THERMO KING

FrontAIRE II™

Thermo King's newest HVAC controller for maximum driver comfort

- Fully Automatic System
- Floor Heating control
- Pre-heater control
- Fully Diagnostic
- Software Customisation

Ingersoll Rand
Climate Control Technologies

FrontAire II™ is a new generation of drivers cabin climate control systems that allows either automatic or manual control, and is capable of floor heating controlling in passenger area. Bus driver's can choose to cool, heat, ventilate or preheat the driver's compartment. FrontAIRE II™ contributes to maximum driver's comfort.

FrontAIRE II™ controller is equipped with a full diagnostic and is capable of storing data (alarms, operating hours, future COD information).
All data can be directly shown on the display or downloaded to a computer. FrontAIRE II™ controller provides flexibility for software customisation, requires less external components, and its usage brings a reduction of electrical connection points on harnesses.

FrontAIRE II™ Features

- Universal controller for TK Front Box
- Full Auto/Manual operation
  (cool, heat, vent, auto)
- Operates modes:
  - Stand-alone HVAC front box with condenser
  - Dependent on compressor of main HVAC unit
- Stepless blower speed control
- Stepless control of 2 flaps and 2 water valves
- Defrost and Smog functions
- Diagnostic & communication through PC
  (RS 232 port)
- 4 digit display, 7 buttons, 2 knobs
- Standard ISO norm car radio bracket
- Real time clock
- Compressor & freeze protection
- Brightness control
- Hour meter
- Alarm modes

FrontAIRE II™ Specification

APPLICATION	Control of HVAC Front Box
SETUP TEMPERATURE RANGE	18°C (64°F) to 27°C (80°F)
OPERATING VOLTAGE RANGE	22-30 VDC
CURRENT CONSUMPTION	Max. 60 mA
OPERATING TEMP. RANGE	–30°C (22°F) to 80°C (176°F)
CONNECTION	Molex 39-01-2140 and 39-01-2180
DIMENSION (WxHxD)	187mm x 57mm x 60mm
INPUTS	Return Air Temperature Sensor
	Coil Temperature Sensor
	Ambient Temperature Sensor
	Floor Temperature Sensor
	Duct Temperature Sensor
	3 Analog Inputs (0 - 24 VDC)
	2 Digital Inputs (0 / 24 VDC)
OUTPUTS	6 Hi/Lo Side Universal Outputs (max. 0.5 A each)
	4 Servomotor Outputs: • Heat Valve • Floor Heat Valve • Fresh Air Damper • Windshield Damper
	Compressor Clutch Output (24 VDC / 2 A)
	PWM Blower Output (24 VDC, 20 kHz, 0 - 100%)
SOFTWARE FEATURES	Real-time clock
	Timer for Preheater
DIAGNOSTIC / PROGRAMMING	RS-232