<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disclaimer</td>
<td>A</td>
</tr>
<tr>
<td>About ActSafe</td>
<td>B</td>
</tr>
<tr>
<td>Safety messages and warnings</td>
<td>C</td>
</tr>
<tr>
<td>Product safety</td>
<td>D</td>
</tr>
<tr>
<td>System description</td>
<td>E</td>
</tr>
<tr>
<td>Pre-use inspection and connection</td>
<td>F</td>
</tr>
<tr>
<td>General safety and operating guidelines</td>
<td>G</td>
</tr>
<tr>
<td>Set-up</td>
<td>H</td>
</tr>
<tr>
<td>Trouble-shooting guide</td>
<td>I</td>
</tr>
<tr>
<td>Performance</td>
<td>J</td>
</tr>
<tr>
<td>Warranty terms</td>
<td>K</td>
</tr>
<tr>
<td>Declaration of conformity</td>
<td>L</td>
</tr>
<tr>
<td>Technical data</td>
<td>M</td>
</tr>
</tbody>
</table>
This manual is intended for use with the ActSafe Portable Power Supply which is only to be used in combination with the ActSafe ACX, ACCII and some TCX Power Ascender Models. It must be read in conjunction with the respective Power Ascender manual.

Never use the equipment unless you have read and understood this manual and completed an ActSafe approved training in the use of the power Ascender system. ActSafe Systems AB, our partners and subsidiaries, disclaim any liability for damages, injuries or death resulting from the use of the equipment which is not in compliance with this manual.

This manual may be updated without notice. For more information about updates and safety warnings, visit www.actsafe.se

DANGER
Training and experience are required to lower the risk of serious bodily injury or death.
ActSafe is a pioneer in developing powered Rope Ascenders and has been delivering high-performance equipment since 1997.

ActSafe has a worldwide distribution network of dedicated experts selling our innovative products to a wide variety of users. Our Power Ascenders have been successfully used for installing fireworks at the top of the Eiffel Tower, hostage rescue from pirates at sea and providing essential logistical support in offshore wind turbines.

ActSafe products are redefining the possibilities for work in vertical environments.

We are completely committed to our customers and do our utmost to deliver top quality products and service.
SAFETY MESSAGES AND WARNINGS

This manual details information on features and safety. However, this manual cannot replace the need for training and experience. The ActSafe Portable Power Supply must only be used by operators who have undergone the proper training.

Safety messages of extra importance are highlighted throughout this manual using the signals ‘danger’, ‘caution’, ‘note’ and ‘recommendation’

⚠️ DANGER
Not following instructions or training methods may result in SERIOUS INJURY or DEATH.

⚠️ CAUTION
Not following instructions or training methods may result in INJURY, or DAMAGE TO PROPERTY.

✅ Note
Important information on the use of the equipment connected to the Power Supply.

ℹ️ RECOMMENDATION
Instructions and tips on how best to use the Power Supply.
The ActSafe Portable Power Supply is only to be used in conjunction with the ACX, ACCII or some TCX Power Ascender Models.

The Power Supply must not be used in any of the following circumstances:

» For any use other than that for which it has been designed
» In an explosive environment
» In a wet environment
» If modified in any way by anyone other than ActSafe Systems
» After a free fall from any height greater than 1m / 3ft onto a hard surface
» If subjected to misuse in any way as parts or components may have been damaged.

Do not:

» Use the Power Supply to charge any batteries
» Open the Power Supply under any circumstances
» Use any parts that are not original/supplied by ActSafe

DANGER
Read the manual carefully and ensure that you have understood its contents. Not following these instructions carefully may result in serious injury or death.
Securing/carrying strap

Air vent

Power output

Power/overheat indicator LED

230V Power cable

ACC Power Supply cable

ACX Power Supply cable

Machine Rating Label

This Power Supply is supplied with a machine rating label attached to the housing. This label must not be removed.
The ActSafe Portable Power Supply must be checked before and after every use and must be subject to at least one inspection per year. National regulations may require more frequent inspections.

Pre-use inspection:
Perform before every use a pre-use check of the ActSafe Portable Power Supply:

230/110V Power Cable and plug
Check for damage to outside cable
- No cuts to cable
- No inner colored plastic or copper cables visible
- No serious kinks in cable
- Check for damages to Power Plug
- No bent pins
- No deformations

ACX or ACCII Power Cable
Check cable for damage
- No cuts to cable
- No inner colored plastic or copper cables visible
- No severe kinks in cable

Power supply ACX or ACCII Connector Pins
Check:
- All pins shall be present
- Pins are not bent
- Pins and sockets are clean
- No corrosion or other damage
- Pins are not loose

Check housing of Power supply
- No Cracks
- No severe damages

CAUTION
In case of any damages or doubt do not use the Power Supply and contact your ActSafe distributor or ActSafe directly.
Connecting Power Supply:

1. Make sure the Power Supply is installed in a secure place

2. Connect the Power Supply cable between the Power Supply and Ascender

   (a) Connect straight connector of the Power Supply Cable to Power Supply

   (b) ACX: Replace the Battery with the Power Supply Adapter

   OR

   (c) ACCII: Remove the Battery and connect the angled connector instead

3. Connect the Power Cable to the socket and check if the led on the Power Supply switches on

4. Switch on the ACX or ACCII Ascender

5. You are ready to go
GENERAL SAFETY  
OPERATING GUIDELINES

Before use make sure that you:

✅ Use only approved and inspected equipment

✅ Make sure you have a steady 230 V 50/60 Hz grounded power source that can deliver 10 A

✅ **DO NOT** connect the Power Supply in a wet environment – risk of electric shock!

✅ **DO NOT** cover the Power Supply while in use – risk of overheating!

✅ Secure the Power Supply when working at height

✅ Always check equipment before use.

⚠️ **CAUTION**

If unclear of the condition of the Power Supply, it must be inspected by ActSafe Systems or an ActSafe approved distributor.
The ActSafe Portable Power Supply should only be used in applications, both personnel and equipment lifting, where the Ascender is rigged to an anchor and therefore remains in a fixed position where the Power Supply can easily be connected to a 230V socket. The Power Supply must not be used connected to long power cables whilst moving the Ascender up and down the rope. These illustrations are intended to be used only as an indication of the position of the Power Supply. Please refer to the respective ACX, ACCII or TCX Manuals for further details on the correct use of ActSafe power Ascenders.
## TROUBLE-SHOOTING GUIDE

<table>
<thead>
<tr>
<th>Problem</th>
<th>Probable cause</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No power to Power Supply, red LED off</strong></td>
<td>Power Supply not plugged in socket</td>
<td>Check that the Power Supply is plugged-in</td>
</tr>
<tr>
<td></td>
<td>Power circuit fuse blown; Too high power consumption</td>
<td>Unplug other devices from the power circuit</td>
</tr>
<tr>
<td></td>
<td>Power circuit fuse blown; Short circuit</td>
<td>Check for damage to cables or for water and/or humidity in close proximity of all power connections</td>
</tr>
<tr>
<td><strong>Ascender is not working, Power Supply LED is blinking</strong></td>
<td>Overheating due to prolonged lowering</td>
<td>Let Power Supply cool down until LED is steadily lit. Perform lowering operations with more cooling intervals to prevent the Power Supply overheating</td>
</tr>
<tr>
<td></td>
<td>Overheating due to bad ventilation</td>
<td>Ensure air vent is not covered. Ensure that outside temperature is not too high</td>
</tr>
<tr>
<td><strong>Ascender is not working, Power Supply LED is on</strong></td>
<td>No power to Ascender</td>
<td>Disengage the Emergency Etop. Check ACX Power Supply cable</td>
</tr>
<tr>
<td></td>
<td>Overheating of Ascender, Orange LED on ACX and TCX. ACCII switches off, no indicator.</td>
<td>Let Ascender cool down and perform lifting with more frequent cooling intervals</td>
</tr>
</tbody>
</table>

If you need further assistance or are in any doubt, please contact ActSafe Systems or an ActSafe approved distributor.
PERFORMANCE

**ActSafe Portable Power Supply**

The Power Supply is a nearly unlimited source of power that enables you to carry out extensive lifting with our Power Ascenders almost continuously without reliance on batteries.

**Lifting and Lowering High Loads**

The limits of this system will only be reached under extreme conditions. Lowering high loads over long distances will cause the Power Supply to become hot and eventually switch itself off due to the in-built overheating protection system. This is indicated by the LED flashing, once the Power Supply has cooled down the LED will revert to its normal ‘on’ state and the Power Supply may be used again.

**Ascender**

The nearly unlimited supply of power will have, under extreme conditions, an effect on the Ascender. When lifting high loads over long distances the Ascender will become hot and may eventually switch itself off due to the in-built overheating protection system. The Ascender can be switched on when cooled down and may be used again.

**Speed**

The Power Supply enables a slightly higher maximum lifting speed for the Ascender.

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**CAUTION**

When lowering heavy loads for long distances the aluminium side-panels of the Power Supply may become hot and should not be touched. It is also advisable to wear protective gloves.
Laboratory tests (20 °C / 68 °F) have shown that the overheat protection will be activated in the following circumstances:

<table>
<thead>
<tr>
<th>Load</th>
<th>ACX/ACC II (Lifting)</th>
<th>PPS (Lowering)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 kg</td>
<td>400 m</td>
<td>500 m</td>
</tr>
<tr>
<td>220 lb</td>
<td>1312 ft</td>
<td>1640 ft</td>
</tr>
<tr>
<td>200 kg</td>
<td>150 m</td>
<td>150 m</td>
</tr>
<tr>
<td>440 lb</td>
<td>492 ft</td>
<td>492 ft</td>
</tr>
</tbody>
</table>

Note

Once the Ascender/Power Supply has overheated initially, an extended cooling period is recommended to prevent an immediate recurrence.

ActSafe Systems AB ("ActSafe") guarantees that the Power Supply ("Product") purchased has no defects in material and workmanship. This is subject to the terms of the limited warranty ("Warranty") given below.

Any claim must be made within the warranty period which is one year from delivery unless otherwise agreed.

ActSafe will, through repair or replacement as appropriate in ActSafe's reasonable discretion, remedy any defect that is covered by the limited warranty and notified in writing within the warranty period. ActSafe reserves the right to use reconditioned parts with performance parameters equal to those of new parts in any repair performed under the Warranty.
Claim under ActSafe’s warranty

Claims under ActSafe’s Warranty may be made only by direct customers of ActSafe who, upon ActSafe’s request, can present the original sales invoice from ActSafe.

The Warranty is not transferable from one user or customer to another.

If you have purchased your product from an authorized distributor of ActSafe products, please contact the distributor for warranty claims.

Warranty Limitations

The warranty does not extend to:

(i) Products which have been modified, repaired or reconditioned by a party not authorised by the Seller;

(ii) defects or damage resulting from failure to maintain or operate the Products in accordance with the Seller’s recommendations;

(iii) normal wear and tear;

(iv) damages which are the result of abuse or negligence including but not limited to water intrusion, physical damage; electrical faults external to the Products, rust or corrosion;

(v) Products for which the serial number has been removed or tampered with; and

(vi) Products to which a component or product not authorised by the Seller has been added. Repair and replacement in accordance with the warranty terms are the sole and exclusive remedies for defects. The Warranty is exclusive and no other warranties, whether statutory or implied shall apply to the Products, including but not limited to warranties of merchantability or fitness for a particular purpose. Any implied warranty that may be imposed by applicable law is limited to the warranty period.

Except as otherwise required by governing law, under no circumstances (including negligence) shall ActSafe, its affiliates, and their respective directors, officers, employees or agents be liable for any consequential, incidental, indirect, punitive, special or other similar damages, whether in action of contract, negligence or other tortious action, arising out of, in connection with or resulting from the sale or provision of any Products.
EC DECLARATION OF CONFORMITY
Machinery Directive 2006/42/EC

Manufacturer:
ActSafe Systems AB, Sagbäcksvägen 13, 437 31 Lindome, Sweden

It is hereby certified that the following product is made according to:

- Description, Elmek, type: ActSafe Power Supply for ACC II
- Social number: SIS-065256
- Notified body if any: Danish Technological Institute
- No. Nr. 0396
- EU-type certificate: TI-14-MD-0419

DIRECTIVE 2006/42/EC
DIRECTIVE 2004/108/EC
DIRECTIVE 2006/95/EC

Harmonised standards:
- EN 61000-6-1:2005
- EN 61000-6-3:2007
- EN 62479 (M) 2005
- EN 60204-1:2006
- EN 60335-1:2012

Signature:
Magnus Glans
Managing Director

Place and Date:
Lindome 2015-04-07

PPS TECHNICAL DATA

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power input</td>
<td>230 VAC, 50-60 Hz, 10 A</td>
</tr>
<tr>
<td>Power output</td>
<td>48V DC, 50 A</td>
</tr>
<tr>
<td>Weight</td>
<td>8 kg / 17.6 lb</td>
</tr>
<tr>
<td>Dimensions</td>
<td>42x24x16 cm / 17”x10”x 6”</td>
</tr>
<tr>
<td>Protection classification</td>
<td>IP 55</td>
</tr>
<tr>
<td>Ascender cable length</td>
<td>3 m / 10 ft</td>
</tr>
<tr>
<td>Mains cable length</td>
<td>2.2 m / 7 ft</td>
</tr>
</tbody>
</table>

PPS WITH CARRY CASE

| Total weight: Case & PPS    | 12.6 kg / 27.7 lb            |
| Case dimensions             | 44x57x22 cm / 17“x25”x 9”    |
| Case protection classification | IP 67                        |