

# CAREL ELECTRONIC CONTROLLERS

## CONFIGURABLE AIR CONDITIONING CONTROLLER

### aria HVAC Configurable Controller

Airefrig Part Number	TAT0000CW0 (Control Panel)	TABASE7000 (Relay Board)
Controller Operation	Parameter <b>H1</b> setting dictates what type of control the aria will be. (see tables below)	
Temperature Range (using standard NTC probe)	0 to +50°C	
Power Supply	Powered from Relay Board - by 2 wires	24Vac (12VA)
Type of Mounting	Wall Mount	Surface mount (in electrical panel)
Relays	-	7
Internal Sensor in Control Panel	1 x internal sensor (*or remote option)	-
Probe 1 – NTC (Purchase separately)	*1 x sensor (for remote option)	-
Probe 3 – NTC (Purchase separately)	-	De-ice control on outdoor unit
De-Ice	Temp initiate & temp terminate with a min time between cycles	
Multi function relay options (Parameter H2)	-	1 = Alarm 2 = Outdoor Fan 4= Heat/cool indication
Digital Inputs (3)	- For fault - Remote ON/OFF - Heat/Cool selection	
Time Settings (4)	- Off - Day - Night - Unoccupied	
Indoor Fan Control	Auto or Continuous (change by entering into control)	
7 Day Time Clock	✓	
Decimal Point Resolution	0.5°C	
Serial Connection RS485 (Purchase separately)	-	✓ (refer manual)
Key Program Opt. (Key Purchase separately)	✓	
Max Distance Between Control Panel & Relay Board	150 metres	



## aria HVAC Controller

Installation is simplified as only a 2 wire cable is needed to connect **aria** terminal (located in the room) to its power board, which is located at the air conditioner or fan coil. The three digital inputs on the power board can be configured for a series of functions including: cooling/heating selection, remote ON/OFF, alarm control (generic, filter, low pressure, fan overload, etc).

An additional analogue input can be used for automatic defrost control, energy saving or set point compensation. Parameters can be password protected to prevent non authorised access.

### Controller Pricing

Airefrig Part Number	TAT0000CW0 (Control Panel)	TABASE7000 (Relay Board)
List Price Ex - GST	\$ 508.83	\$ 342.78

### aria HVAC Programmable Controller - Accessories

Airefrig Part Number	Description	List Price Ex GST
TRA00BE240	Transformer 240 to 24Vac 20VA	\$114.33
TAKEY00000	Programming Key	P.O.A.
DPWT011000	NTC Room Sensor (wall mount)	\$104.55
DPDT011000	NTC Duct Sensor	\$217.54
NTC_____	Sensor NTC (select suitable opt.)	P.O.A.

### aria "H1" Parameter Setting Examples

H1 Parameter Setting Mode Examples	Description	Relay 7 SPST	Relay 6 SPST	Relay 5 SPST	Relay 4 SPST	Relay 3 SPST	Relay 2 SPST	Relay 1 SPST
3	3 stage heating only (with economy cycle)	Economy Open	Economy Close	Heat 1	Heat 2	Indoor Fan	Heat 4	Multi Function
4	2 stage cooling only (with economy cycle)	Economy Open	Economy Close	Cool 1	Cool 2	Indoor Fan	Multi Function	Alarm
11	1 comp heat pump (with economy cycle)	Economy Open	Economy Close	Comp	Indoor Fan	Auxiliary Heat	Reversing Valve	Multi Function
12	2 comp heat pump (with 1 stage aux heat)	Comp 1	Comp 2	Indoor Fan	Auxiliary Heat	Multi Function	Reversing Valve	Alarm
14	1 comp heat pump (with 3 speed fan)	Comp 1	Auxiliary Heat	Fan speed 1	Fan speed 2	Fan speed 3	Reversing Valve	Multi Function

(Note: There are another 14 options for the **H1** parameter)

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**clima** is the CAREL proposal for the management of simple air-conditioning and heating systems. The 0 to 10V output can also be connected for the modulating control of the CAREL "compactSteam" humidifier in residential and light commercial applications.

**clima** comes with a built in temperature or temperature/humidity sensor, one multifunction digital input, up to two relays + one 0 to 10V proportional output for 11 different control modes, including zone control for radiant underfloor installations. In addition, an outside temperature sensor can be connected for automatic compensation of the temperature and humidity set points.

The Real Time Clock manages a daily time band, and the optional RS485 serial interface completes the product, making it a technologically advanced solution.

### clima HVAC Configurable Controller

Airefrig Part Number	ADCA000100	ADCA000210	ADCD000100	ADCF000210
Controller Type	Classic Thermostat	Advanced Thermostat	Classic Humidistat	Advanced Thermostat / Humidistat
Temperature Range	10 °C to 40°C	10 °C to 40°C	-	10 °C to 40°
Humidity Range	-	-	10 %rH to 70 %rH	10 %rH to 70 %rH
Power Supply	24 Vac (1VA)			
Relays	1	2	1	2
Analogue output	1	1	1	1
Real Time Clock	-	✓	-	✓
Digital Input	1: heat / cool selection, 2: Remote ON / OFF, 3: Day / Night selection, 4: Alarm from homeSteam			
Decimal point resolution	0.1 °C	0.1 °C	1 %rH	0.1 °C / 1 %rH
Serial Connection RS485 (Purchase separately)	Optional	Optional	Optional	Optional
Key programming option	✓	✓	✓	✓

General specifications:

Dimension: 135 x 86 x 36 mm.

Type of mounting: wall mount.

Internal sensor in control panel (temperature (NTC) and humidity).

Analogue input for external sensor.



Airefrig Part Number	ADCA000100	ADCA000210	ADCD000100	ADCF000210
List Price Ex GST	P.O.A.	P.O.A.	P.O.A.	\$774.20