

The Methode EV Charge Coupler Connector



Electric Vehicle Charge Coupler Connector J1772 AC Level 1 & 2

KEY SPECIFICATIONS:

- Complies with SAE J1772 and meets USR & CNR requirements
- PowerBud[®] patented contact technology proven in excess of 10,000 cycles
- Very low insertion and extraction forces
- Secure squeeze-to-release locking mechanism
- Keyed housing ensures proper mating polarity
- Ergonomic contoured grip makes the connector comfortable and easy to use
- Robust strain relief allows flexibility in the cable while maintaining a secure attachment to the connector
- Very flexible cable, even at low temperatures
- Available in custom molded colors

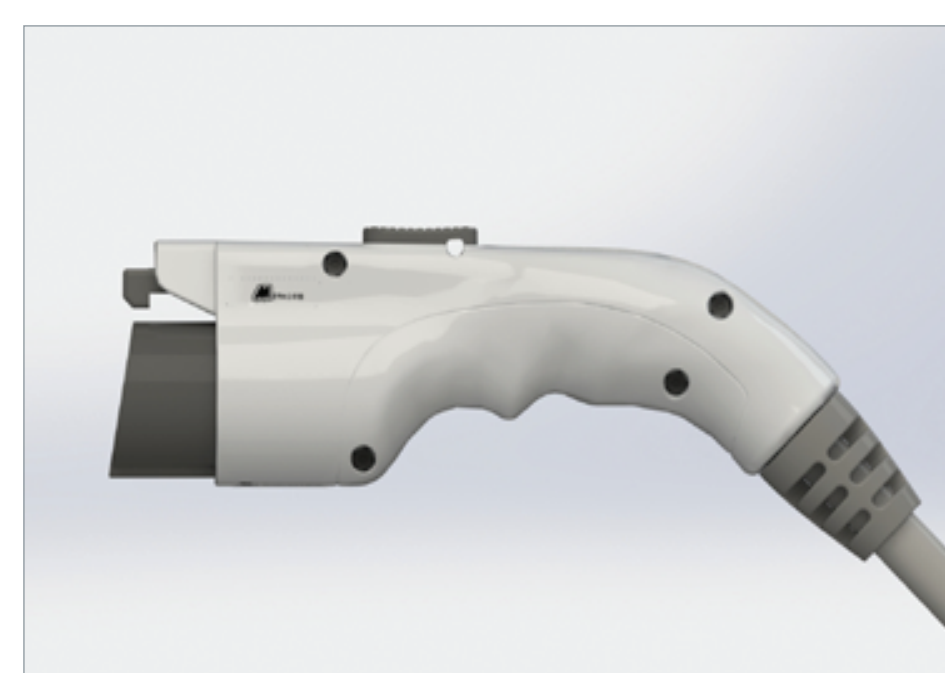
Specifically designed for electric vehicle charging applications, this charge coupler connector mates with sockets conforming to SAE J1772. This connector incorporates Methode's patented PowerBud[®] contact technology which insures very low power contact resistance and a lifetime in excess of 10,000 mating-unmating cycles.



PowerBud[®] patented contact technology features highly redundant points of contact, which efficiently conducts a much higher current with low resistance and low insertion force than similar-sized contacts. The cycle life has been proven in excess of 10,000 cycles.



The Methode J1772 connector has the option for an integrated white LED docking light that allows easy location of inlet when charging in the evening or a dimly lit environment.



The ergonomic contoured grip and strain relief makes the connector comfortable and easy to use. The Methode custom cable remains flexible, even at low temperatures. The cable construction for the 40A and 32A coupler is 3x 10AWG, 1x 18AWG. For the 20A and 16A coupler it is 3x 14AWG, 1x 18AWG. Also available with other types of cable.

EVSE Connector J1772 AC Level 1 & 2

Electrical Specifications

Description	Test Condition	Value/Limits
Current Rating	Power Contacts	32A, 300VAC 40A, 300VAC 20A, 300VAC 16A, 300VAC
	Signal Contacts	2A, 12VDC
Interconnect Resistance	Power Contacts	TBD
	Signal Contacts	TBD

Mechanical Specifications

Description	Test Condition	Value/Limits
Housing	UL 94, 746C	Thermoplastic, V-0, f1
Insertion / Extraction Force		TBD

Environmental Specifications

Description	Test Condition	Value/Limits
Environmental Rating	UL 2251	3S
Temperature Range	Operating	-30°C to +90°C
	Non-operating	-30°C to +90°C
Humidity Range	Operating, non-condensing	10%-90% RH
	Non-operating, non-condensing	5%-93% RH
Altitude	Operating	0 to 2000 meters
	Non-operating	0 to 12,000 meters

Safety and Regulatory Specifications

Description	Test Condition	Value/Limits
Safety	UL 2251, CSA C22.2 No.182.2	Power: 32A, 300VAC 40A, 300VAC 20A, 300VAC 16A, 300VAC
	UL File E346777	Signal: 12VDC, 2 A
Automotive Compatibility	SAE J1772	AC Level 1 & 2
RoHS	IEC Directive 2002/95/EC (Restriction of Hazardous Substances Directive)	< 0.1% Lead (Pb)
		< 0.1% Mercury (Hg)
		< 0.01% Cadmium (Cd)
		< 0.1% Hexavalent Chromium (Cr [VI])
		< 0.1% Polybrominated Biphenyls (PBB)
		< 0.1% Polybrominated Diphenyl Ethers (PBDE)
		< 0.1% Decabromodiphenyl Ether (DecaBDE)