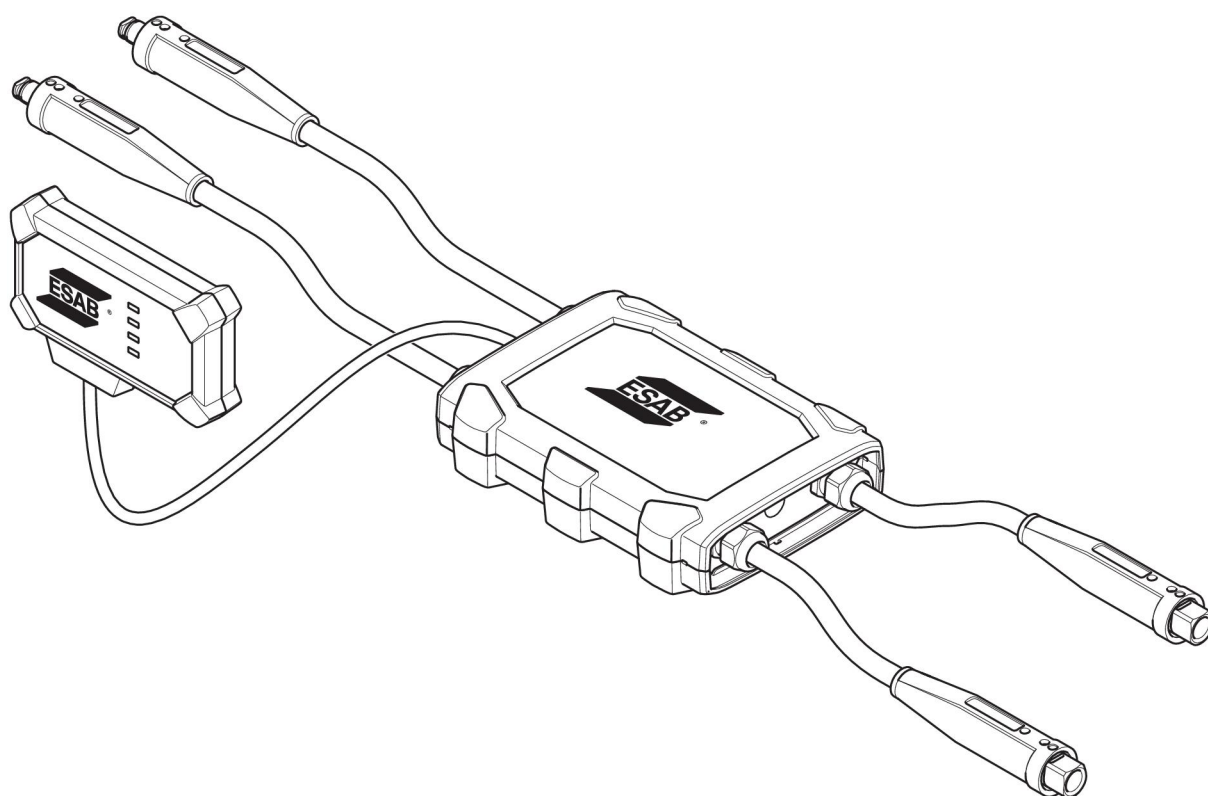




WeldCloud™ Universal Connector



Instruction manual

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1 SAFETY

1.1 Meaning of symbols

As used throughout this manual: Means Attention! Be Alert!

**DANGER!**

Means immediate hazards which, if not avoided, will result in immediate, serious personal injury or loss of life.

**WARNING!**

Means potential hazards which could result in personal injury or loss of life.

**CAUTION!**

Means hazards which could result in minor personal injury.

**WARNING!**

Before use, read and understand the instruction manual and follow all labels, employer's safety practices and Safety Data Sheets (SDSs).



1.2 Safety precautions

Users of ESAB equipment have the ultimate responsibility for ensuring that anyone who works on or near the equipment observes all the relevant safety precautions. Safety precautions must meet the requirements that apply to this type of equipment. The following recommendations should be observed, in addition to the standard regulations that apply to the workplace.

All work must be carried out by trained personnel well-acquainted with the operation of the equipment. Incorrect operation of the equipment may lead to hazardous situations, which could result in injury to the operator and damage to the equipment.

1. Anyone who uses the equipment must be familiar with:
 - its operation
 - the location of emergency stops
 - its function
 - the relevant safety precautions
 - welding and cutting or other applicable operation of the equipment
2. The operator must ensure that:
 - no unauthorized person is within the working area of the equipment when it is started up
 - no-one is unprotected when the arc is struck or work is started with the equipment
3. The workplace must:
 - be suitable for the purpose
 - be free from drafts

4. Personal safety equipment:
 - Always wear recommended personal safety equipment, such as safety glasses, flame-proof clothing, safety gloves
 - Do not wear loose-fitting items, such as scarves, bracelets, rings, etc., which could become trapped or cause burns
5. General precautions:
 - Make sure the return cable is connected securely
 - Work on high voltage equipment **may only be carried out by a qualified electrician**
 - Appropriate fire extinguishing equipment must be clearly marked and close at hand
 - Lubrication and maintenance must **not** be carried out on the equipment during operation

**WARNING!**

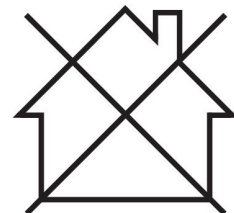
- WeldCloud™ Universal Connector contains a lithium-ion battery (located in the electronics box). Charging of the battery occurs during welding. If charging of the battery is needed when no welding is performed, use the included battery charger. Charging using any other type of charger may create a risk of fire.
- When replacing the battery, only use a lithium-ion battery of the type specified in the WEAR PARTS chapter of this manual. Using any other type of battery may create a risk of injury and fire.
- If the battery is removed from the electronics box, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- Under abusive conditions, liquid may be ejected from the battery. Avoid contact with any liquid! If contact accidentally occurs, flush with water. If liquid comes into contact with the eyes, seek additional medical help. Liquid ejected from the battery may cause irritation or burns.
- Do not use a battery that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.
- Do not expose a battery to fire or excessive temperature. Exposure to fire or temperature above +130 °C (+266 °F) may cause an explosion.

**WARNING!**

Do not connect the WeldCloud™ Universal Connector to a welding power source used in MMA mode. It can trigger or activate welding mode.

**CAUTION!**

Class A equipment is not intended for use in residential locations where the electrical power is provided by the public low-voltage supply system. There may be potential difficulties in ensuring electromagnetic compatibility of class A equipment in such locations, due to conducted as well as radiated disturbances.



**NOTE!**

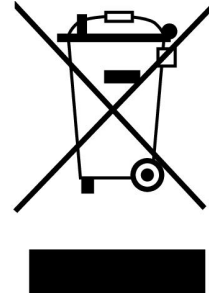
WeldCloud™ Universal Connector is intended for maximum 15 kV HF peak ignition voltage in TIG welding. 15 kV is maximum peak ignition voltage in standard welding power sources of today. In older welding power sources, the maximum peak ignition voltage sometimes can be higher.

**NOTE!****Dispose of electronic equipment at a recycling facility!**

To conform with the European Directive 2012/19/EC on Waste Electrical and Electronic Equipment and its implementation in accordance with national law, electrical and/or electronic equipment that has reached the end of its life must be disposed of at a recycling facility.

As the person responsible for the equipment, it is your responsibility to obtain information on approved collection stations.

For further information contact the nearest ESAB dealer.



ESAB has an assortment of welding accessories and personal protection equipment for purchase. For ordering information, contact your local ESAB dealer or visit us on our website.

**CAUTION!****ADDITIONAL SAFETY INFORMATION**

For more information on safe practices for electric arc welding and cutting equipment, ask your supplier for a copy of “Precautions and Safe Practices for Arc Welding, Cutting and Gouging,” Form 52-529.

The following publications are recommended:

- ANSI/ASC Z49.1 - “Safety in Welding and Cutting”
- AWS C5.5 - “Recommended Practices for Gas Tungsten Arc Welding”
- AWS C5.6 - “Recommended Practices for Gas Metal Arc welding”
- AWS SP - “Safe practices” - Reprint, Welding Handbook
- ANSI/AWS F4.1 - “Recommended Safe Practices for Welding and Cutting of Containers That Have Held Hazardous Substances”
- OSHA 29 CFR 1910 - "Safety and health standards"
- CSA W117.2 - "Code for safety in welding and cutting"
- NFPA Standard 51B, “Fire Prevention During Welding, Cutting, and Other Hot Work”
- CGA Standard P-1, “Precautions for Safe Handling of Compressed Gases in Cylinders”
- ANSI Z87.1, "Occupational and Educational Personal Eye and Face Protection Devices"

2 INTRODUCTION

WeldCloud™ Universal Connector is a brand-agnostic welding measurement system used to enable data collection of any welding power source (ESAB made or numerous other welding power sources on the market). The welding current and welding voltage are measured and the collected data is sent to the WeldCloud™ cloud via Wi-Fi and the local network.

To install WeldCloud™ Universal Connector, access to WeldCloud™ web service is required. Register for a username and password to be able to access your WeldCloud™ account.

ESAB accessories for the product can be found in the "ACCESSORIES" chapter of this manual.

2.1 Equipment

WeldCloud™ Universal Connector is supplied with:

- Instruction manual
- Ratchet straps for attachment of the sensor box
- Two additional Tweco connectors (two terminal lugs)
- Lithium-ion battery
- Battery charger for lithium-ion battery

2.2 Before setup of your WeldCloud™ Universal Connector

In order to complete the setup of the WeldCloud™ Universal Connector, the following is needed:

- An Android device with operating system 8.0 or greater (recommended minimum screen size 4.7")
- A torx screwdriver size T10
- A WeldCloud™ account
- A fully charged lithium-ion battery (see below)
- A Wi-Fi network (2.4 GHz, WPA2)

2.2.1 Charging the lithium-ion battery

1. Insert the lithium-ion battery into the battery charger included in the delivery.
2. Charge the lithium-ion battery for at least 24 hours.

3 TECHNICAL DATA

WeldCloud™ Universal Connector, Valid from serial no. 849-xxx-xxxx, OP132YY-XXXXXX	
Permissible load (I₂):	
60% duty cycle	500 A
100% duty cycle	400 A
MIG	15 A / 14.8 V to 500 A / 39 V
TIG HF	15 A / 10.6 V to 500 A / 30 V
U₁	10–100 V
Current and power at U₁ = 30 V:	
I ₁	0.3 A
P _{max}	9 W
Measurement accuracy (regarding measured current and voltage)	±2%
Operating temperature	-10 to +40 °C (+14 to +104 °F)
Battery data:	
Technology	Lithium-ion battery
Nominal voltage	3.7 V (±0.1 V)
Rated Capacity	3500 mAh
Storage temperature	-4 to +140 °F (-20 to +60 °C)
Charging temperature	+5 to +40 °C (+41 to +104 °F)
Dimensions (l × w × h):	
Sensor box	12.5 × 9.2 × 2.9 in (318 × 234 × 74 mm)
Electronics box	238 × 147 × 40 mm (9.4 × 5.8 × 1.6 in.)
Weight:	
Sensor box	4.4 lb (2.0 kg)
Electronics box	0.7 kg (1.5 lb)
Total including cables	7 kg (15.4 lb)
Enclosure class	IP54
Application class	S

Enclosure class

The **IP** code indicates the enclosure class, i.e. the degree of protection against penetration by solid objects or water.

Equipment marked **IP54** is designed for indoor and outdoor use.

4 INSTALLATION

The installation must be carried out by a professional.



CAUTION!

This product is intended for industrial use. In a domestic environment, this product may cause radio interference. It is the user's responsibility to take adequate precautions.



WARNING!

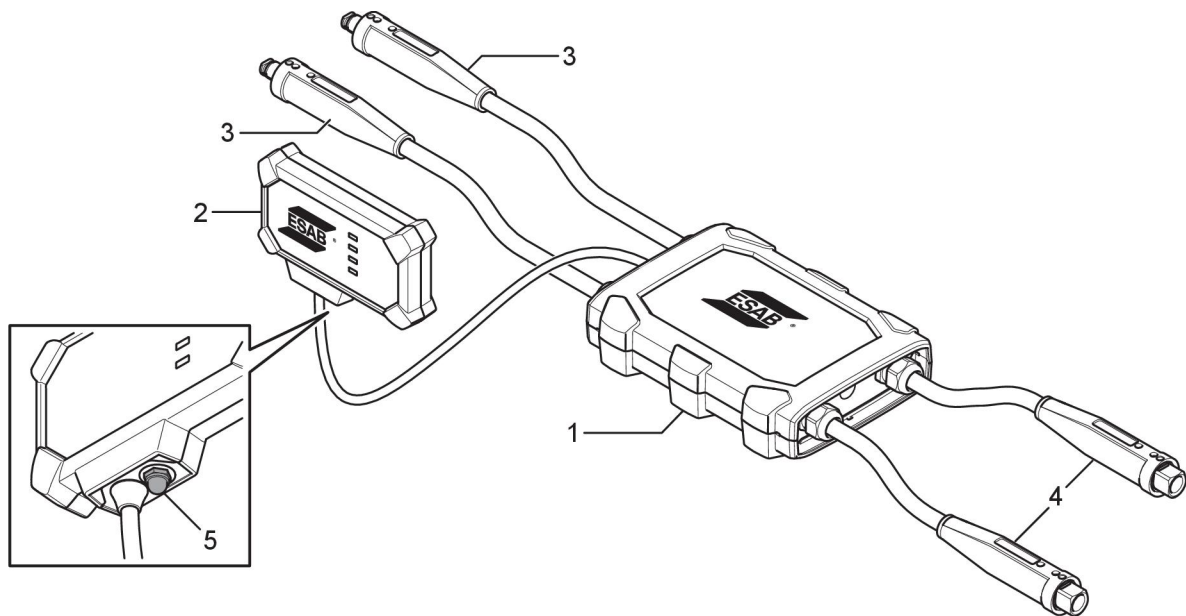
Assure cables make full contact!



NOTE!

If at any time you need assistance, the chat support in WeldCloud is manned and available. Go to <https://esabcloud.com>, and find the support chat in the lower right corner.

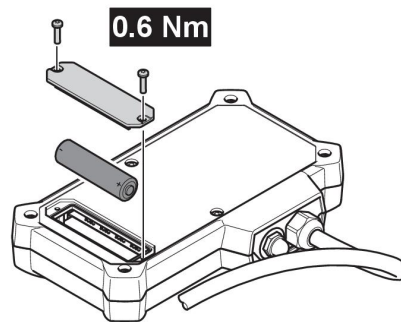
4.1 Main components



1. Sensor box
2. Electronics box
3. Connection to welding output terminals on the power source
4. Connection to welding circuit
5. Push button (to power up, shut down and restart the WeldCloud™ Universal Connector)

4.2 Inserting the lithium-ion battery into the electronics box

1. Make sure the lithium-ion battery is fully charged.
2. Loosen the two screws at the back of the electronics box. Remove the battery lid.



3. Insert the lithium-ion battery. Attach the battery lid and the screws in reverse order. Tightening torque 0.6 Nm.

4.3 Installing WeldCloud™ Universal Connector

1. Attach the electronics box in a suitable position on the welding equipment, using Velcro® tape on the back of the electronics box.



NOTE!

The electronics box contains a radio transmitter and receiver. Position it as high as possible on the welding equipment.

- a) Use alcohol to clean the area where the Velcro® tape is to be attached.
- b) Remove the protection cover of the Velcro® tape and attach the electronics box.

Once the adhesive tape on the back of the Velcro® tape is fastened to the welding equipment, the electronics box can easily be attached and detached multiple times.

2. Connect the sensor box to the power source welding output terminals. It does **not** matter which connector is connected to the + terminal and which is connected to the - terminal of the power source.

If the power source doesn't have Tweco connectors: Disassemble the Tweco connectors from the sensor box cables and replace with the appropriate type of connectors.



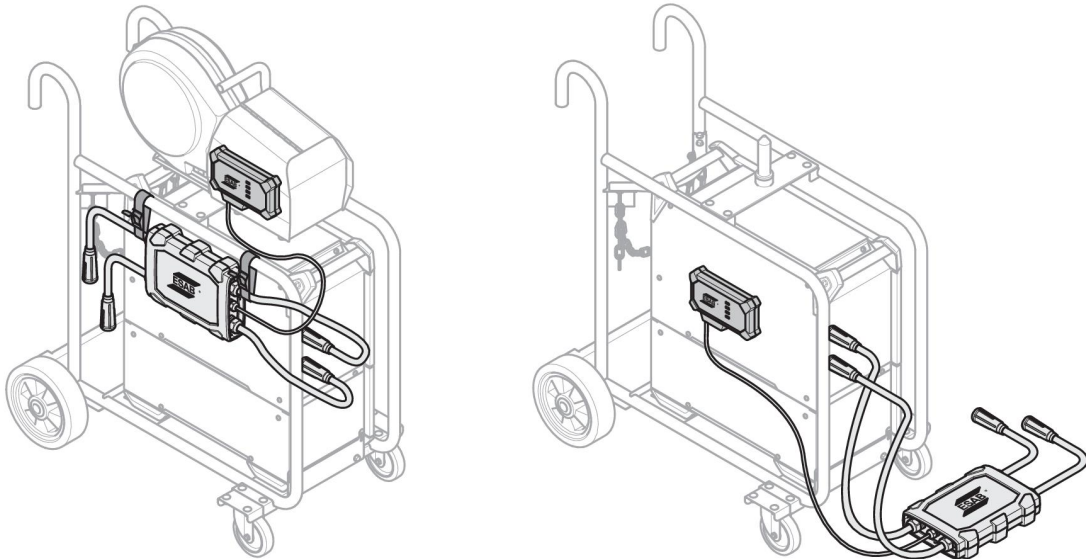
WARNING!

The plugs may only be replaced by a specialist and must comply with the applicable standards for welding current connections. The plugs and sockets must be suitable for a 400-A continuous current or 500 A at 60% duty cycle. Connecting non-permissible contact elements or improper installation can lead to heating, cable fires and further consequential damage.

This will void the warranty.

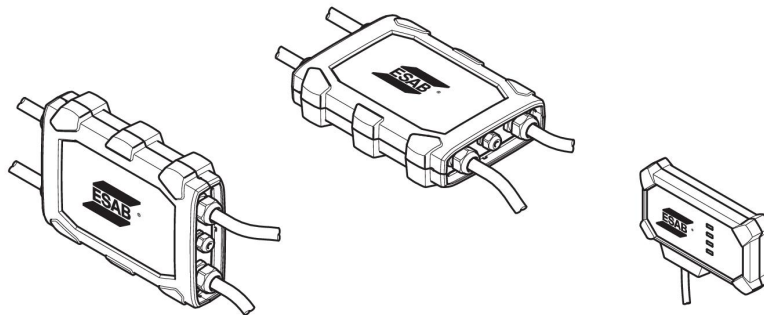
3. Connect the torch and the work lead to the sensor box, ensure the correct polarity (with respect to the welding output terminals) depending on the welding method used.

Examples of how to position the electronics box and the sensor box on the welding equipment. In the first case, the ratchet straps included in the delivery are used to attach the sensor box to the trolley.



NOTE!

To ensure ingress protection (IP) of the WeldCloud™ Universal Connector, the sensor box and the electronics box must be positioned according to one of the alternatives below.



NOTE!

If the WeldCloud™ Universal Connector is used together with a power source with a Voltage Reduction Device (VRD), check that VRD functionality is maintained after the installation!

4.3.1 Replacing connectors

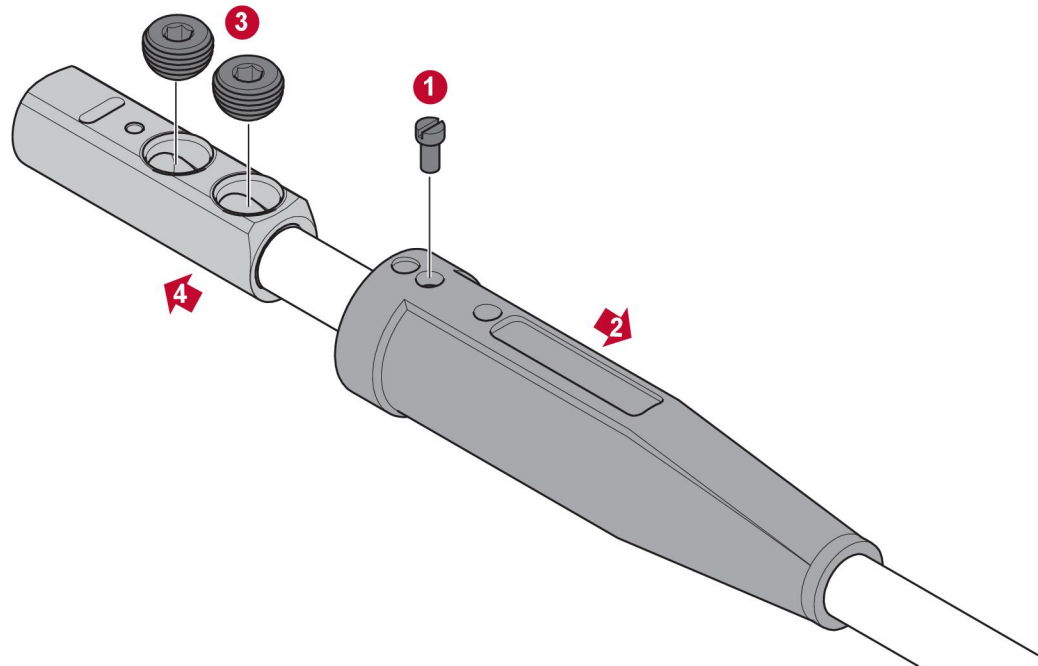


CAUTION!

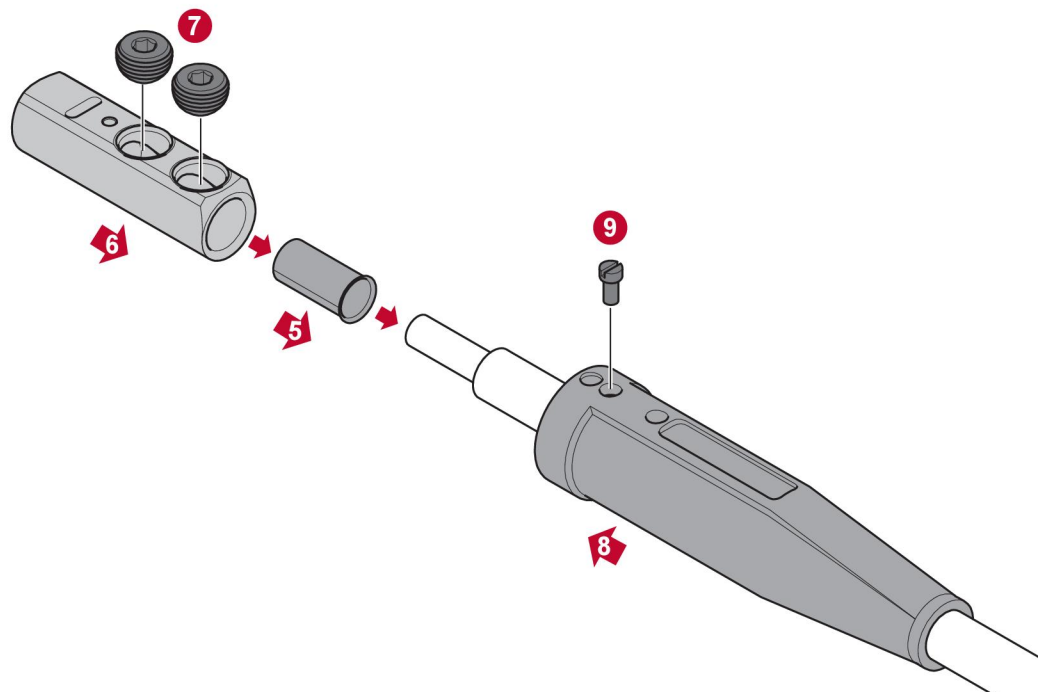
The connectors can cause burn injuries.

Non-ESAB cable connectors must be replaced with the provided connectors in any of the following scenarios:

- The connections to the welding output terminals on the power source are not secure.
- The connector is damaged.
- The rubber surface of the connector is very hot.



1. Remove the screw from the top of the connector (1).
2. Pull the rubber housing (2) off the brass connector.
3. Remove the Allen screws from the brass connector (3).
4. Remove the brass connector from the cable wiring (4).
5. If the cable wire shroud (5) is damaged or missing, add the provided cable wire shroud. Insert the cable wire with the cable wire shroud into the provided brass connector (6).
6. Tighten the Allen screws to fasten the cable wire in the brass connector (7). Tighten the Allen screws to be aligned with or below the surface of the brass connector.
7. Pull the rubber housing back (8) until it completely covers the brass connector (6).
8. Insert the screw into the top of the connector and tighten (9).



4.4 Setup of WeldCloud™ Universal Connector

After the physical installation of WeldCloud™ Universal Connector is completed, software setup of the system must be performed. The software setup includes the following main activities:

- Downloading and installing the application to the Android device from WeldCloud Link. (Operating system 8.0 or greater, recommended minimum screen size 4.7".)
- Powering up the WeldCloud™ Universal Connector
- Pairing the Android device to the WeldCloud™ Universal Connector
- Connecting the WeldCloud™ Universal Connector to the local Wi-Fi network
- Connecting the WeldCloud™ Universal Connector to WeldCloud™ Cloud Platform

Each activity is explained below.



NOTE!

Starting with software version 2.0 of the Universal Connector, there have been changes to the mobile application that are not compatible with older software versions. Contact us if you face issues or have old devices (version 1.x.x).

It is recommended to follow the online instructions.

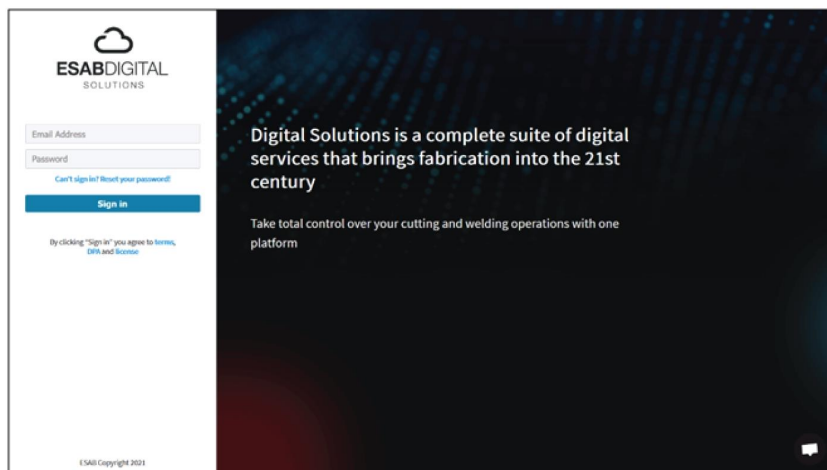
For more information, visit https://esab.com/weldcloud_guide.



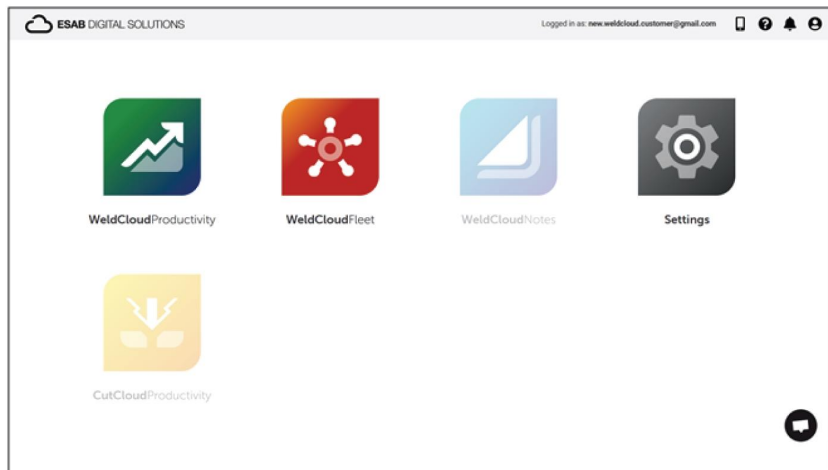
4.4.1 Setting up a site in WeldCloud

Before setting up a Universal Connector, a Site in WeldCloud is required:

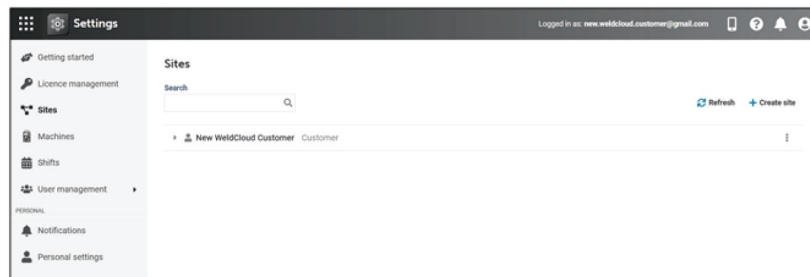
1. Go to <https://esabcloud.com>.
2. Log into your account.



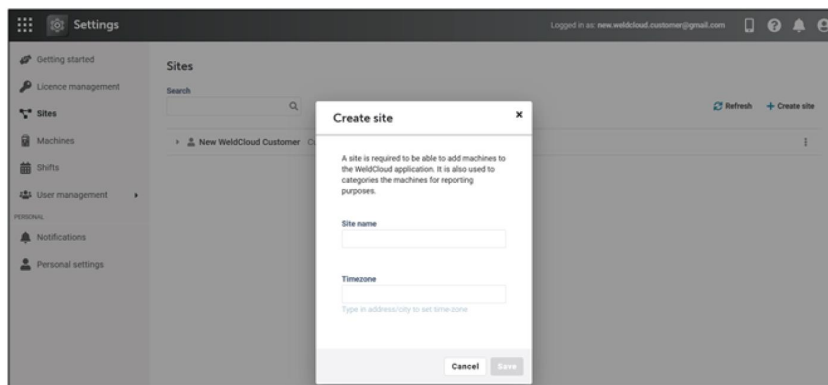
3. Go to *Settings*.



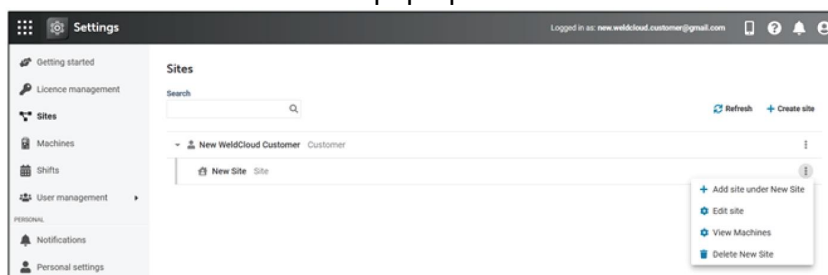
4. Go to *Sites* in the menu to the left.



5. Click on *Create site* to get a pop-up.
6. Enter your desired name for the site and an address to get the correct time zone
7. Click on *Save* to finish the creation.



8. If you want to organize your machines further, it is possible to add sub-sites. Click on the three dots next to a site to open the menu.
9. Click on *Add site under New site* in the pop-up menu.



4.4.2 Downloading and installing the WeldCloud Link application

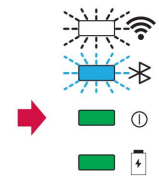
1. Download the latest software version of the Android application WeldCloud Link from the Google Play store.
The WeldCloud Link application is found in the Google Play store, scan the QR code below.



2. Install the WeldCloud Link application on the preferred Android device.

4.4.3 Powering up the WeldCloud™ Universal Connector

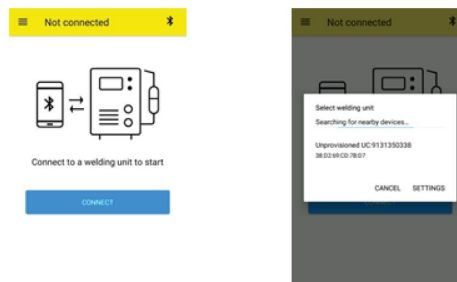
1. Initiate the WeldCloud™ Universal Connector by pressing the push button on the right side of the signal cable inlet on the electronics box.



A steady green power LED on the electronics box indicates that the WeldCloud™ Universal Connector is on. This takes approximately 20 seconds.

4.4.4 Pairing the Android device to the WeldCloud™ Universal Connector

1. Enable Bluetooth on the Android device.
2. Start the ESAB UCMon application on the Android device.
Click **CONNECT** and choose the desired device from the list. A new Universal Connector will show up as *Unprovisioned UC:<serial number>*. This can take up to 2 minutes.



If the correct WeldCloud™ Universal Connector is **not** present in the list, click *Cancel* try **CONNECT** again.

If the correct WeldCloud Universal Connector is not found, make sure it is powered up.

If issues persist, click **SETTINGS** to use the Android menu for connecting or pairing a new device. Refer to the manual of your device for help on how to perform this.

On successful pairing, the application automatically displays the *Live view* screen.

A steady blue Bluetooth LED on the electronics box confirms the connection to WeldCloud™ Universal Connector.



4.4.5 Connecting the WeldCloud™ Universal Connector to a local Wi-Fi network and to WeldCloud Cloud Platform

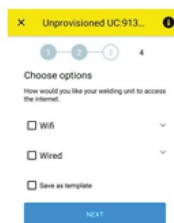
1. 1. Create a site in WeldCloud or make sure there is an existing site that can be accessed by your account. See XXX.
2. 2. In WeldCloud Link, click the menu button in the top left corner to open the menu.
3. Click on *Welding Unit Setup*.
4. Connect to the device.
5. Log into WeldCloud using an account with access to the intended site.
6. Click on *NEW SETUP* to set up a new Universal Connector.
IMPORT EXISTING SETUP can be used to reconfigure a Universal Connector when an asset has already been created in WeldCloud.
NETWORK SETTINGS can be used to change your Wi-Fi settings.



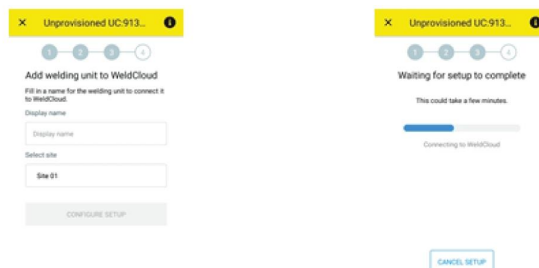
7. Log in using your Welding unit password.
The default password for the Universal Connector is "**gateway.**"
8. Set a new password and save this information.
If you ever forget your password, you can perform a factory reset using the service password "**gatewayreset.**"
9. Click on Wi-Fi and add SSID and Password.
Save as a template if you wish to configure multiple devices.
If you have a previous template, this can be used by selecting it in the template list.

NOTE!
The Universal Connector uses wireless communication. Wired connection is not applicable for this product.

10. Click *NEXT* when complete.



11. Enter a *Display* name, which will be displayed in WeldCloud and for the Bluetooth interface.



12. Click on *Select site*, which will be used in WeldCloud.
13. Click on *CONFIGURE SETUP*
14. Wait for the setup to complete

4.4.6 Set up additional weld parameters

It is possible to add additional information to your weld sessions either in WeldCloud Fleet or in WeldCloud Link.

In WeldCloud Fleet, you add information in the machine pages.

1. Go to *Machines & stations* and *List view*.
2. Click the machine to which you wish to add information.
3. In the *Weld information* card, click *Edit* and enter *Operator*, *WPS*, *Part ID*, *Work order* or *Wire*.
4. Click *Save*.

To add information through the mobile application WeldCloud Link, you must first create an operator group with the Universal Connector and add any operator that will use the system.

1. Log into WeldCloud and go to WeldCloud Fleet.
2. In the left-hand menu, go to *Operator management* and *Operators*.
3. Click *Add operator* and add any WeldCloud user as an Operator or invite a new user using their email.
4. In the left-hand menu, go to *Operator management* and *Groups*.
5. Click *Create group* and enter a *Group name*.
6. In the *MACHINES* tab, click *Add machine*, select machines and click *Add*.
7. In the *MACHINES* tab, set permissions from the drop-down list.
8. In the *OPERATORS* tab, click *Add operators*, select operators and click *Add*.
9. Click *Save*.

In WeldCloud Link:

1. Connect to the Universal Connector.
2. Log in with your WeldCloud account.
3. In the live view screen, click *BEGIN SCANNING*.
If an ID and Password are requested, it means that you either aren't logged into WeldCloud Link or your operator ID was rejected. Make sure you have set up an Operator group as above. You can also try restarting the Universal Connector to update valid operators.
4. Click *Scan* to scan with a camera or built-in barcode scanner, and scan any barcode or QR code to add information.
Select the type of scanned item, such as Electrode, Electrode Batch, Flux, Flux Batch, Gas, Part, Tag, Wire, Wire Batch, Work order or WPS.
The Tag type can be used for items that don't fall into any other category.



NOTE!

The check mark indicates that the item has been sent to the Universal Connector. If the item hasn't sent correctly, you can try clicking the *Refresh* icon.

5. To remove items, click on the *Trash can* icon or the *CLEAR* button.

4.4.7 Factory reset

To clear all user data and configurations from the Universal connector, and to reset the Welding unit password, a Factory reset can be performed.

1. Connect to the Universal Connector with WeldCloud Link.
2. Go to *Welding Unit Setup* in the left-hand menu.
3. Click *FACTORY RESET*.
4. Enter your Welding unit password or use the service password "**gatewayreset**."
5. Click *PERFORM FACTORY RESET*.

The factory reset will then be performed.

It can take a while before your mobile device updates the name of the Universal Connector back to *Unprovisioned UC:<serial number>*. If there are any problems with the connection, restart the Universal Connector or remove the pairing in the Bluetooth settings of your mobile device.

5 OPERATION

5.1 Power supply

The WeldCloud™ Universal Connector is powered from the welding circuit during welding. There is no need for external power supply to the unit.

The WeldCloud™ Universal Connector has a lithium-ion battery as backup power when no welding is conducted. The lithium-ion battery is charged during welding.

5.2 Operation modes

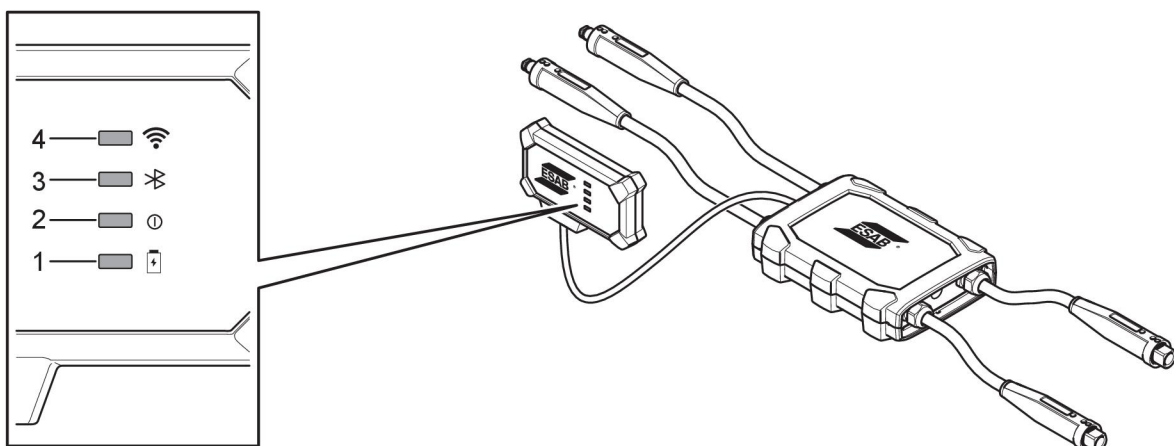
The WeldCloud™ Universal Connector has three operation modes:

- **System off**
Data collection is off. The system will start up at weld start or when the push-button on the electronics box is pressed. Start-up takes approximately 20 seconds, during this time no welding data is collected. After a total of 60 seconds, Wi-Fi and Bluetooth will be ready to use.
- **Sleep mode**
Battery saving mode. The system will wake up at weld start or when the push-button on the electronic box is pressed. The reboot takes approximately 1 second, during this short time no welding data is collected. If no welding is detected for 2 hours, the system will shut down automatically.
- **System on**
The system is capable of data collection. Weld start detection takes approximately 1 second, during this short time no welding data is collected. The system will go to sleep 5 seconds after a weld.
If the mobile application is connected, the system will be on for 20 minutes.
If the system was started using the push-button, the system will also be on for 20 minutes

The WeldCloud™ Universal Connector can always be turned on or off manually by the push-button on the electronics box.

5.3 Status indication LEDs

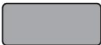











Four status indication LEDs (Light Emitting Diodes) are located on the electronics box.











1. Battery LED
2. Power LED

3. Bluetooth LED
4. Wi-Fi LED







1. Battery LED

Indication	Explanation
 	System is Off or in Sleep mode
Flashing green  	Charging
Steady red  	Low battery
Steady green  	Charging complete
Steady orange  	No longer charging
Quick red flashing  	Battery missing or faulty, or battery has stopped charging





2. Power LED

Indication	Explanation
Off  	System off
Flashing green  	Starting up
Steady green  	System on or sleep mode
Steady orange  	Welding ongoing

3. Bluetooth LED

Indication	Explanation
Off  	Bluetooth off, no connection possible
Blue short flash every 2 seconds  	Ready for pairing
Steady blue  	Connected

4. Wi-Fi LED

Indication	Explanation
Off 	Wi-Fi off, no connection possible
Flashing white 	System connected to the local Wi-Fi network but not to WeldCloud™ cloud.
White short flash every 2 seconds 	System ready but not connected to the local Wi-Fi network. (Configuration not correct or Wi-Fi point unavailable.)
Steady white 	System connected to the local Wi-Fi network and to WeldCloud™ cloud.

5.4 Measuring and storing data

The WeldCloud™ Universal Connector measures the absolute average values of the welding current and the welding voltage. The data is collected at high-speed sampling rate. Averaging of the data, down to 10 samples per second, is done to limit the amount of data sent to the WeldCloud™ cloud.

The amount of data created and stored with each weld is dependent on:

- The welding time
- The amount of information entered into the system prior to welding

After each weld, the data is automatically sent to WeldCloud™. If the connection to the cloud is lost, the data is internally stored in WeldCloud™ Universal Connector. More than 10,000 weld seams of 10 seconds can be stored. If the system is reconnected, the internally stored data is automatically sent to the WeldCloud™ cloud.



NOTE!

The current must drop below 15 A for at least 0.5 seconds to stop recording. If two or more welds are done without a 0.5-second pause, then they will be registered as one combined weld.

5.5 Welding system compatibility

The Universal Connector can have issues when connected to some systems.

The Universal Connector:

- Does not support welding in SMAW as this can trigger welding mode in some power sources.
- Has a maximum current limit of 400 A 100% duty cycle and 500 A 60% duty cycle.
- Does not support power sources with a test voltage.

5.5.1 Test voltage

Various power source manufacturers apply a test voltage to the welding cables during standby. This is used to determine if there is a short circuit. The ignition behavior at start is then changed accordingly. These test voltages are usually less than 24 V (typically 14–18 V) and have a high resistance. If the wire electrode touches the workpiece during standby, this test voltage collapses (less than 2 V).

The current electronics of the Universal Connector are not able to distinguish these test voltages from real welding voltages. This wakes up the Universal Connector and tries to obtain power.

As a result of these problems, the following phenomena may occur during the power source standby mode:

- Continuous switching on of the Universal Connector even without welding current.
- Incorrect current and voltage displays on the mobile device.
- Potentially short seams in the WeldCloud with wrong values.
- Battery discharge.

To identify test voltage:

1. Connect the Universal Connector to the power source.
2. Switch on the power source and select a normal GMAW welding program.
3. Check that the power source is in standby mode/not welding.
4. Observe Universal Connector. The Universal Connector can be started by starting the power source.

After 20 minutes or less, it will go into sleep mode. It has to remain in this sleep mode for at least 2 minutes while the power source isn't welding.

If the Universal Connector starts without welding or wakes up continuously without welding, the power source is currently not suitable.

6 MAINTENANCE

**NOTE!**

Regular maintenance is important for safe and reliable operation.

**CAUTION!**

All warranty undertakings from the supplier cease to apply if the customer attempts any work to rectify any faults in the product during the warranty period.

6.1 Inspection and cleaning

When needed, clean the dust off boxes, cables and connectors included in the WeldCloud™ Universal Connector system using a dry cloth, according to standard workshop practices.

6.2 Validation

It is recommended to periodically validate the accuracy of the external sensor. The validation can be coordinated with the user's validation of welding equipment in general. If accuracy is found to be out of tolerance, contact an authorized ESAB distributor or service center for further assistance.

6.3 Charging the lithium-ion battery

Normally charging of the lithium-ion battery in the electronics box occurs during welding. If charging of the lithium-ion battery is needed when no welding is performed, it can be removed from the electronics box and charged in a separate battery charger. Use a charger of the L1 type intended for lithium-ion batteries of the 18650 type. Only use chargers with CCCV (constant current, constant voltage) characteristics. Do not charge more than 4.2 V. Charging using any other type of charger creates a risk of fire.

6.3.1 Storing the Universal Connector

If the WeldCloud™ Universal Connector is to be stored, make sure that the lithium-ion battery is fully charged. For a longer storage period, remove the lithium-ion battery from the electronics box! Before reusing the WeldCloud™ Universal Connector, charge the lithium-ion battery using the included battery charger.

7 TROUBLESHOOTING

Try these recommended checks and inspections before sending for an authorized service technician.

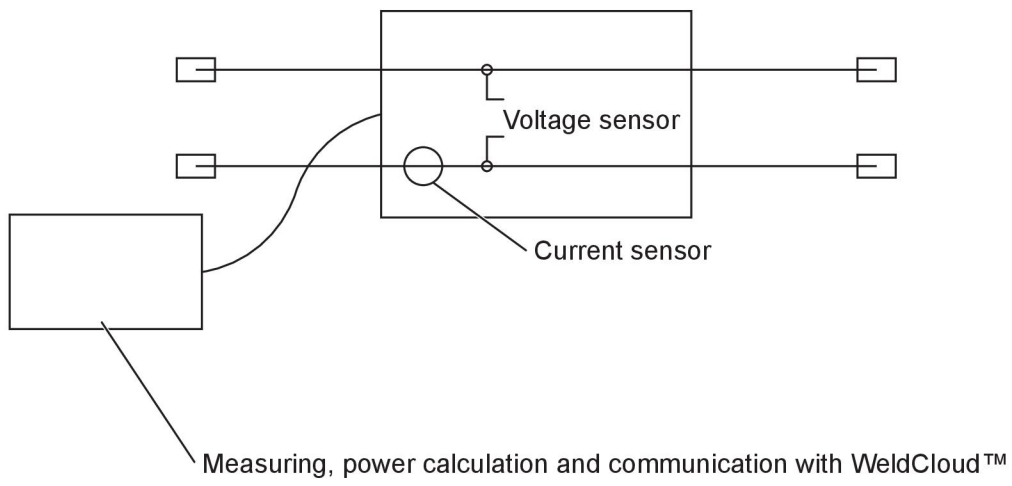
Type of fault	Corrective action
<p>The battery LED on the electronics box is not lit or is flashing red, despite the fact that welding is going on. The WeldCloud™ Universal Connector has got no power or the battery is low.</p>	<p>Use the charger included and charge the lithium-ion battery for a minimum of 24 hours or replace it with a fully charged spare lithium-ion battery.</p>
<p>The welding power source is not turned on and nothing happens when the push button (on the electronics box) is pressed.</p>	<p>Use the included charger and charge the lithium-ion battery or replace it with a fully charged spare lithium-ion battery.</p>
<p>There is no data for the specific WeldCloud™ Universal Connector visible in the WeldCloud™ software.</p>	<p>Check the power LED on the electronics box. The power LED should be on with a steady green light. If the power LED is off or is flashing green, power up the WeldCloud™ Universal Connector (by pushing the button) and wait until it has entered ready mode (steady green power LED).</p> <p>Check the Wi-Fi LED on the electronics box. The Wi-Fi LED should be on with a steady white light. If the Wi-Fi LED is flashing with a white short flash every 2 seconds, connect the WeldCloud™ Universal Connector to the local Wi-Fi network. If the Wi-Fi LED is flashing steadily in white, connect the WeldCloud™ Universal Connector to WeldCloud™ cloud.</p>
<p>The welding power source shows unexpected error messages or performs unintended actions when it is connected to the WeldCloud™ Universal Connector. Some modern welding power sources operating in SMAW (stick) mode have sensitive safety protection circuits that can be disturbed by the WeldCloud™ Universal Connector.</p>	<p>Contact your welding power source supplier and ask for advice.</p>
<p>The rubber surface of the connector is hot.</p>	<p>Check if the cable connection is tight. Make sure that the cable connection makes full contact. Twist the male and female ends of the Tweco connector until the ends are locked together.</p> <p>Replace the male connector with the male Tweco connector provided. See chapter "Replacing connector".</p>

8 ORDERING SPARE PARTS

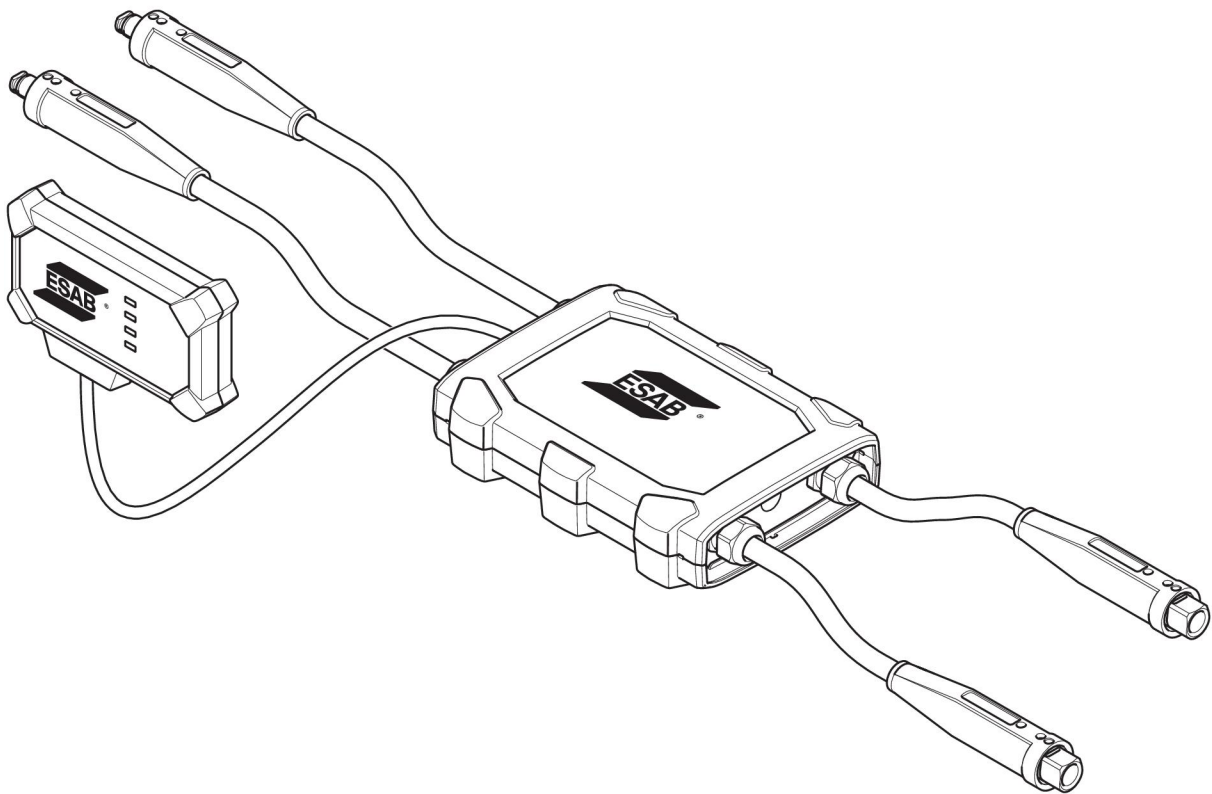
WeldCloud™ Universal Connector is designed and tested in accordance with the international and European standards **IEC/EN 60974-1** and **IEC/EN 60974-10 Class A**. It is the obligation of the service unit which has carried out the service or repair work to make sure that the product still conforms to the mentioned standards.

Spare parts and wear parts can be ordered through your nearest ESAB dealer, see the back cover of this document. When ordering, please state product type, serial number, designation and spare part number in accordance with the spare parts list. This facilitates dispatch and ensures correct delivery.

DIAGRAM



ORDERING NUMBERS

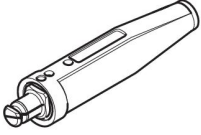
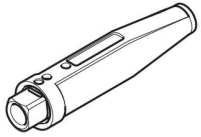



Ordering number	Denomination	Type
0445 690 882	WeldCloud™ Universal Connector	Basic, with Tweco connectors
0463 602 001	Service manual	WeldCloud™ Universal Connector
0463 603 001	Spare parts list	WeldCloud™ Universal Connector

WEAR PARTS

Ordering number	Denomination	Notes
0194 008 101	Lithium Coin Cell Battery	3 V, 225 mAh
0445 670 001	Lithium-ion battery	Type 18650

ACCESSORIES

9425-1410	Tweco 4-MPC male cable connection (2 pieces)	
9425-1420	Tweco 4-MPC female cable connection (2 pieces)	
9510-1111	Tweco OF2 (terminal lug style)	



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