



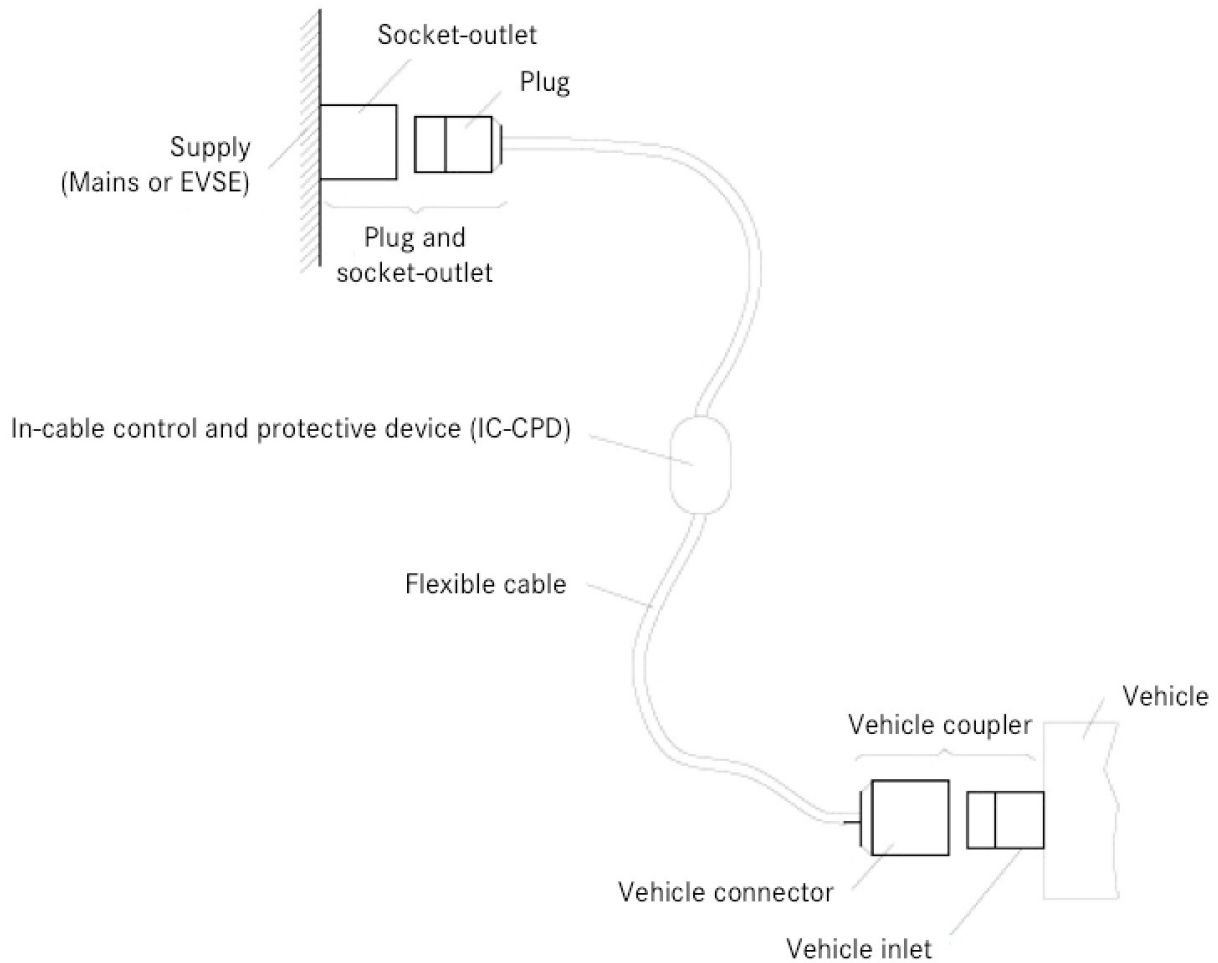
HVCO

High Voltage Coupler Outlet



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IEC STANDARD 62196-2



STANDARD SHEET	
Socket-outlet	Standard sheet 2-IIa
Plug	Standard sheet 2-IIb
Vehicle connector	Standard sheet 2-IIe
Vehicle inlet	Standard sheet 2-IIf



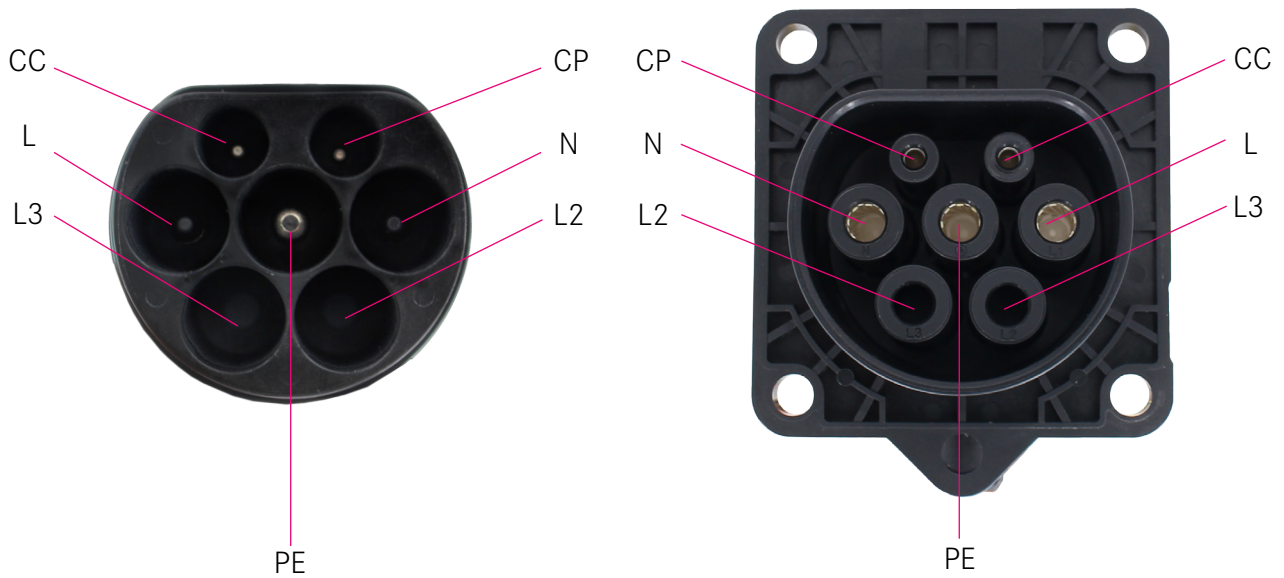
KEY FEATURES:

Compliant with:
IEC 62196-2
IEC 61851-1

High current contacts with
Amphenol Radsok technology

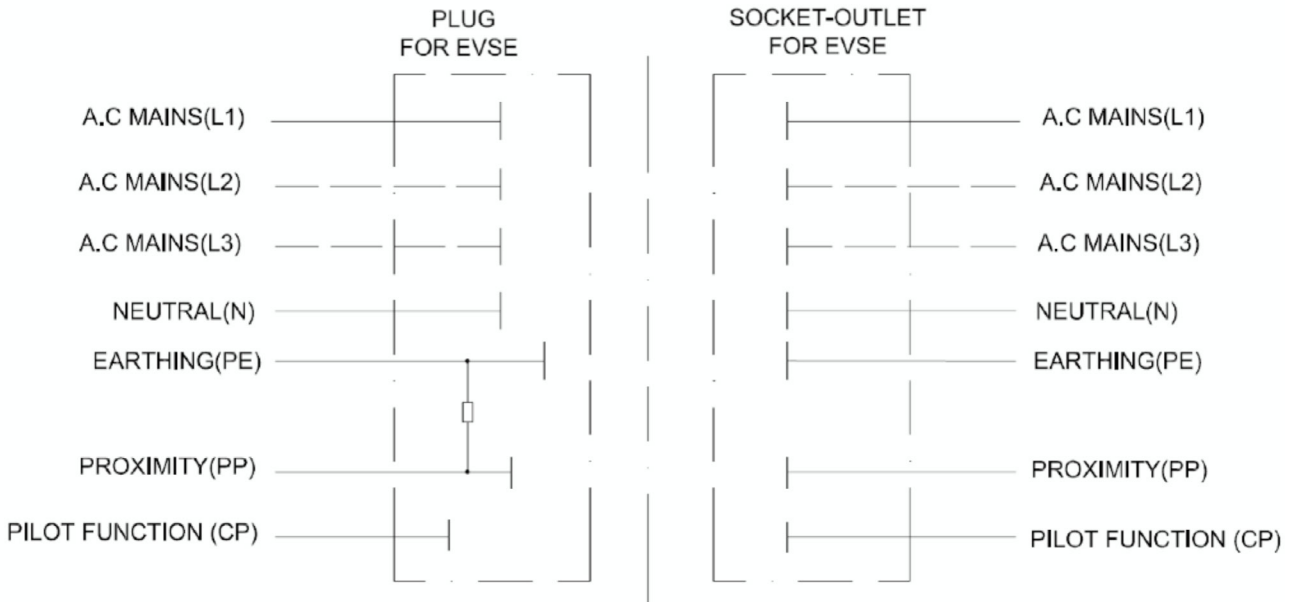
MECHANICAL		
Mating cycles	> 10,000 cycles (unloading)	
Connector (in mated condition) retention force:		
AC coupler	Unmating	100N Max
	Mating	100N Min
ELECTRICAL		
Rated current	63A Max	
Rated voltage	250V/480V AC	
Contact resistance	0.5MΩ Max	
Insulation resistance	>100MΩ (DC500V)	
ENVIRONMENTAL		
Protection degree	IP55 (mated)	
Operating ambient temperature	-30°C to 50°C	
MATERIAL		
Shell	Thermoplastic	
Contact	Copper alloy, silver or nickel plating	
Inserts	Thermoplastic	
Sealing gasket	Rubber or silicon rubber	
Insulator inflammability	UL94V0	

INSERT ARRANGEMENTS

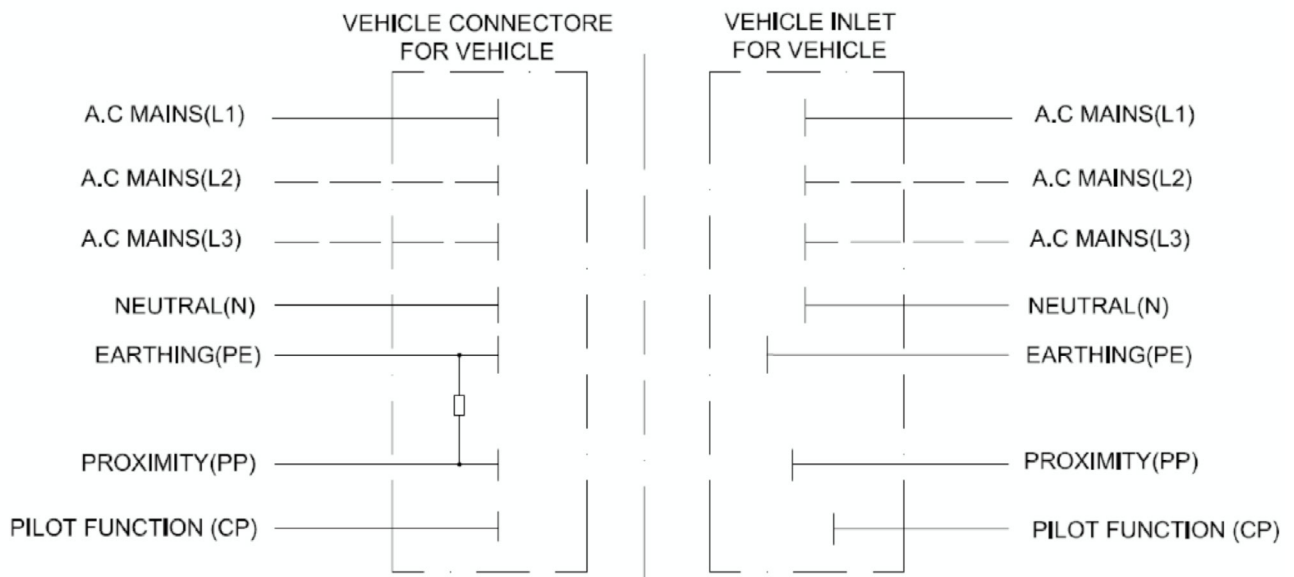


A.C.		Functions
1-Phase	3-Phase	
250V (16A), 20A, 32A	480V 16A, 20A, 32A	L1 (Mains 1)
-	480V 16A, 20A, 32A	L2 (Mains 2)
-	480V 16A, 20A, 32A	L3 (Mains 3)
250V (16A), 20A, 32A	480V 16A, 20A, 32A	N (Neutral)
Rated for fault		PE (Protective Ground/Earth)
30V 2A		CP (Control pilot)
30V 2A		PP (Proximity)

Circuit diagram for EVSE charging coupler



Circuit diagram for vehicle coupler



AC TYPE 2 COUPLER FOR EVSE SIDE

Socket-outlet



Part Number (without cable)		
16/20A	1-Phase	HVCOIFSR6SS502L0000
16/20A	3-Phase	HVCOIFSR6SS702L0000
32A	1-Phase	HVCOIFSR6SF510L0000
32A	3-Phase	HVCOIFSR6SF710L0000
63A	1-Phase	HVCOIFSR6SF516L0000
63A	3-Phase	HVCOIFSR6SF716L0000

Compliant with IEC 62196-2 standard 2-II a.

Configuration:

250V | (16A), 20A, 32A or 63A | 1-phase

480V | (16A), 20A, 32A or 63A | 3-phase

Electronic lock and Solenoid lock both available

3 positions (120° rotatable):

4 o'clock, 8 o'clock, 12 o'clock

More features:

Protection cap, water drainage design, rear mount

Plug



Part Number (without cable)		
16/20A	1-Phase	HVCOIMASR6PS502L0000
16/20A	3-Phase	HVCOIMASR6PS702L0000
32A	1-Phase	HVCOIMASR6PF506L0000
32A	3-Phase	HVCOIMASR6PF706L0000

Compliant with IEC 62196-2 standard sheet 2-II b.

Configuration:

250V | 16A/20A, or 32A | 1-phase

480V | 16A/20A or 32A | 3-phase

AC TYPE 2 COUPLER FOR EV SIDE

Vehicle connector



Part Number (without cable)		
16/20A	1-Phase	HVCOIMAR6PS502L0000
16/20A	3-Phase	HVCOIMAR6PS702L0000
32A	1-Phase	HVCOIMAR6PF506L0000
32A	3-Phase	HVCOIMAR6PF706L0000

Compliant with IEC 62196-2 standard sheet 2-II e.

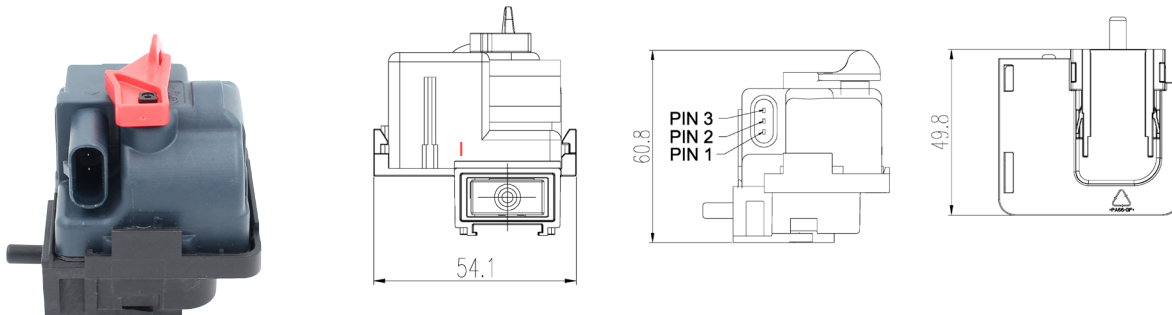
Configuration:

250V | 16A/20A or 32A | 1-phase

480V | 16A/20A or 32A | 3- phase

LOCKING ACTUATOR

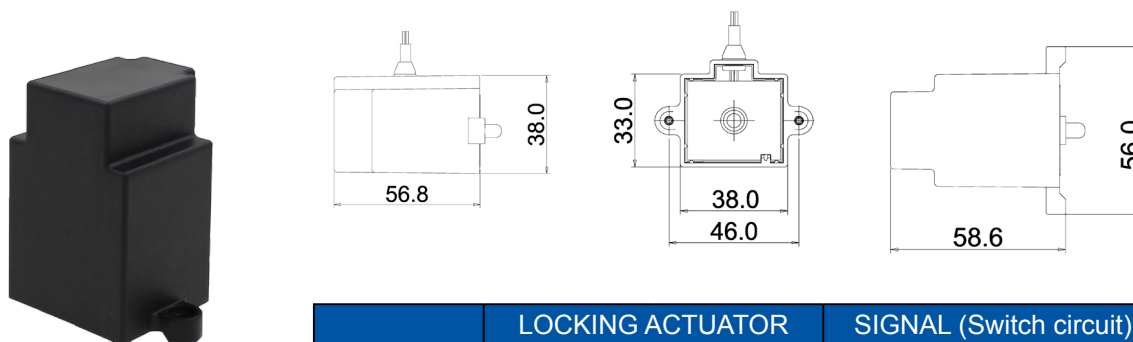
Electronic lock



P/N: HVCOACSELOCKH

E-LOCK	PIN 3	PIN 1	PIN 2 SIGNAL
UNLOCKING	+12V DC	-	
LOCKING	-	+12V DC	SIGNAL

Solenoid lock

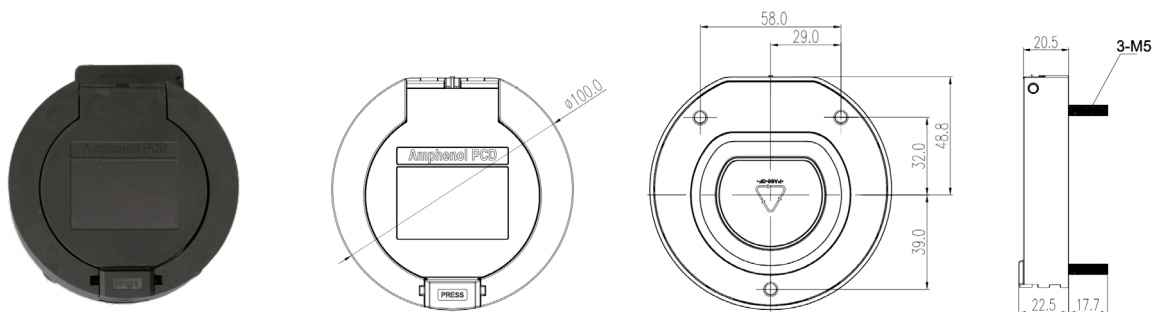


P/N: HVCOACSELOCKS

	LOCKING ACTUATOR		SIGNAL (Switch circuit)	
	Black	Yellow	Red	White
Lock	+12V	0V	Up to 250V AC	
Unlock	0V		0V	
Current	Initial current: 0.5A		0.1A	

PROTECTION CAP

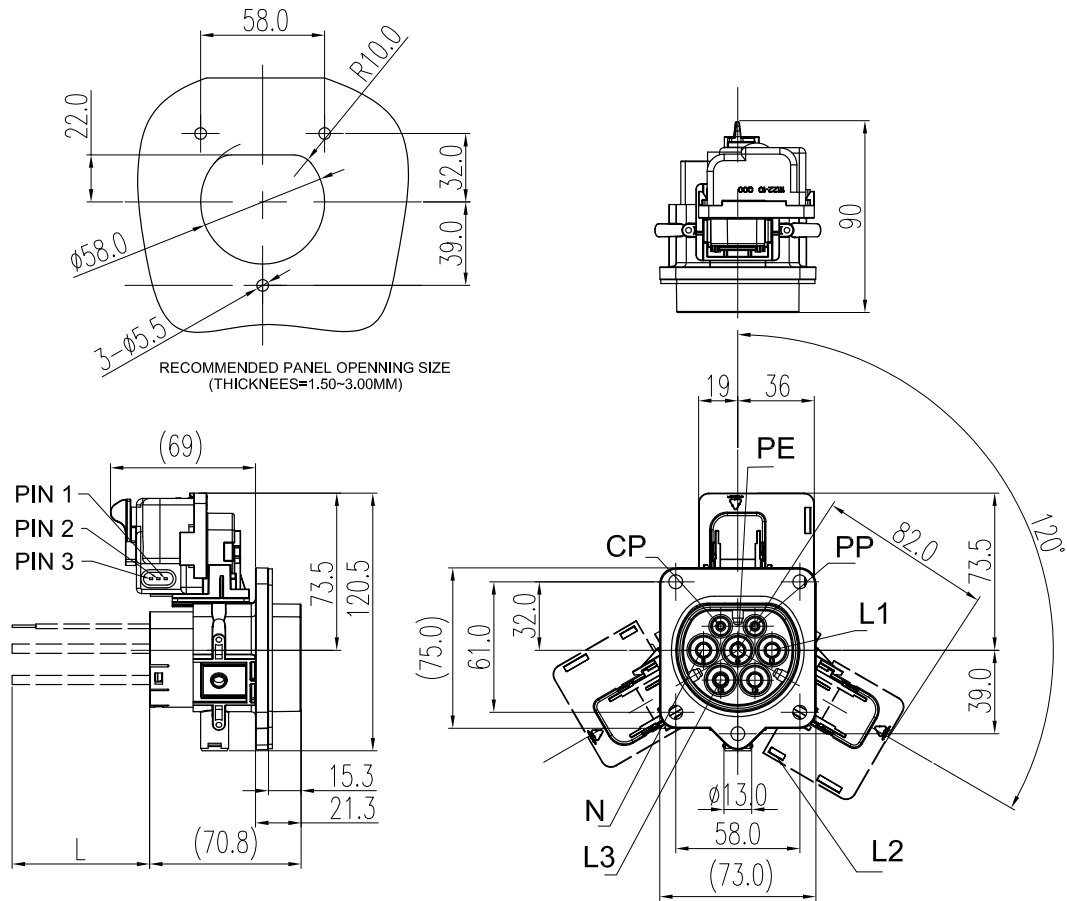
Protection cap with hinged lid



P/N: HVCOILIDA

SOCKET OUTLET DIMENSIONS

Socket-outlet with electronic lock



12 o'clock



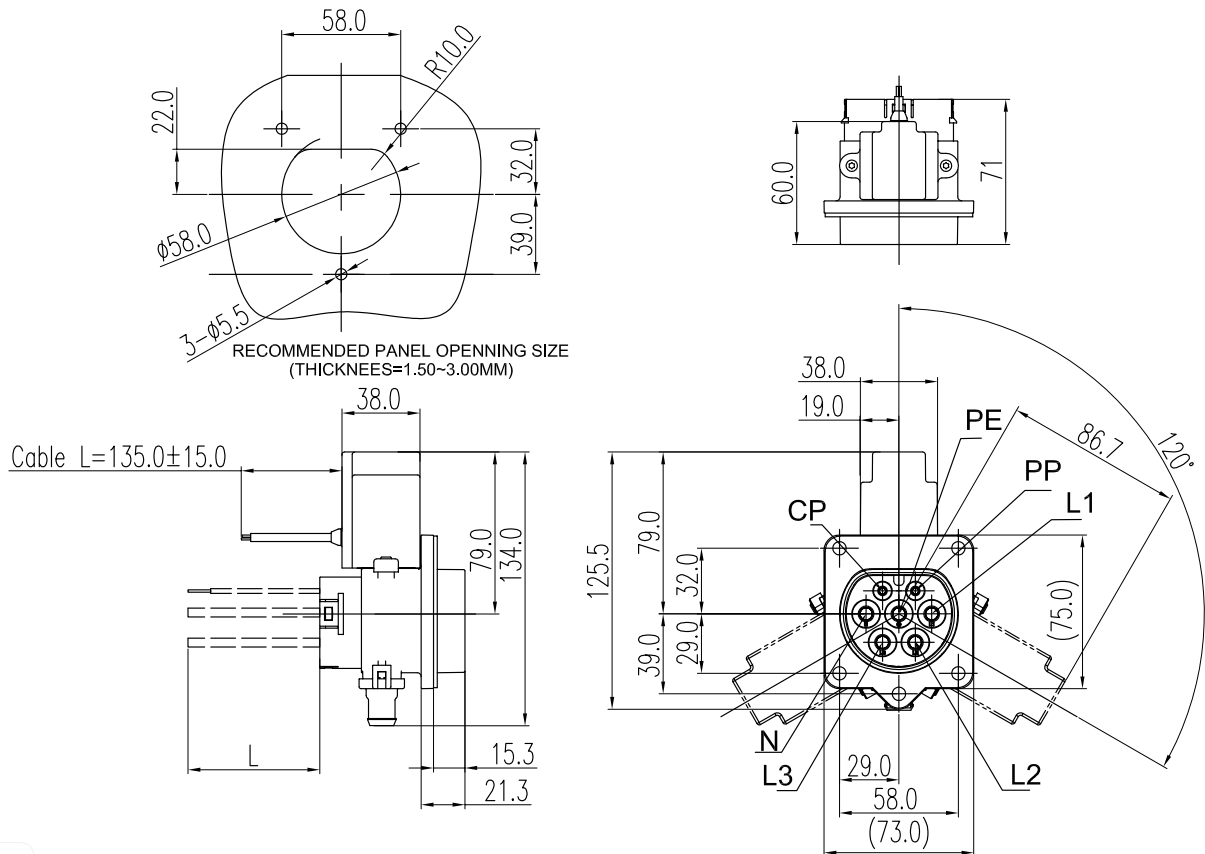
8 o'clock



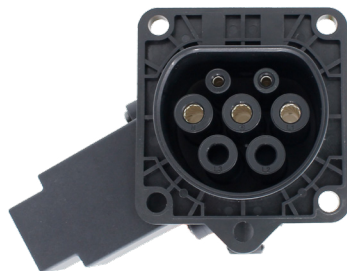
4 o'clock

SOCKET OUTLET DIMENSIONS

Socket-outlet with solenoid lock



12 o'clock

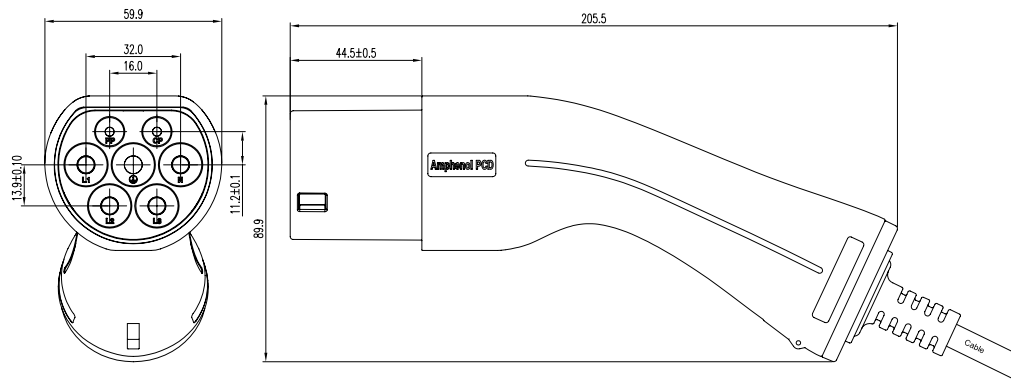


8 o'clock

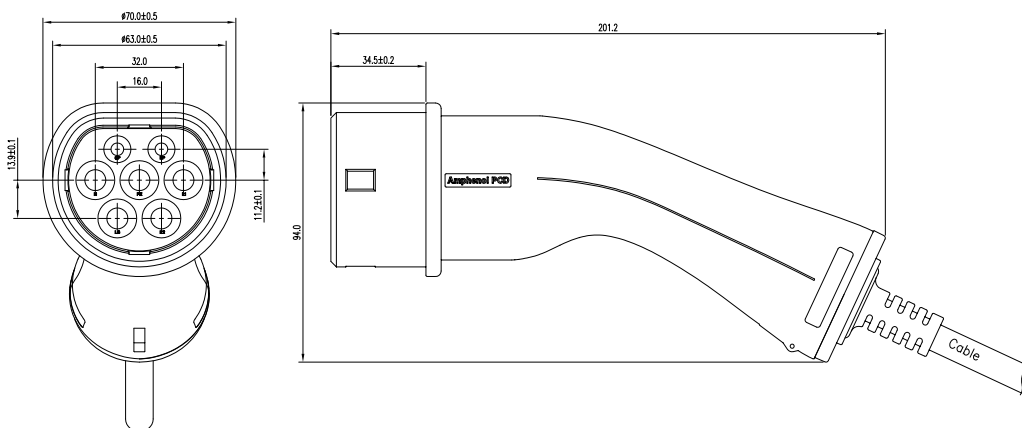


4 o'clock

PLUG DIMENSIONS (EVSE)



VEHICLE CONNECTOR DIMENSIONS

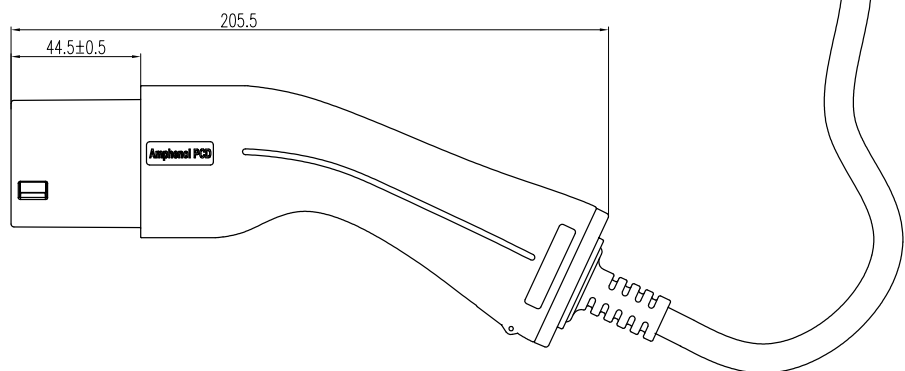
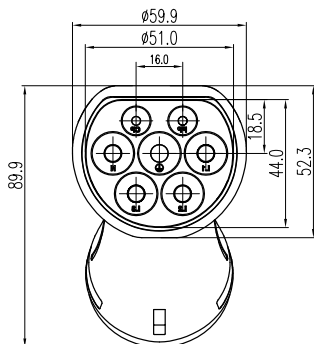
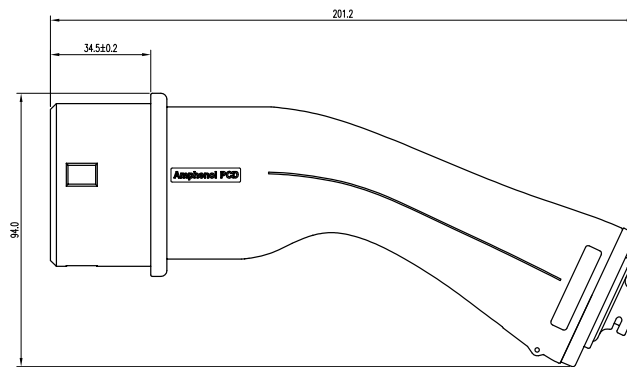
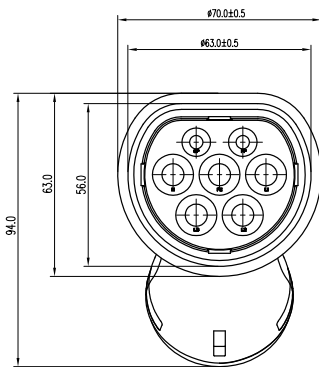


VEHICLE CONNECTOR (EV) + PLUG (EVSE) DIMENSIONS



Part Number (without cable)		
16/20A	1-Phase	HVCOIMASCR6PS502LXXXX
16/20A	3-Phase	HVCOIMASCR6PS702LXXXX
32A	1-Phase	HVCOIMASCR6PF502LXXXX
32A	3-Phase	HVCOIMASCR6PF702LXXXX

LXXXX: Cable length (unit in mm)



HOW TO ORDER

	HVCO	I	M	SC	R6	PSXXX	T	R	W	LXXXX	XXXX
I: IEC Type 2 Charge outlet											
Connector type: M: Plug / Plug + Vehicle connector (see p.12) / Vehicle connector F: Socket-outlet / Vehicle inlet											
S: EVSE coupler (Plug or socket-outlet) SC: Plug + Vehicle connector (see p.12) Omit SC: Vehicle coupler (Vehicle connector or vehicle inlet)											
Contact size: R6: 6mm Radsok, pin contact											
Type of connector and insert arrangements: PSXXX: 20A cable side (Plug Slow / Vehicle connector Slow) PFXXX: 32A cable side (Plug Fast / Vehicle connector Fast) SSXXX: 20A panel side (Socket-outlet Slow / Vehicle inlet Slow) SFXXX: 32A cable side (Socket-outlet Fast / Vehicle inlet Fast)											
Temperature sensor: T: Temperature sensor Omit: No temperature sensor needed											
R: Resistor inside the plug / vehicle connector Omit: No resistor needed											
W: Protection tube Omit: No protection tube needed											
Cable length: LXXXX: Cable length (Unit in mm) Omit: No cable needed											
Cable accessories: XXXX: Cable accessories or customer code											

HVCO IEC COMBO - TECHNICAL CHARACTERISTICS



KEY FEATURES:

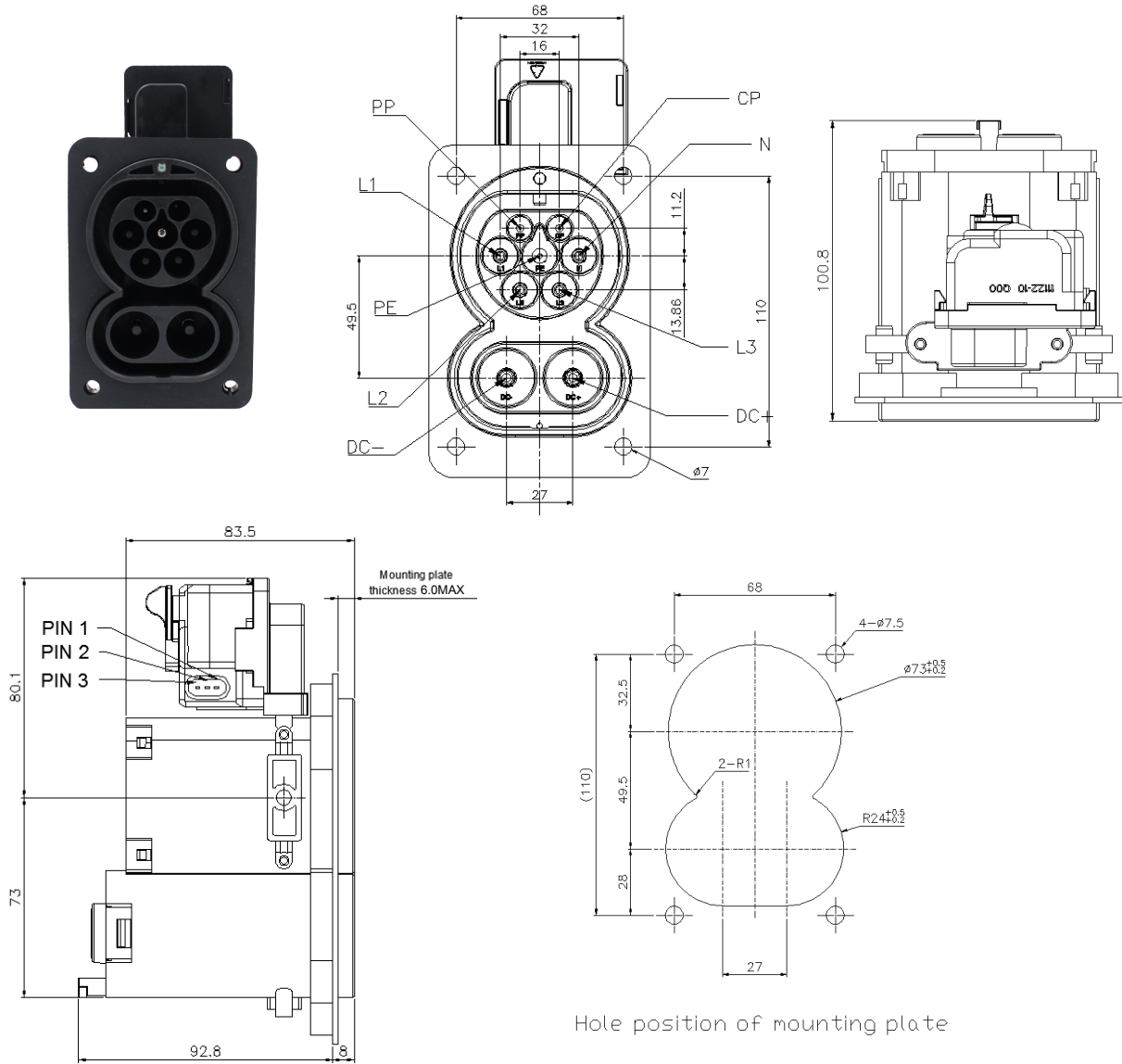
Compliant with:
IEC 62196-2
IEC 62196-3

High current contacts with
Amphenol Radsok technology

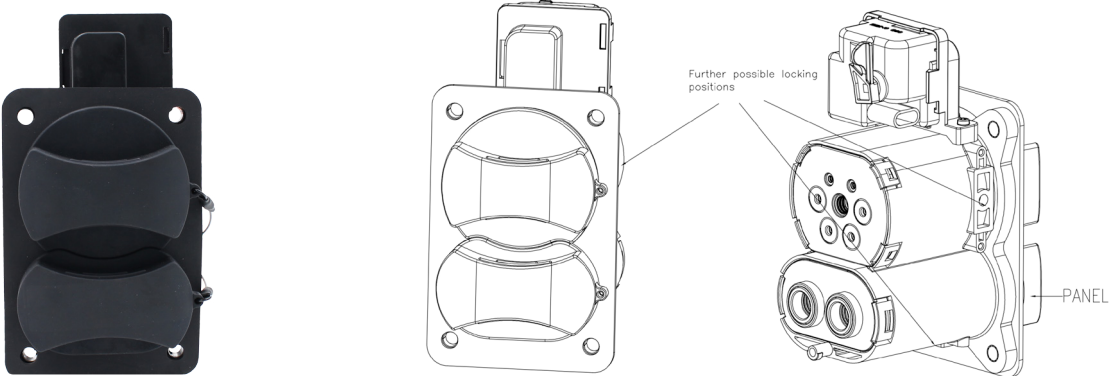
MECHANICAL		
Mating cycles	> 10,000 cycles (unloading)	
Connector (in mated condition) retention force:		
AC coupler	Unmating	100N Max
	Mating	200N Min
DC coupler	Unmating	140N Max
	Mating	200N Min
ELECTRICAL		
Rated current	32A Max (R6) 125A Max (R8)	
Rated voltage	480V Max AC (R6) 1000V/750V Max DC (R8)	
Contact resistance	0.5MΩ Max (R6) 0.35MΩ Max (R8)	
Insulation resistance	>100MΩ	
ENVIRONMENTAL		
Protection degree	IP44 (mated)	
Operating ambient temperature	-30°C to 50°C	
MATERIAL		
Shell	Nylon	
Contact	Copper alloy, silver or nickel plating	
Inserts	Thermoplastic	
Sealing gasket	Rubber or silicon rubber	
Insulator inflammability	UL94V0	

IEC COMBO VEHICLE INLET DIMENSIONS

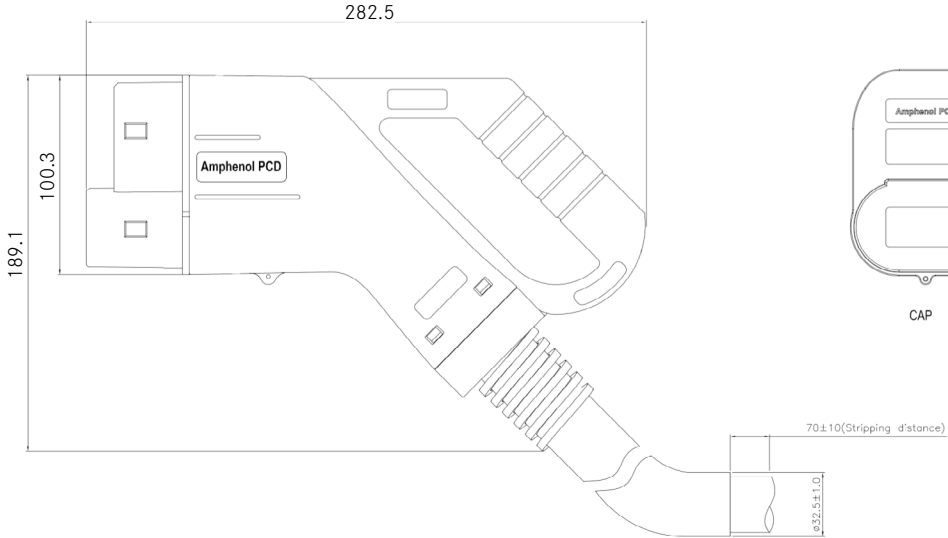
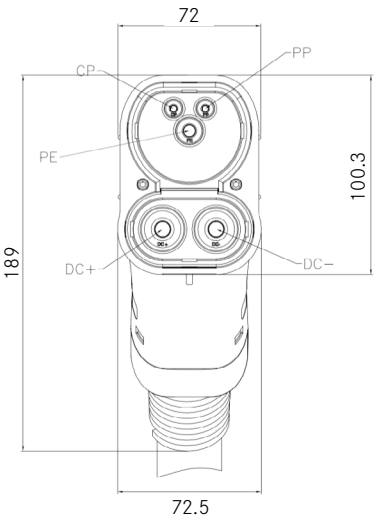
Rear mount without protection cap



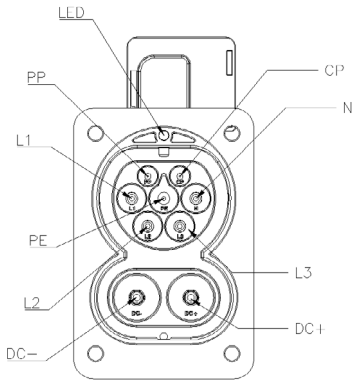
Rear mount with protection cap



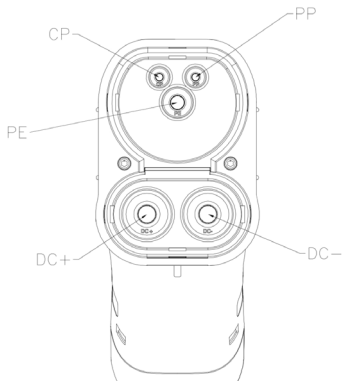
IEC COMBO VEHICLE CONNECTOR DIMENSIONS



IEC COMBO ELECTRICAL SPECIFICATIONS

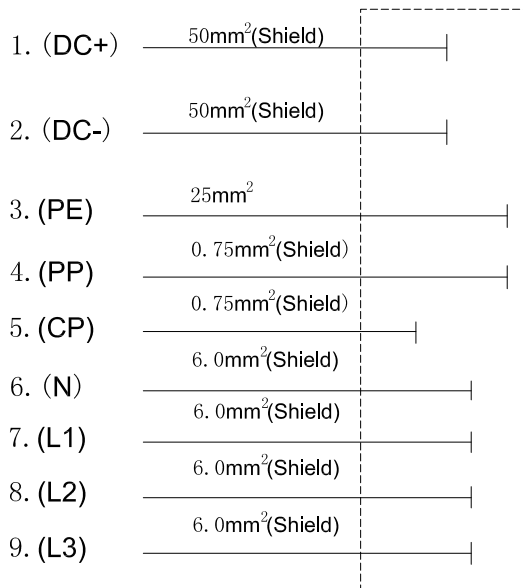


Contacts Number & Function	Rated Voltage & Current	Function
PP	30V 2A	Charging confirmation
CP	30V 2A	Control confirmation
PE	-	PE, connect charging stake and vehicle chassis ground
L1	480V 32A	AC power
L2	480V 32A	AC power
L3	480V 32A	AC power
N	480V 32A	Neutral
DC-	1000V/750V 125A	DC power
DC+	1000V/750V 125A	DC power

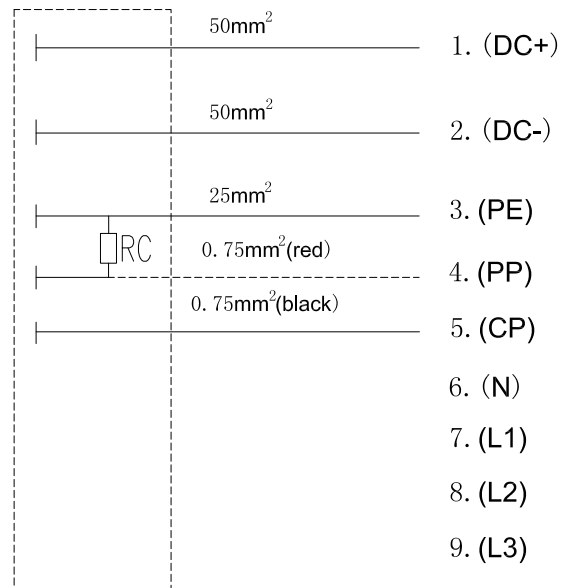


Contacts Number & Function	Rated Voltage & Current	Function
PP	30V 2A	Charging confirmation
CP	30V 2A	Control confirmation
PE	-	PE, connect charging stake and vehicle chassis ground
L1	-	NO PIN
L2	-	NO PIN
L3	-	NO PIN
N	-	NO PIN
DC-	1000V/750V 125A	DC power
DC+	1000V/750V 125A	DC power

CIRCUIT DIAGRAMS



Vehicle inlet



Vehicle connector

HOW TO ORDER

	HVCO	C	M	X	A	R8	SFXXX	LXXXX	XXXX
C: IEC Combo									
Connector type: M: Vehicle connector F: Vehicle inlet									
Power cable size: X: AC + DC (refer to the table below)									
Protection cap: A: Protection cap (only for receptacle)									
Contact size: R8: 8mm Radsok (for vehicle connector) or 8mm pin contact (for vehicle inlet)									
Type of connector and insert arrangements: PFXXX: 32A cable side (Vehicle connector Fast) SFXXX: 32A cable side (Vehicle inlet Fast)									
Cable length: LXXXX: Cable length (Unit in mm) Omit: No cable needed									
Cable accessories: XXXX: Cable accessories or customer code									

Table: Power cable size

Model	No. cables	Max DC	Max AC	Wire mm ²	NO.	DC +	DC -	PE	PP	CP	L1	L2	L3	N
HVCOCF6AR8SF950	9	125A	32A	50	50	50	50	25	0.75	0.75	6	6	6	6
HVCOCMR8PF550	5	125A	N/A	50	50	50	50	25	0.75	0.75	N/A	N/A	N/A	N/A

HOW TO ORDER: Interlock actuator

	HVCO	CB	ELOCK	H
CB: IEC COMBO				
ELOCK: Interlock				
H: Hella electronic lock				

Amphenol PCD Shenzhen

Building 21
1st Liao Keng Industrial Zone
Shi Yan Street, Bao An District Shenzhen 518108
China

Tel.: +86 755-8173-8000
Fax: +86 755-8173-8180
Email: inquiry@amphenolpcd.com.cn

www.amphenolpcd.com.cn

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