Thank you for choosing ABB product
Please read this document thoroughly before commencing installation and retain for future reference. Contact ABB customer service in Australia on 1800 60 20 20 if you need any assistance. The installation instructions were correct at the time of print. To reflect changes in technology and Australian standards; ABB reserves the right to amend the instructions without notice. Updated document can be found on the Stanilite website.

Safety warning
In Australia and New Zealand, only licensed electricians are permitted by law to work with 240 volt electrical installations. Do not attempt to install or connect this product unless you are a licensed electrician.

As the installer, it is your responsibility to ensure compliance with all relevant building and safety codes, (ie: AS/NZS 3000, AS/NZS 2293). Refer to the applicable standards for data and mains cabling installation procedures and requirements.

EMC warning
Power pack complies with EMC regulations. We advise that if you incorporate this pack into your product (batten/fitting) you must test the complete (product/fitting) for EMC compliance.

Important to note:
• This product is designed for indoor use only.

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Troubleshooting guide
If you have installed and connected the fitting as per the instructions listed earlier and it does not function correctly, use the following table as a guide to fixing the problem. Look up the type of fault in the left column and check the possible causes from the right column.

If the fitting still does not work after checking these possible causes, contact ABB customer service in Australia on 1800 60 20 20.

<table>
<thead>
<tr>
<th>No.</th>
<th>Fault</th>
<th>Possible causes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Red LED not lit</td>
<td>AC supply not connected; or AC supply turned off; or Battery plug not connected to battery pack; or Test switch damaged</td>
</tr>
<tr>
<td>2</td>
<td>Red LED is lit but AC lamp not lit when connected to mains</td>
<td>Switched active supply turned off; or Missing loop from unswitched to switched active; or Lamp damaged; or Lamp not inserted properly</td>
</tr>
<tr>
<td>3</td>
<td>Red LED is lit but lamp does not come on when test switch is pressed</td>
<td>Lamp damaged; or Lamp not inserted properly; or Battery pack damaged; or Test switch damaged</td>
</tr>
<tr>
<td>4</td>
<td>Lamp is lit momentarily when test switch is pressed; or When mains fail</td>
<td>Battery not yet charged (allow up to 24 hours); or Battery pack damaged</td>
</tr>
</tbody>
</table>

This document covers
- Safety warning
- Installation instructions
- Removal instructions
- Testing precautions
- Troubleshooting guide

What’s Inside the box
- Power pack standard
- Installation manual
- Warranty information

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9AKK106930A0664 - A - Jul 2019

Doc no. 29-01068_8
Installation instructions

1. Use a pencil to mark the position of the mounting screw holes for the inverter and the battery pack in the gear tray. Figure 1 shows the inverter pack dimensions.

![Inverter standard dimensions](image)

Figure 1: Inverter pack dimensions

2. Fit the inverter and battery pack using suitably sized screws and nuts. Make sure that the battery pack is mounted away from the ballast or from any other components that may get hot. Figure 2 shows a block diagram of how a power pack works.

![Block diagram of power pack operation](image)

Figure 2: How a power pack works

3. Figure 3 shows wiring connections using power pack and conventional magnetic ballast.

<table>
<thead>
<tr>
<th>Wire/fitting type</th>
<th>Wiring connections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unswitched active</td>
<td>Wire to terminal USA</td>
</tr>
<tr>
<td>Switched active</td>
<td>Wire to ballast as shown in figure 3</td>
</tr>
<tr>
<td>Neutral</td>
<td>Wire to terminal neutral</td>
</tr>
<tr>
<td>Earth</td>
<td>Wire to earth lug and should be labelled with earth label</td>
</tr>
<tr>
<td>Lamp and ballast</td>
<td>Wire connections as shown in the wiring diagram</td>
</tr>
</tbody>
</table>

4. Ensure that the stripped wire ends are completely inserted into the terminal block and no bare conductors are exposed to the metal.

5. Lamp operation:
   - Maintained; once powered up, in a maintained fitting the normal AC lamp (if present) should light up and stay on until the power supply fails. The emergency function of the fitting should only operate when the unswitched active power supply fails or when somebody presses the manual test button located on the fitting. Normal status of the fitting when powered indicating LED steady red. This indicates that the power is connected and the battery is charging.
   - Non-maintained; once powered up, in a non-maintained fitting the present lamp stays off. The emergency function of the fitting should only operate when the unswitched active power supply fails or when somebody presses the manual test button located on the fitting. Normal status of the fitting when powered indicating LED steady red. This indicates that the power is connected and the battery is charging.

6. Check the operation of the fitting to ensure that the installation was successful. When powered up, allow a few minutes to give the battery a small charge, then press the manual test button located on the fitting. Press and hold the test button for a few seconds and observe that the emergency lamp lights up and stays on until the test switch is released. If the lamp works only momentarily, this ensures that the connections are correct and the battery requires at least 24 hours to fully charge. If the lamp does not work at all, check the supply, the connections and the troubleshooting guide at the end of this document.

Wiring connections

Note: Wiring connections are different if using electronic or other magnetic ballast. Wiring diagrams are available from ABB on request.

![Wiring diagram](image)

Figure 3: Wiring diagram power pack standard using conventional magnetic ballast

Important: 24 hours is required to allow the fitting battery to reach full capacity, ie: prior to a discharge test. As the installer, it is your responsibility to conduct the initial discharge testing of the fitted product. Refer to AS/NZS 2293.

Removal instructions

1. Before removing the installed power pack, switch off the mains supply to the fitting.
2. Unscrew the unswitched active, switched active, neutral and output (lamp and ballast) wire connections from the terminal block using suitably sized screwdriver.
3. Undo the test switch nut and remove LED from the grommet.
4. Disconnect the battery plug from the battery pack and then unscrew the mounting screws of the power pack.
5. When the fitting is reconnected to the supply, it will need time to recharge its battery before it will be capable of a full length discharge again.

Note: When sending power packs for repairs make sure that LED and test switch are included with the power pack.

Testing precautions

Once the fitting is permanently connected to the mains supply, a commissioning discharge test as required in AS/NZS 2293.2 must be carried out. You will need to allow 24 hours for the battery to fully charge prior to conducting this test. Presently (at the time of writing), the standard requires that fittings operate in emergency mode for a period not less than 2 hours for their commissioning test and for not less than 90 minutes thereafter (it is required that 6 monthly discharge tests be carried out). You will need to keep the records for the commissioning test and enter them into the building emergency services logbook or via other recording methods as allowed by AS/NZS 2293.2.

Construction sites

Continuously switching off the mains power supply that is connected to emergency light fittings during the construction phase of an installation will cause these fittings to discharge and their batteries many times over a short period; this can shorten life of the battery. ABB does not recommend such practices and may not honour the warranty on batteries when they are subjected to such harsh operating conditions. Emergency light fittings are designed to be discharged tested once every 6 months as per AS/NZS 2293.2, subjecting the product to repeated discharge or charge cycles is regarded as an abuse of the fittings.