AERO 5503
ROOFTOP UNIT
(DESIGN FOR MINI / MIDI BUSES
WITH SIDE DUCTS)
W ELECTRONIC CONTROLLER
12V, 18Kw
P.N. 4700-553

ALEX ORIGINAL RESERVE THE RIGHTS TO MAKE CHANGES IN ITS PRODUCTS WITHOUT ADVANCE NOTICE.
AERO 3500, 4500, 5500
ROOFTOP UNIT
(DESIGNER FOR MINI / MIDI BUSES WITH SIDE DUCTS)
W. ELECTRONIC CONTROLLER

<table>
<thead>
<tr>
<th></th>
<th>AERO 3500</th>
<th>AERO 4500</th>
<th>AERO 5500</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Refrigeration capacity at ambient temperature 30°C</strong></td>
<td>14.5kw/15.5kw</td>
<td>16kw/17kw</td>
<td>18kw/19kw</td>
</tr>
<tr>
<td>Refrigerant</td>
<td>R-134A</td>
<td>R-134A</td>
<td>R-134A</td>
</tr>
<tr>
<td>Refrigerant charge for 134a</td>
<td>2500gr.</td>
<td>2700gr.</td>
<td>2800gr.</td>
</tr>
<tr>
<td>Oil charge (in addition to the existing in the compressor)</td>
<td>90cc</td>
<td>100cc</td>
<td>110cc</td>
</tr>
<tr>
<td>Rooftop Unit weight</td>
<td>61kg</td>
<td>61kg</td>
<td>61kg</td>
</tr>
</tbody>
</table>

TA 9093 -1- 10.19
AERO 3500, 4500, 5500 • Rooftop Unit

AERO 3500 (2 PCS.)
AERO 4500 (3 PCS.)
AERO 5500 (3 PCS.)

CONDENSER
ELECTRIC FANS

FIXING POINTS & ROOF OPENING

AERO 3500  (2 POINTS A+B)
AERO 4500  (3 POINTS A+B+C)
AERO 5500  (4 POINTS A+B+C+D)

BLOWERS AIR OUTLET

AIR INLET

4.7”
120 mm

4.5”
115 mm
3.4”
86 mm
5.4”
139 mm
6.7”
170 mm
13.38”
340 mm
3.93”
100 mm
13.38”
340 mm

MARK AND DRILL 4 HOLES Ø10mm FOR LOCATING TEMPLATE. HOLES SHOULD BE 582mm FROM CENTER LINE AND 50mm FROM CENTER OF ROOF CROSS MEMBER.
FIXING POINTS & ROOF OPENING

INSTALL ON BOTH SIDES

TEMPLATE

ROOF

R-100

100 / 3.93"

360 / 14.17"

1094 / 43"

100 / 3.93

360 / 14.17"
1. MARK AROUND THE UNIT.
2. LIFT THE UNIT.

INSTALL
2 POP RIVET 4x10mm

8 BOLTS M6x25 + WASHERS

POSITION THE ROOFTOP UNIT ACCORDING THE 4 HOLES.

EVAPORATOR ASSY.

CONDENSER COUNTER STARP (4 PCS.)

2028-020
CLEAN THE ROOF SURFACE ALONG TO MARKED AREA TO ALLOW GOOD CONTACT FOR THE POLYURETHANE

PAINT TWICE ALL HOLES AND CUTTING LINES WITH TOP QUALITY ANTI-RUST PAINT ENRICHED WITH ZINC.

THE EVAPORATOR UNIT MUST BE TURNED OVER AND PAINTED BY A THIN LAYER OF PRIMER SIKA 209D

★ POLYURETHANE
★ SIKA 221 IS RECOMMENDED
APPLY POLYURETHANE SEALING ON THE MARKED LINE.
CONDENSER ASSY.

INSTALL TEMPLATE ON BOTH SIDES

8 BOLTS M6x25

ORIGINAL INSTALL TEMPLATE ON BOTH SIDES

HOSE 1/2"

HOSE 13/32"

AERO 3500, 4500, 5500 • Rooftop Unit
AERO 3500, 4500, 5500 • Rooftop Unit

VIEW OF THE CEILING FROM THE INSIDE

HOSE 1/2” TO COMPRESSOR

DRAW HOSE 1/2”

HOSE 13/32” TO COMPRESSOR

2028-019 BASE COUNTER STARP (4 PCS.)

VIEW A

VIEW B

A B

FRONT

ROOF

ROOF

3/4”NF

3/4”NF

3/4”NF

3/4”NF

3/4”NF

3/4”NF

7/8”NF

7/8”NF

TA 9092

10.19
### 4021-018T
**ELECTRIC FAN**
- AERO 3500 (2 PCS.)
- AERO 4500 (3 PCS.)
- AERO 5500 (3 PCS.)

### 3801-870
- **UNIT ACRYLIC ABS COVER**

### 15 BOLTS M6x16
- +ALUMINUM / RUBBER WASHERS
INSTALL AIR FILTER ASSY (PN. 3801-265)

CEILING

CUT OPENING

700

220

3801-2651
FILTER BASE
PLASTIC

6 SCREWS 5x12

2316-165
FILTER

3801-2652
FILTER HOUSING
PLASTIC

6 BOLTS M6x15
MIDI FUSE 60A SHOULD BE PLACED NEAR THE BATTERY

ELECTRONIC CONTROL BOX WITH DISPLAY

PLASTIC FOR ELECTRONIC CONTROLLER

CUT OPENING AS SHOWN

2 NUTS M6

ELECTRONIC CONTROL BOX WITH DISPLAY (WITH FLAP)

1011-061 MIDI FUSE 60A SHOULD BE PLACED NEAR THE BATTERY
AERO 3500, 4500, 5500 • DIGITAL CONTROL • 12V/24V

<table>
<thead>
<tr>
<th>AERO</th>
<th>CONDENSER FAN</th>
<th>EVAPORATOR FAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>3500</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>4500</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>5500</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

1050-376 ELECTRONIC CONTROL BOX WITH DISPLAY
1050-377 ELECTRONIC CONTROL BOX WITH DISPLAY (WITH FLAP)

RED WIRE CONNECTOR

ORIGINAL WIRE (+) AFTER IGNITION
MIDI FUSE 30A

EXTERNAL TEMP SENSOR
TRINARY SWITCH

INTERNAL TEMP SENSOR

DIGITAL CONTROL

ELECTRIC FAN
ELECTRIC FAN
ELECTRIC FAN

CONDENSER FAN
EVAPORATOR FAN

FLAP MOTOR

OPTION FOR FLAP
**ADVANTAGES**

1. Electronic climate control.
2. Automatic fan speed adaptation according to temperature.
3. Easy readable digital Display.
4. Automatic changeover from heating to cooling.
5. Heating system control.
6. windshield defogging.
7. Outside temperature indication.
8. 3 speed internal fan.

**FUNCTION**

- **KEY - N1 Automatic climate control.** Switches on- off the automatic temperature control.
- **KEY - N2 Blower control.** Increases/decreases manual blower speed.
- **KEY - N3 Temperature control.** Decreases interior temperature set point by one degree per stroke.
- **KEY - N4 Temperature control.** Increases interior temperature set point by one degree per stroke.
- **KEY - N5 EXT. Temperature.** Pressing key N5 will display the ambient temperature for 3 seconds.
- **KEY - N6 Air Recirculation - Available Only for 1050-377.** Pressing key N6 to turn on recirculation.

**OPERATING INSTRUCTIONS**

When engine is running press key N1 to activate the climate control.

*Display* When A/C is on, display shows the interior set point temperature and LED L5 illuminates.

*Temperature control* When A/C is on, select temperature by using key N3 to decrease or key N4 to increase temperature.
The temperature can be adjusted between 12°C-28°C / 54°F-82°F.

*Ventilation* When A/C is on in automatic mode, the blower’s speed is controlled by interior temperature. Blower speed can be changed by pressing key N2.

*Heating (option)*
If temperature drops below set temperature heating will start automatically L1 LED will flash.
* In case the heating unit is not a part of the A/C system, on heating mode the A/C blowers should be cut off, by connecting points B1 and B4 on connector B.
**Defogging (with heating option)**
To help to defog the windshield Press N1 (aiming star) and N2 (aiming star) at the same time to activate compressor for 3 minutes.

**Temperature indication**
To check the interior temperature press simultaneously key N3 (down arrow) and key N4 (up arrow).

**Celsius to Fahrenheit conversion**
To convert Celsius to Fahrenheit - Press the down arrow continuously for eight seconds.
To convert Fahrenheit to Celsius - Press the up arrow continuously for eight seconds.

### 1. A connector

<table>
<thead>
<tr>
<th>A1</th>
<th>A2</th>
<th>A3</th>
<th>A4</th>
<th>A5</th>
<th>A6</th>
<th>A7</th>
<th>A8</th>
<th>A9</th>
<th>A10</th>
</tr>
</thead>
</table>

### 2. B connector

<table>
<thead>
<tr>
<th>B1</th>
<th>B2</th>
<th>B3</th>
<th>B4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressor relay output (+).</td>
<td>Hot water relay output (+).</td>
<td>Input (-).</td>
<td>Input (+).</td>
</tr>
</tbody>
</table>

### 3. Error Codes

- E1 Internal temp. sensor fault.
- E2 External temp. sensor fault.
- CO No Gas in the system.