Option 56E
IEC-61204-7 Certified

Operation Manual
1.0 General Description

The 56E option for A77 chargers adds IEC 3rd party testing and certification. The chargers will be certified to IEC-61204-7, and tested to IEC61000-6-4 & IEC61000-6-2.

Other Reference Standards:

- UL-1012
- IEC-62477-1
- IEC-60950-1
- EN65011A
- EN55011B
- FCC Part 15B
- IEEE-C37.90.1
- IBC-2009
- NEMA PE5

2.0 Installation:

In addition to the standard installation documentation provided in the generic A77 manual, please observe the following additional notes. For TN power system grounding. For your safety, this charger must be properly earth grounded at the chassis. The ISC of the source should not exceed the KAIC of the charger’s circuit breakers. (See breaker ratings table). OCV Class: III, Protective Class: I, IP-2X

3.0 Environmental Service Conditions:

This equipment is to be used in an indoor conditioned environment.

- Operating Temperature Range: 0 → 50°C
- Operating Humidity Range 10 → 85% R.H.
- Pollution Degree: 2
- Humidity condition of the skin: dry
- Mechanical: vibration Class 3M1
- Biological: no mold/ fungus
- Requires drip shield to maintain IP-2X rating.
4.0 Related charger models and component ratings:

See Charger Model components rating table below.

<table>
<thead>
<tr>
<th>Charger Model</th>
<th>AC Volt/Hz</th>
<th>Typ AC Draw</th>
<th>Typ KVA</th>
<th>ACB Amps</th>
<th>ACB Poles</th>
<th>Interrupt @ Rated Voltage</th>
<th>Typ Watt Loss</th>
<th>Typ BTU/Hr</th>
<th>Approx Weight LBS (KG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A77DE-25-24V-5Q1-12L-02852</td>
<td>230V / 50Hz</td>
<td>6.4A</td>
<td>1.5</td>
<td>15</td>
<td>2</td>
<td>85KAIC</td>
<td>163</td>
<td>557</td>
<td>141 (2256)</td>
</tr>
<tr>
<td>A77DE-40-24V-5Q1-12L-02852</td>
<td>Single Phase</td>
<td>11A</td>
<td>2.7</td>
<td>15</td>
<td>2</td>
<td>260</td>
<td>888</td>
<td>172</td>
<td>172 (2752)</td>
</tr>
<tr>
<td>A77DE-60-24V-5Q1-12L-02852</td>
<td></td>
<td>16A</td>
<td>3.9</td>
<td>20</td>
<td>3</td>
<td>390</td>
<td>1331</td>
<td>342</td>
<td>342 (5472)</td>
</tr>
<tr>
<td>A77DE-75-130V-5ZA3-55L-02853</td>
<td>400V / 50Hz</td>
<td>26A</td>
<td>16.5</td>
<td>40</td>
<td>3</td>
<td>895</td>
<td>3054</td>
<td>672</td>
<td>672 (10752)</td>
</tr>
<tr>
<td>Space Heater Circuits</td>
<td></td>
<td>0.24A</td>
<td>57.6</td>
<td>5</td>
<td>2</td>
<td>10KAIC</td>
<td>57.6</td>
<td>197</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

5.0 Additional Safety Related Markings

Please review the following additional safety related markings.
TO BE MOUNTED ON NON-COMBUSTIBLE SURFACE

WAIT 60 SECONDS AFTER DE-ENERGIZING ALL SOURCES BEFORE OPENING THE DOOR

TURN OFF ALL 3 BREAKERS (AC, DC, HEATER) TO DISCONNECT ALL INCOMING POWER TO THE UNIT

SPACE HEATER INPUT 50/60HZ .24A@240Vac .23A@230Vac

PROTECTIVE CLASS: I  IP RATING: IP2X  OVC CLASS-III

WARNING

“TO REDUCE THE RISK OF FIRE, INSTALL BATTERY CHARGER ABOVE A FLOOR OF NON-COMBUSTIBLE MATERIAL, SUCH AS STONE, BRICK, CONCRETE OR METAL.”

USE COPPER CONDUCTORS ONLY FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE AND RATING OF FUSE.
6.0 Before opening an energized charger for service or routine inspection:
In addition to the service instructions in the general A77 manual, please also observe the following.

Before opening the charger, it is necessary to de-energize 3 circuit breakers, the AC-Breaker, DC-Breaker, and the Space Heater-Breaker. It is strongly advised that the upstream feeder breakers for these 3 sources be opened as well for additional safety.

After opening these 3 circuits, wait at least 60-seconds before opening the door to allow the internal capacitors to discharge to a safer level.

Verify with a DMM that all 3 power circuit feeds are indeed open & de-energized before proceeding.

7.0 Additional Documentation:

The 56E option requires that the parts placement drawing is included as to identify serviceable components. This will be a larger print included in the manual.