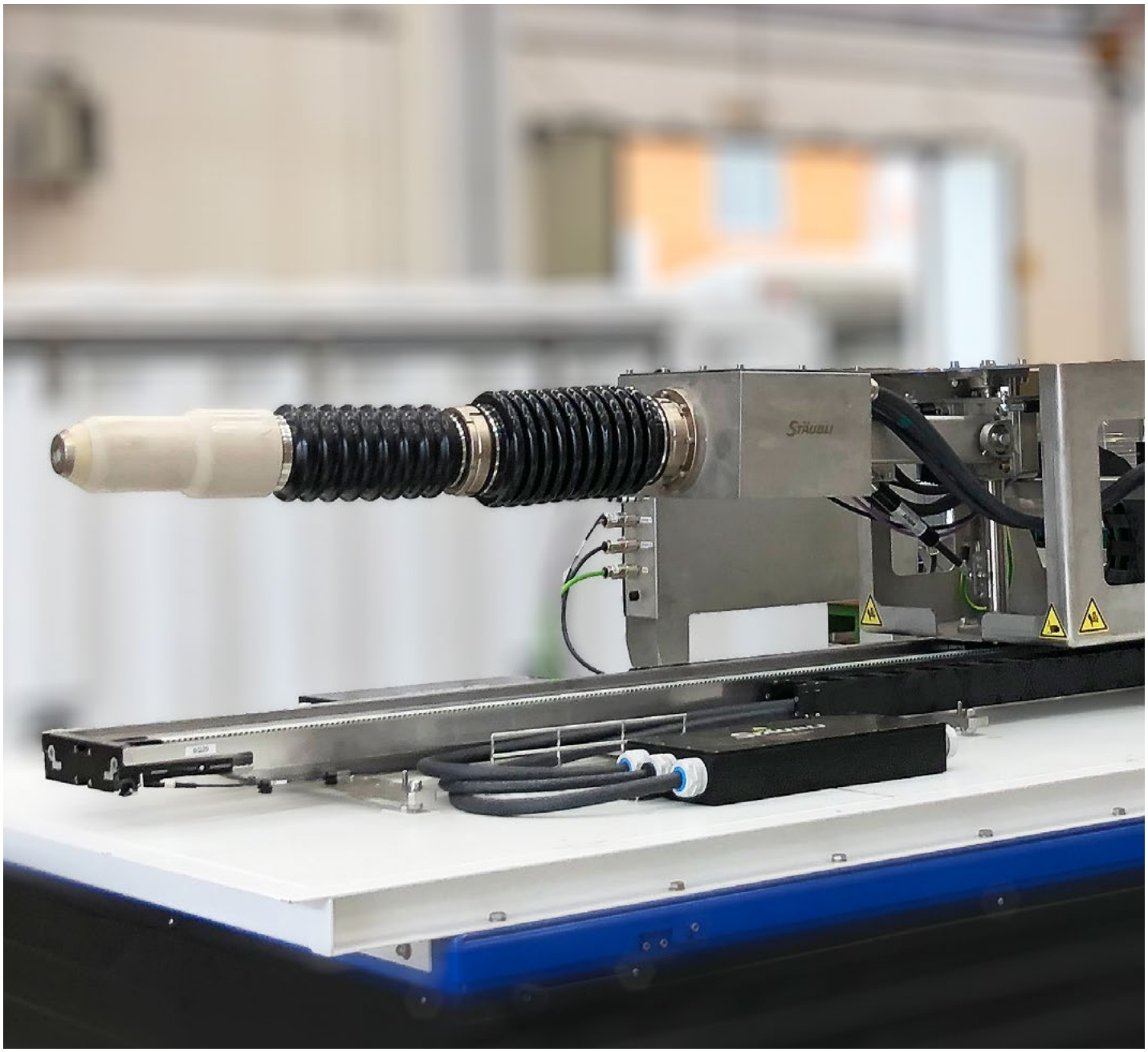
FAST MOVING TECHNOLOGY

Automated rapid charging connector QCC

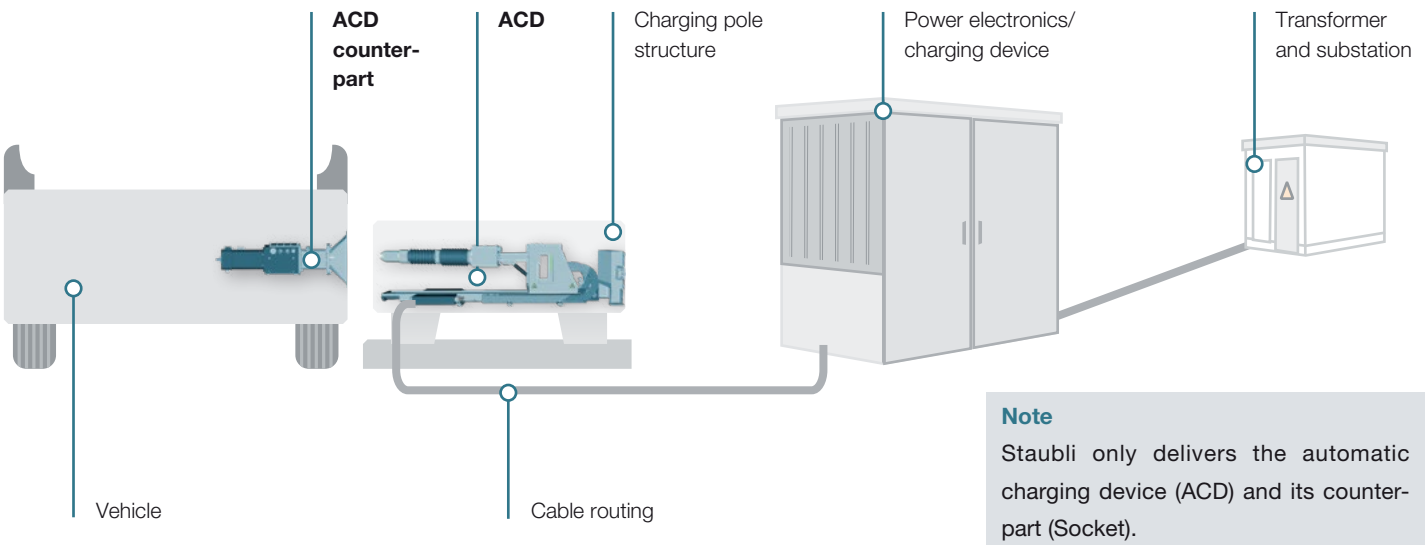
Quick reference guide

EN



SCOPE OF SUPPLY

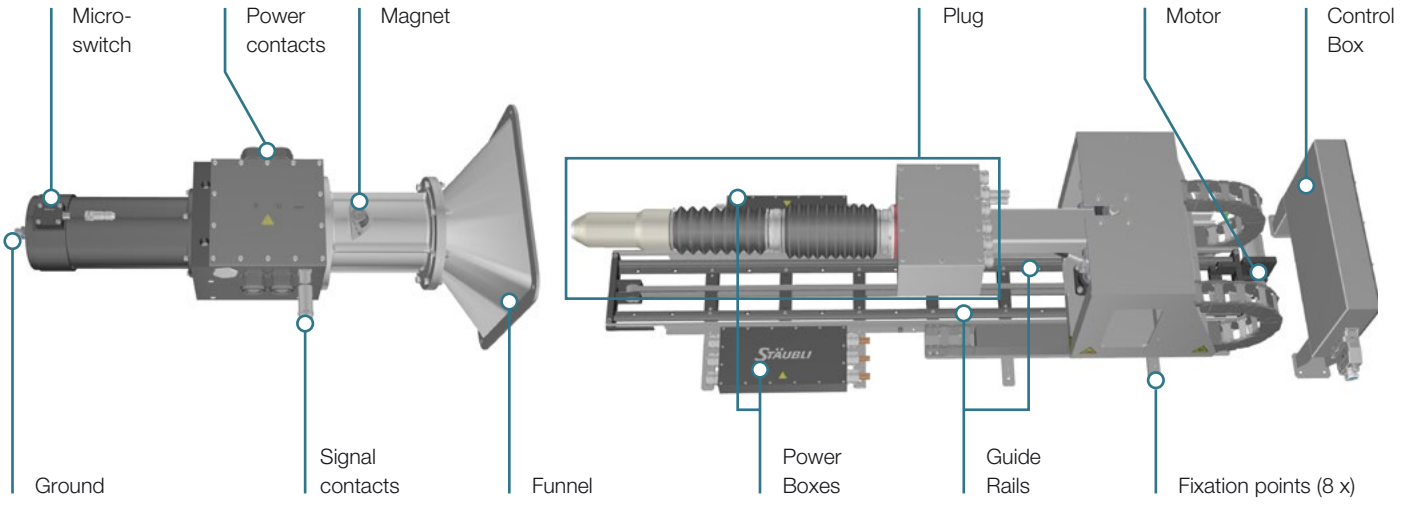
Generic site layout



Note

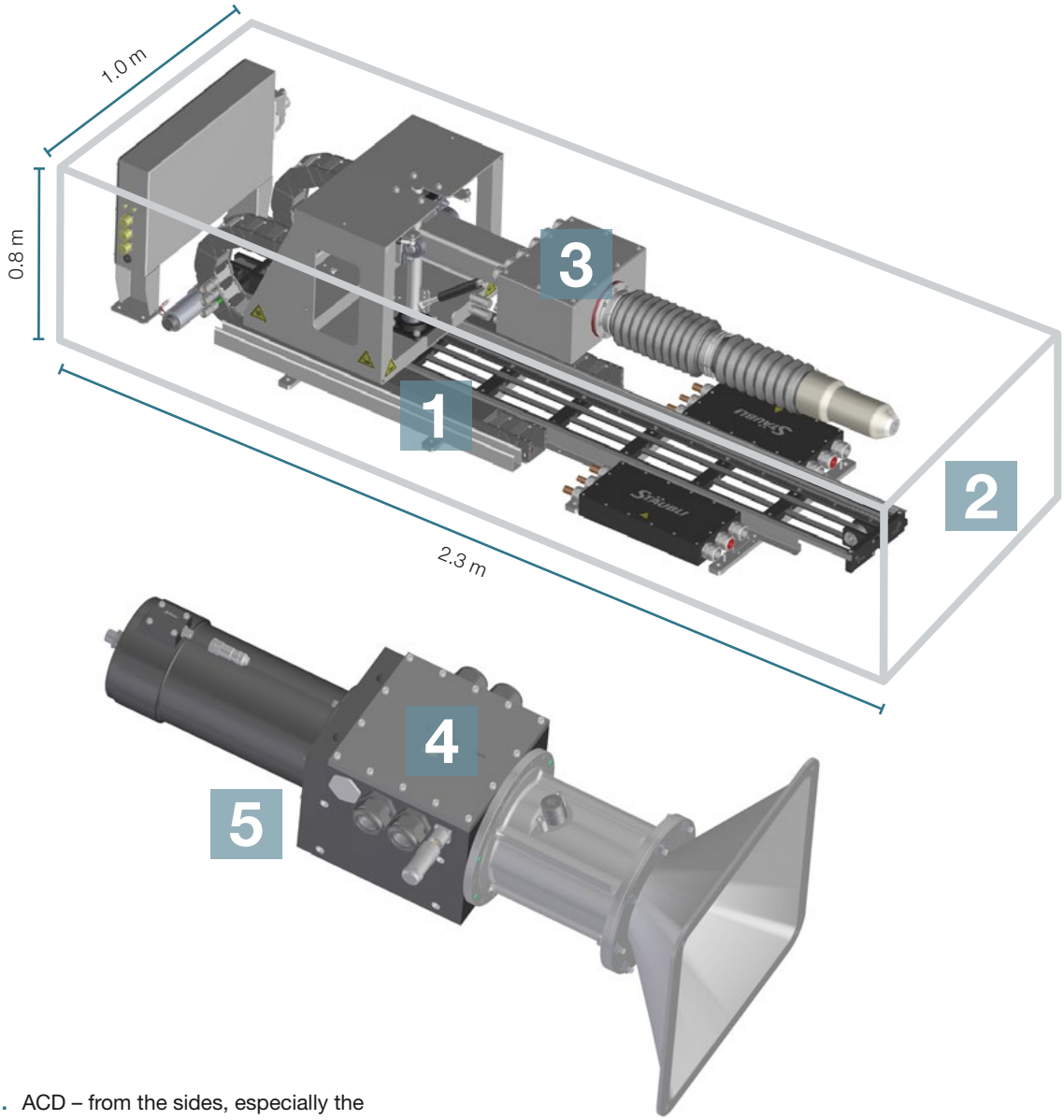
Staubli only delivers the automatic charging device (ACD) and its counter-part (Socket).

Illustration ACD and socket w/sub-parts



Space and mounting

The QCC-ACD is intended to be placed inside of an enclosure. The enclosure shall have the minimum dimensions shown below for the ACD and access for maintenance is described by the 5 positions shown.



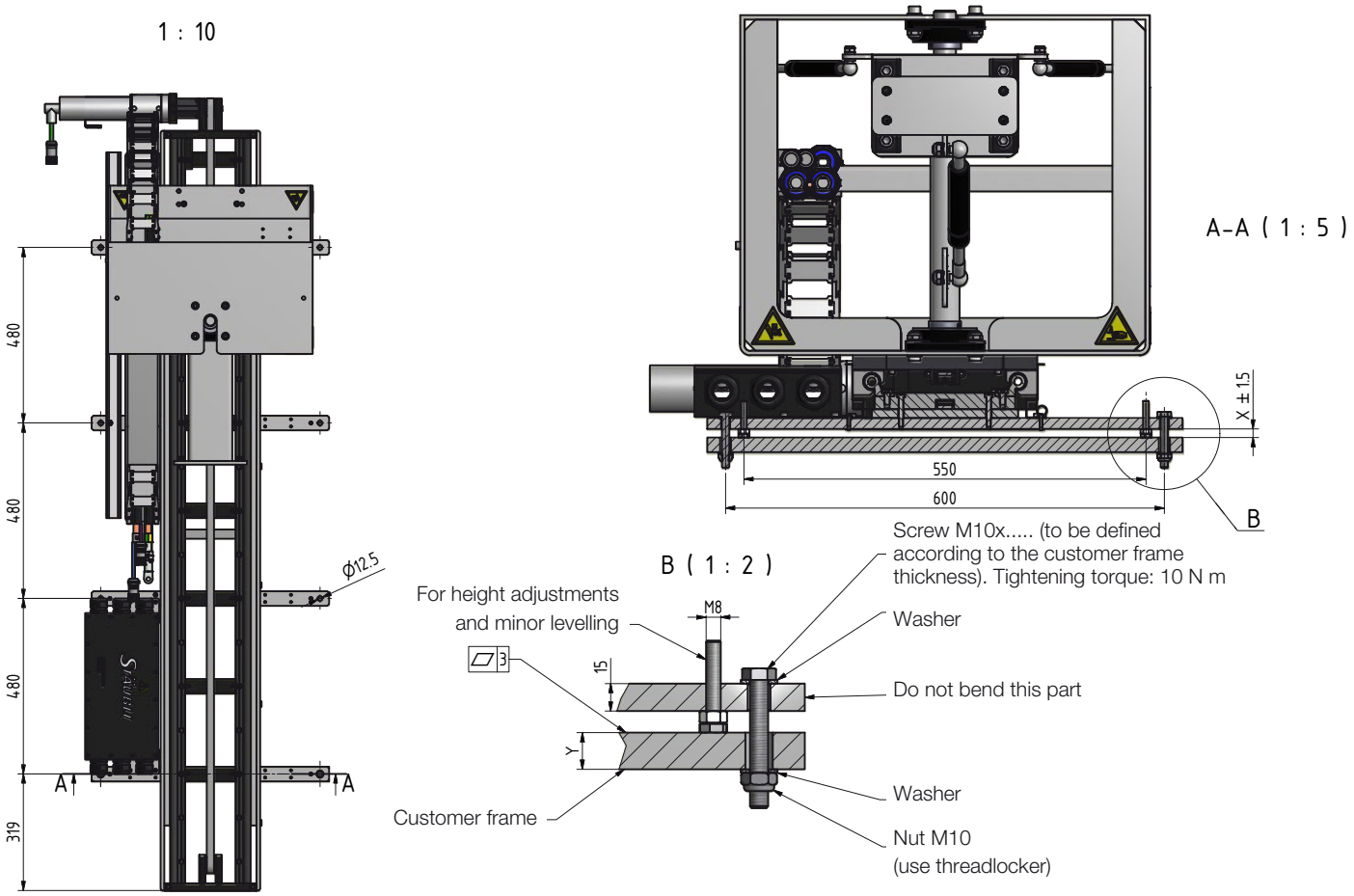
1. ACD – from the sides, especially the side of the power box.
2. ACD – from the front, this needs to be open for mating as well.
3. ACD – from the top.
4. Socket – from the top
5. Space to turn wrenches (both sides)

Note

Make sure to plan cable routing with minimum bend radius according to manufacturer recommendation.

DIMENSIONS

QCC – ACD

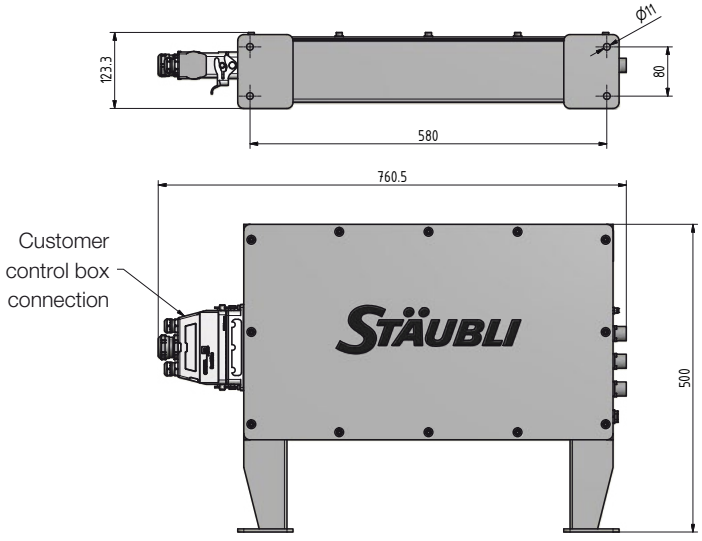


Note

*Sketches show QCC2 ACD.

QCC3 comes with 2 Power boxes

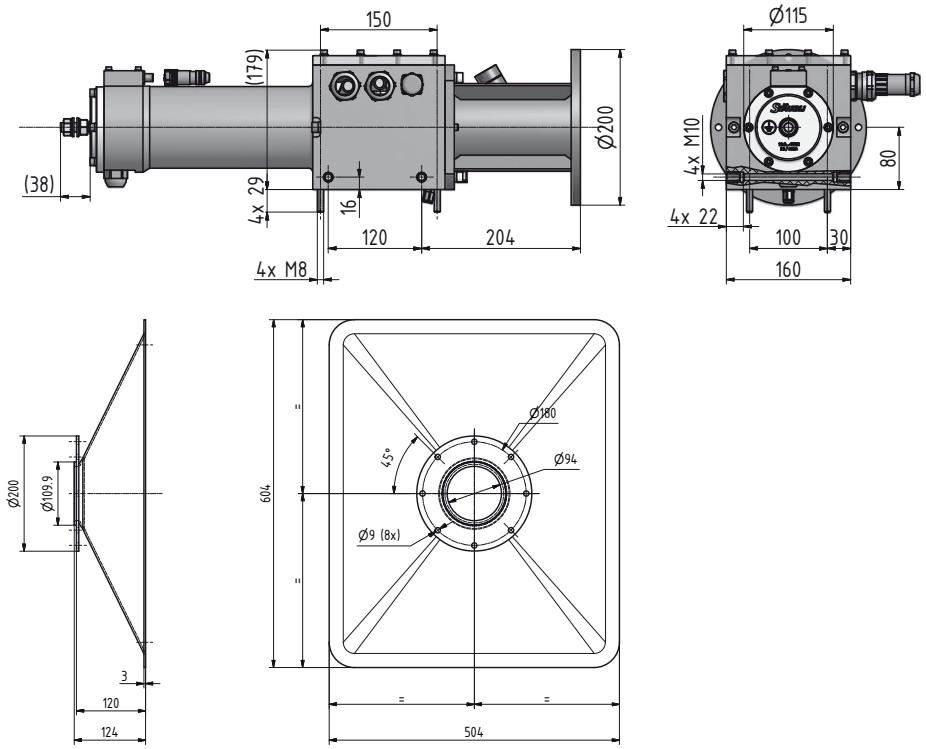
Control box



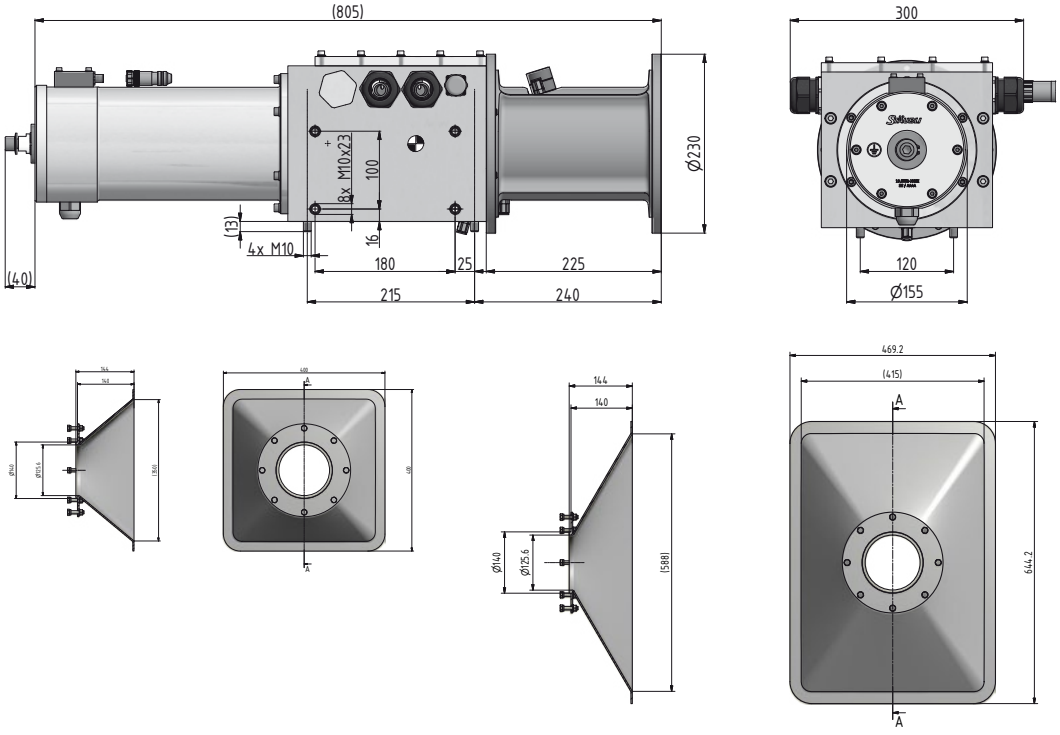
Note

The control box can be installed up to 2 m away from ACD.

QCC2 – Socket (ACD counterpart)

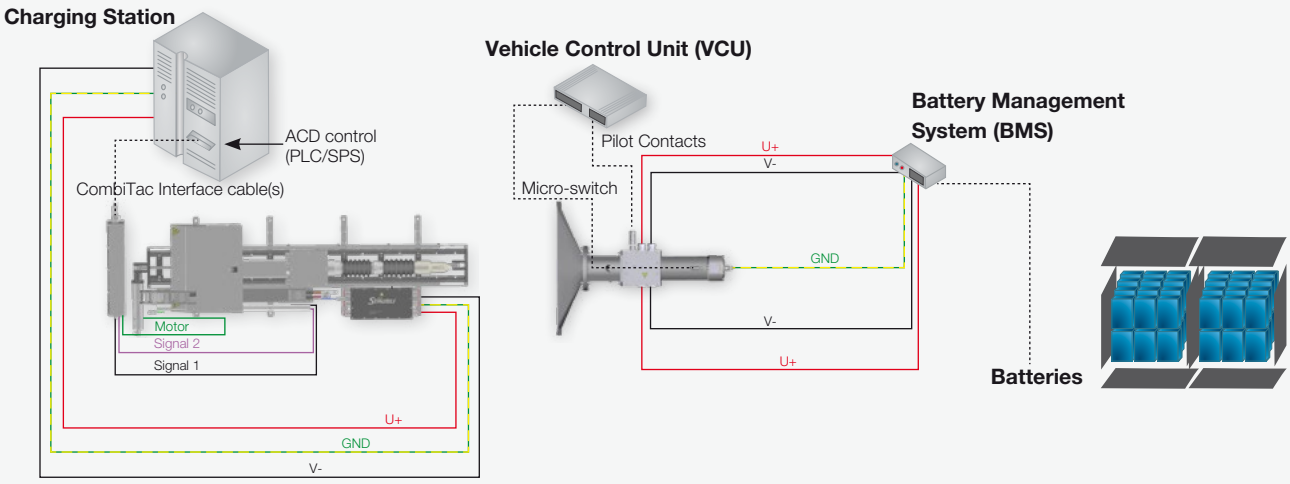


QCC3 – Socket (ACD counterpart)



Infographics with wiring details

QCC2



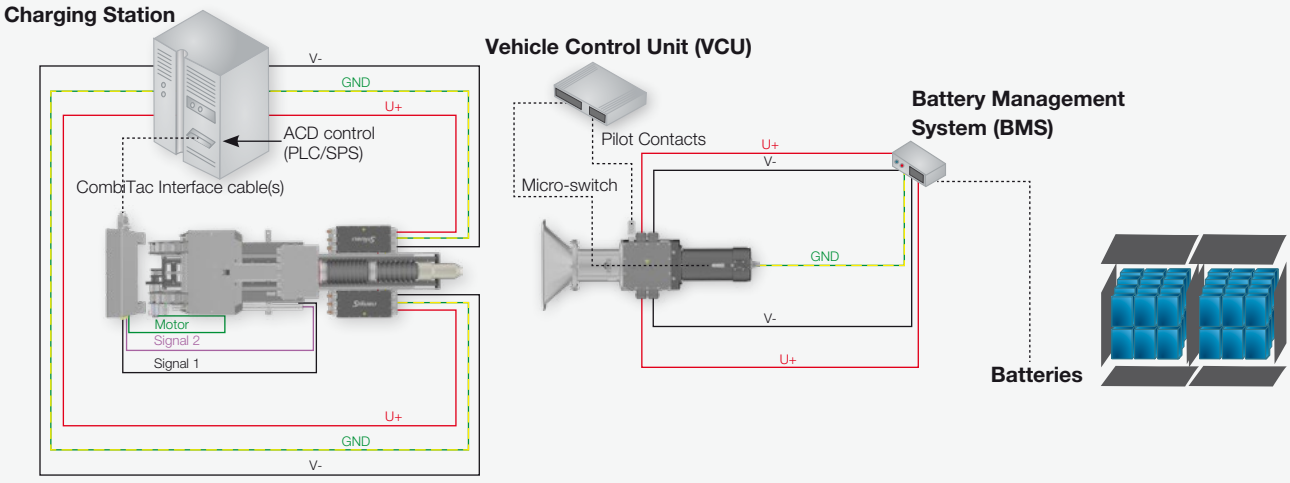
Power Lines U+/V-/GND
Up to 95 mm²/Outer-Ø 10 mm – 32 mm
Class 5 or 6 stranding recommended

CombiTac interface cable
Signals (3 twisted pairs): 0.25 mm² – 0.75 mm²
I/O (up to 30 wires): 0.5 mm² – 1.5mm²
Motor power (3 wires): 2.5 mm² – 4 mm²

Pilot contacts (socket side)
Up to 6 wires: 0.14 mm² – 1 mm²

Micro-switch
Up to 4 wires: max. 0.5 mm²

QCC3



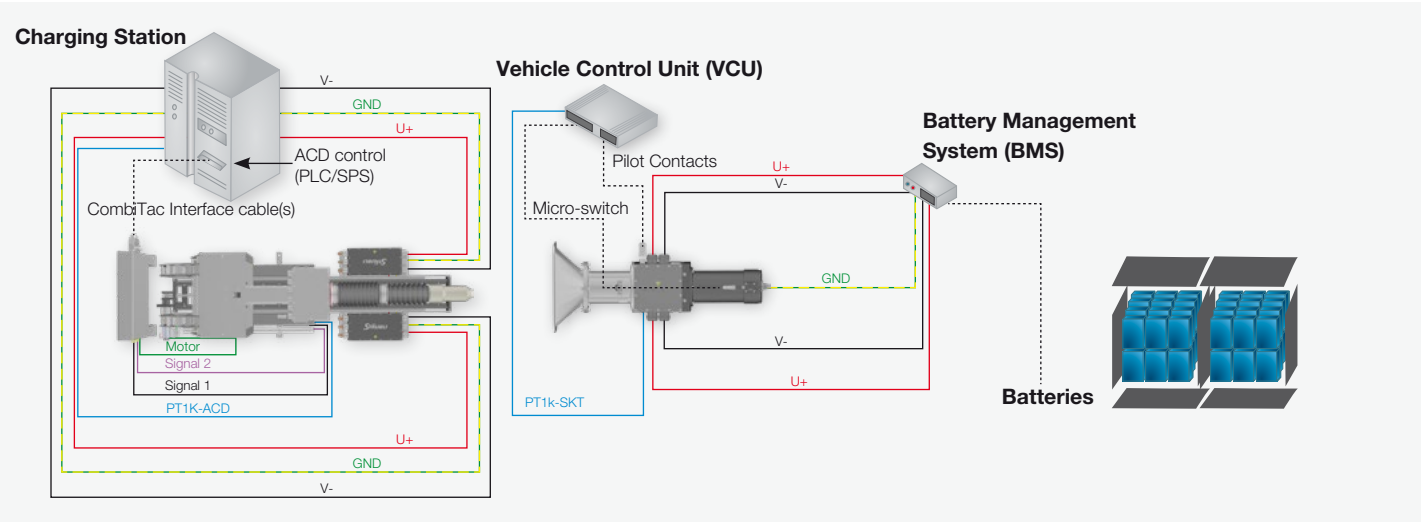
Power Lines U+/V-/GND
Up to 120 mm²/Outer-Ø 10 mm – 32 mm
Class 5 or 6 stranding recommended

CombiTac interface cable
Signals (3 twisted pairs): 0.25 mm² – 0.75 mm²
I/O (up to 30 wires): 0.5 mm² – 1.5mm²
Motor power (3 wires): 2.5 mm² – 4 mm²

Pilot contacts (socket side)
Up to 6 wires: 0.14 mm² – 1 mm²

Micro-switch
Up to 4 wires: max. 0.5 mm²

QCC3 + Temperature sensor



Power Lines U+/V-/GND
Up to 120 mm²/Outer-Ø 10 mm – 32 mm
Class 5 or 6 stranding recommended

CombiTac interface cable
Signals (3 twisted pairs): 0.25 mm² – 0.75 mm²
I/O (up to 30 wires): 0.5 mm² – 1.5mm²
Motor power (3 wires): 2.5 mm² – 4 mm²

Pilot contacts (socket side)
Up to 6 wires: 0.14 mm² – 1 mm²

Micro-switch
Up to 4 wires: max. 0.5 mm²

PT1000 Temperature sensor cable
PT1K-ACD side: 3 wires 0.75 mm² – 2 mm²
PT1K-SKT side: 3 wires 0.14 mm² – 1 mm²

Programmable Logic Control (PLC)

In order to drive the ACD, a PLC will need to be programmed and connected via the CombiTac Interface Cable to the Stäubli Control box. The connection is made via dry contacts and the system is driven by closing the circuit. Opening the circuit returns the system to the home position. A more detailed presentation is usually made during the first consultation with the Stäubli engineer who will commission the system.

Commissioning and service

Each ACD shall be commissioned by Stäubli personnel to ensure that it is properly integrated and works from day one. There is a line in the quote for this service and upon placing your order, you will be put in contact with someone from the Stäubli Service Team who will:

- Assist in preparations for installation.
- Answer questions about the system to facilitate integration.
- Schedule a site visit when the time is near for commissioning.

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Global presence of the Stäubli Group

www.staubli.com

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