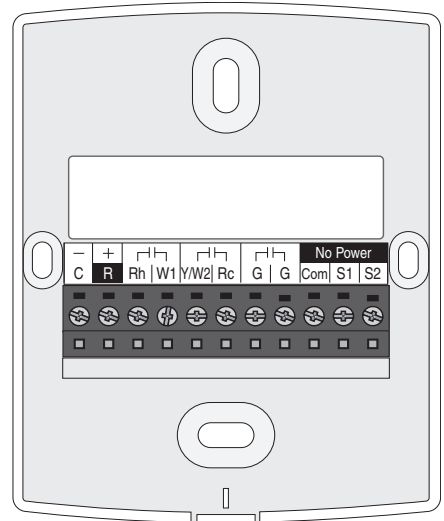
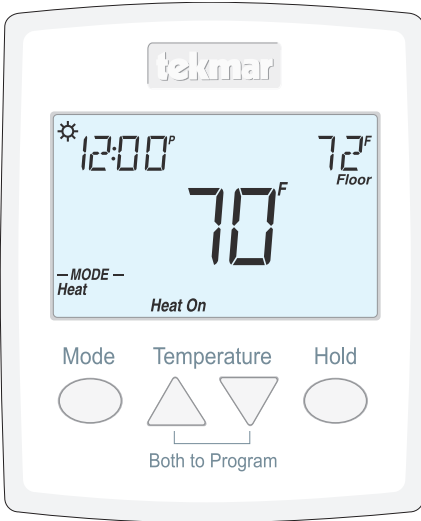


Zoning

Replaces: New

Application Brochure



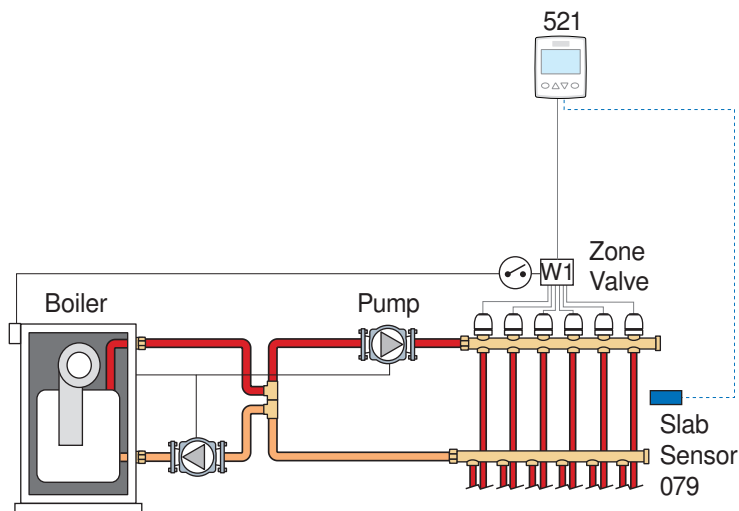
Equipment Compatibility

Page

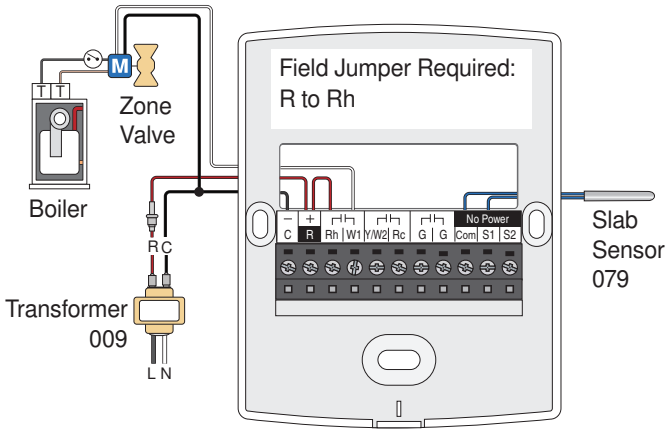
1 Stage Heat with Zone Valve	2
1 Stage Heat with Zone Pump	4
2 Stage Heat	6
2 Stage Heat / Fan	8
1 Stage Heat / 1 Stage Cool / Fan	10

Description

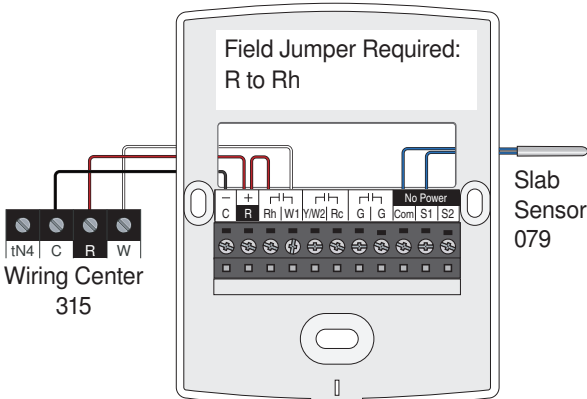
The 521 operates a single hydronic heating zone by operating a zone valve. The boiler is turned on by an end switch. An optional Slab Sensor 079 can be installed for radiant floor heating applications. The temperature is automatically adjusted by an optional programmable schedule. Optimum start learns the heat up rate of the room and starts the heating early so that the room is warm at the time set on the programmable schedule.



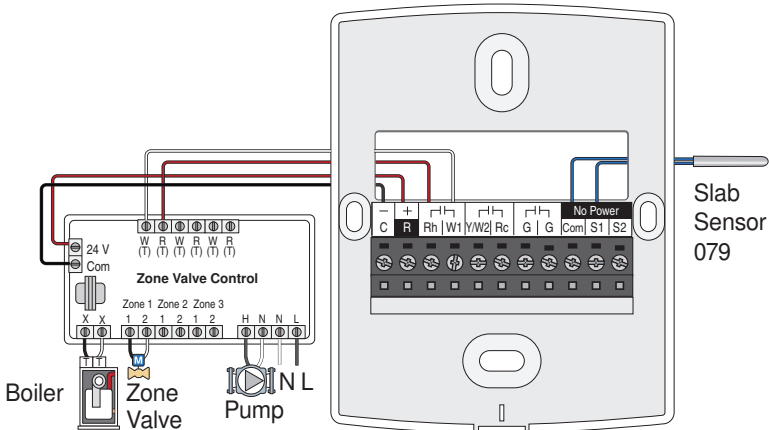
Zone Valve Wiring



Wiring Center Wiring

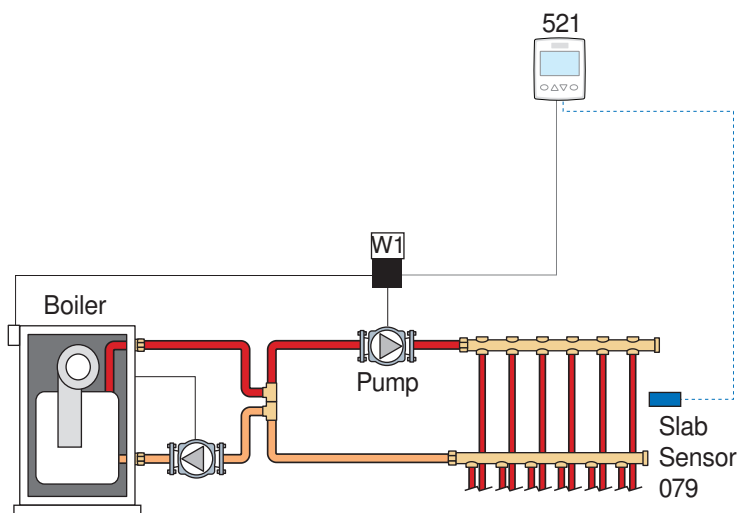


Zone Valve Control Wiring

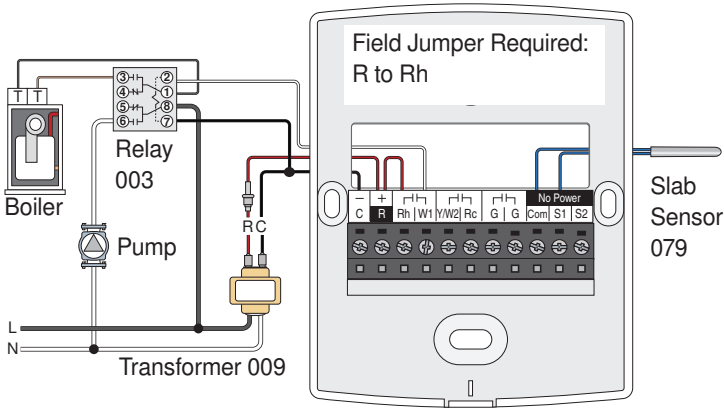


Description

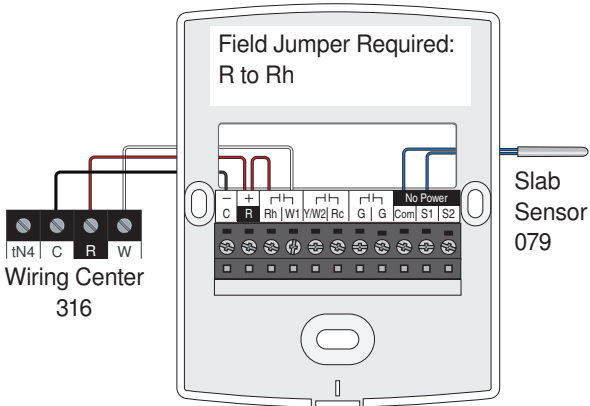
The 521 operates a single hydronic heating zone by operating a zone pump. The boiler is operated by an end switch. An optional Slab Sensor 079 can be installed for radiant floor heating applications. The temperature is automatically adjusted by an optional programmable schedule. Optimum start learns the heat up rate of the room and starts the heating early so that the room is warm at the time set on the programmable schedule.



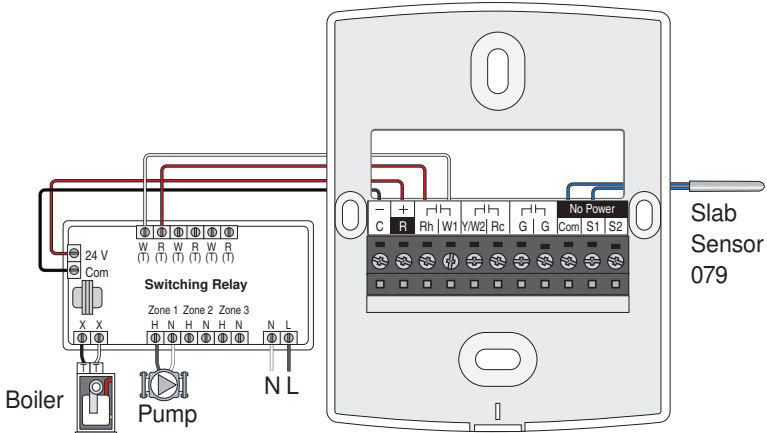
Zone Pump Wiring



Wiring Center Wiring

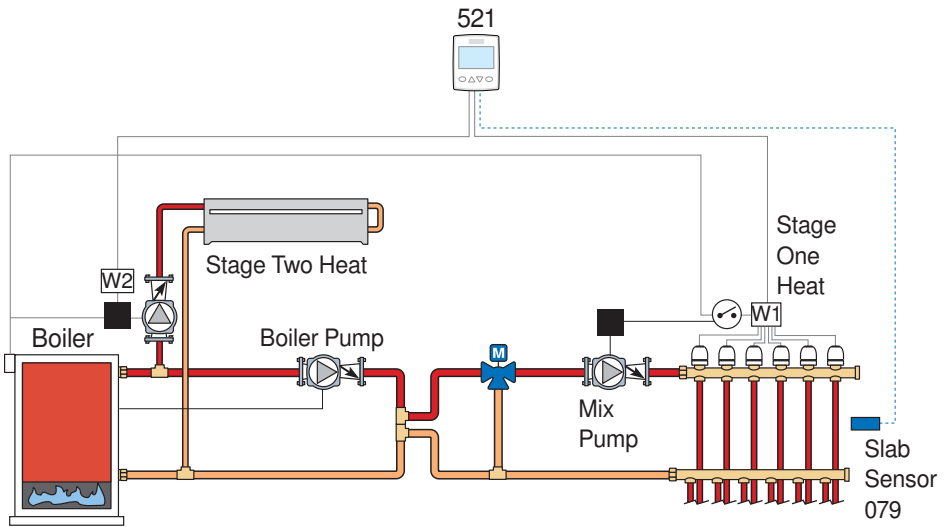


Switching Relay Wiring

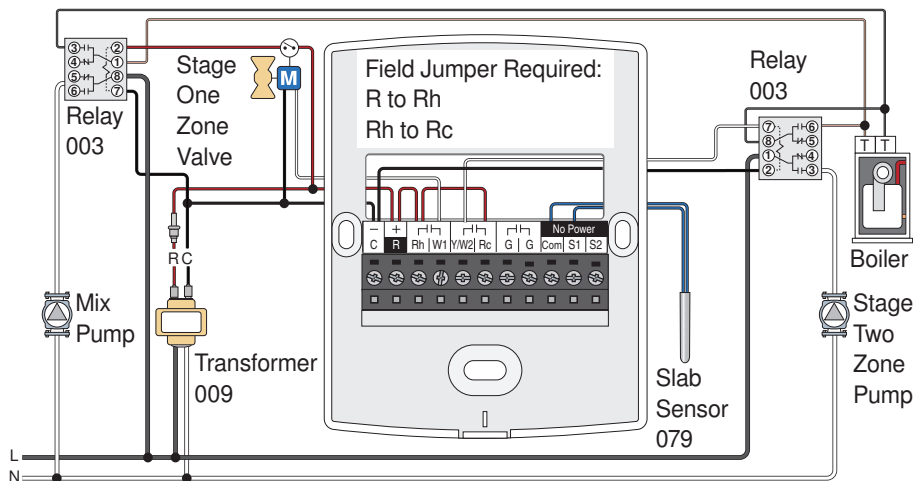


Description

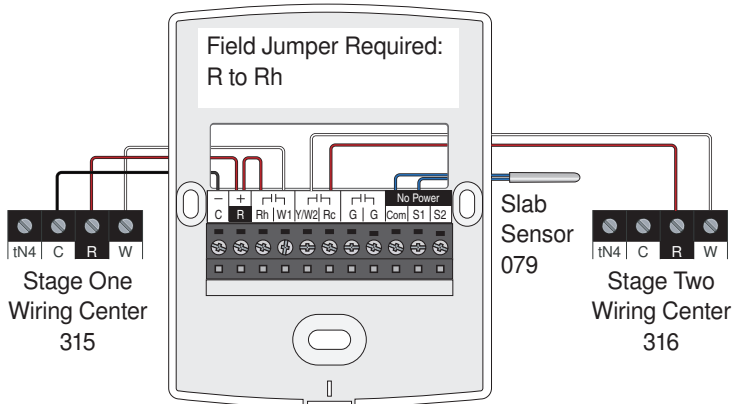
The 521 operates a radiant floor as the first stage of heat and a hydronic baseboard as the second stage heat. An optional Slab Sensor 079 can be installed for radiant floor heating applications. The temperature is automatically adjusted by an optional programmable schedule. Optimum start learns the heat up rate of the room and starts the radiant floor heating early so that the room is warm at the time set on the programmable schedule.



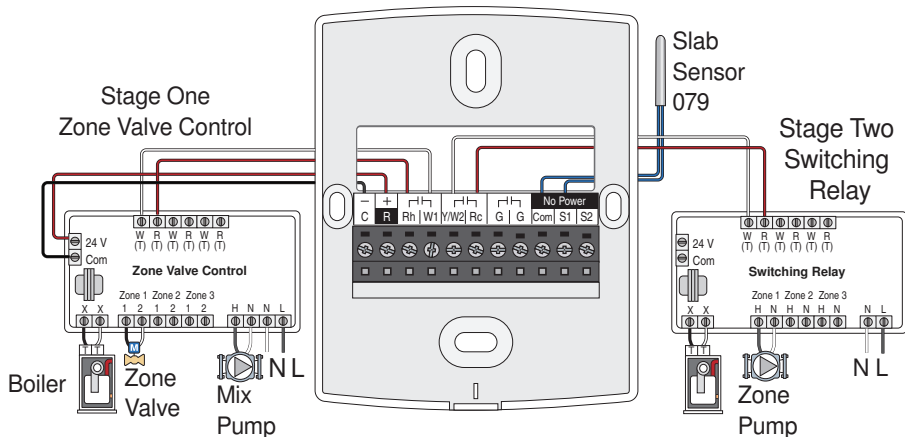
Zone Valve and Relay 003 Wiring



Wiring Center Wiring

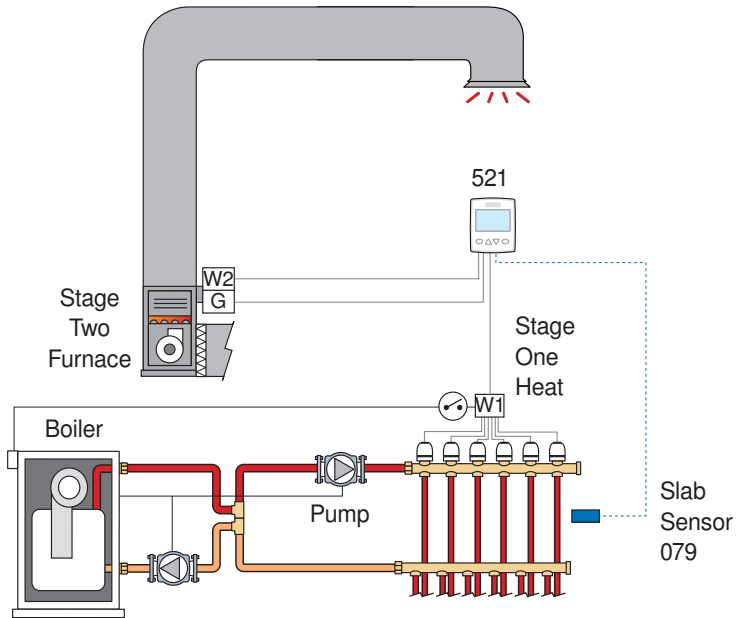


Switching Relay Wiring

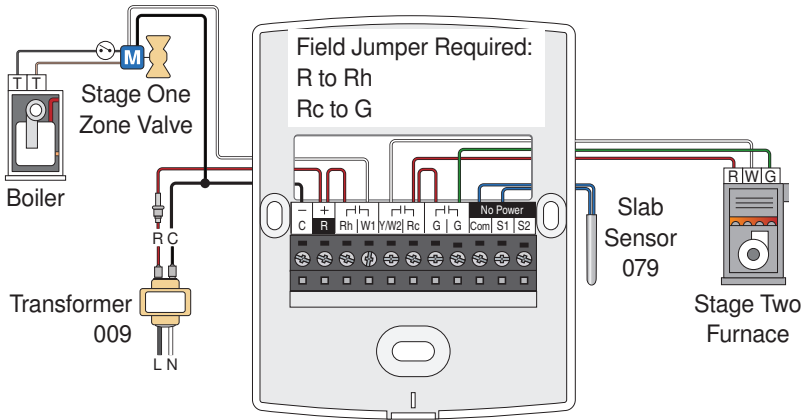


Description

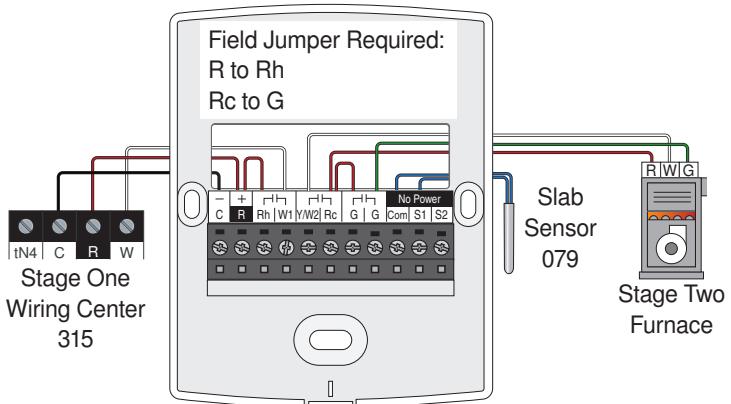
The 521 operates a radiant floor as the first stage of heat and a furnace as the second stage of heat. The fan is operated together with the furnace or can be manually set on to provide air circulation in the building. An optional Slab Sensor 079 can be installed for radiant floor heating applications. The temperature is automatically adjusted by an optional programmable schedule. Optimum start learns the heat up rate of the room and starts the radiant floor heating early so that the room is warm at the time set on the programmable schedule.



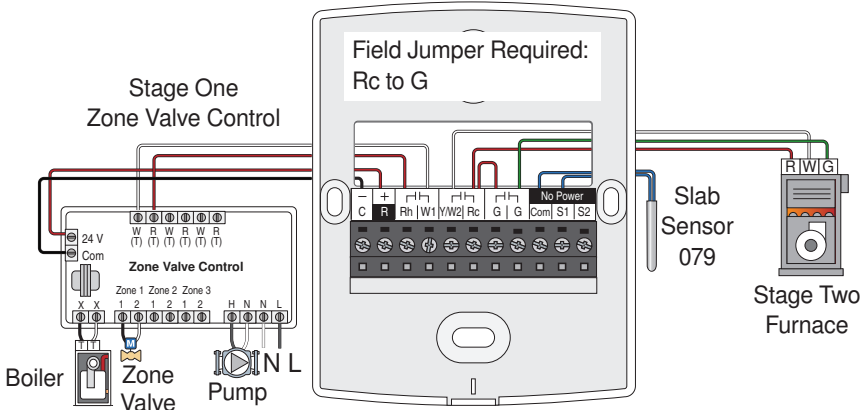
Zone Valve Wiring



Wiring Center Wiring

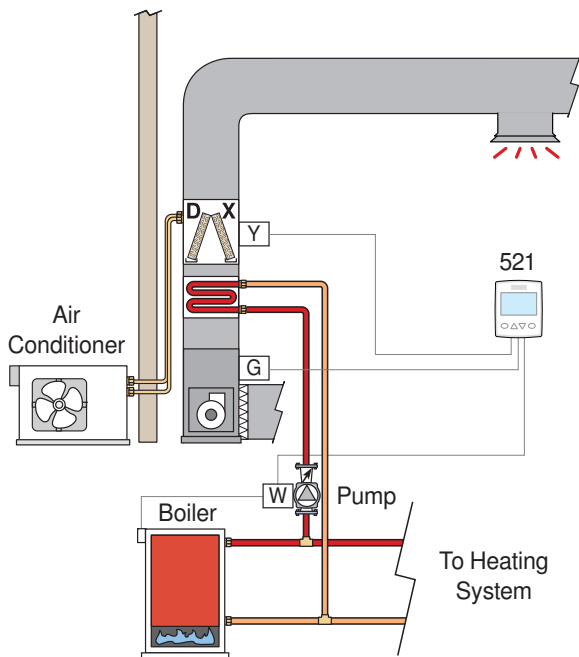


Switching Relay Wiring

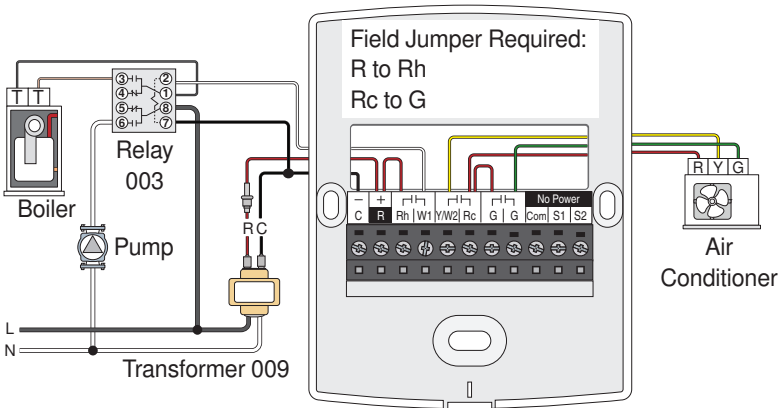


Description

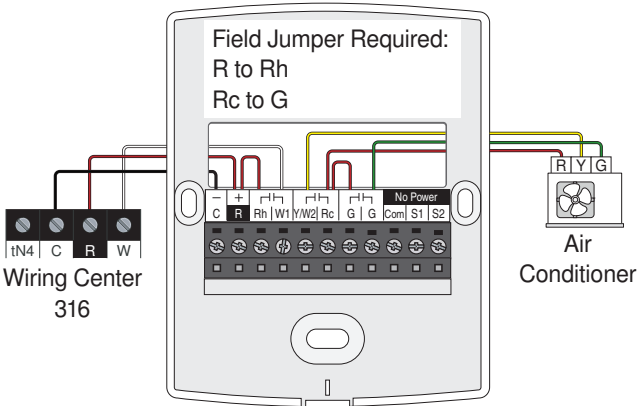
The 521 operates a hydronic fan coil for heating and operates an air conditioner for cooling. The temperature is automatically adjusted by an optional programmable schedule. The fan is operated together with the fan coil or air conditioner or can be manually set on to provide air circulation in the building.



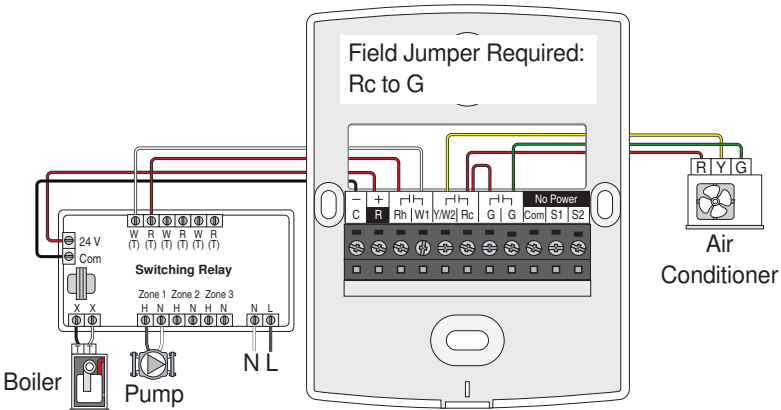
Relay 003 Wiring



Wiring Center Wiring



Switching Relay Wiring





Product design, software and literature are Copyright ©2014 by tekmar Control Systems Ltd.,
A Watts Water Technologies Company. Head Office: 5100 Silver Star Road, Vernon, B.C.
Canada V1B 3K4, 250-545-7749, Fax. 250-545-0650 Web Site: www.tekmarControls.com