10 Troubleshooting

10.1 Troubleshooting procedure

1. Try to find a solution for the problem with the aid of the information in this document.
2. If you cannot find a solution for the problem, contact the manufacturer or the local service unit. Refer to section 1.12.

10.2 Troubleshooting table (IEC portfolio)

Problem (error code)	Possible cause	Possible solution
Residual current detected (0x0002)	There is residual current (30mA AC or 6mA DC) in the charge circuit. Current leaks into the ground.	1. De-energize the EVSE. Refer to section 10.4. 2. Contact your local representative of the manufacturer or a qualified electrical contractor. Refer to section 1.12.
PE missing or swap neutral and phase (0x0004)	The EVSE is not earthed correctly.	1. Do a check of the protective earth line of the connector of the AC input. 2. Install the protective earth conductor.
	The neutral and phase wires are swapped.	1. Examine the electrical connections. 2. Make sure that the connection of the phase and line and neutral wires is correct. 3. If necessary, adjust the electrical connections. Refer to chapter 7.
Over voltage (0x0008)	The maximum voltage on the power input is too high.	Make sure that the voltage from the grid is not more than specified.
Under voltage (0x0010)	The voltage on the power input is not sufficient.	Make sure that the voltage from the grid is not less than specified.
Over current (0x0020)	There is an overload on the EV side.	1. Examine the EV charge cable connection. 2. Connect the EV charge cable correctly.
Severe over current (0x0040)	There is an overload on the EV side.	1. Examine the EV charge cable connection. 2. Connect the EV charge cable correctly.

Problem (error code)	Possible cause	Possible solution
Overtemperature (0x0080)	The internal temperature is too high.	1. Do a check of the operation temperature on the product label. If the ambient temperature is too high, the EVSE will decrease the output current automatically. 2. If it is necessary, install the EVSE in an environment with a lower ambient temperature. 3. Make sure that the voltage from the grid is not more than specified. 4. If you can not solve the problem, do not use the EVSE. Contact your local company representative or a qualified electrical contractor. Refer to section 1.12.
Power relay fault (0x0400)	The relay contact is detected in wrong state or has damage.	1. Examine the relay contact. 2. If necessary, adjust the current. 3. If necessary, replace the relay contact.
Internal communication failure (0x0800)	The printed circuit boards of the EVSE fail to communicate with each other.	. 1. The circuit board receives a confirmation packet （250 ms）. Make sure that the connection between P and C is normal. 2. The circuit board receives a confirmation packet （1S）. Make sure that the connection between B and C is normal.
E-Lock failure (0x1000)	Error to lock / unlock the charge connector.	1. Examine the connection of the EV charge cable. 2. If necessary, connect the EV charge cable.
Missing phase (0x2000)	B and C phase are missing or one of these phases is missing.	1. Examine the electrical connections. 2. Make sure that the connection of the phase and line and neutral wires is correct. 3. If necessary, adjust the electrical connections. Refer to chapter 7.

Problem (error code)	Possible cause	Possible solution
Modbus communication lost (0x4000)	The Modus communication is lost.	1. Do a check on the connection of the wires and the polarity. 2. Do a check if all addresses are unique. 3. Do a check if the baud rate is the same as the other device or meter. 4. Do a check if the parity value of the other device or meter agrees with the EVSE 'None'. 5. Do a check if the stop bit and data bit are the same on the other device or meter.
The display shows that the EV is not ready for the charge session or the *ChargerSync* app shows *waiting for EV*.	The EV is unavailable.	Wake up the EV. Refer to the user manual.
The EV is not charged	There is a problem with the EVSE.	1. Make sure that the power supply to the EVSE is on. 2. Examine the EVSE to find if it is working correctly. 3. Examine the *ChargerSync* app and the charge LED to make sure that the charge session is authorized. 4. Start the charging session.
	The EV charge cable is defective.	1. Examine the EV charge cable. 2. If the standard supplied EV charge cable is defective, replace the EV charge cable. Refer to section 7.5.
The EV connection or authorization process fails	The EV charge cable is defective.	1. Examine the EV charge cable. 2. If the standard supplied EV charge cable is defective, replace the EV charge cable. Refer to section 7.5.

Problem (error code)	Possible cause	Possible solution
	The EV charge cable is not connected correctly.	1. Examine the connection of the EV charge cable. 2. If necessary, connect the EV charge cable.
	There is a problem with the *ChargerSync* app or the RFID card.	1. Make sure that the user has registered in the *ChargerSync* app. 2. Make sure that you use a RFID card that the manufacturer provided. 3. Make sure that the RFID card is added on the *ChargerSync* app. 4. Start the *ChargerSync* app. 5. Start the authorization process.

10.3 Troubleshooting table (UL and Japan portfolio)

Problem (error code)	Possible cause	Possible solution
Residual current detected (0x0002)	There is residual current (20mA AC) in the charge circuit. Current leaks into the ground.	1. De-energize the EVSE. Refer to section 10.4. 2. Contact your local representative of the manufacturer or a qualified electrical contractor. Refer to section 1.12.
PE missing or swap neutral and phase (0x0004)	The EVSE is not earthed correctly.	1. Do a check of the protective earth line of the connector of the AC input. 2. Install the protective earth conductor.
	The neutral and phase wires are swapped.	1. Examine the electrical connections. 2. Make sure that the connection of the phase and line and neutral wires is correct. 3. If necessary, adjust the electrical connections. Refer to chapter 7.
Over voltage (0x0008)	The maximum voltage on the power input is too high.	Make sure that the voltage from the grid is not more than specified.
Under voltage (0x0010)	The voltage on the power input is not sufficient.	Make sure that the voltage from the grid is not less than specified.

Problem (error code)	Possible cause	Possible solution
Over current (0x0020)	There is an overload on the EV side.	1. Examine the EV charge cable connection. 2. Connect the EV charge cable correctly.
Severe over current (0x0040)	There is an overload on the EV side.	1. Examine the EV charge cable connection. 2. Connect the EV charge cable correctly.
Overtemperature (0x0080)	The internal temperature is too high.	1. Do a check of the operation temperature on the product label. If the ambient temperature is too high, the EVSE will decrease the output current automatically. 2. If it is necessary, install the EVSE in an environment with a lower ambient temperature. 3. Make sure that the voltage from the grid is not more than specified. 4. If you can not solve the problem, do not use the EVSE. Contact your local company representative or a qualified electrical contractor. Refer to section 1.12.
Power relay fault (0x0400)	The relay contact is detected in wrong state or has damage.	1. Examine the relay contact. 2. If necessary, adjust the current. 3. If necessary, replace the relay contact.
Internal communication failure (0x0800)	The printed circuit boards of the EVSE fail to communicate with each other.	1. The circuit board receives a confirmation packet（250 ms）. Make sure that the connection between P and C is normal. 2. The circuit board receives a confirmation packet（1S）. Make sure that the connection between B and C is normal.
E-Lock failure (0x1000)	Error to lock / unlock the charge connector.	1. Examine the connection of the EV charge cable. 2. If necessary, connect the EV charge cable.

Problem (error code)	Possible cause	Possible solution
Missing phase (0x2000)	B and C phase are missing or one of these phases is missing.	1. Examine the electrical connections. 2. Make sure that the connection of the phase and line and neutral wires is correct. 3. If necessary, adjust the electrical connections. Refer to chapter 7.
Modbus communication lost (0x4000)	The Modus communication is lost.	1. Do a check on the connection of the wires and the polarity. 2. Do a check if all addresses are unique. 3. Do a check if the baud rate is the same as the other device or meter. 4. Do a check if the parity value of the other device or meter agrees with the EVSE 'None'. 5. Do a check if the stop bit and data bit are the same on the other device or meter.
The display shows that the EV is not ready for the charge session or the *ChargerSync* app shows *waiting for EV*.	The EV is unavailable.	Wake up the EV. Refer to the user manual.
The EV is not charged	There is a problem with the EVSE.	1. Make sure that the power supply to the EVSE is on. 2. Examine the EVSE to find if it is working correctly. 3. Examine the *ChargerSync* app and the charge LED to make sure that the charge session is authorized. 4. Start the charging session.
	The EV charge cable is defective.	1. Examine the EV charge cable. 2. If the standard supplied EV charge cable is defective, replace the EV charge cable. Refer to section 7.5.
The EV connection or authorization process fails	The EV charge cable is defective.	1. Examine the EV charge cable. 2. If the standard supplied EV charge cable is defective, replace the EV charge cable. Refer to section 7.5.

Problem (error code)	Possible cause	Possible solution
	The EV charge cable is not connected correctly.	1. Examine the connection of the EV charge cable. 2. If necessary, connect the EV charge cable.
	There is a problem with the *ChargerSync* app or the RFID card.	1. Make sure that the user has registered in the *ChargerSync* app. 2. Make sure that you use a RFID card that the manufacturer provided. 3. Make sure that the RFID card is added on the *ChargerSync* app. 4. Start the *ChargerSync* app. 5. Start the authorization process.

10.4 De-energize the EVSE

1. Open the breaker that supplies the power to the EVSE.
2. Wait for minimum 1 minute.