



**Countries:** BAHAMAS, BOLIVIA, BELIZE, CANADA, CHILE, TAIWAN, COLOMBIA, COSTA RICA, DOMINICAN REPUBLIC, ECUADOR, EL SALVADOR, GUAM, GUATEMALA, GUYANA, HAITI, HONDURAS, JAMAICA, KOREA, SOUTH KOREA, MEXICO, ARUBA, NICARAGUA, PANAMA, PERU, PUERTO RICO, TRINIDAD AND TOBAGO, UNITED STATES, URUGUAY, VENEZUELA, Curaçao  
**Document ID:** IK2200088  
**Availability:** ISIS, Bus ISIS, FleetISIS, IsSIR  
**Revision:** 11  
**Major System:** BUS BODY  
**Created:** 10/19/2009  
**Current Language:** English  
**Last Modified:** 4/22/2025  
**Other Languages:** [Français](#), [Español](#),  
**Author:** Brandon Akridge  
**Viewed:** 12288

[Less Info](#)

Hide Details

Coding Information

<b>Copy Link</b> 	<b>Copy Relative Link</b> 	<b>Bookmark</b>  <a href="#">View My Bookmarks</a>	<b>Add to Favorites</b> 	<b>Print</b> 	<b>Provide Feedback</b> 	<b>Helpful</b>  182	<b>Not Helpful</b>  197
----------------------	-------------------------------	--	-----------------------------	------------------	-----------------------------	---------------------------	-------------------------------

**Title:** Factory Installed Air Conditioning, EC4.0 System BE, CE, FE, RE Bus Models

**Applies To:** BE, CE, FE, RE Bus Models any Air Conditioning feature with the 4.0 in description BE and CE only – 48ADC EC4.0

## Change Log

Please refer to the change log text box below for recent changes to this article:

04/22/2025 - Updating features, adding 48HDP

05/05/2020 - Adding diagnostic info on compressor, updating Transair location, charging info distinction, addressing feedback, updating feature codes

11/13/2018 - Added 48CXE to feature list

08/02/2016 - Corrected Formatting and Layout.

04/24/2015 - Added link for system specs and capacity's per article feedback

## Description

This article includes the operating instructions and the service manual for the Trans/Air EC4.0 air conditioning system.

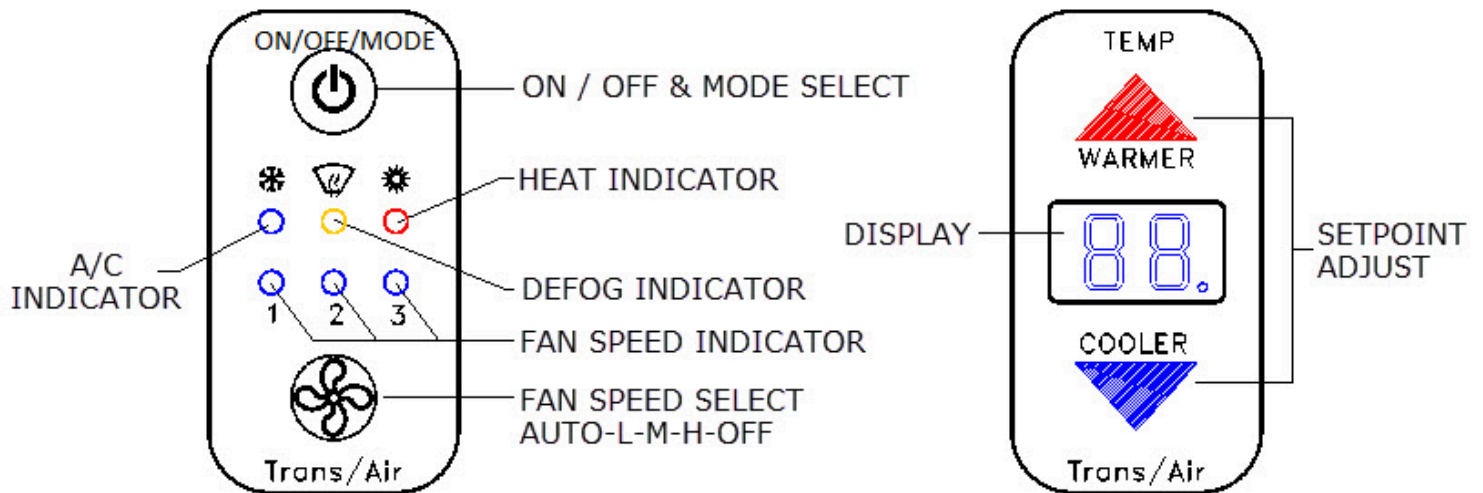
Units built with factory-installed air conditioning will have an option code for the air conditioning system installed in the components section in ISIS. (Sample shown below) Verify the operating system ordered on the unit prior to utilizing the appropriate iKNOW article for service information. NOTE: This article is for features with 4.0 in the description.

<b>Sample Feature Codes</b>
-----------------------------

Feature Code	Description
0048USZ	AIR CONDITIONER, BODY IC Air, 96,000 BTU, Evaporator, Condenser & Compressor, With Rear Flush Mounted Evaporator and EC2.5 Control System
0048AAS	AIR CONDITIONER, BODY IC Air, 120,000 BTU, Evaporator, Condenser & Compressor, With EC3.0 Control System
0048CWK	AIR CONDITIONER, DASH IC Air, 40,000 BTU, Stand-Alone Dash Air Evaporator, SMC2S Condenser & Compressor, and EC4.0 Control System
0048ADC	AIR CONDITIONER, DASH IC Air, With Heat, Evaporator, with EC4.0 Control System, with 60K & 120K Body Systems
0048HDP	AIR CONDITIONER, BODY IC Air, 120,000 BTU, Evaporators FM55 Front & Rear Flush Mounted, Condensers SC-3 Skirt Mounted, Compressors TM21, #16 Suction Hose, with EC4.0 Control System
0048GTK	STAND-ALONE AC DASH IC W/EC4.0 SYS IC Air, 40,000 BTU, Stand-Alone Dash Air Evaporator, Radiator Mounted Condenser & 10CID Compressor in Primary Drive Location, EC4.0 Control System

## Operating Instructions

### Trans/Air EC 4.0 Climate Control System



#### **BASIC OPERATION**

With the vehicle running, press the MODE button to turn the EC4.0 system on. The A/C indicator will light up, indicating the system is in A/C mode. Fan speed indicator 1 will light up, indicating the fan speed is Low. The thermostat will also turn on automatically. The LED display shows cabin air temperature.

#### **Select mode of operation (Heat / Defog Optional)**

Press the MODE button to change the operation mode between A/C, Defog, or Heat.

#### **Change fan speed**

Press the **FAN** button to change the fan speed between Low, Medium, and High.

### Change the set point temperature

The thermostat LCD display shows cabin air temperature during normal operation. Press **UP** or **DOWN** arrow once for set point mode. The set point temperature and a flashing decimal point will be displayed on the LED in set point mode. Press the **UP** or **DOWN** arrow again to adjust the set point to the desired value. After 5 seconds, EC4.0 will switch back to normal operating mode, displaying cabin temperature. The new set point then becomes effective.

The default set point temperature is 70°F. This setting is stored in EC4.0s non-volatile memory. It takes effect every time the system turns on. To change the default set point temperature setting, go into the setting mode and adjust the set point to the desired value, then press the **UP** and **DOWN** arrow **simultaneously**. The new set point value will be stored into the non-volatile memory and become the default set point.

### Turn the system off

Press the **MODE** button until all the mode indicators turn off. The fan speed indicators and the thermostat LCD display will turn off consequently.

### Fan-only mode operation

Press the **FAN** button while the EC4.0 system is off. The A/C system will be running in Fan Only mode. (Only evaporator blowers run, compressor and condenser remain off.) Press the **FAN** button to set the fan to the desired speed (Low, Medium, or High). In Fan Only mode, the thermostat LCD still shows the cabin air temperature. To turn Fan Only mode off, keep pressing the **FAN** button until all the fan speed indicators turn off.

---

## Troubleshooting

Fault Code	Description
HP	High pressure fault
LP	Low pressure fault
Lu	Low clutch voltage/blown fuse
Sr	Maintenance required
<b>System Indicator</b>	
Hi	Return air temperature above 90°F
Lo	Return air temperature below 60°F
Sr	1500 Hr Service Reminder

No service required when the thermostat LCD shows “Hi” or “Lo”.

Turn the system off and then turn it back on to reset the “Sr” code. Service is required if the “Sr” code cannot be reset.

## Compressor

For issues such as those listed below, see the exact details on the Valeo website (<http://www.valeocompressors.com/>) and look at their troubleshooting section

- oil contamination (change in color, metal filings, etc.)
- leaking
- not cooling
- noise
- smoke

Valeo's website also contains service procedures for the magnetic clutch, cylinder heads, seals, etc..

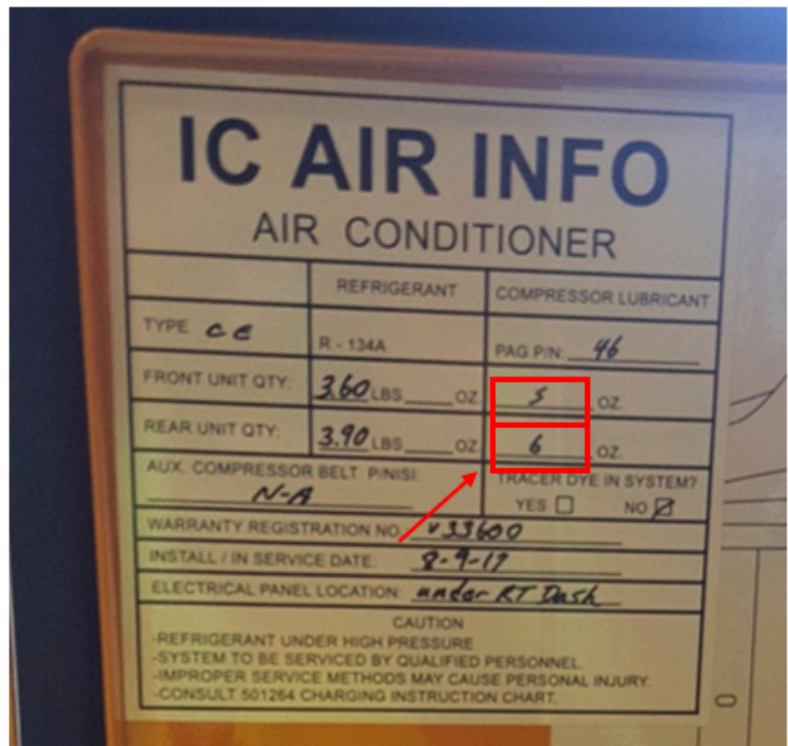
If replacing the compressor, the discharge line must be flushed with non-solvent-based flushing agents. Also, the Filter Drier must be replaced.

## Service Manuals

[EC4.0 Service Manual](#)

[Click here for the charging system specs and capacities](#)

Note: The charging system info located on the electrical access door for each bus, as shown below, does not contain the amount of oil that was originally contained in the compressor/s, so when replacing the lubricant take that into consideration calculating total lubricant required. Check the label on the compressor for its lubricant info.



## Technical Support

[Trans/Air Manufacturing Website](#) (800) 673-2446

Please refer to the Trans/Air website for the following:

- Manuals
- Maintenance & Troubleshooting, see below for location

Home Products Systems Service Parts Warranty Education/Training Service Centers Support

About Us  
Contact Us  
Feedback  
Press Releases  
Job Opportunities  
Links  
Recalls/Advisories/  
Product Improvements  
Service Parts Online  
Customer Survey

## Support Documents

Trans/Air's desire is to make this website as useful as possible for any type of customer. If for any reason you are unable to find the document you require, please feel free to **contact us** for personalized assistance.

*Note: Electrical and Piping Diagrams published here are listed by Trans/Air drawing number (part number) listing, which includes Trans/Air's most widely purchased wiring and piping schematics is, by no means, intended to be all-inclusive. Prior to using any of these drawings, make certain it is the correct revision for your application. Please contact Trans/Air directly if you do not know which drawing number (part number) or revision you need or if you require technical assistance.*

- System Selection
- Installation
- Installation Other
- Manuals
- Maintenance & Troubleshooting
  - Preventive Maintenance Schedule (11/18/11 JP)
  - Preventive Maintenance Check List (Form)
  - 15 Preventive Maintenance Action Items
  - Compressor Considerations
  - Normal Wear Component Considerations
  - 7 Things to do Before Leaving for a Mid-Season Trip
  - 8 Warning Signs Which Indicate Trouble
  - Typical Installation Related Failures
  - Troubleshooting Guidelines & Secondary Troubleshooting
  - Compressor Diagnostics
  - Temperature Pressure Chart
  - AC Maintenance Basics for Reliable Operation (Presentation)

Basics of Bus Air Conditioning  
Support Documents  
FAQ  
Customer Feedback Form

- System Performance
- Electrical Diagrams

Please refer to the Valeo website for support on compressors

<http://www.valeocompressors.com/>

Related iKNow Articles		
<a href="#">IK2200001</a>	BUS BODY	Bus Air Conditioning Service Contacts for HVAC Information
<a href="#">IK2200090</a>	BUS BODY	Factory Installed Air Conditioning, EC3.0 System
<a href="#">IK2200089</a>	BUS BODY	Factory Installed Air Conditioning, EC2.5 System

## WARRANTY INFORMATION

### Warranty Claim Coding:

Refer to the [Warranty Coding Manual](#) for Group and Noun Codes.

---

## Standard Repair Time(s):

Refer to the [SRT Manual](#) for Repair Times

---

## **OTHER RESOURCES**

[Master Service Information Site](#)

 Hide Details

### Feedback Information

Viewed: 12287

Helpful: 182

Not Helpful: 197

No Feedback Found