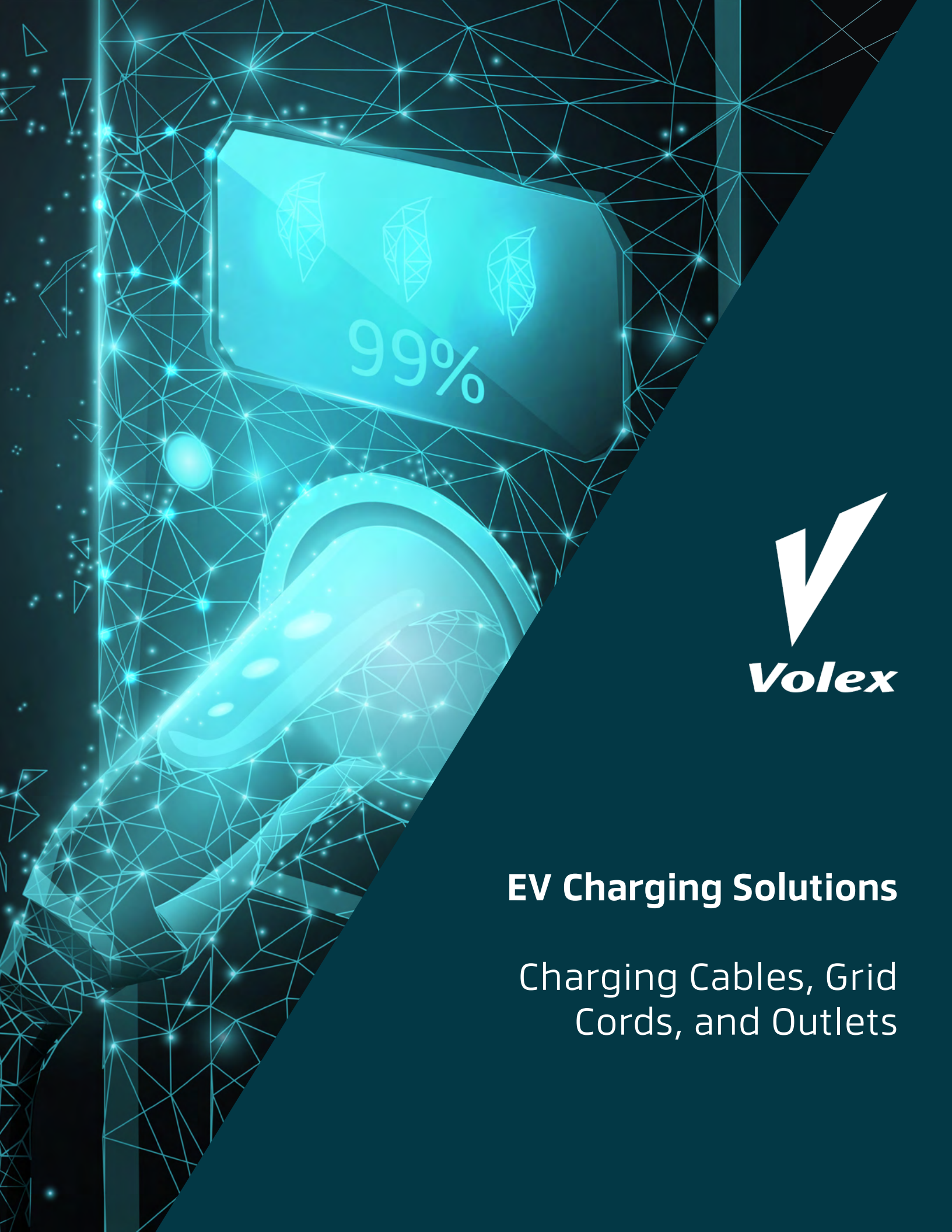




Volex

EV Charging Solutions

Charging Cables, Grid
Cords, and Outlets

Volex is a leading integrated cable manufacturing and electronics manufacturing service specialist for performance-critical applications and power products.

Our products and services are as diverse as the customers we serve. Each helps to enable the increasingly sophisticated digital world in which we live. Providing power and connectivity for both complex machinery and everyday items, from data centre high-speed interconnects and power distribution, radiation oncology treatments, industrial lasers, right through to electric vehicles for the 21st century, Volex is integral to a vast universe of modern manufacturers.



Volex EV charging solutions.

Volex offers EV charging cables that are designed for residential and public charging applications around the globe and have the approvals and certifications relevant for all specific EV market sector and regulatory requirements worldwide.

Through our vertically integrated core competencies across our global manufacturing and production locations, our customers are ensured security of supply as they continue to ramp up volumes to meet EV market demands.

Global reasons for doing business with Volex:

- Total system solution design, manufacturing, and delivery provider
- Tariff-free manufacturing options
- Local engineering and sales support in over 20 countries
- Quick turnaround and customer response time
- Cost competitive without sacrificing performance and quality
- Partnership for mutual benefit

Volex EV charging proposition:

- Regional and country-specific compliance and certifications
- IATF approved manufacturing sites
- Vertical integration solutions
- Automotive standard quality processes and commitment to end user safety
- Engineered solutions for customised application specific requirements
- HALT testing capabilities

EV Charging Modes & Function



Domestic Socket Outlet



Mode 1 - AC Charging

- Standard socket outlet - domestic installation
- 120V AC, 16A max.
- No safety function device
- Not used in Europe, prohibited in U.S.



Domestic Socket Outlet



Mode 2 - AC Charging

- AC household/industrial socket to IC-CPD, IC-CPD to vehicle
- 250V AC (1-Phase), 480V (3-Phase), 32A max.



Public Charging Device



Mode 3 - AC Charging

- AC socket charging device to vehicle OR
- AC e-Mobility termination fixed charging device to vehicle
- 250V AC (1-Phase), 480V (3-Phase), 80A max.



Public Charging Device



Mode 4 - DC Charging

- e-Mobility termination fixed charging device to vehicle
- 1000V DC fast charge up to 300A
- High-power charging cables with optional liquid cooling >600A

Cable Characteristics:

- Compliant with RoHS 2.0 and REACH
- Media resistance
- Abrasion resistance
- Hydrolysis-resistant plastics
- Flame-resistant
- Halogen-free
- Flexible materials
- Flex bend performance

Advantages:

- Global leader in the power cord industry
- Long-standing safety certifications for country-specific approvals
- Customised options available

Volex Cables Have the Following Approvals:



EN 50620 for Europe



GB/T 33594 for China

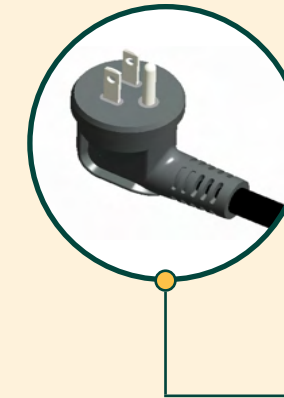


PSE for Japan



UL 62 for North America

EV Vehicle Charging Solutions:



Grid Cords | AC Charging | Worldwide Solutions

- Precision temp sensing embedded on plug end
- IP67/IP68 (SR cable entry and plug interface, mated)
- Operating Temp: -40°C to +90°C
- High durability (UV resistant)
- USCAR38 and USCAR21 compliant terminations
- Custom reliability and EV standards testing

Designed to meet industry standards, regulatory, and country-specific compliance requirements ensuring compatibility with various regional grid plug interfaces



AC Charging Cables | J1772 Type 1 and IEC62196 Type 2

- 32/40A, 48/50A, 63A, & 80A (16A upon request)
- 250V AC, 1-phase and 3-phase
- Tethered and untethered versions available
- CE, UL, VDE approvals
- Terminal interfaces sealed when mated
- IP67 compliant, unmated
- Variants available upon request

Functional, compact housing design with best handling



DC Charging Cables | CCS Type 1 and CCS Type 2

- 125A, 200A, 300A, & 1000V DC
- CE, UL, VDE approvals
- Integrated sensor technology for monitoring
- Efficient power transmission and long-term stability
- Variants available upon request

Ergonomic design for enhanced reliability, functionality and aesthetics



Infrastructure AC Socket Outlets | Mode 3 – EU Type 2

- 32A (1-phase) 250V & (3-phase) 480V
- Integrated temperature sensing and locking actuator for enhanced safety
- Rear-mounted installation
- Protective covers compliant with IP54
- Long term stability with silver-plated contacts

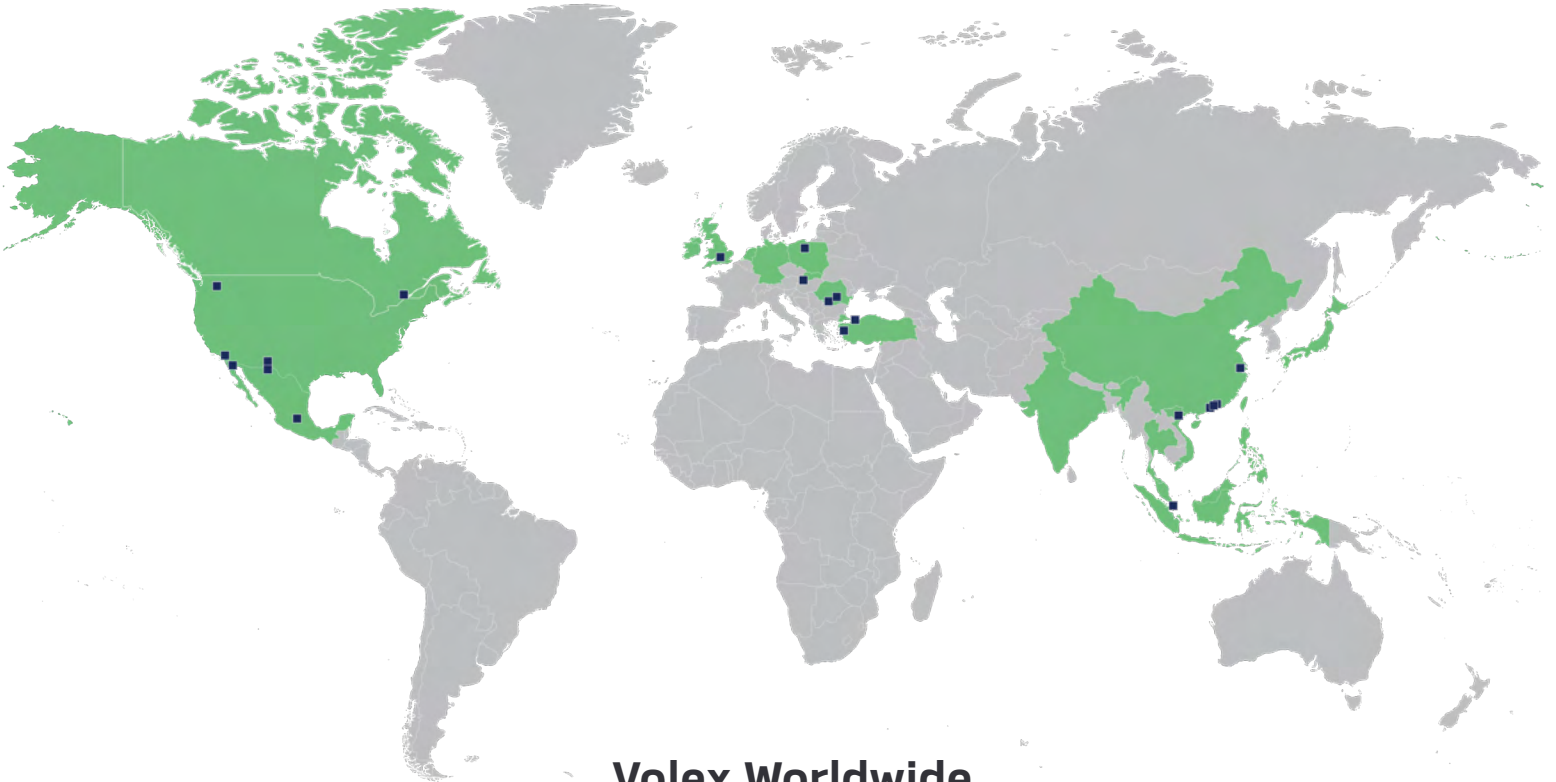
Modular design for uniform, space saving installation

Regulatory	Application	Description	Operating Temperature	Nominal Voltage	Current	Supply	Number of Cores + Cross Section [mm²] / [AWG]	Nominal Outer Diameter [mm]
Europe & China						Europe & China		
EN 50620 GB/T 33594 CQC	AC Charging (Domestic & Public Use)	H07BZ5-F EYU / EYUPU	-40°C to 90°C	450 / 750V AC	1-Phase	max. 13A	3 x 1.5mm² + signal wires (0.5mm²)	9.25
						max. 20A	3 x 2.5mm² + signal wires (0.5mm²)	10.30
						max. 50A	3 x 6.0mm² + signal wires (0.5mm²)	12.75
						max. 63A	3 x 16.0mm² + signal wires (0.5mm²)	18.00
					3-Phase	max. 13A	5 x 1.5mm² + signal wires (0.5mm²)	11.10
						max. 20A	5 x 2.5mm² + signal wires (0.5mm²)	12.70
						max. 50A	5 x 6.0mm² + signal wires (0.5mm²)	15.30
						max. 63A	5 x 16.0mm² + signal wires (0.5mm²)	21.60
	DC Charging (Public Use)	EVDC-REYU	1000V DC	DC Connection	max. 150A	2 x 35.0mm² + 1 x 25.0mm² + signal wires (0.75mm²)	25.90	
max. 200A					2 x 50.0mm² + 1 x 25.0mm² + signal wires (0.75mm²)	28.10		
max. 300A					2 x 70.0mm² + 1 x 35.0mm² + signal wires (0.75mm²)	32.40		
Japan						Japan		
PSE	AC Charging (Domestic & Public Use)	OOC TF/F (TPE)	-40°C to 90°C	450 / 750V AC	1-Phase	max. 12A	3 x 1.25mm² + signal wires (0.5mm²)	8.30
						max. 16A	3 x 2.0mm² + signal wires (0.5mm²)	9.60
						max. 30A	3 x 5.5mm² + signal wires (0.5mm²)	12.20
North America						North America		
UL 62 (UL Recognised)	AC Charging (Domestic & Public Use)	EVE (TPE)	-40°C to 90°C	600V AC	1-phase	max. 40A	3 x AWG10 + signal wires (AWG22)	12.00
						max. 50A	2 x AWG8 + 1xAWG10 + signal wires (AWG22)	14.50
						max. 80A	2 x AWG6 + 1 x AWG8 + signal wires (AWG22)	20.50
UL 62 (UL Listed)		EVJT (PVC) EVJE (TPE)	-40°C to 105°C	300V AC		max. 12A	3 x AWG16 + signal wires (AWG18)	10.50
						max. 16A	3 x AWG14 + signal wires (AWG18)	11.10
						max. 20A	3 x AWG12 + signal wires (AWG18)	12.20
		EVT (PVC) EVE (TPE)		600V AC		max. 40A	3 x AWG10 + signal wires (AWG18)	15.80
						max. 50A	2 x AWG8 + 1 x AWG10 + signal wires (AWG18)	20.90
						max. 80A	2 x AWG6 + 1 x AWG8 + signal wires (AWG18)	24.00
DC Charging (Public Use)	EVE (TPE)	-40°C to 105°C	1000V DC	DC Connection	max. 150A	2 x AWG2 + 1 x AWG3 + signal wires (AWG18)	33.00	
					max. 200A	2 x AWG1 + 1 x AWG3 + signal wires (AWG18)	35.30	
					max. 300A	2 x AWG2/0 + 1 x AWG3 + signal wires (AWG18)	41.80	

*Customised designs available upon request



GLOBAL SUPPORT



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■ Factories / Warehouses ■ Countries / Territories

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