terminal designs that meet exact customer specifications, so please contact us in this regard. e.g. Designs for high voltage (more than 800 V), Designs supporting high current (150 A or higher), Pressure resistance (air) of 20 MPa min, etc.



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