


Replacement of 2400 Power Coil Aircraft Cable

P/N: 574.207 (24 m) / 574.208 (28 m) / 574.209 (26 m)

1

Put the converter into “Cable Replacement Mode”.

From the default screen press the center button  on keypad for approx. 10 seconds

Note!

If the Icon screen don't appear after pressing the centre button for 10 seconds, the display is locked and cant' be accessed.

Follow the below:

(which also can be found in the unit manuals)

7.1 Preventing changes of set-up parameters

To avoid unintentional modification of the Set-up parameters, it is possible to block the access to the Set-up Mode, by means of a DIP switch situated at the Display Board A3.

Note!

If the DIP switch is set to blocked, pressing the SW1 enables the user to enter the set-up menu within 10 seconds. After the time elapses the menu will be blocked again.

SW1


To prevent changes of the setup parameters, move the switch SW2:1 to the OFF position (DOWN).



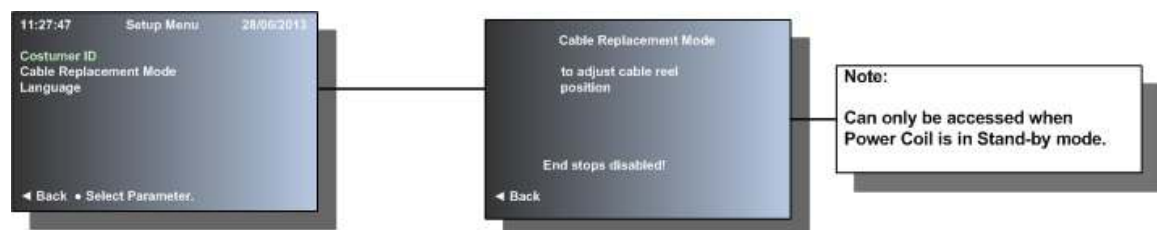
Fig. 7.1.1 Display Board A3

Icon screen then appears.



Highlight the  icon by using the navigation ◀▼▲▶ keys and press center button.

Use the ▼/▲ to browse through the screens until the **Cable Replacement Mode** screen appears and press center button.



Warning!

In Cable Replacement Mode all safety features are disabled !



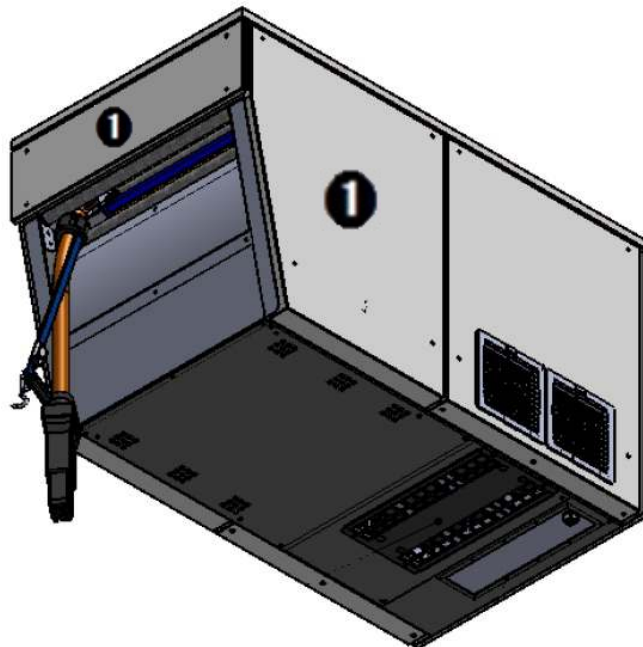
- Keep away from fans, cable drum, cable rollers and cable guides.
- Have only qualified people remove guards or covers for maintenance or troubleshooting.
- Keep hands, hair, loose clothing and tools away from moving parts.



- DC Capacitors remain charged to dangerous voltages.

2

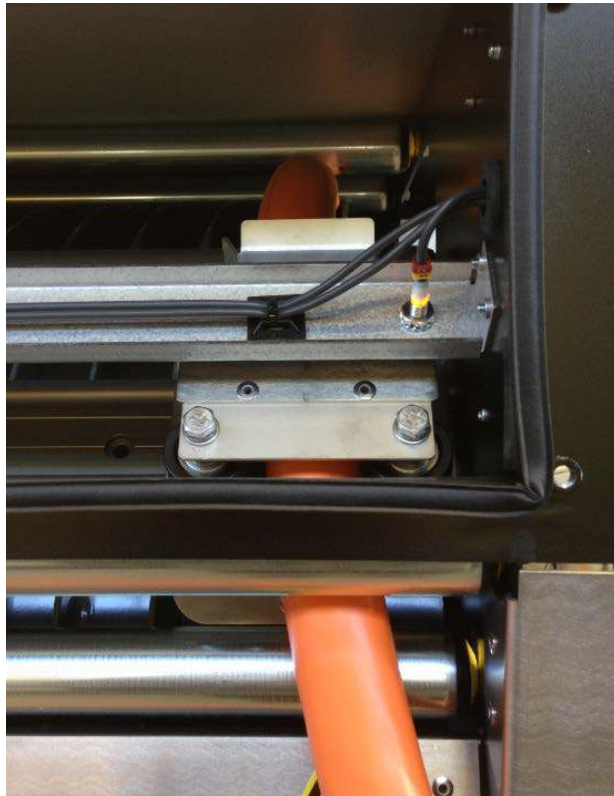
Remove panels marked **1** by using a 6mm Allen key.

**Note:**

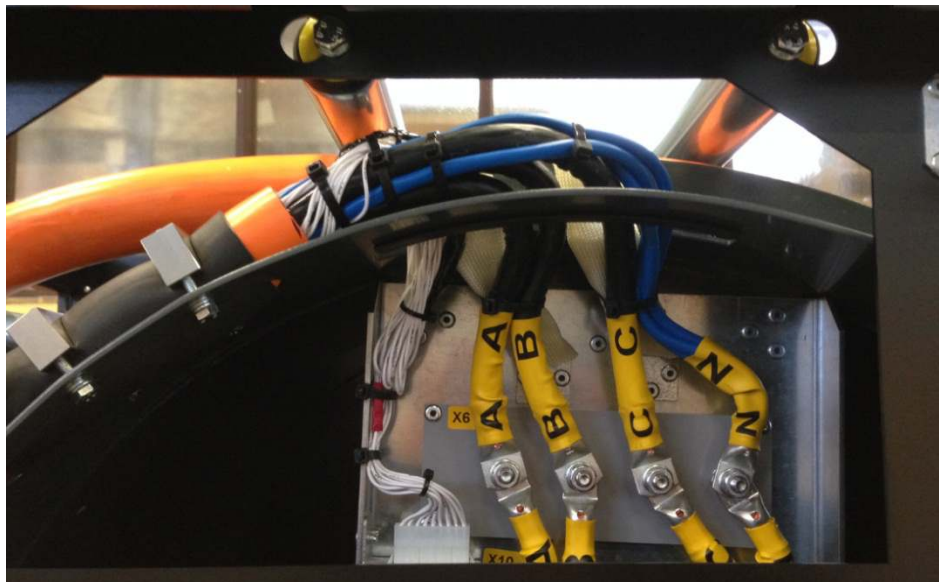
Keep the covers stored in a safe place.

3

Roll out the cable slowly until the cable / cable fixture is aligned to the right hand side.



Picture shows alignment from cable side



Picture shows alignment from side
(this can be observed when side panel has been removed)


4

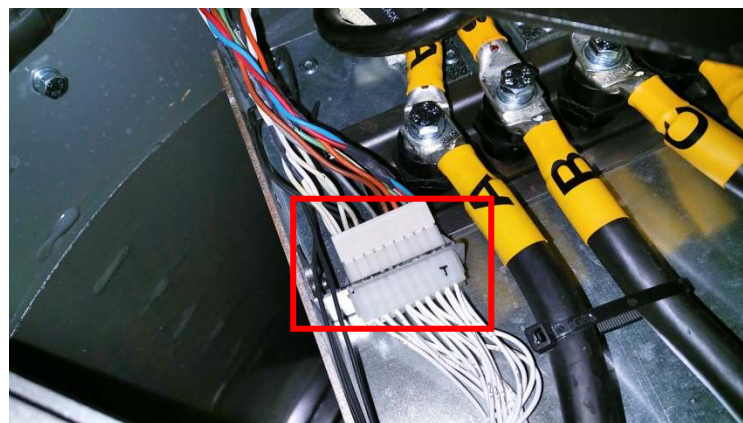
Cut the cable ties marked 



5

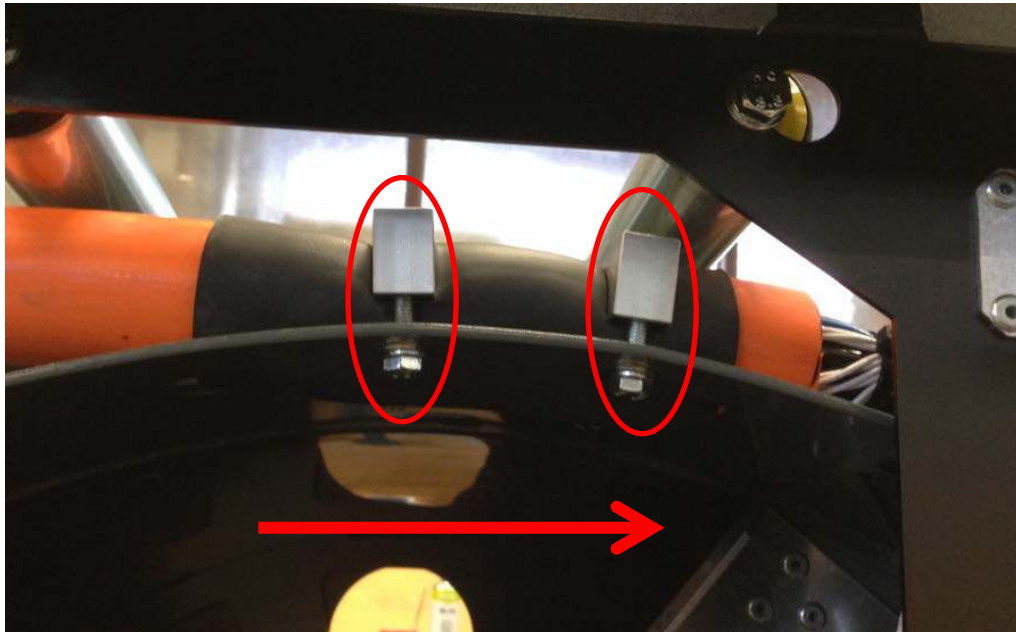
A. Disconnect power cables A – B – C – N

B. Disconnect the control plug 



6

- A. Rotate the drum in the direction shown, until the cable clamps are accessible.
- B. Remove the 2 cable clamps, by removing the 4 bolts ○
Please support the cable as it might fall out of the unit when the cable clamps are removed.

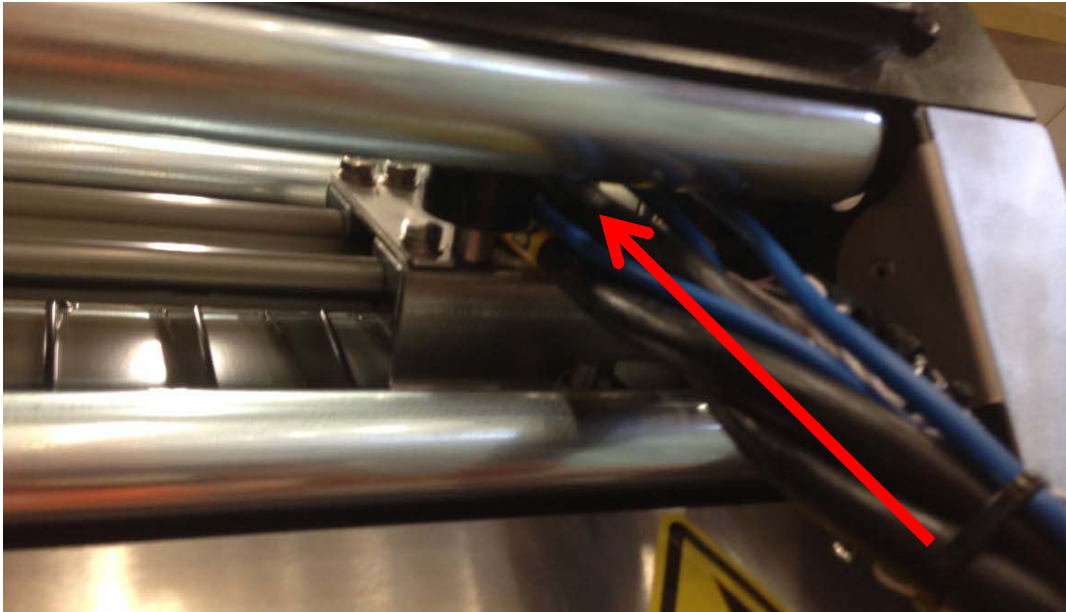
**7**

Now the cable can be dragged out of the Power Coil, from the front.



8

- A. Insert the new cable in opposite direction as it was pulled out in step 7.



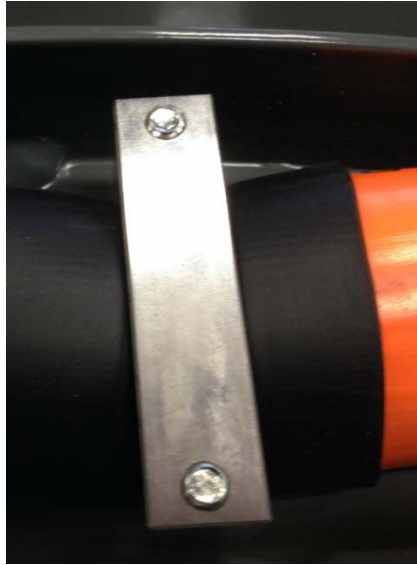
Note:

Observe that all wires and control plug easily fit through the cable guide.

- B. Pull the cable until the jacket is just past the drum cut-out (as shown below)



- C. Fit the front cable clamp and tighten the bolts by turns, until the bolt ends are through the cable clamp.

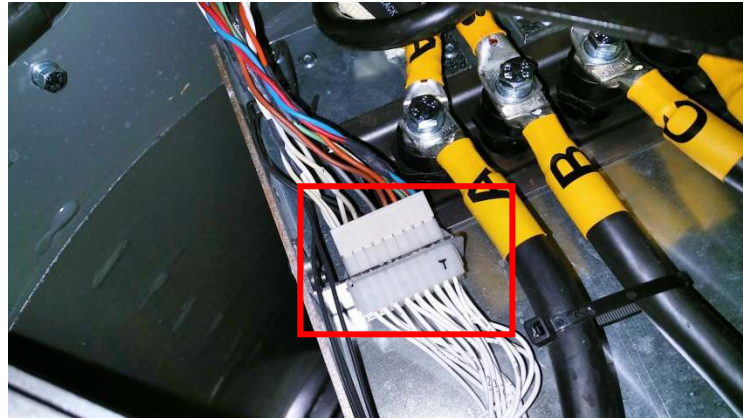


- D. Repeat point C to install the second cable clamp.
- E. The clamped cable should now look like the pictures below.



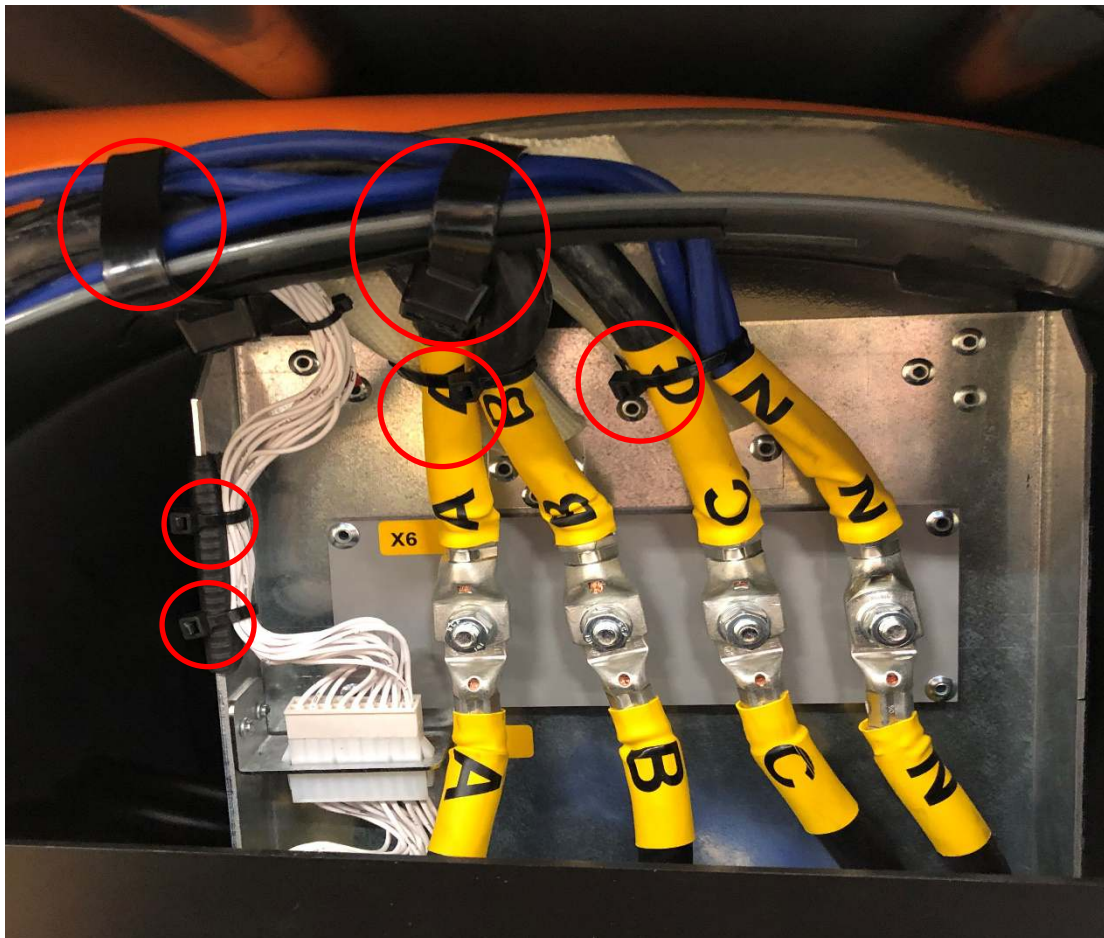
9

A. Connect the control plug



B. Connect the A – B – C – N power cables and fasten the bolts

C. Attach the cable and wires to the drum with cable ties. ○



10

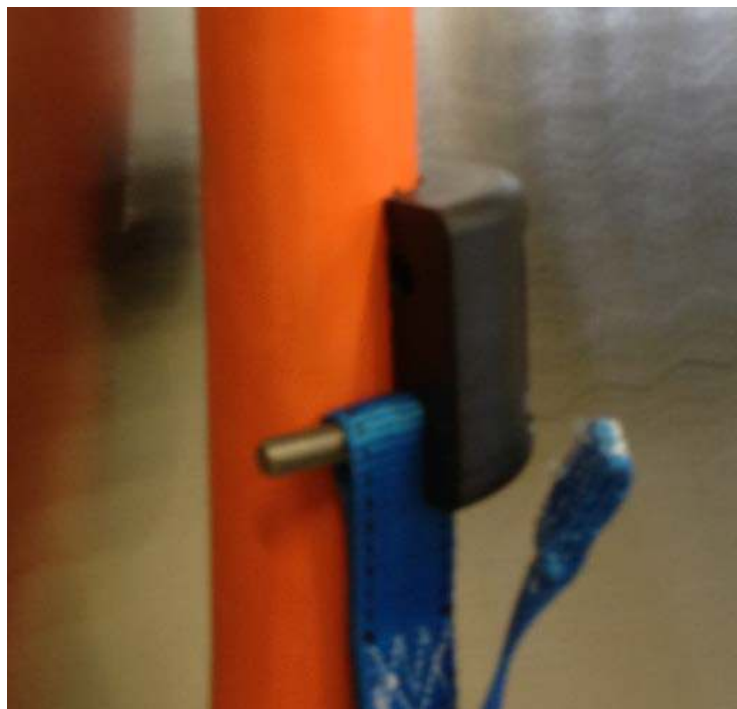
If the cable is delivered with the cable strain relief skip the section and proceed to step 11.

- A. Coil the cable onto the drum of the Power Coil leaving 1 meter of cable hanging out.
- B. Mark the cable 540 mm (21 inches) from Plug front.
- C. Mount the cable strain relief as shown below

1.



2. Place one half of the “Donut” at the 540 mm (21 inches) mark at the cable.



3. Connect the second half and fasten the four 40mm screws until the two “donut” halves are touching each other. (Make sure that the bolts don’t extend past the surface of the “donut”.)

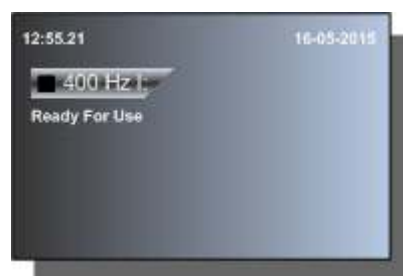


11

Exit the “Cable Replacement Mode” and return to default screen.

12

Display should now show “Ready to use”



13

Use the push buttons “cable in” and “cable out” on the Remote Control Box to verify that the cable coils smoothly onto the drum.

14

Check that all limit stops are working correctly.

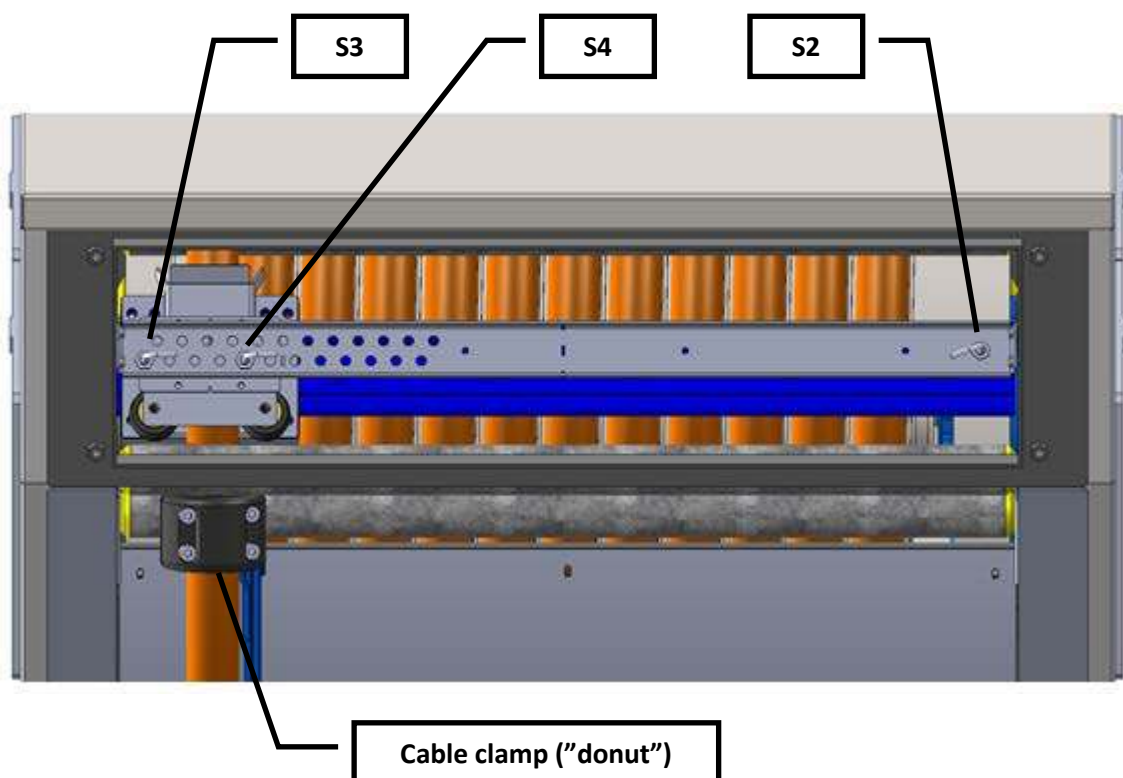
Verify the position of the limit stop switches by coiling the cable to the end positions. The following adjustment applies for the three switches:

S3: When activated (LED in the end of the barrel is lit), the aircraft cable should be fully coiled.

Observe that the cable clamp is touching the cable guidance inlet rollers.

S4: Must be activated shortly before the cable leaves the ground when the PBB is raised to service the largest aircraft that uses the gate (approximately 4 meters (13 feet) of cable will be out of the unit).

S2: When activated, the output cable should be almost fully uncoiled.



Note:

Position of limit switches S3-S4 may vary depending on cable length and bridge height.

15	<p>Function test of the 2400 Power Coil:</p> <ul style="list-style-type: none">A. Test “cable in” and “cable out” using the pushbuttons on the plug.B. Check that the cable phase sequence (ABC) is correct.C. Calibrate the cable by using the “Plug & Play” compensation.
16	<p>Start the unit and apply 72 Kw load and let it run for 10 – 15 minutes. During operation check values in the display and at the load bank (voltage / current / kVA / kW), to verify that the unit / cable works correctly. For the above a DVM and current probe can be used.</p> <p>Stop the unit and remove the load bank.</p>
17	<p>Replace the panel covers.</p> <p>The unit is now ready for use.</p>