Portable EV Charging Connector（TYPE2）

Main parameters

- Model：YG196-535
- Rating：16A 220V AC 50Hz
- Rated residual operating current：≥25mA±5mA
- Residual non-working current：＜25mA±5mA
- Protection class：IP67

Serial number	Project	Test conditions & Notes	Requirements
1	Operating temperature range	-40～+55℃	/
2	Storage temperature range	-40～+85℃	/
3	Relative humidity	No condensation at 5% ~ 95%RH	/
4	Level of pollution	Contamination class Ⅱ (This PCBA assembly is placed in a sealed shell)	/
5	Flame retardant grade	UL94 V-0	/
6	Altitude above sea level	≤4000m	/
7	MTBF(mean time to Failure)	Normal use	≥20000H

8	Aging	Input: 230Vac/50Hz; Load: 13A; Temperature: 50+5℃/-0℃; Aging time: 4H	Function remains normal during and after aging.
9	Vibration test	The mode 2 charger is placed in a closed box of 50*50*50 (cm) to simulate vehicle vibration, which should meet the requirements of 4.1.2.4 in GB/T 28046.3-2. The test in each axial direction lasts for 8h, and the root mean square (r.m.s) of acceleration is 27.8m/s2.	After the test, the sample IP level should not be reduced and the function should remain normal.

1. If the fault indicator light is often on or flashing, please refer to the LED light fault situation to make a fault judgment, and find the instruction manual for troubleshooting. If the fault cannot be removed, please contact the local dealer;

2. After the residual current action, please remove the plug and then plug it in to reset.

3. Charging Steps
   (1) Before charging, turn off the power system in the car, switch gear to P gear, and apply the parking brake;
   (2) Open the protective cover of the AC charging inlet of the vehicle。
   (3) Take the product out of the storage position;
   (4) Insert the three-wire plug into the power socket correctly;
   (5) Remove the vehicle plug protection cover;
   (6) Press and hold the latch button, insert the vehicle plug vertically into the AC charging socket until fully engaged, then release;
   (7) Follow the vehicle's charging operation instructions to start charging;
   (8) After charging, please wait for the charging device to disconnect the charging process, then press the card hook button and pull out the charging gun vertically;
   (9) Pull out the three plugs from the power socket, arrange the cable, and put the product back into the storage area of the package or vehicle;
   (10) According to the vehicle operation instructions, cover the socket protection cover, and complete the charging.

4. Storage Guidelines
   (1) When not using this product, please keep the protective cover always covered on the gun head of the vehicle plug;
   (2) After charging, please arrange the product and put it into the storage bag, or the established storage location of the vehicle;

(3) When storing this product, please place it in a dry and tidy position, do not approach the fire source or wet area.

5. Display feature requirements

The control status of the indicator light of the IC-CPD on the cable is shown in Table 1.

Table 1

Serial number	**Functional status**	**Power indicator light（LED1,LED2,LED3,LED4）**	**DefinitionDescription**	**Remarks**
LED color		Red, green, yellow, white and blue		
1	Initialization (power on flashing)	The white light flashed	Initialize the self-test peripheral	/
2	To be connected	The white light is always on	The CP voltage is 12±0.8V, and the relay is divided	/
3	Failure of self-test	Flash red light	/	/
4	Ready to charge	The blue light is always on	The CP voltage is 9±0.8V, and the relay is divided	/
5	Normal charging	Slow flashing of green light	The CP voltage is 6±0.8V and the relay is on	/
6	End of charge	The green light is always on	The CP voltage jumps from 6±0.8V to 9±0.8V (without fault)	The relay switches from closed to normally open
7	PCB environment over temperature	The yellow light is always on	The CP voltage jumps from 6±0.8V to 9±0.8V (without fault)	Disconnect the relay
8	The input is ungrounded	The yellow light flashes	Allow charging, the indicator light does not ground prompt, re-power can be restored;	Closure of relay

9	Ground fault during charging	1s The yellow and green alternate slow flash intervals are 1s	Allow charging, the indicator light does not ground prompt, re-power can be restored	Closure of relay
10	Weak overcurrent	Red and blue light slow flashing interval of 1s	Overcurrent protection alarm	Disconnect the relay 3 times in a row
11	Strong overcurrent	Red and blue lights flash quickly	Overcurrent protection alarm	Restart by disconnecting the relay
12	Leakage of electricity	The red light flashes slowly at intervals of 1s	The leakage is 25mA±5mA	Disconnect the relay
13	Abnormal communication	The yellow light flashes slowly at intervals of 1s	CP failure alarm	Disconnect the relay
14	The relay is bonded	The red light keeps flashing	Before closing the relay, after the relay is disconnected, the relay adhesion is detected and the alarm is given	
15	Ac over and under voltage	The overpressure red and yellow light flashes slowly for 1S Overpressure red and yellow light flash	Overvoltage 264±5Vac Ac Undervoltage 90±5Vac	The relay is disconnected
16	Three plugs over temperature	The yellow light is always on	The relay is disconnected when the temperature of the three plugs is greater than 85±5°C, and the relay is closed when the temperature of the three plugs is reduced to 70±5°C.	/

10 The indicator light controls the state priority

The LED control state priority is shown in Table 2

Table 2

Serial number	Failure state	Priority
1	Leakage of electricity	1
2	Over temperature	2
3	Abnormal communication	3
4	Over current	4
5	Over/under pressure	5
6	Poor grounding	6

11 Precautions

(1) Make sure to use a 16A electrical outlet for charging
(2) It is forbidden to use extension cord, ground treasure, adapter, adapter and other accessories that are not part of the IC-CPD itself, unless the accessories are part of the IC-CPD;
(3) It is forbidden to short-connect the zero or fire line with the ground line;
(4) Please use the socket with good contact with the plug, find the plug and socket contact loose, please replace the socket immediately;
(5) It is only used in the environment with leakage protector at the power supply side;
(6) Do not charge when the charging cable is damaged;
(7) Please keep the plug and socket dry, do not use rain or water;
(8) If there is dirt or foreign matter on the surface of the plug/socket, clean up before charging;
(9) It is forbidden to disassemble the product without permission, and the product does not contain user maintenance parts;
(10) Do not touch the charging port when charging;
(11) During charging, it is forbidden to try to pull out the plug of the vehicle vigorously;
(12) It is strictly forbidden to start the vehicle without pulling out the plug of the vehicle;
(13) Do not tilt the charging plug out or shake it out, otherwise it may damage the charging plug and the vehicle charging socket;
(14) Allow the use of combined IC-CPD for charging; (Note: all parts should be provided by the original manufacturer, and should be returned to the original factory for repair after damage).