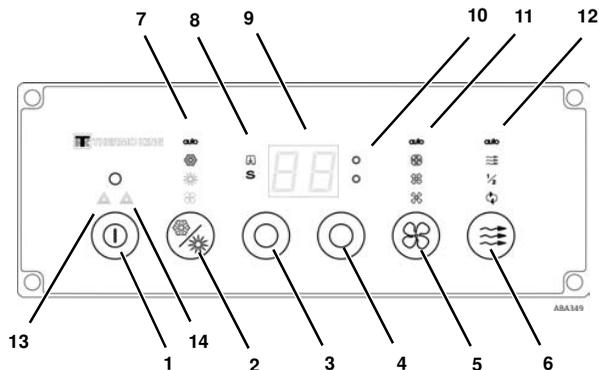


## Driver Panel



Item	Description
1.	On/Off Key
2.	Mode Select Key (ESCAPE)
3.	Temperature Key (Blue) (DOWN)
4.	Temperature Key (Red) (UP)
5.	Blower Speed Key (ENTER)
6.	Fresh Air Select Key
7.	A/C Mode Icons
8.	Temperature Icons
9.	Display
10.	Clutch and Boost Pump Icons
11.	Blower Mode Icons
12.	Fresh Air Mode Icons
13.	Red Alarm
14.	Yellow Alarm

## Setup/Calibration/Test Mode

**NOTE: When in the Setup/Calibration/Test Mode the HVAC unit is out of operation.**

Turn the ignition switch ON to supply power to the unit controller and leave the display in the OFF position.

Press and hold both **DOWN** (Blue) and **UP** (Red) keys simultaneously for 3 seconds (t1 will be displayed).

The following functions are available in the Setup/Calibration/Test Mode.

Display	Description
t1	Test Mode 1 - basic test of HVAC unit
rt	Relay Test
Pr	Setup of program number and reading of Firmware version
CA	Calibration of temperature sensors
SE	Setup of controller
AL	Reading and clearing of alarms
Hr	Reading of hourmeter

Press **DOWN** (Blue) or **UP** (Red) keys to scroll through the menu selections.

Press **ENTER** (Fan Speed) key to save parameter setting.

Press **ESCAPE** (Mode Select) key to leave a parameter unchanged.

Press **On/Off** key when finished to confirm changes.

**See ClimaAIRE ID Service Manual (TK 60020-3-MM) for additional information.**

## Function 1: Test Mode 1 (t1)

In Setup/Calibration/Test Mode menu press the **DOWN** (Blue) or **UP** (Red) keys to scroll to "t1" and press **ENTER** (Fan Speed) key.

The following tests are available:

### 1. Cooling/Heating Control

Press **ESCAPE** (Mode Select) key to change heating or cooling outputs.

The following table is used to verify all relay outputs and function of heating and cooling.

Function	Relay Output ON	Relay Output OFF	LED
Ventilation			
Heating	BP, MCV	CR	Red - ON
Cooling	CR	BP, MCV	Blue - ON
Auto / Reheat	CR, BP, MCV pulsing		Red & Blue - ON

### 2. Blower Speed Control

Press **ENTER** (Fan Speed) key to change evaporator blower speed.

The following table is used to verify all relay outputs and functions of evaporator blowers.

Function	Relay Output ON	Relay Output OFF
Low Speed	EFL	EFH, EFM
Medium Speed	EFL, EFM	EFH
High Speed	EFL, EFM, EFH	
Auto		EFL, EFM, EFH

### 3. Fresh Air Control

Press **Fresh Air Select** key to change position of fresh air dampers.

The following table is used to verify all relay outputs and functions of fresh air dampers.

Function	Relay Output ON	Relay Output OFF
Re-circulation		DM
Fresh air damper 50% open	DM pulsing	
Fresh air damper 100% open	DM	

## Function 2: Relay Test (rt)

In Setup/Calibration/Test Mode menu press the **DOWN** (Blue) or **UP** (Red) keys to scroll to 'rt' and press **ENTER** (Fan Speed) key. The display will show the relay or output symbol.

Press **DOWN** (Blue) or **UP** (Red) keys to scroll through the function menu.

Press **ENTER** (Fan Speed) key and corresponding relay/output is energized.

Display	Description	Signal	Note
EL	Evaporator low speed relay	EFRL	
En	Evaporator medium speed relay	EFRM	
EH	Evaporator high speed relay	EFRH	
CL	Compressor clutch relay	CR	Blue icon is ON
bP	Boost pump relay	BPR	Red icon is ON
C0	Modulating coolant valve	MCV	Low side output - compatibility with old ClimaAIRE I
C1	Modulating coolant valve	MCV	High side output
d0	Damper output	DM	Low side output - Fresh air damper open (100%),
d1	Damper input	DM	High side output - Fresh air damper open (100%)

Press **ESCAPE** (Mode Select) key to continue with another function.

Press **On/Off** key when finished to confirm changes and switch OFF (soft restart) the system.

## Function 3: Setup Program Number (Pr)

In Setup/Calibration/Test Mode menu press **DOWN** (Blue) or **UP** (Red) keys to scroll to "Pr" and press Blower Speed (**ENTER**) key.

The Firmware version will be displayed followed by the program number. To change program number press **DOWN** (Blue) or **UP** (Red) keys as required.

Press **ENTER** (Fan Speed) key to save parameter setting.

Press **ESCAPE** (Mode Select) key to leave a parameter unchanged.

Press **DOWN** (Blue) or **UP** (Red) keys to continue with another function.

Press **On/Off** key when finished to confirm changes and switch OFF (soft restart) the system.

## Function 4: Calibration (CA)

In Setup/Calibration/Test Mode menu press the **DOWN** (Blue) or **UP** (Red) keys to scroll to "**CA**" and press **ENTER** (Fan Speed) key. The display will show name of parameter and calibration.

Press **ENTER** (Fan Speed) key again to see its current value.

Press **ESCAPE** (Mode Select) key to leave a parameter unchanged.

Press **DOWN** (Blue) or **UP** (Red) keys as required to change the value.

- The calibration range/correction for temperature sensors is from -1 C to +26 C (30.2 F to 78.8 F).

Press **ESCAPE** (Mode Select) key to save new value and continue to next parameter.

If **On/Off** key is pressed now a new value is also saved and the system will restart (soft restart).

Press **DOWN** (Blue) or **UP** (Red) keys to select next parameter to continue in calibration.

After calibration press **ESCAPE** (Mode Select) key to return to Function menu or press **On/Off** key to switch OFF (soft restart) the system.

Display	Description
rA	Return air temperature sensor
Ct	Evaporator coil air temperature sensor
At	Ambient temperature sensor
Cf	Clutch feedback - no calibration
Ub	Battery voltage on PWR - no calibration

## Function 5: Set up of Controller (SE)

In Setup/Calibration/Test Mode menu press the **DOWN** (Blue) or **UP** (Red) keys to scroll to "**SE**" and press **ENTER** (Fan Speed) key. The system to check/change the parameters is similar as for Calibration (CA). The display will show name of parameter and calibration.

Press **ENTER** (Fan Speed) key again to see its current value.

Press **ESCAPE** (Mode Select) key to leave a parameter unchanged.

Press **DOWN** (Blue) or **UP** (Red) keys as required to change the value.

Press **ESCAPE** (Mode Select) key to save new value and continue to next parameter.

If **On/Off** key is pressed now a new value is also saved and the system will restart (soft restart).

Press **DOWN** (Blue) or **UP** (Red) keys to select next parameter to continue in calibration.

## Function 5: (continued)

After calibration press **ESCAPE** (Mode Select) key to return to Function menu or press **On/Off** key to switch OFF (soft restart) the system.

Display	Preset Value	Unit	Min. value Max. value	Name
Ab	07	C	0 C 15 C	Ambient switch point
Fr	-3	C	-5 C +5 C	Evaporator anti-freeze switch point
rh	01			Reheat mode
dt	07	C	1 C 15 C	Delta T
Ao	00	-		Automatic On
LS	17	C	15 C 30 C	Low set point
HS	27	C	15 C 30 C	High set point
rt	00			Default value on the display
0C	00			Old ClimaAIRE
un	C			Celsius/Fahrenheit
EL	45	%	0% 100%	Low speed of blower
En	66	%	0% 100%	Medium speed of blower
Eh	100	%	0% 100%	High speed of blower
Lt	00			Limited temperature setpoint
EC	00			Economic cool mode
HO	0	C	0 C 5 C	Heat offset
Lc	00			Lock function

## Function 6: Reading/Clearing Alarms (AL)

In Setup/Calibration/Test Mode menu press the **DOWN** (Blue) or **UP** (Red) keys to scroll to "**AL**" and press **ENTER** (Fan Speed) key.

All alarm codes will be displayed for 2 seconds and at the end will be displayed "dE".

If no alarm is stored "no" will be displayed for 1 second.

To keep alarms press **On/Off** key. The panel will be switched off but the alarms will remain recorded.

Press **ENTER** (Fan Speed) key to clear all alarms. The display will show "00" then returns to Function menu and display will show "AL".

Alarms cleared through the driver panel will remain in internal memory and can be read through connected PC with Service software installed.

Press the **On/Off** key to switch OFF (soft restart) the system.

Alarm Code	Alarm Type	Description
01-04		Not Used
05	RED	Clutch cycling
06	RED	Long delay of HPCO or LPCO
07	YELLOW	RTS Low
08	YELLOW	RTS High
09	YELLOW	CTS Low
10	YELLOW	CTS High
11	YELLOW	ATS Low
12	YELLOW	ATS High
13-30		Not Used
31-37	RED	Inverter Alarms

## Function 7: Reading of Hourmeter (Hr)

In Setup/Calibration/Test Mode menu press the **DOWN** (Blue) or **UP** (Red) keys to scroll to "**Hr**" and press **ENTER** (Fan Speed) key. Each value will automatically be displayed and at the end will be displayed "Hr".

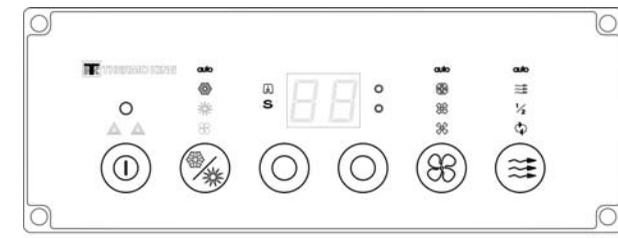
Press **ENTER** (Fan Speed) key to repeat process.

Press the **DOWN** (Blue) or **UP** (Red) key to select next function or press the **On/Off** key to switch OFF (soft restart) the system.



# ClimaAIRE ID

## Diagnostic Procedures



### Using Driver's Panel

TK 55022-3-PC (Rev. 0, 05/11)

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