# Installation and operation manual

**AC MAX**EU-Basic version



Version: 1.0.4

Issue date: 2023-01

AC MAX Basic Firmware Version 5.1





# **Table of Contents**

1	Infor	nformation3			
	1.1	Copyright	3		
	1.2	Intended use	3		
	1.3	Safety instructions	3		
	1.4	Operator's duty of supervision	4		
	1.5	Model series	5		
	1.6	Product overview	6		
2	Insta	ıllation	9		
	2.1	Prepartion before start	9		
	2.2	Installation steps	10		
3	Operation				
	3.1	(Optional) Connect the AC MAX App	22		
	3.2	Start charging	22		
	3.3	Stop charging	22		
4	LED	Indicator	22		
	4.1	Fault events	23		
	4.2	Symbol description	24		
5	Trou	bleshooting	24		
6	Specifications				
7	Clea	ning	26		
8	Warranty26				
9	Disposal				



### 1 Information

## 1.1 Copyright

The ownership and all intellectual property rights of this Installation and Operation Manual (this "Manual"), including but not limited to the content, data and figures contained herein are vested by Delta Electronics, Inc. ("DELTA"). The Manual can only be applied to operation or use of the device. Any disposition, duplication, dissemination, reproduction, modification, translation, extraction or any other usage to the Manual is prohibited without obtaining DELTA's prior written permission. As the product will be developed and improved continuously, DELTA may modify or update the Manual from time to time without any notice. DELTA disclaims any kinds or forms of warranty, guarantee or undertaking, either expressly or implicitly, including but not limited to the completeness, accuracy, non-infringement, merchantability or fitness for particular purpose or usage. Copyright © 2021 Delta Electronics, Inc. All Rights Reserved.

#### 1.2 Intended use

The device is developed, manufactured, tested and documented according to the safety standards. If you comply with the instructions and safety instructions described for its intended use, the product normally will not pose any danger in terms of property damage or to the health of people. The instructions contained in this manual shall follow to the letter. Otherwise, sources of danger may be produced or safety equipment may be rendered inoperable.

This device may only be used to charge Battery Electric Vehicle or Plug-in Hybrid Electric Vehicle in accordance with the following regulations:

- Mode 3 charging according to IEC 61851-1 for electric vehicles with non-gas discharged batteries.
- Use with plugs and sockets according to IEC 62196. In addition, the following conditions apply for intended use:
- The device is exclusively for stationary installation.
- The device is designed for installation on a wall or pedestal.
- The device can be used for indoors and outdoors.

The following uses are considered as not intended:

The charging of electric vehicles with gassing batteries is not permitted.

#### 1.3 Safety instructions

Before installing, commissioning, and operating of the EVSE, review this manual carefully and consult with licensed contractors, licensed electricians and installation experts to ensure compliance with local building practices, climate conditions, safety standards, and state and local codes. DELTA is not responsible for damage caused by failure to follow the safety instructions and work instructions in this manual.



#### **DANGER**



#### Risk of electric shock

Dangerous voltages and currents can occur during operation of the EVSE. Therefore, before carrying out any work on the EVSE, take the following protective measures:

- Disconnect all electrical power prior to installing the EVSE. Failure to do so may result in electric shock, physical injury or damage to the electrical system and charging unit.
- Do not remove circuit protective devices or any other component until all electrical power is disconnected.
- Secure the working area against access by unauthorized persons.



- The EVSE must be connected to a grounded, metal, permanent wiring system or an equipment grounding conductor must be run with the circuit conductors and connected to the equipment grounding terminal or lead on the EVSE.
- Use a measuring instrument to check that there is no voltage.
- Use appropriate protection when connecting to the main power distribution cable.



#### **DANGER**



#### Risk of electric shock

Dangerous voltages and currents can occur when operating the EVSE.

- Do not use the device to charge or supply other devices.
- Do not touch the contact pins of the charging plug when operating.
- Do not use adapters, conversion adapters or cord extension sets with the EVSE.
- Do not use this EVSE if the flexible power cord or charging cable is frayed, the insulation is broken, or the device shows signs of damage.



#### **WARNING**

- Close the charging plug with the protective cap when not in use.
- Damaged cables may only be replaced by electricians.
- Do not use this EVSE if the enclosure or the vehicle connector is broken, cracked, open, or shows any signs of damage.
- Only pull the charging cable out of the charging socket by the charging plug.



#### **CAUTION**



#### Risk of tripping

People can trip over cables lying around.

- ▶ Always hang the charging cable in the holder supplied with the EVSE after use.
- A device using pressure connectors for field wiring connections must be supplied with instructions that specify a range or nominal value of the tightening torque to be applied to the terminal screws of the connectors.
- Any repair work as well as the replacement of components on the EVSE may only be carried out by DELTA. Otherwise the warranty will become void.
- Damaged or illegible safety labels must be replaced.
- The EVSE can only be installed by licensed contractors, or licensed electricians in accordance with all
  applicable state, local and national electrical codes and standards in a location with non-restricted access.
- To ensure the ingress protection degree IP55, seal all external connections adequately. Seal unused connections with the caps provided.
- Warning notices, warning symbols and other markings attached to the EVSE by DELTA must not be removed.

#### 1.4 Operator's duty of supervision

- As the operator of the EVSE, you are responsible for the safety of the users and its proper use.
- As the operator of the EVSE, you are responsible for the safety of particularly vulnerable persons, especially children. Ensure that such persons maintain a sufficient safety distance from the EVSE and the charging cable.
- Consider the emergency routes at the installation site.
- Do not install the device at potentially explosive atmosphere areas (Ex areas).
- In case of risk of electric shock, fire or explosion, please press the emergency button immediately, which
  will turn off all input and output to ensure safety. Once the emergency button is pressed, the operator
  shall be informed and the EVSE shall not restart until the technician reset the EVSE.



## 1.5 Model series

The following describes the segmentation used to describe the basic features of each available model:

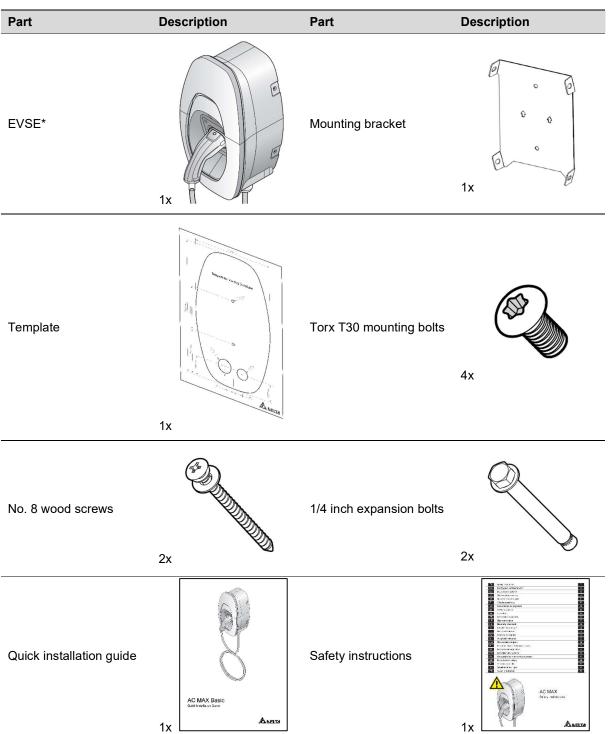
# **EIAW -** X XXK X X X X X XX XX XX 1 2 3 4 5 6 7 8

Segment	Item	Description
	E: AU/NZ, EMEA, SEA,	
	G: China	
1	J: Japan	Indicate the available region
	T: Taiwan	
	U: Canada, US	
	From 1-99:	
2	7: 7 kW	Indicates the nominated maximum output power
_	11: 11 kW	
	22: 22 kW	
3	S: Single phase	Indicates the phase of input rating
·	T: Three phase	manado ino pridos er inpartaning
-	B: Basic	
4	S: Smart	Indicates the version of EVSE
	P: Premium	
	U: SAE J1772 plug	
	E: IEC 62196-2 plug	
5	S: IEC 62196-2 socket	Indicates the charging interface
	H: IEC 62196-2 shutter	
	G: GB/T 20234.2 plug	
-	From 1-9:	
6	5: 5 m	Indicates the cable length (0 for socket or shutter)
	7: 7 m	
	From A-Z:	
7	A: Generation A	Indicates the product generation
	B: Generation B	
8	From 01-99	Indicates the serial code of EVSE



## 1.6 Product overview

# 1.6.1 Scope of delivery





Part	Description	Part	Description
Cable gland	1x	wood screws	2x
Control board	1x	Cable holder* (For plug version only)	1x
Key	1x		

<sup>\*</sup>Depends on model configuration

## 1.6.2 Recommended tools

The following tools are recommended for the installation of product:

Part	Description
Electro drill	Used for masonry walls
Pencil	
Spirit level	
Terminal crimper	Crimping input wire
Torque wrench	
Torque screwdriver (cross)	Securing mounting bracket to masonry walls or stand
Torque screwdriver (slotted)	Securing mounting bracket to masonry walls or stand
Torx T20 screwdriver	Securing front cover and middle cover
Torx T30 screwdriver	Securing mounting bracket



## 1.6.3 Installer-supplied components

Installers may prepare the following parts:

- 1. Conduit of appropriate size or cable gland (M32) for input power wires to ensure the water resistance.
- 2. DIN 46228-4 Cord end terminal:

Please use the cord end terminal for split conductors while installation.

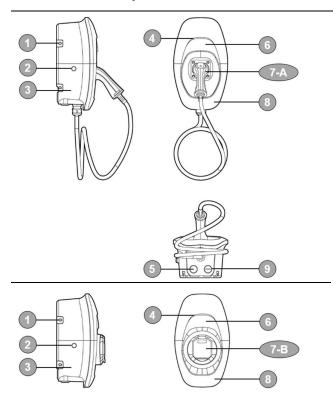
Current	16 A	32 A	
Pin length	18 mm	18 mm	18mm
Wire range	4 mm <sup>2</sup>	10 mm <sup>2</sup>	10111111

#### 3. Upstream breakers:

To reduce the risk of fire, only connect to a circuit with circuit breaker conforming to IEC 60898-1.

Model	Circuit breaker specification
EIAW-E7K	40A min., 230V min., 2 poles, Type B
EIAW-E11K	20A min., 400V min., 4 poles, Type B
EIAW-E22K	40A min., 400V min., 4 poles, Type B

# 1.6.4 Overview of components



- 1. Mounting bracket
- 2. Key switch
- 3. Body
- 4. LED bar
- 5. Cable gland
- 6. Middle cover
- 7-A. Vehicle connector
- 7-B. Socket/ socket with shutter
- 8. Front cover
- 9. Water proof cap





### 2 Installation

Before you start, please read the following instructions.

### 2.1 Prepartion before start

## 2.1.1 Installation site selection

AC MAX can be installed in both indoor and outdoor environments. It is necessary to consider the installation conditions and protection at the site:

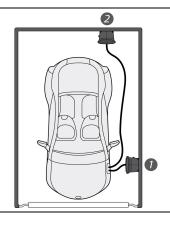
- Follow local electrical regulation and installation standards.
- Consider the emergency routes at the installation site.
- Do not install the device at potentially explosive atmosphere areas (Ex areas).

## 2.1.2 Recommended installation positions

When considering installation positions, make sure EV can be easily connected with EVSE and have enough space for maintenance.

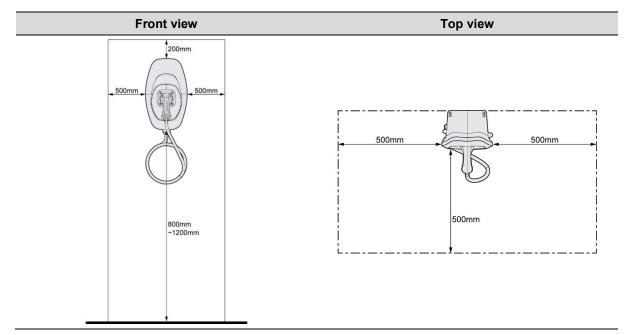


- 1. Recommended position
- 2. Alternative position



#### 2.1.3 Recommended installation space

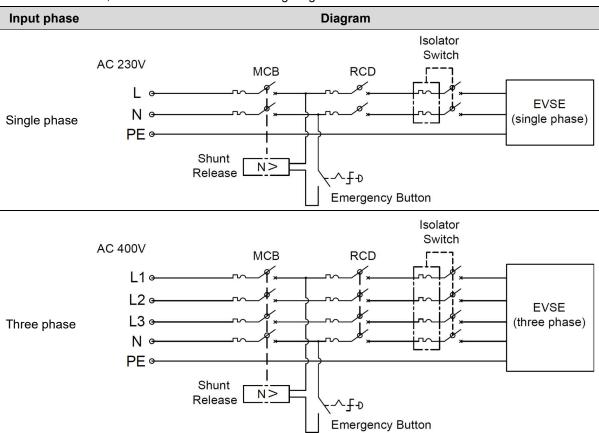
Installers shall follow applicable accessibility requirements for the mounting position. The EVSE shall be mounted at a height between 800 mm (31.5 inches) and 1200 mm (47.2 inches) above ground.





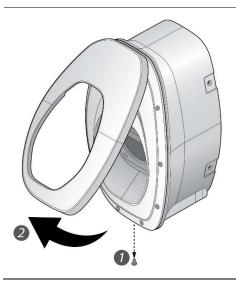
# 2.1.4 (Optional) emergency button

Installers shall install a waterproof box (at least IP 44) and an isolator switch that both complies with local codes. Installers assemble the MCB and Type A RCD in the waterproof box, then install the Isolator switch at front end of the box, as shown in below circuit wiring diagram.



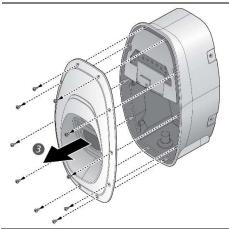
## 2.2 Installation steps

### 2.2.1 Remove front cover and middle cover



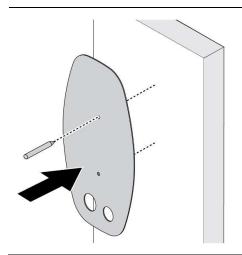
- 1. Remove the screw located at the bottom of front cover by using a Torx T20 screwdriver.
- 2. Pull the front cover upward to separate from the EVSE.





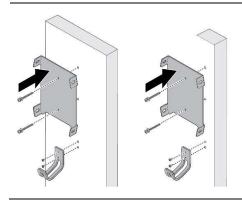
- Remove the screw located at the middle cover by using a Torx T20 screwdriver.
- 4. Remove the middle cover.

### 2.2.2 Mark drill holes



The EVSE is a stationary wall-mounted equipment. Using the template to mark the screw locations for the mounting bracket and cable holder (optional).

## 2.2.3 Secure mounting bracket



- 1. The cable holder is optional and depicted in the figure for demonstration purposes. The following are recommended bolt types:
- Masonry walls: 1/4" expansion bolts.

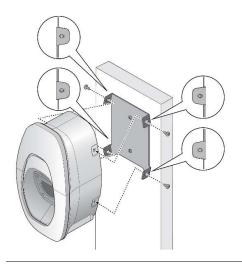
Torque: 8.8 N·m (78 lb·in)

• Finished walls supported by wood studs: #8 wood screws of 2" or above screw length.

Torque: 3 N·m (26 lb·in)

11

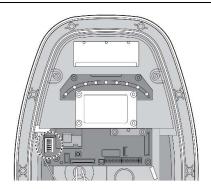




- Align the EVSE with the screw holes on the mounting bracket.
- 3. Secure the EVSE on the mounting bracket with the supplied Torx T30 screws.

Torque: 1.5 N·m (13 lb·in)

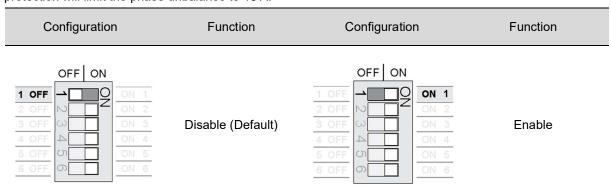
## 2.2.4 Configure dip switches



Configure the dip switches with following steps

## 2.2.4.1 Phase unbalance protection

Choose the pin 1 to enable or disable the phase unbalance protection. When the function is enabled, the protection will limit the phase unbalance to 15 A.



Note: The unbalance current rating can be changed via Bluetooth with the AC MAX App. The configured unbalance must comply with the specifications of the grid code in force at your installation site.

The password to reach this setting in the AC MAX App is: 0000



#### 2.2.4.2 Authorization mode

Choose the pin 2 to configure the authorization mode for Bluetooth availability.

Configuration	Function	Configuration	Function
OFF ON  1 OFF 2 OFF 3 OFF 4 OFF 5 OFF 6 OFF 0 0 0 1	Key switch (Default)	OFF ON  1 OFF ON  2 OFF ON 2  ON 2  ON 3  ON 4  ON 5  ON 6	Bluetooth

If the pin 2 is set to OFF (left), the key switch has to be turned ON to start a charging session. The Bluetooth authentication is deactivated in this configuration but the app can still connect and be used to configure, monitor and update the wallbox.

If the pin 2 is set to ON (right), the charging session can only be started from the Delta AC MAX App. The key switch authentication is deactivated in this configuration.

#### 2.2.4.3 Grounding system

Choose the pin 3 to configure the grounding system for TT/TN or IT system.

Configuration	Function	Configuration	Function
OFF ON  1 OFF ON  1 OFF ON  1 ON 1 ON 2 ON 3 ON 4 ON 5 ON 6	TT/TN (Default)	OFF ON  1 OFF 2 OFF 3 OFF 4 OFF 6 OFF 0 ON 1 ON 2 ON 3 ON 4 ON 5 ON 6	ΙΤ

If the pin 3 is set to OFF, the wallbox is configured for TN/TT grids. In this configuration, the wallbox continuously monitors the availability of the protective earth conductor. If the impedance of this measurement is too high, the wallbox will indicate the problem by the status LED.

If the pin 3 is set to ON, the wallbox is configured for IT grids. In this configuration, the wallbox monitors that no protective earth conductor is connected. If the wallbox recognizes the availability of the protective earth conductor, it will indicate the problem by the status LED.



# 2.2.4.4 Maximum current setting

Choose the pin 4-6 to configure the maximum output current ratings.

Configuration	Max. Current Ratings	Configuration	Max. Current Ratings
OFF ON  1 OFF ON  2 OFF ON  0 ON 1  ON 2  ON 3  4 OFF  5 OFF  6 OFF  ON 6	6 A (Default)	OFF ON  1 OFF ON  2 OFF ON  0 ON 1  ON 2  ON 3  4 OFF  5 OFF  6 OFF  ON 6	16 A
OFF ON  1 OFF ON  2 OFF ON  ON 2  ON 3  ON 4  ON 5  ON 6	8 A	OFF ON  1 OFF ON  2 OFF ON  3 OFF ON 3  4 OFF ON 5  ON 6	20 A*
OFF ON  1 OFF 2 OFF 3 OFF 4 OFF 5 OFF 6 OFF 0 ON 6	10 A	OFF ON  1 OFF ON  2 OFF ON  1 ON 2  ON 3  ON 4  ON 5  ON 6	24 A*
OFF ON  1 OFF 2 OFF 3 OFF 4 OFF 5 OFF 6 OFF 0 ON 5 ON 6	12 A	OFF ON  1 OFF 2 OFF 3 OFF 4 OFF 6 OFF 0 ON 1 ON 2 ON 3 ON 4 ON 5 ON 6	32 A*

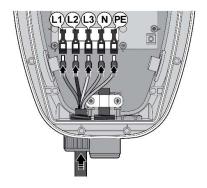
<sup>\*</sup> Depends on model configuration

For AC MAX models with a maximum current of 16 A, the configurations 20 A, 24 A and 32 A limit the maximum output current to 6 A.

Note: There are cars that do not start the charging session at 6 A.



### 2.2.5 Connect input wire

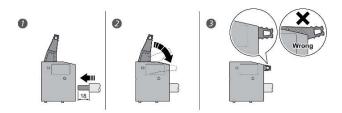


 Install the copper wire as described. The section of copper wire connected to terminal shall be reserved enough tolerance to prevent any tension or stress from the external force.

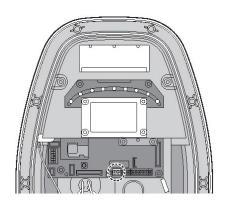
Note: Copper wire type: 10 mm<sup>2</sup>, 70°C.

Insert the input wire into the terminal accordingly. The cord end terminal shall be inserted to the end without any deviation.

Note: Bottom-fed/rear-fed is available for indoor/outdoor installation with cable gland.



Make sure the terminal block is secured correctly.



#### **Dry contact**

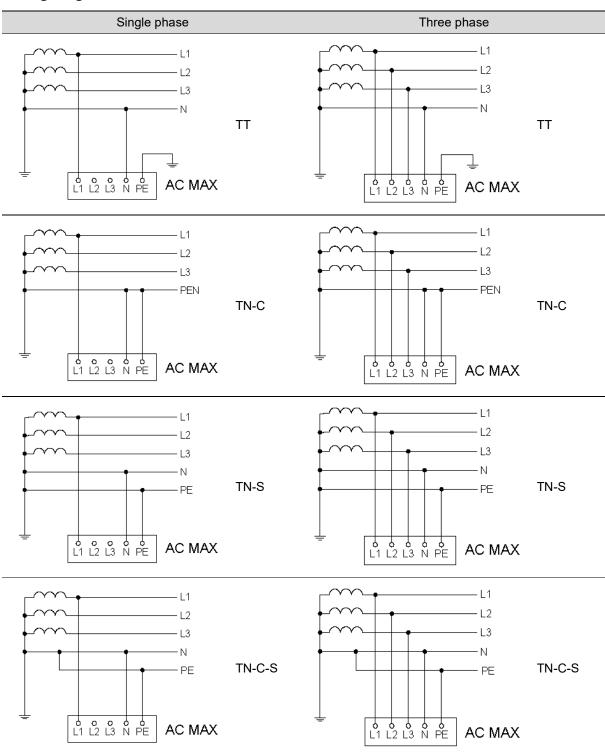
Use appropriate wires  $(0.75~\mathrm{mm}^2)$  and connect each of them to the correct terminal connector for dry contact connections shown on wiring schemes (Left 1: NO, Left 2: COM).

#### Note:

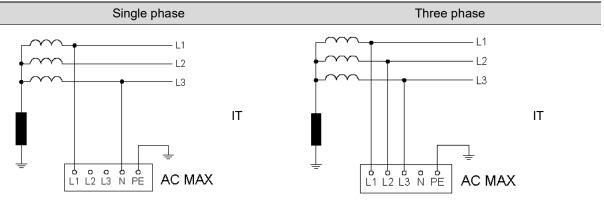
The product provides a closing signal when unable to close the output. There are breaker types that trip to stop output when a closing signal is accepted. It is mandatory requirement for Netherland and Italy.



# 2.2.5.1 Wiring diagram







Note: To fulfill requirements for electrical installations in UK, the following shall be observed.

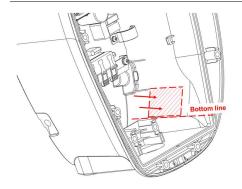
- 1. When installed in a TN systems, the supplying circuit shall not include a PEN conductor(combined protective and neutral).
- 2. If the power grid belongs to TN-C-S system, the charger needs to be grounded separately to TT system. A PME earthing facility shall not be used as the means for the protective conductor contact of a charging point located outdoors.

## 2.2.6 (Optional) active power control

Users can control the EVSE with external components (e.g. a ripple control receiver from the power supplier, a domestic controller, a time switch, a combination lock, a photovoltaic system, etc.).

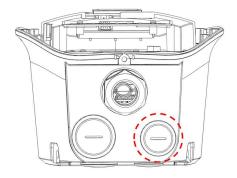
#### Note:

- 1. Ensure that hazardous voltages are isolated safely.
- The application is taken into consideration for that charging station with a rated power > 12 kVA shall be
  equipped with control equipment for network integration via an interruptibility by the network operator in
  Germany.

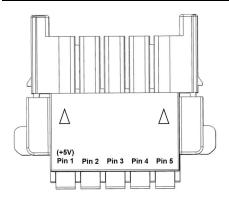


1. Based on the bottom line, attach the control board to the inner surface of EVSE.



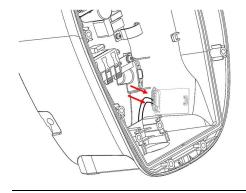


2. Remove the water proof cap and pass through the signal cable with appropriate conduit or cable gland.

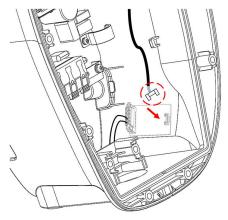


3. Connect the signal cable according to pin definition (2.2.6.1) and must connect to the Pin 1 (+5V).

Note: suggested wire of signal cable: 1.5 mm<sup>2</sup>.



4. Assemble the connector



5. Connect the control board

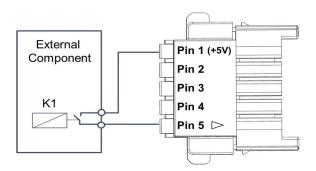


### 2.2.6.1 Pin definition

User can connect the external component with signal cable based on following configuration. The output power will be adjusted by the following pin definition once the grid power is limited by network operator. The power limitation is based on rated output power configured by dip switches (2.2.4.4).

## 2.2.6.1.1 Configuration A

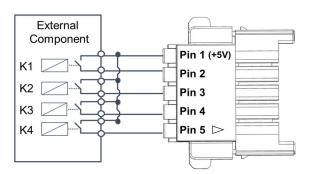
Connect the signal cable with Pin 1 and Pin 5 as below:



Pin 2	Pin 3	Pin 4	Pin 5	Power limitation
Low	Low	Low	Low	Output 100% power
Low	Low	Low	High	Stop charging

# 2.2.6.1.2 Configuration B

Connect the signal cable with Pin 1 to Pin 5 as below:





Pin 2	Pin 3	Pin 4	Pin 5	Power limitation
Low	Low	Low	Low	Output 100% power
High	Low	Low	Low	Output 87.5% power
Low	High	Low	Low	Output 75% power
High	High	Low	Low	Output 62.5% power
Low	Low	High	Low	Output 50% power
High	Low	High	Low	Output 37.5% power
Low	High	High	Low	Output 25% power
High	High	High	Low	Output 12.5% power
Low	Low	Low	High	Stop charging

# 2.2.7 (Optional) ModBus RTU via RS485

To connect the wallbox with an external (Home) Energy Management System (H)EMS, connect two communication wires to the RS485 terminal.



The default RS485 settings are 8N1

- Data bits: 8

Parity bit: None

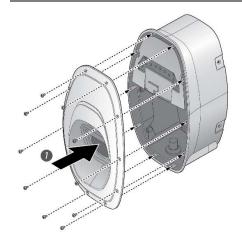
- Stop bit: 1

- Baud rate: 19200 Baud

Note: The Modbus settings can be changed via Bluetooth with the AC MAX App. The password to reach this setting in the AC MAX App is: 0000



### 2.2.8 Secure middle cover and front cover

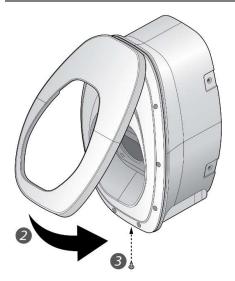


 Recover the middle cover on the EVSE and secure the middle cover by using Torx T20 screwdriver.

Torque: 1.2 N·m (10.5 lb·in)

Note: rubber sealing shall be put on the appropriate

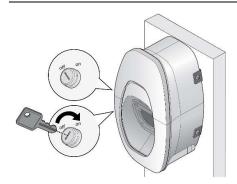
position before recovery.



- 2. Recover the front cover on the EVSE.
- 3. Secure the screw located at the bottom of front cover by using a Torx T20 screwdriver.

Torque: 0.5 N·m (4.4 lb·in)

# 2.2.9 Enabling the Charging Function



The key switch is located on the side of the product. The EVSE is authorized to charge when the key switch is in the "On" position.

Note: This applies only, if the Authorization mode is set to Key switch.

# 3 Operation

Turn on the upstream breaker. The indicator flashes in yellow during a system self-test. After the self-test



completed, the indicator illuminates in blue and the EVSE is ready to charge.

## 3.1 (Optional) Connect the AC MAX App

- 1. Search on the Apple App Store or Google Play for **Delta AC MAX App** and install the app on your smartphone.
- 2. Open the app and follow the instructions on the connect screen.
  Note: If there is no QR code on the back of your quick installation guide, your AC MAX was produced before the compatibility with the AC MAX App. In this case, open the firmware update manual in the AC MAX App and follow the instructions to upgrade your wallbox.



3. The required password to enter the advanced settings is 0000.

## 3.2 Start charging

- 1. Connect the vehicle connector to vehicle inlet.
  - Note: for socket or socket with shutter model, please connect the plug to EVSE first.
- 2. Authorize the charging session either be setting the key switch to ON or via the AC MAX App, dependent on the DIP switch number 2 (2.2.4.2 Authorization mode) configuration.
- 3. The indicator flashes blue to indicate the charging is initiated.

## 3.3 Stop charging

- 1. Stop charging session at the vehicle.
- 2. Disconnect the vehicle connector from the vehicle inlet.
  - Note: the plug would be locked by the EV and please unlock the plug if needed.
- 3. Recover the vehicle connector to vehicle connector inlet.

#### 4 LED Indicator

Status	Description
Black	Power off.
Yellow, fast flashing	Initial configuration and self-test.
Blue	Standby mode (not connecting to EV).
Blue / Yellow (alternating)	Charging with limited charging power (limitation via external power control)



Yellow	Ready to charge (connecting to EV).	
Blue, slow flashing	Charging in progress.	
Green	Charging process completed.	
Yellow, slow flashing	Limited output power by active power control, firmware upgrade or log download.	
Red, slow flashing	Refer to fault event.	
Red	Failed self-test or general malfunction.	

# 4.1 Fault events

Status	Description	Action	
Red, 1 Flash	High/under voltage protection	The EVSE will be auto-recovery once the voltage is normal. If not, please restart the EVSE or contact customer support.	
Red, 2 Flashes	Residual Current Device (RCD) tripped	<ol> <li>Turn off the charger (open the circuit breaker)</li> <li>disconnect the car</li> <li>Check the charging cable and all other compontents for isolation damages.</li> <li>If no isolation issues are visible, turn on the charger again by closing the circuit breaker.</li> </ol>	
Red, 3 Flashes	Ground does not correctly connect to the EVSE.	<ol> <li>Check if ground (PE) is well connected.</li> <li>Ensure the wallbox runs Firmware version 5.1 or higher by using the AC MAX App.</li> </ol>	
Red, 4 Flashes	Over current protection.	Unplug the vehicle connector and plug it again.	
Red, 5 Flashes	Over temperature protection.	Wait for recovery and check if any heat source around the EVSE. If yes, please try to remove the heat source.	
Red, 6 Flashes	Input mis-wired.	Swap the Line (L) and Neutral (N).	
Red, 7 Flashes	Control pilot signal error, Gun lock error/fault	Unplug the vehicle connector and plug it again. If not recovery, please contact customer support.	



# 4.2 Symbol description

Status	Description	
Slow flashing	Slow flashing (period = 2 s, duty cycle = 50%)	
Fast flashing	Fast flashing (period = 0.8 s, duty cycle = 50%)	
1 Flash	1s 1s 1s 1s	
2 Flashes	1s 1s 1s 1s 1s 1s 1s 1s 1s	

3 or more Flashes refer to previous figures of time duration.

# 5 Troubleshooting

Contact Customer Support if the EVSE appears to malfunction or if the LED indicators display a fault event. DO NOT open the EVSE, touch or remove the circuit protective devices or any other component.

Situation	Action	
Indicator does not light	Make sure the power input is connected correctly and the power is within operating range of the unit.	
	2. Power cycle the EVSE.	
	3. If the problem persists, contact customer support.	
Indicator does not flash after plugging vehicle connector	Check if the vehicle connector is fully inserted to EV	
	2. Check if the battery is full on EV	
	3. If the problem persists, contact customer support.	
	Wait until the temporary error is resolved and the EVSE returns to normal condition, typically less than 10 seconds.	
Indicator starts to flash in red	2. Unplug the vehicle connector.	
while charging	3. Power cycle the EVSE.	
	4. If the situation persists, contact customer support.	
	It might be a critical error (e.g. hardware fault).	
Indicator illuminates in red	2. Unplug the vehicle connector.	
indicator indiminates in red	3. Power cycle the EVSE.	
	4. If the situation persists, contact customer support.	



# Specifications

Model	AC MAX Basic			
Input	3.7 kW / 11 kW	7.4 kW / 22 kW		
Nominal Current	16 A	32 A		
Grid Connection	Single-phase electric power (L1, N, PE) Three-phase electric power (L1, L2, L3, N, PE) All AC MAX BASIC models support both, single phase and three phase installations			
AC Voltage	230 V / 400 V			
Frequency	50 Hz / 60 Hz			
Grounding systems	TN, TT, IT			
Terminal	PCB terminal block			
Protection	Over current, Under voltage, Over voltage, Over temperature, Surge protection, Short circuit, Ground fault			
Standby Power	3.6 W			
Charging Output	1			
Nominal Power	Single-phase: 3.7 kW Three-phase: 11 kW	Single-phase: 7.4 kW Three-phase: 22 kW		
Nominal Current	16 A per phase	32 A per phase		
Connector Type	AC Type 2 Plug	AC Type 2 Plug AC Type 2 Socket AC Type 2S Socket		
Charging Voltage	230 V / 400 V			
Cable Length	5 m (models with AC Type 2 Plug	g charging interface)		
Protection	RCD Type A (AC 30 mA) RDC-DD (DC 6 mA)			
Compliance	IEC 61851-1, IEC 62196-2, IEC610	008-1, IEC 62955		
User Interface				
Display	Status LED, 4 colors			
Authentication	Key switch			
Charger Configuration	Maximum charging current selec	ctable by 8-step hardware DIP switch		
Network Interface				
Bluetooth				
Protocols and Applications	Configuration, control, monitoring	ng and firmware update		
RS485				
Protocols and Applications	ModBus RTU for energy manage	ement		
Mechanical Properties	1.000			
Ingress Protection (IEC 60529)	IP55			
Impact Protection (IEC 62262)	IK09			
Cooling	Natural convection			
Dimensions* (W x H x D)	218 x 371 x 167 mm ( 8.6 x 14.6 x 6.6 inch)			
Weight*	6.0 kg (13.3 lbs), including charging cable			
Environmental Conditions				
Operating Temperature Range	- 30 °C to + 50 °C (- 22 °F to + 122 °F)			
Storage Temperature Range	- 40 °C to + 80 °C (- 40 °F to + 176 °F)			
Humidity Altitude	< 95 % relative humidity, non-condensing Up to 2,000 m (6,500 ft.)			
Compliance				
EU Low Voltage Directive IEC 61851-1, IEC 62479				
EU EMI Directive	EN 61000-3-11 / -12, IEC 61851-21-2			
	V. VVV V 117 12, 120 V. VVI LI-L			



## 7 Cleaning

Regular cleaning of EVSE is required while standby state. Using a soft damp cloth with clear water is highly recommended and make sure no water enters the vehicle connector.

# 8 Warranty

Customer service can provide more information on the terms of warranty. However, the following cases are not covered by the warranty.

- Defects or damage caused by not using the product as specified in the Installation and Operation Manual.
- Costs and damage caused by repair work which is not provided by DELTA approved authorized specialist
  or electrician.

# 9 Disposal



The EVSE is an electronic device and must be disposed of separately from normal house wastes. Please have it disposed in compliance with the waste disposal and recycle local regulation.



Tout les papiers se trient et se recyclent, y compris tous les documents fournis avec cet appareil.