

INSTALLATION MANUAL

HUBER+SUHNER

HUBER+SUHNER AG

Power-to-the-Antenna distribution box 6 RRH

Item no. 85145915

DOC-0000892737

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Power-to-the-Antenna distribution box 6 RRH



Features

- Power distribution for 6 RRH
- Suitable for 12-core power cable with conductor cross section 6 to 16 mm² and power jumper with cross section 4 to 10 mm²
- Small size 278 x 188 x 130 mm
- Latest connection technology - push in terminals with front access for easy and fast connection
- Robust polycarbonate box with ingress protection IP65
- Optional with hinged cover

The Power-to-the-Antenna distribution box 6 RRH is fitted with the latest connection technology - push in terminals - for conductors up to 16mm² cross section. The push in terminals have front access to allow easy and fast connection. 6 power jumper can be installed by only one cable gland with a 6-fold seal which is tailored to HUBER+SUHNER 2-core power cables 4mm², 6mm² and 10mm² conductors. With robust mounting brackets the box can be installed on a pole, mast or wall. A set of 2 hose clamps is included. The PTTA box is optional available with a hinged cover on request.

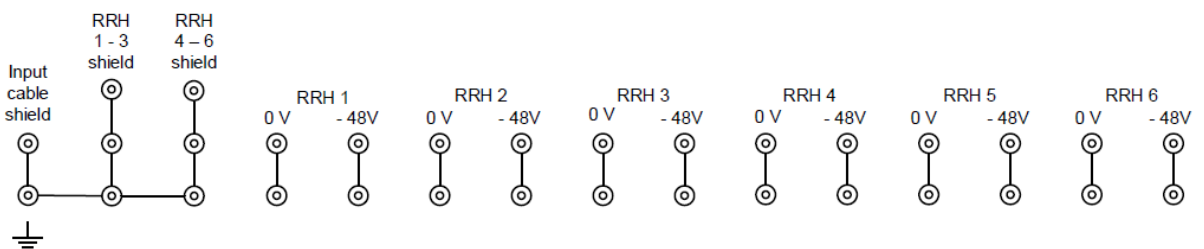
Technical data

Characteristics		
Number of RRH		6
Power entry cable compatibility	M50	Ø 21.0 – 25.5 / 25.5 – 36.0mm (2 seals) Suitable HUBER+SUHNER power cables: Item no. 85138962: 12 x 6mm ² , Ø 23.7 mm, 25 A Item no. 85138979 12 x 10mm ² , Ø 27.4mm, 34 A Item no. 85096008 12 x 16mm ² , Ø 32.2mm, 46 A 6-fold Ø 10.2–10.9 / 11.5-12.2 / 12.8-13.5mm (3 seals)
Power exit cable compatibility	M63	Suitable HUBER+SUHNER power cables: Item no. 85013655: 2 x 4 mm ² , Ø 10.7 mm, 34 A Item no. 85138932 2 x 6 mm ² , Ø 12.1 mm, 45 A Item no. 85138935 2 x 10 mm ² , Ø 13.3mm, 61 A
Grounding cable diameter range	M20	Ø 6 - 12 mm
Box dimensions		188 x 278 x 130 mm
Weight		2.2 kg
Maximum voltage		- 74 Vdc
Maximum current per RRH		40 A
Temperature range during installation		-10 to 40°C IEC 61300-2-22
Temperature range during service		-40 to 75°C IEC 61300-2-22
Terminals		Push-in type up to 16mm ² Phoenix Contact PT10 Nominal current 57 A
Material	Box Seal Mounting bracket	Polycarbonat Polyurethan Stainless steel

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Color	RAL7035, light grey	
Ingress protection	IP65	EN 60529
Impact resistance	IK08	EN 62262
Flammability	UL 746C5	
Halogen free	yes	
UV resistance	UL 508	
Protective vent typical airflow	1500 ml/min	

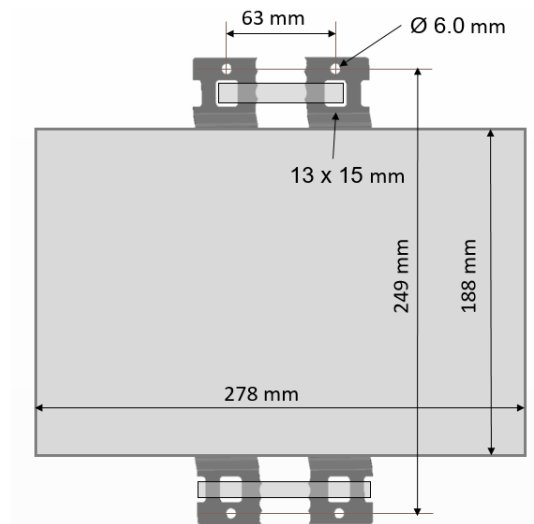
Circuit drawing



Mounting bracket

The mounting brackets have 4 rectangular cut out 13 mm x 15 mm for pole mounting with hose clamps. Suitable hose clamps are:
 - Item no. 84076411 for pole diameter 40 to 160 mm
 - Item no. 84076412 for pole diameter 60 to 500 mm

For wall mounting, the mounting brackets have 4 holes with diameter 6.0 mm.



Installation manual

A label in the box cover includes a QR-code with a link to the installation Manual on HUBER+SUHNER's website

HUBER+SUHNER



Installation Manual
 PTTA distribution box 6 RRH

Please scan the QR code for the installation manual.

Label item no 85152859

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Safety notes



Installation and maintenance work on this device may only be carried out by an authorized electrician.

National laws and regulations must be observed during installation. The housing and the components used must be checked for exterior damage prior to installation. If the device is defective, it may not be used.

Installation

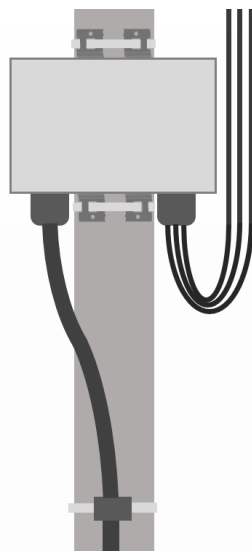
Mounting on a pole, mast or wall

- Pole mounting**
 Fit a hose clamp through the rectangular cut out 13 mm x 15 mm of the upper and lower bracket.
 2 hose clamps (HUBER+SUHNER Item no. 84076411) are included and are suitable for pole diameter 40 to 160 mm.
 For poles with diameter 60 to 500 mm the hose clamps have to be ordered separately (HUBER+SUHNER Item no. 84076412)

Mast and wall mounting
 The mounting brackets have 4 holes with diameter 6.0 mm. Hole pattern: 63 x 249mm

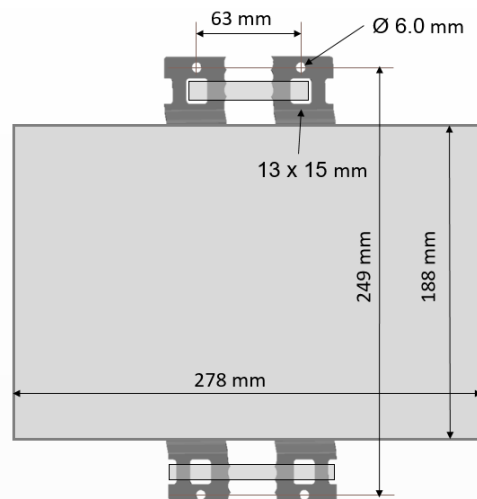


The PTTA box has to be mounted with cable glands directed downwards.



use rectangular cut out for pole diameter < 160 mm

use outer cut out for pole diameter > 160 m



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Connection of the 12-core power input cable

2 Strip jacket, length approx. 39cm
 Disentangle the braided copper shield and twist the single wires. Use a yellow/green shrink tube for the twisted wires.
 Cut the conductors to the recommended length as shown on below table.



Conductor number	Terminal	Conductor length
1	1 0V	28 cm
2	1 -48V	29 cm
3	2 0V	30 cm
4	2 -48V	31 cm
5	3 0V	32 cm
6	3 -48V	33 cm
7	4 0V	34 cm
8	4 -48V	35 cm
9	5 0V	36 cm
10	5 -48V	37 cm
11	6 0V	38 cm
12	6 -48V	39 cm
Shield	Ground	26 cm

3 Feed the 12-core power cable through the cable gland on the left side. The cable gland has 2 seals:
 Seal 1 for Ø 25.5 – 36.0mm
 Seal 1 and 2 for Ø 21.0 – 25.5 mm
 Use both seals for HUBER+SUHNER power cables:
 Item no. 85138962: 12 x 6mm², Ø 23.7 mm, 25 A
 Use only the large seal for HUBER+SUHNER power cables:
 Item no. 85138979 12 x 10mm², Ø 27.4mm, 34 A
 Item no. 85096008 12 x 16mm², Ø 32.2mm, 46 A



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4 Tight cable gland.
Install the 12-core power cable straight downward. The first cable clamp below the box must have a distance of 1m. Maximum horizontal misalignment is 0.15m.

Do not bend the 12-core power cable right after the cable gland.

5 Strip insulation from the conductors.


Stripping length is 18 mm

6 HUBER+SUHNER power cables have flexible class 5 conductors. To connect the conductor to the PT10 push-in terminal, push-in the orange knob with a medium size screw driver.

Recommended connection allocation:

Conductor number	Terminal	Conductor length
1	1 0V	28 cm
2	1 -48V	29 cm
3	2 0V	30 cm
4	2 -48V	31 cm
5	3 0V	32 cm
6	3 -48V	33 cm
7	4 0V	34 cm
8	4 -48V	35 cm
9	5 0V	36 cm
10	5 -48V	37 cm
11	6 0V	38 cm
12	6 -48V	39 cm
Shield	Ground	26 cm

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<p>Connection of the earthing cable</p> <p>There is one pre-installed M20 cable gland for the earthing cable, which is suitable for cable with a diameter of 6 – 12 mm (1 x 16 mm²)</p>													
<p>7</p> <p>Feed the grounding cable through the M20 cable gland.</p> <p>Connect the grounding cable to the yellow/green terminal</p> <p>Tight the cable gland</p>													
<p>Connection of the power jumper cable</p>													
<p>8</p> <p>Strip jacket, length approx. 28cm</p> <p>Disentangle the braided copper shield and twist the single wires. Use a yellow/green shrink tube for the twisted wires.</p> <p>Cut the conductors to the recommended length as shown on below table.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Conductor number</th> <th>Terminal</th> <th>Conductor length</th> </tr> </thead> <tbody> <tr> <td>blue</td> <td>x 0V</td> <td>16 cm</td> </tr> <tr> <td>brown</td> <td>x -48V</td> <td>16 cm</td> </tr> <tr> <td>shield</td> <td>ground</td> <td>28 cm</td> </tr> </tbody> </table>	Conductor number	Terminal	Conductor length	blue	x 0V	16 cm	brown	x -48V	16 cm	shield	ground	28 cm	
Conductor number	Terminal	Conductor length											
blue	x 0V	16 cm											
brown	x -48V	16 cm											
shield	ground	28 cm											

9 Remove the 6 blind plugs on the cable gland on the right side of the box.
 Feed the 6 2-core power jumper through the cable gland.
 The cable gland has a 6-fold seal suitable for cable diameter 11.5 – 12.2mm. This is suitable for HUBER+SUHNER power cable Item no. 85138932 2 x 6 mm², Ø 12.1 mm, 45 A

 For 4 mm² power jumper, the seal has to be replaced with the attached seal for 10.2 – 10.9mm diameter. Power cable item no. 85013655: 2 x 4 mm², Ø 10.7 mm, 34 A

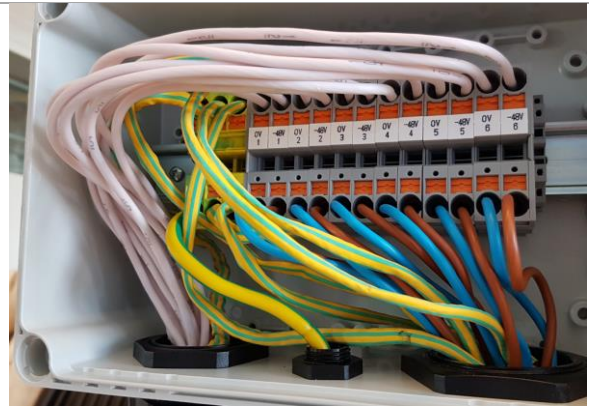
 For 10 mm² power jumper, the seal has to be replaced with the attached seal for 12.8 – 13.5mm diameter. Power cable item no. 85138935 2 x 10 mm², Ø 32.2mm, 61 A



10 HUBER+SUHNER power cables have flexible class 5 conductors. To connect the conductor to the PT10 push-in terminal, push-in the orange knob with a medium size screw driver.



Recommended connection allocation:

Jumper / RRH number and conductor color	Terminal
1 blue	1 0V
1..brown	1 -48V
1 shield	ground
2 blue	2 0V
2..brown	2 -48V
2 shield	ground
3 blue	3 0V
3..brown	3 -48V
3 shield	ground
4 blue	4 0V
4..brown	4 -48V
4 shield	ground
5 blue	5 0V
5..brown	5 -48V
5 shield	ground
6 blue	6 0V
6..brown	6 -48V
6 shield	ground



Close PTTA box cover

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11	<p>Close PTTA box with the cover.</p>  <p>Cover screws torque 1.8 ± 0.2 Nm</p>	
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