

## EXCELMATE CC IEC COMBO - TECHNICAL CHARACTERISTICS



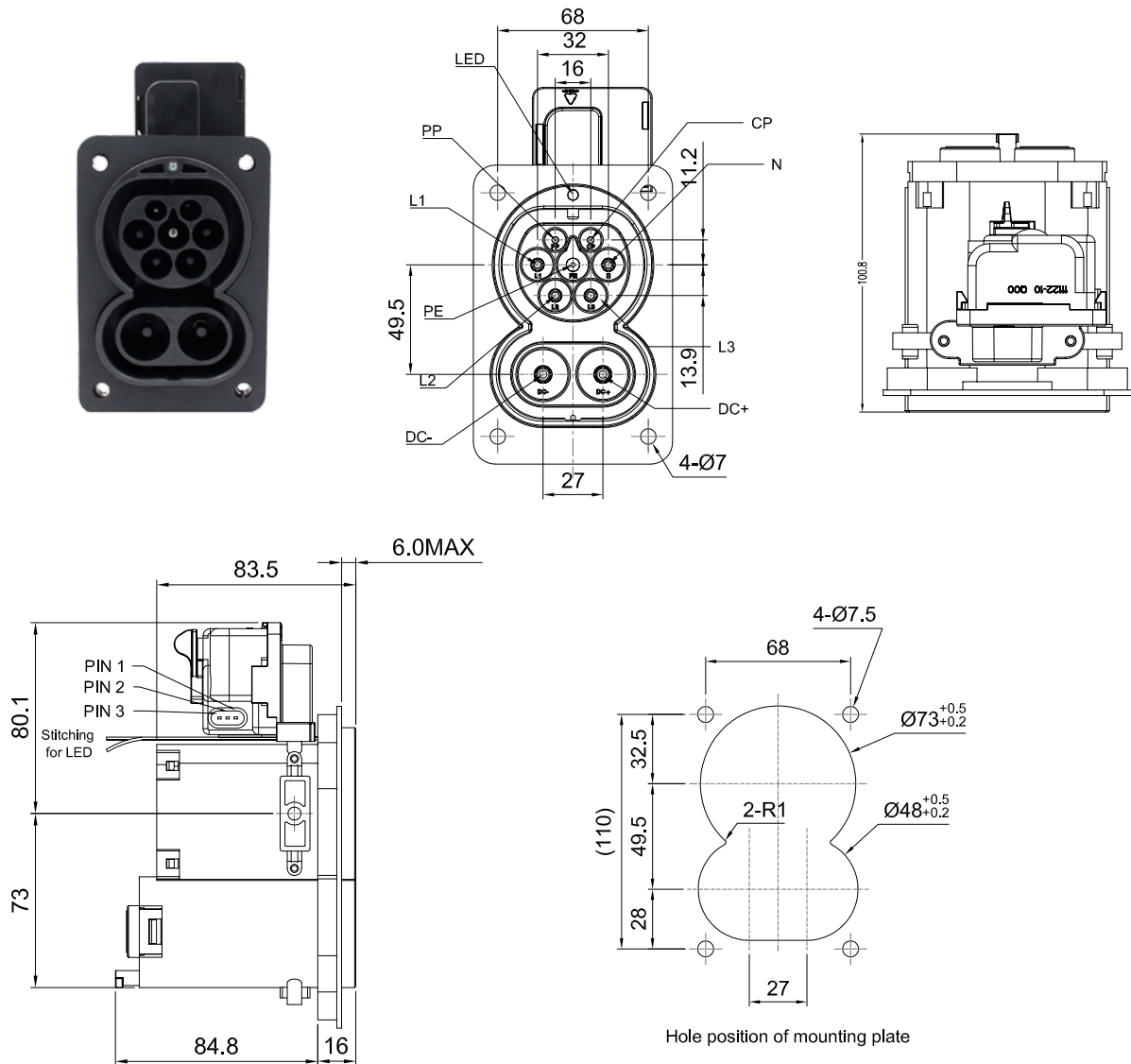
### KEY FEATURES:

Compliant with:  
IEC 62196-2  
IEC 62196-3

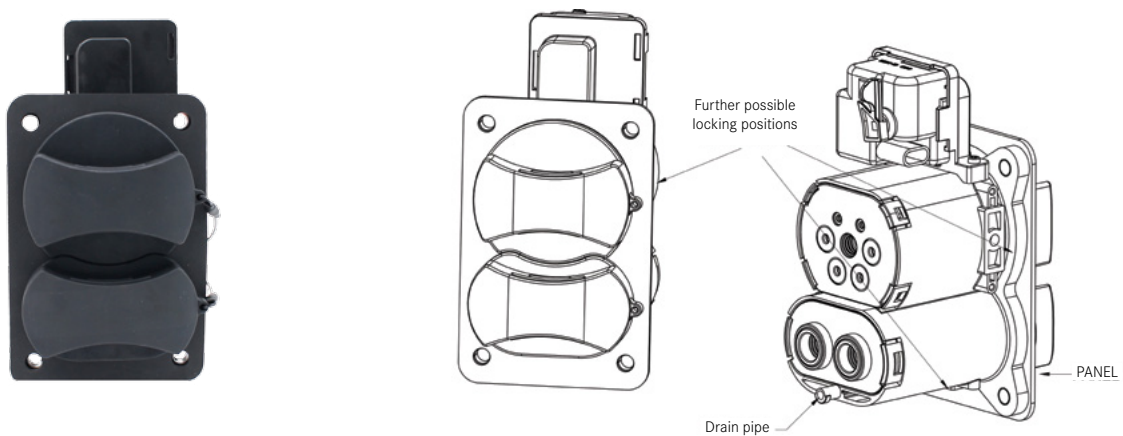
MECHANICAL	
Mating cycles	> 10,000 cycles (unloaded)
Insertion / withdrawal force	< 100N
ELECTRICAL	
Rated current	See page 20 and 22
Rated voltage	See page 20 and 22
Contact resistance	0.5MΩ Max (AC) 0.35MΩ Max (DC)
Insulation resistance	> 100MΩ
Temperature sensor (Optional)	The two power contacts DC+ and DC- are monitored by temperature-dependent resistor sensors
ENVIRONMENTAL	
Protection degree	IP44 (mated)
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

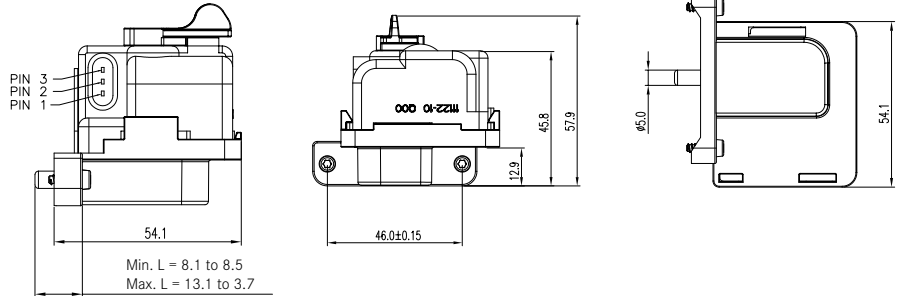


### Rear mount with protection cap



## LOCKING ACTUATOR

### Electronic lock | HELLA (12V)



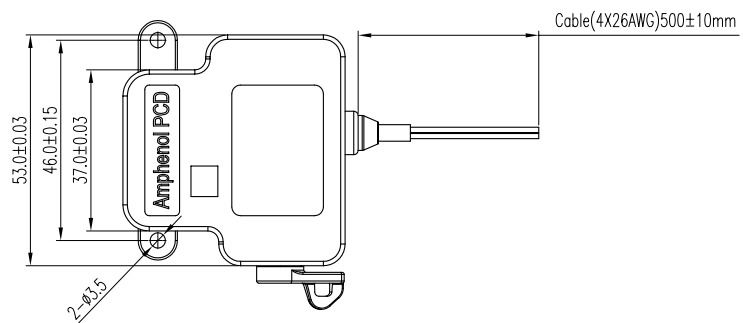
P/N: HVCOCBELOCKH

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



### Electronic lock | AMPHENOL PCD SHENZHEN (12V, 24V)

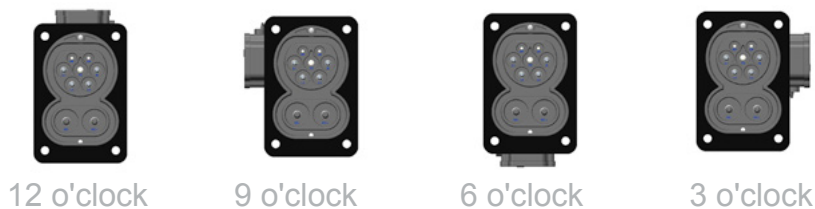
4 wire solution is available for both 12V and 24V.



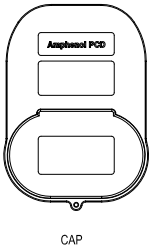
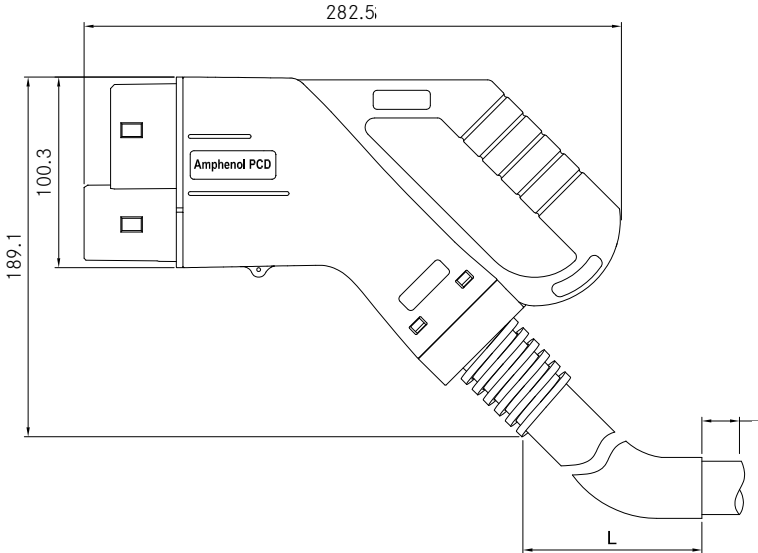
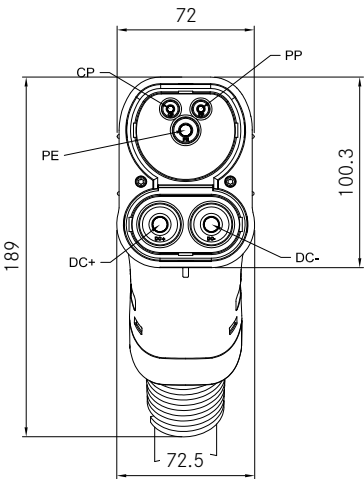
TYPE	RED	BLACK	WHITE	BLUE
UNLOCKING	+	-	/	
LOCKING	-	+		SIGNAL

P/N (12V): HVCODC12VELOCK

P/N (24V): HVCODC24VELOCK

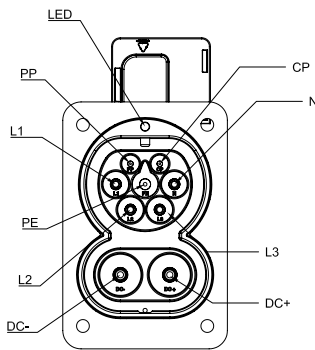


IEC COMBO VEHICLE CONNECTOR DIMENSIONS

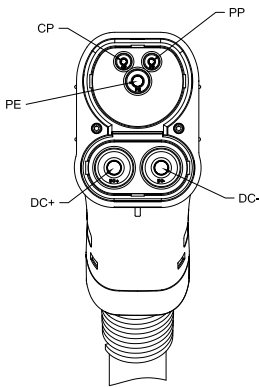


70±10(Stripping distance)

## IEC COMBO ELECTRICAL SPECIFICATIONS

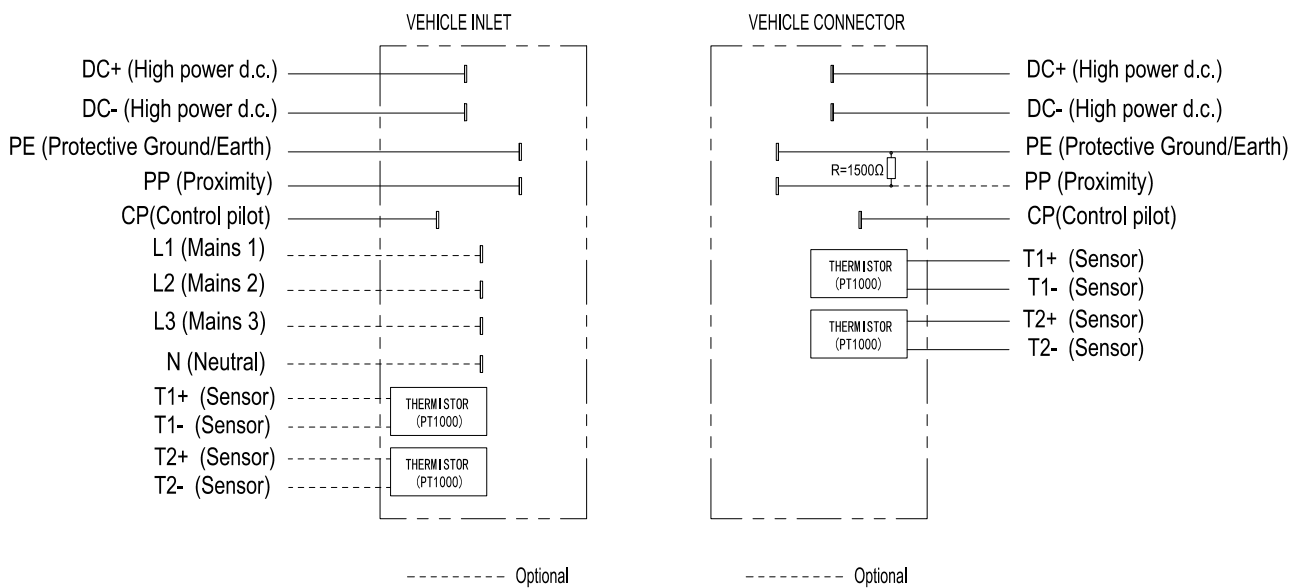


Combined interface		Functions
1-phase	3-phase	
250V   32A	480V   32A, 63A	L1 (Mains 1) - Optional
-	480V   32A, 63A	L2 (Mains 2) - Optional
-	480V   32A, 63A	L3 (Mains 3) - Optional
250V   32A	480V   32A, 63A	N (Neutral) - Optional
Rated for fault		PE (Protective Ground/Earth)
30V   2A		CP (Control pilot)
30V   2A		PP (Proximity)
1000V   60A, 125A, 200A		DC+ (High power d.c.)
1000V   60A, 125A, 200A		DC- (High power d.c.)



Combined interface	Functions
Rated for fault	PE (Protective Ground/Earth)
30V   2A	CP (Control pilot)
30V   2A	PP (Proximity)
1000V   60A, 125A, 200A	DC+ (High power d.c.)
1000V   60A, 125A, 200A	DC- (High power d.c.)

## CIRCUIT DIAGRAMS



IEC Combo 60A & 125A can be equipped with either NTC or PT1000 temperature sensor.

Temperature sensors: NTC or PT1000	
60A, 125A	200A
T: NTC	T: PT1000
PT: PT1000	-

HVCO	C	M	X	A	T	R8	SFXXX	LXXX	XXXX
<b>C: IEC Combo</b>									
<b>Connector type:</b>									
M: Vehicle connector									
F: Vehicle inlet									
<b>Power cable size:</b>									
X: AC + DC (refer to next page)									
<b>Protection cap:</b>									
A: Protection cap (only for receptacle)									
<b>Temperature sensor:</b>									
T: NTC temperature sensor									
PT: PT1000 temperature sensor									
Omit: No temperature sensor needed									
<b>Contact size:</b>									
R8: 8mm Radsok (for vehicle connector) or 8mm pin contact (for vehicle inlet)									
<b>Type of connector and insert arrangements:</b>									
PFXXX: 32A cable side (Vehicle connector Fast)									
SFXXX: 32A cable side (Vehicle inlet Fast)									
<b>Cable length:</b>									
LXXX: Cable length (Unit in mm)									
Omit: No cable needed									
<b>Cable accessories:</b>									
XXXX: Cable accessories or customer code									

## Vehicle inlet

The temperature sensor is optional for the vehicle inlet.

T: NTC (optional)

Part Number (without cable)		
Only DC	DC 60A	HVCOCFATR8SF516L0000
	DC 125A	HVCOCFATR8SF550L0000
1-phase	AC 32A + DC 60A	HVCOCF6ATR8SF716L0000
	AC 32A + DC 125A	HVCOCF6ATR8SF750L0000
3-phase	AC 32A + DC 60A	HVCOCF6ATR8SF916L0000
	AC 32A + DC 125A	HVCOCF6ATR8SF950L0000
	AC 63A + DC 60A	HVCOCF10ATR8SF916L0000
	AC 63A + DC 125A	HVCOCF10ATR8SF950L0000

PT: PT1000 (optional)

Part Number (without cable)		
Only DC	DC 60A	HVCOCFAPTR8SF516L0000
	DC 125A	HVCOCFAPTR8SF550L0000
1-phase	AC 32A + DC 60A	HVCOCF6APTR8SF716L0000
	AC 32A + DC 125A	HVCOCF6APTR8SF750L0000
3-phase	AC 32A + DC 60A	HVCOCF6APTR8SF916L0000
	AC 32A + DC 125A	HVCOCF6APTR8SF950L0000
	AC 63A + DC 60A	HVCOCF10APTR8SF916L0000
	AC 63A + DC 125A	HVCOCF10APTR8SF950L0000

## Vehicle connector

T: NTC

Part Number (without cable)		
-	DC 60A	HVCOCMTR8PF516L0000
	DC 125A	HVCOCMTR8PF550L0000

PT: PT1000

Part Number (without cable)		
-	DC 60A	HVCOCMPTR8PF516L0000
	DC 125A	HVCOCMPTR8PF550L0000

IEC Combo 200A can only be equipped with PT1000 temperature sensor. Consequently, in this case T stands for PT1000 temperature sensor.

Temperature sensors: NTC or PT1000	
60A, 125A	200A
T: NTC	T: PT1000
PT: PT1000	-

HVCO	C	M	X	A	T	R8	SFXXX	LXXX	XXXX
<b>C:</b> IEC Combo									
<b>Connector type:</b>									
<b>M:</b> Vehicle connector									
<b>F:</b> Vehicle inlet									
<b>Power cable size:</b>									
<b>X:</b> AC + DC (refer to next page)									
<b>Protection cap:</b>									
<b>A:</b> Protection cap (only for receptacle)									
<b>Temperature sensor:</b>									
<b>T:</b> PT1000 temperature sensor									
<b>Omit:</b> No temperature sensor needed									
<b>Contact size:</b>									
<b>R8:</b> 8mm Radsok (for vehicle connector) or 8mm pin contact (for vehicle inlet)									
<b>Type of connector and insert arrangements:</b>									
<b>PFXXX:</b> 32A cable side (Vehicle connector Fast)									
<b>SFXXX:</b> 32A cable side (Vehicle inlet Fast)									
<b>Cable length:</b>									
<b>LXXX:</b> Cable length (Unit in mm)									
<b>Omit:</b> No cable needed									
<b>Cable accessories:</b>									
<b>XXXX:</b> Cable accessories or customer code									



Vehicle inlet

The temperature sensor is optional for the vehicle inlet.

T: PT1000 (optional)

Part Number (without cable)		
Only DC	DC 200A	HVCOCFATR8SF570L0000
1-phase	AC 32A + DC 200A	HVCOCF6ATR8SF770L0000
3-phase	AC 32A + DC 200A	HVCOCF6ATR8SF970L0000
	AC 63A + DC 200A	HVCOCF10ATR8SF970L0000

Vehicle connector

T: PT1000

Part Number (without cable)		
-	DC 200A	HVCOCMTR8PF570L0000