



TRANE®

Specifications

Management Control System

Trane TVR™ II
DC Inverter System

Intelligent Management Control System

The TVR™ II system can be controlled at different user levels, from the individual user level with the zone controllers to a more centralized tenant by tenant control, or a fully integrated building control PC system with a third party BMS control system.

Individual Controllers

Wireless Controller

- Functions: LCD display, Clock, ON/ OFF, Temp. setting, Mode setting, Fan speed setting, Timer, Horizontal Swing, Vertical Swing, Air Direction
- Mode: Auto/Dry/Cool/Heat & Fan only
- Timer: 0 - 24 hrs timer setting
- Addressing function



Wired Controller

- Functions: LCD display, ON/OFF, temp. setting, Mode setting, Fan speed setting, Timer, Swing setting, Lock
- Mode: Auto/Dry/Cool/Heat & Fan only
- Timer: 0 - 24 hrs timer setting
- Follow me: Allows precise room temperature control using the Temperature sensor in the controller



Centralized Controllers

Indoor unit Centralized Controller

- Functions: Centralized ON/OFF mode setting, Temperature setting, Fan setting, Mode lock function
- Set weekly schedule
- Blue lit background LCD
- Lock mode
- RS232 connection to PC



Outdoor unit Centralized Controller

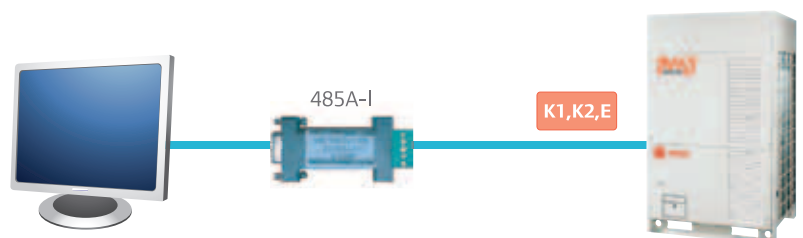
- Functions: Centralized ON/OFF, Mode query, Temp. query, Fan query, Mode lock function
- Controls 32 outdoor units and a PC can control 16 OU centralized controllers
- This controller cannot be connected directly to Mini TVR™ II units.
- Blue lit background LCD
- Emergency stop contact or forced cooling start signal
- Maximum wiring length 1,000m
- RS 232 interface to TVR™ II system PC control



New Service Software

As part of our new TVR™ II portfolio, we introduce a new service tool that allows you to diagnose and troubleshoot the system.

- Real time display of outdoor unit operating parameters
- Description of error codes



Building Management Control

The TVR™ II control network can combine several centralized controllers with a PC (or external BMS systems such as Tracer SC) through BACnet™ or MODBUS interfaces to meet customers' needs in different applications. This higher level of control adds more user friendly features such as power consumption reporting.

TVR II PC Network control software

- Up to 1,200m of wiring can be extended to 3,000m with signal booster relay
- Monitors the system online, records operation data, reports errors
- Manages up to 16 Outdoor and 16 Indoor centralized controllers or up to 1,024 indoor units and 512 Outdoor Units
- Compatible with Windows XP
- Remote online service access possible through internet
- Power consumption report (requires additional external Watt meters)



BACnet® Interface

- This gateway connects through BACnet® to the TVR™ II entire installation and other external components through an existing BMS
- Connects through Ethernet to BACnet®/IP
- 4 RS485 connections for connecting to 4 TVR II centralized controllers (BACnet® is a registered trademark of ASHRAE).

Digital Ampmeter

- One Amp meter per Master Outdoor Unit or condensing system
- Needs to be connected to specific wiring terminals on outdoor unit
- Outdoor Units TVR II need to have a centralized controller that connects to PC or network.



MODBUS Interface

- Integrates TVR II systems to BMS systems through MODBUS.
- Controls up to 1024 indoor units and 64 outdoor units
- Transfers the information via the RTU mode
- Wide voltage 12-48VDC



BMS Lonworks Gateway

- Enables centralized control of up to 1024 indoor units and 512 outdoor units to the LonWorks BMS.
- Easily connectable to the BMS system.
- Ideal module for scattered units in large projects.

Other Accessories

Trane also offers other accessories to maximize customers' comfort in different applications.



Air Handler (AHU) Connection Kit

This kit allows you to integrate other indoor units to the TVR II system. The kit includes the control boards, EXV, sensors, and wired controller.



Motion Sensor

Turns off the system when it doesn't sense movement in the room.



Hotel Inserting Card

- ON-OFF control
- Auto-restart function