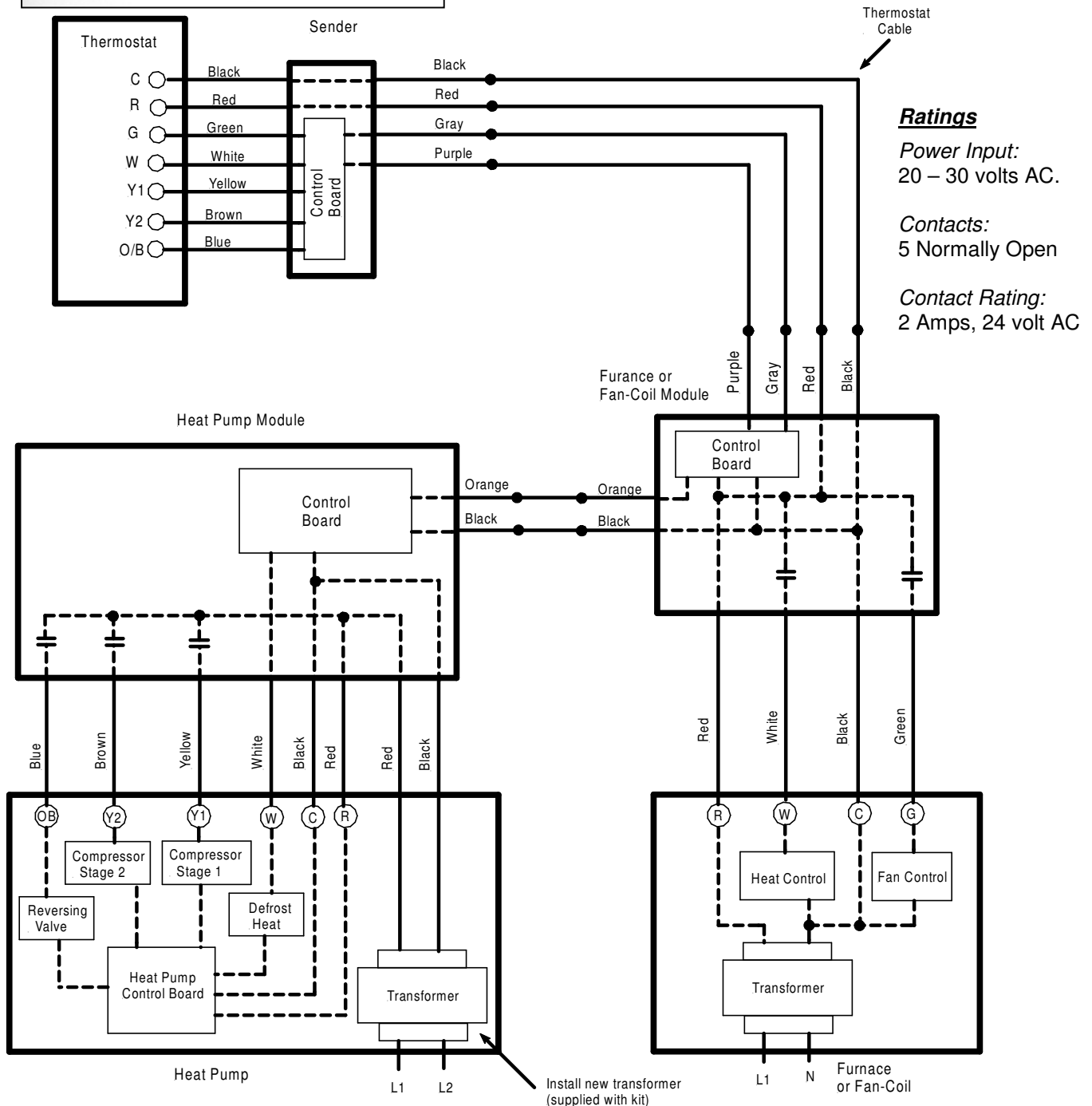


**Product Description**

The **FAST-STAT Model 7000** provides 7-wire control from the thermostat to the furnace or fan-coil over a 4-wire cable. This includes "R", "C", "G", "W", "Y1", "Y2" & "O/B". From the furnace or fan-coil to the heat pump it provides 6-wire control over a 2-wire cable. This includes "R", "C", "Y1", "Y2", "O/B" & "W" (defrost).

Common Uses

Converting from an air conditioning to a heat pump (single or 2-stage) system.

**Ratings**

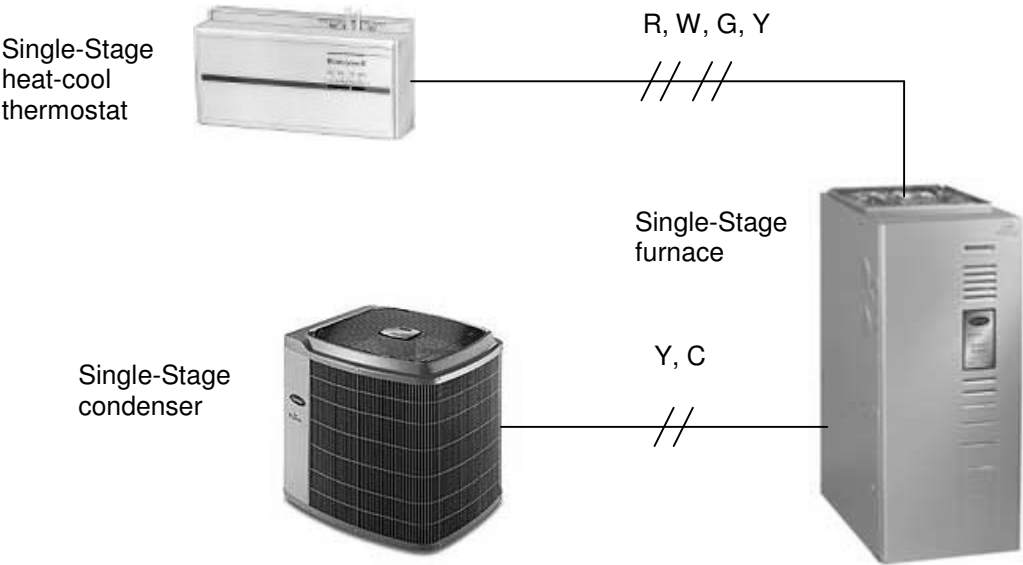
Power Input:
20 – 30 volts AC.

Contacts:
5 Normally Open

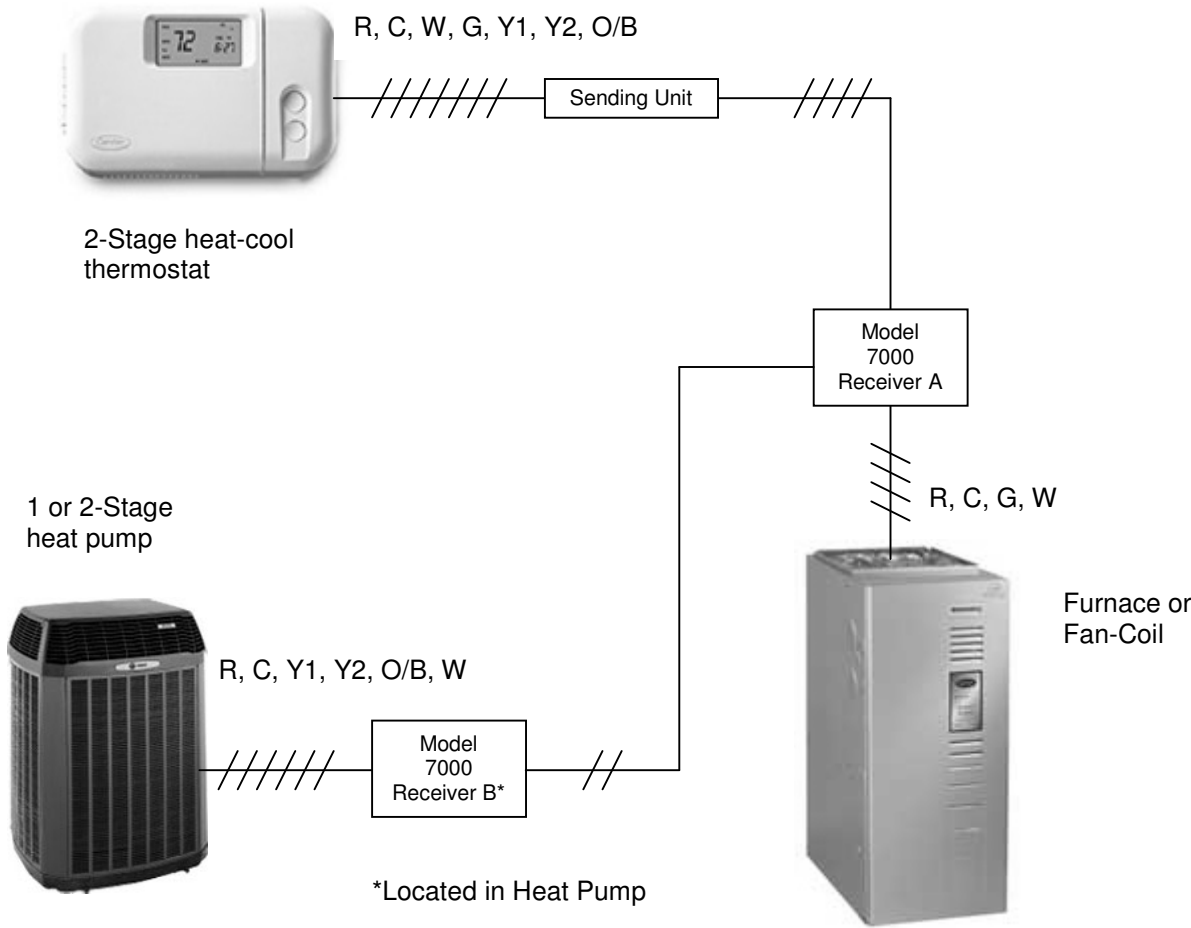
Contact Rating:
2 Amps, 24 volt AC

EXAMPLE: **FAST-STAT** model 7000 used to upgrade to a Heat Pump.

OLD SYSTEM



NEW SYSTEM



FAST-STAT

Model 7000 Installation Instructions

Application

1. The model 7000 FAST-STAT is designed to reduce installation time when retrofitting heat pumps.
2. With a 2-wire thermostat cable it can provide single-stage heating and cooling control. With a 3-wire thermostat cable it can provide 2-stage heating and cooling control. Additional functions can be added dependent upon the number of thermostat cable conductors (see wiring diagrams).

Before installing this product

1. Read instructions. If you have any questions please contact tech support line at the number listed below.
2. This product is designed for use only on 24 volt ac circuits supplied by a class 2 transformer.
3. This product is only to be installed by qualified technicians.
4. To avoid risk of electrical shock or equipment damage disconnect power before beginning installation.

Operational Considerations

1. The FAST-STAT model 7000 has time delays for fan, compressor and reversing valve. The time delay will be between 15 seconds and 3 minutes depending on mode of operation. When testing system please allow for time delays.
2. The common connection provided by the sending unit for the thermostat may not be compatible with all thermostats that require a "C" connection. If this problem is encountered, a wire (if available) may be connected to the thermostat "C" terminal and the furnace / fan coil common terminal. Remove and tape back the sending unit black wire when doing this.
3. The power supply must be between 21 to 28 volts for correct operation. The total connected load must not exceed 2 amps.

Table 1. Terminal designation descriptions

Terminal Designation	Description	Comment	Color
R	Transformer Power	Included & must be connected	Red
C	Transformer Common	Included & must be connected at Receiver	Black
Y - Y1	Compressor Stage 1	Included	Yellow
Y2	Compressor Stage 2	Requires additional thermostat cable conductor	not defined
G	Fan	Included	Green
W	Heat	Additional relay required for supplemental electric heat	White
E	Emergency Heat	Requires additional thermostat cable conductor	not defined
O/B	Reversing Valve	Included	Blue

Tech Support: 1-800-775-4750

FAST-STAT

Installation Guide A

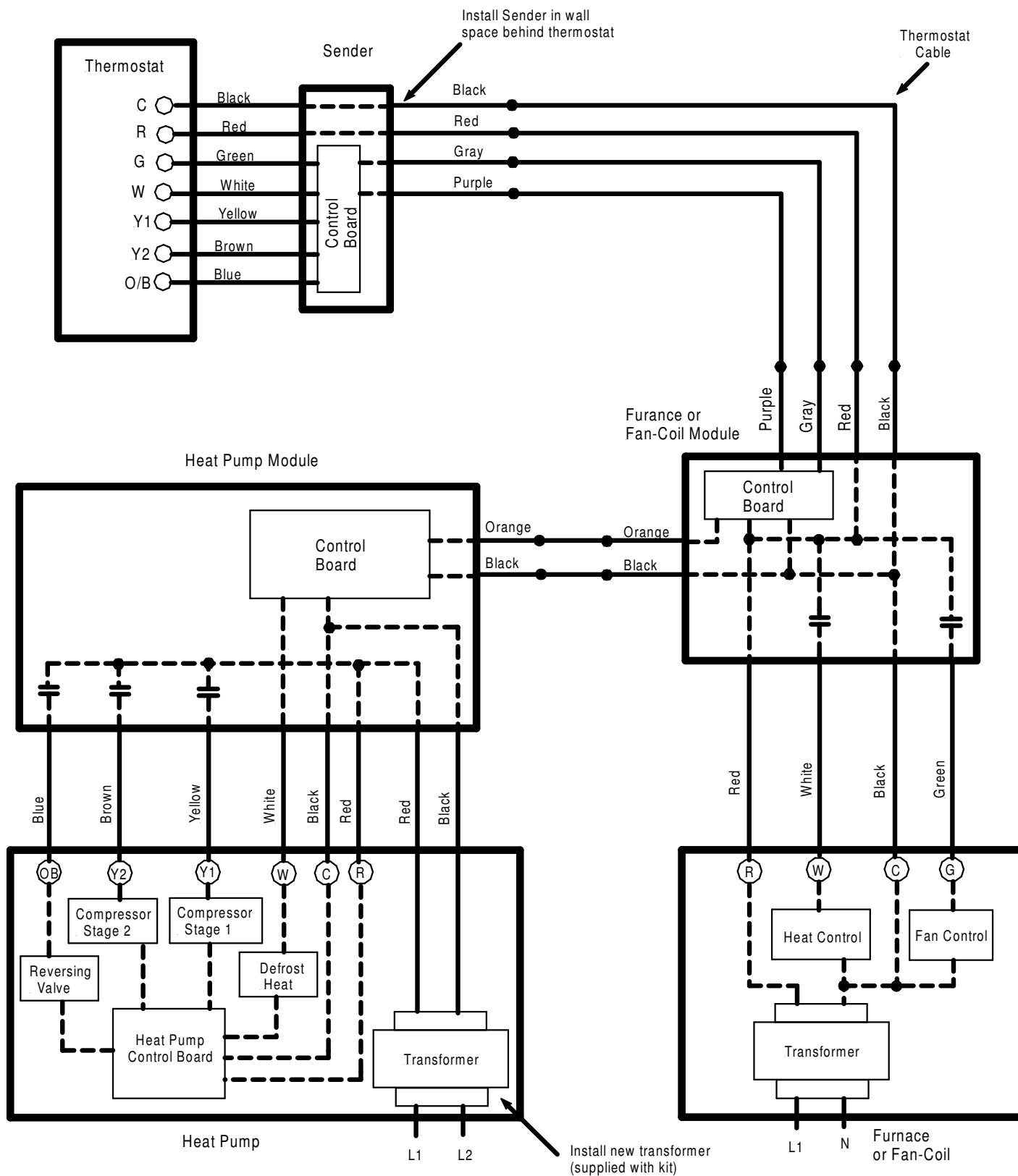
Model 7000 Typical Installation.

Single or 2 Stage Heat Pump

2 Transformers

4-Wire Thermostat Cable

2-Wire Cable Between Heat Pump & Furnace or Fan-Coil



Model 7000

Steps 1 to 4 (of 4)

Step 1. **Is the Furnace / Fan-Coil Receiver getting power?**

Switch on furnace / fan-coil control circuit and measure voltage at R & C.

There should be 20 to 30 volts ac at the Receiver's black & red wires.

There must be voltage at all times at the Furnace / Fan-Coil Receiver for it to operate.

If OK go to step 2.

Step 2. **Is the Heat Pump Receiver getting power?**

Switch on heat pump power circuit and measure voltage at R & C.

There should be 20 to 30 volts ac at the Receiver's black & red wires.

There must be voltage at all times at the Furnace / Fan-Coil Receiver for it to operate.

The heat pump transformer primary leads must be connected to the line side of the contactor.

If OK go to step 3.

Step 3. **Are the Receivers working?**

At the Furnace / Fan-Coil Receiver disconnect the 4 wires from the thermostat cable.

Switch on the Furnace / Fan-Coil control circuit and the power supply to the heat pump.

Touch the Receiver Red wire to the Receiver Purple wire - the Fan and Heat should start.

Touch the Receiver Red wire to the Receiver Gray wire - the Compressor should start and the Reversing Valve should energize.

If either test fails check wiring and re-test. If either Receiver continues to not operate then the Receiver(s) are defective and require replacement.

If OK go to step 4.

Step 4: **Does the Sender work?**

Remove the thermostat from it's sub-base.

Use a wire jumper to join the Red ("R") and Green ("G") together - the fan should start.

Join the Red ("R") and White ("W") together - the backup heat should start.

Join the Red ("R") and Yellow ("Y1") together - the compressor should start on stage 1.

Join the Red ("R") and Brown ("Y2") together - the compressor should start on stage 2.

Join the Red ("R") and Blue ("O/B") together - the reversing valve should energize.

If any of the above tests fail then the Sender is defective.

If OK go to step 5

Step 4: **Is the thermostat working?**

Reinstall the thermostat to it's sub-base.

Test all functions of the thermostat. Allow for compressor time delays.

If any of the above tests fail then the thermostat is defective or not compatible.