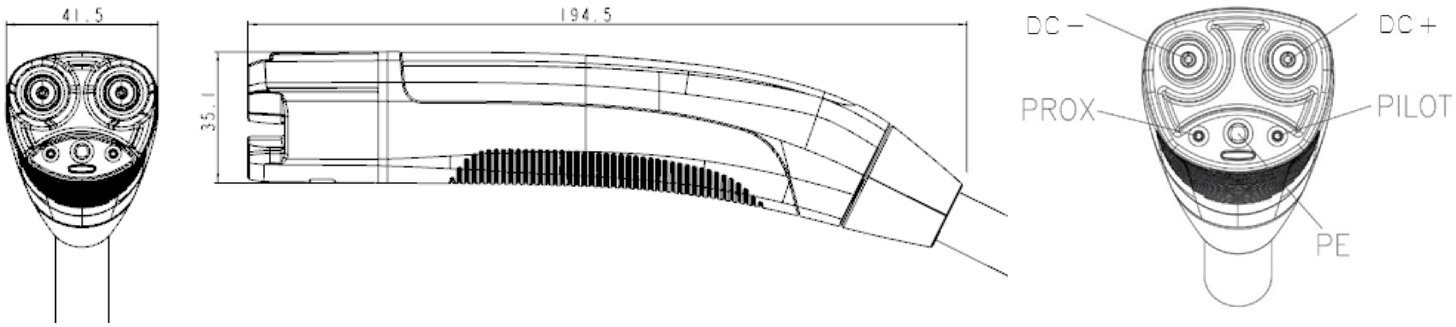
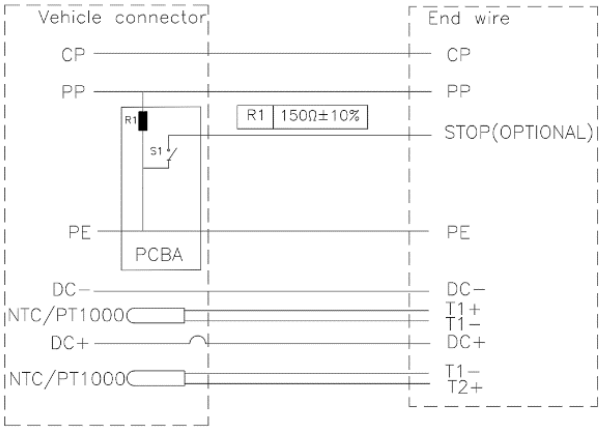
NACS 80A DC
Charging Connector + Charging Cable

PRODUCT DEFINITION	
Charging Standard	SAE J3400
Approvals & Certification	UL 2251, CSA C22.2 NO. 282
DIMENSIONS CHARGING CONNECTOR	
Width	41.5 mm
Height	35.1 mm
Depth	194.5 mm
Cable Length & End Treatment	5.5 m, 6.1 m, 7.6 m or On Request
AMBIENT CONDITIONS	
Ambient Temperature (Operation)	-40°C to +50°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
ELECTRICAL PROPERTIES	
Number of Phases	DC
Rated Voltage for Power Contacts	1,000V
Rated Current for Power Contacts	80A
Maximum Charging Power	80 kW
Number of Power Contacts	3 (DC+, DC-, PE)
Temperature Sensor Type	2 * NTC or 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
MECHANICAL PROPERTIES	
Mating Cycles	> 10,000
Insertion Force	< 90 N
Withdrawal	< 90 N
Rated Drop Resistance	200 Drops
Replaced component	HV Terminal & Plug Head

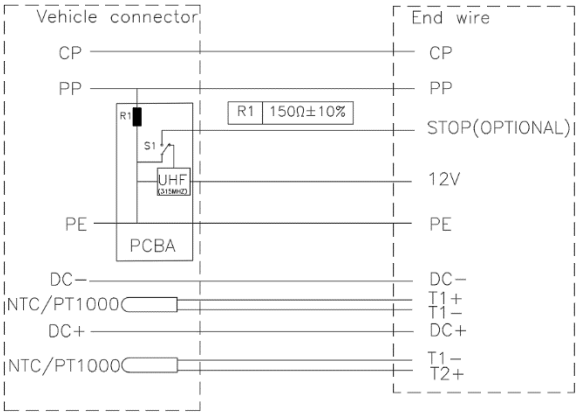
NACS DC MECHANICAL DRAWING



CONNECTION DIAGRAM:



CONNECTION DIAGRAM:



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.
80A	EVC 2 x 6 AWG + 1 x 8 AWG + 8 x 22 AWG	19.1 mm

CABLE RESISTANCE AT 20°C

6 AWG	8 AWG	22 AWG
≤ 1.4 Ω/km	≤ 2.23 Ω/km	≤ 56.8 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.