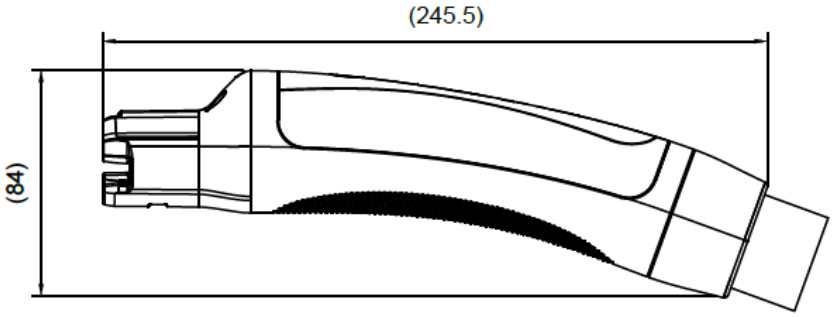
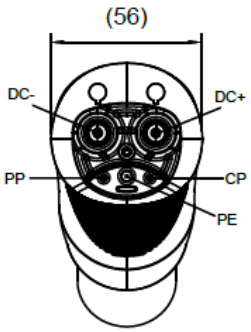
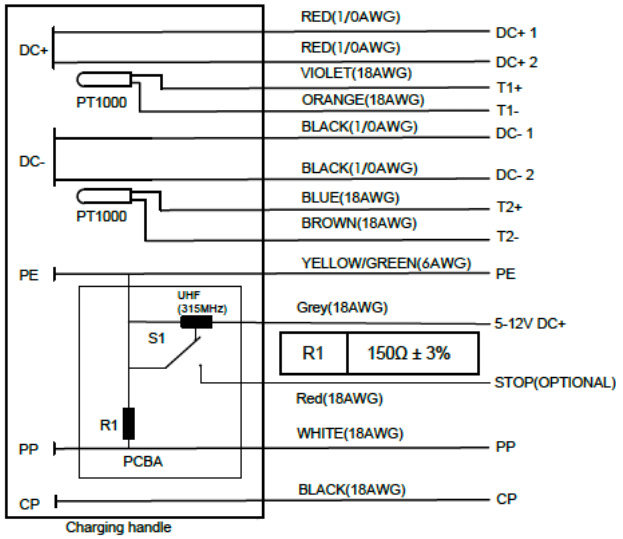
NACS 150 / 250 / 375A
DC Charging Cable

PRODUCT DEFINITION			
Charging Standard	SAE J3400		
Approvals & Certification	UL 2251, CSA C22.2 NO. 282		
DIMENSIONS CHARGING CONNECTOR			
Width	56 mm		
Height	84 mm		
Depth	245.5 mm		
Cable Length & End Treatment	5.5 m, 6.1 m, 7.6 m or On Request		
AMBIENT CONDITIONS			
Ambient Temperature (Operation)	150A / 250A	375A	
	-40°C to +50°C	-40°C to +55°C	
Ambient Temperature (Storage / Transport)	-40°C to +105°C		
Max. Altitude	4,000 m (above sea level)		
Operating Humidity	Up to 95% RH, Condensing		
UV Resistance	F1 per UL 746C		
Degree of Protection (Unmated)	Type 4 / IP67		
Flammability Rating	UL 94 V-0		
ELECTRICAL PROPERTIES			
Number of Phases	DC		
Rated Voltage for Power Contacts	1,000V DC		
Rated Current for Power Contacts	150A	250A	375A
Maximum Charging Power	150 kW	250 kW	375 kW
Number of Power Contacts	3 (DC-, DC+, PE)		
Temperature Sensor Type	2 NTC or 2 x Pt1000		
Temperature Sensor Threshold	90°C		
Number of signal contacts	2 (CP, PP)		
Note on the Connection Method	Crimp Termination (cannot be disconnected)		
Resistor Coding (between PE and CS)	150 Ω		
UHF Transmitter (Optional)	Silicon Labs Si4010-C2-ATR		
UHF Transmitter Frequency (Optional)	315 MHz		
UHF Transmitter Voltage (Optional)	3-4V or 5-12V		
MECHANICAL PROPERTIES			
Mating Cycles	> 10,000		
Insertion Force	< 90 N		
Withdrawal	< 90 N		
Rated Drop Resistance	200 Drops		

NACS DC MECHANICAL DRAWING







MATERIAL		DESIGN	
Material Housing / Handle Area	Plastic	**Housing / Handle Area Colour**	Black
Material Mating Face	Plastic	**Mating Face / Locking Lever Colour**	Black
Flammability Rating	V-0	**Housing with Customer Logo**	On Request
Material Contacts	Cu-Alloy		

CABLE

CABLE IS UL-R (SET APPROVAL IS REQUIRED WHEN USING EVC CABLE)

AMPERAGE	CABLE STRUCTURE	CABLE O.D.
150A	EVC 5 x 5 AWG + 8 x 18 AWG	27 mm
250A	EVC 4 x 3 AWG + 2 x 8 AWG + 8 x 18 AWG	30 mm
375A	EVC 4 x 1/0 AWG + 1 x 6 AWG + 8 x 18 AWG	36.5 mm

CABLE RESISTANCE AT 20°C

1/0 AWG	3 AWG	5 AWG	6 AWG	8 AWG	18 AWG
≤ 0.351 Ω/km	≤ 0.70 Ω/km	≤ 1.11 Ω/km	≤ 1.40 Ω/km	≤ 2.23 Ω/km	≤ 22.4 Ω/km

Cable Standard	UL 2263
Type of Conductor	Per Above Construction
Outer Sheath Material	TPE
Outer Sheath Colour	Black

ENVIRONMENTAL PRODUCT COMPLIANCE	
REACH SVHC	Compliant
China RoHS	Compliant
EU RoHS	Compliant

Contact us at **sales@volex.com**
for assistance in finding the right solution for your needs.