



Zoning

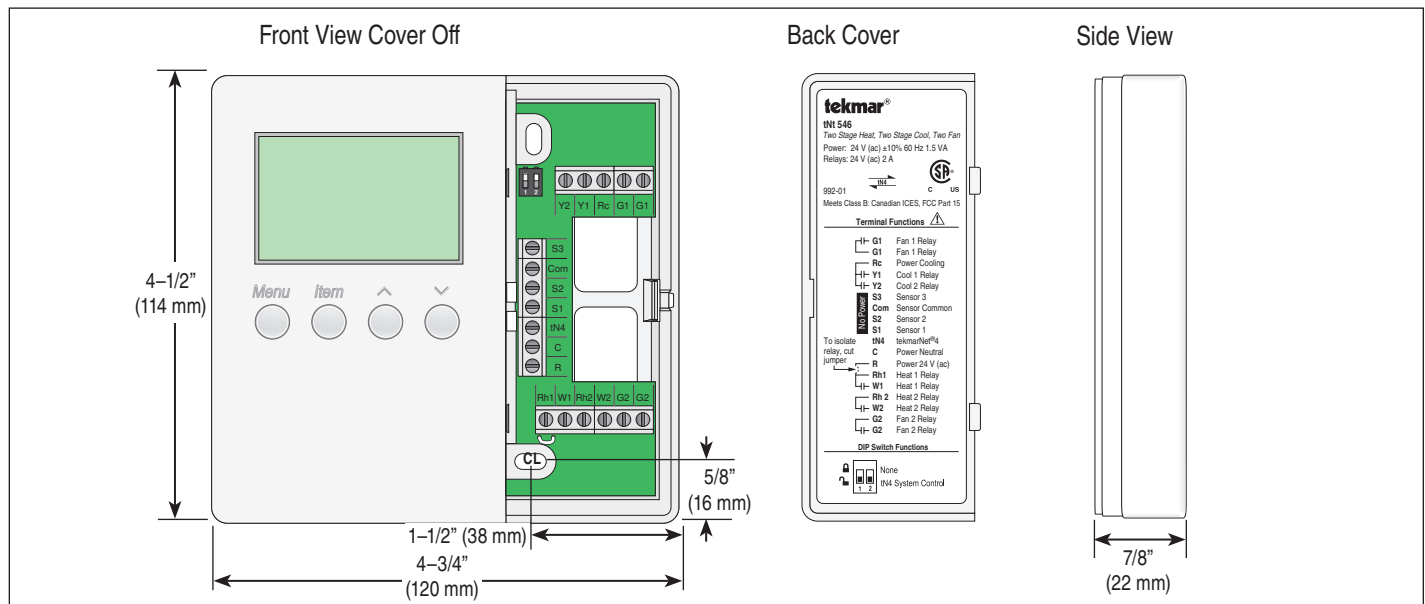
C 546

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Replaces: New

Job _____ Designer _____ Contact _____

The tekmarNet®4 thermostat 546 is designed to operate mechanical equipment to deliver 2 stages of heating and 2 stages of cooling to a single zone within a hydronic heating system while maintaining a programmable setback schedule. It can be used with any terminal unit type including radiant floor, baseboard, fan coils, and non-hydronic sources. This product is capable of controlling 2 zone valves or pumps directly or through a tekmarNet®4 Wiring Center or Zone Manager, 2 cooling devices, and 2 fans while reading up to three auxiliary sensors. These could be floor, outdoor, duct, or remote air sensors.



Specifications

tekmarNet®4 Thermostat 546 Two Stage Heat, Two Stage Cool, Two Fan	
Literature	D546, W546, J546, U546
Control	Microprocessor control. This is not a safety (limit) control
Packaged weight	1.0 lb. (450g)
Dimensions	4-1/2" H x 4-3/4" W x 7/8" D (114 x 120 x 22 mm)
Enclosure	White PVC plastic, NEMA type 1
Approvals	CSA C US, meets Class B: ICES & FCC Part 15
Ambient conditions	Indoor use only, 32 to 122°F (0 to 50°C), RH ≤80% to 88°F (31°C), down to 50% above 104°F (40°C), Altitude <6560 ft. (2000 m), Installation Category II, Pollution Degree 2
Power supply	24 V (ac) ± 10%, 60 Hz, 1.5 VA
W1 & W2 relays	24 V (ac) 2 A
Y1 & Y2 relays	24 V (ac) 2 A
G1 & G2 relays	24 V (ac) 2 A
Sensors	NTC thermistor, 10 kΩ @ 77°F (25°C ±0.2°C) β=3892
-Included	None
-Optional	tekmar type # 070, 071, 072, 073, 076, 077, 078, 079, 082, 083, 084
Warranty	Limited 3 Year (See D546 for full warranty)

Energy Saving Features

- Zone Synchronization
- Zone Post Purge
- Programmable Setback Schedule
- One touch overrides (with optional User Switch)
- Auto Heating Cycle
- Cooling Interlock

Additional Features

- tekmarNet®4 communication compatible
- Requires 9 wires
- Two stage Heat, two stage Cool, and two stage Fan
- Pulse Width Modulation
- CSA C US Approved for use in USA and Canada
- Outdoor Temperature Display
- Cool Group Control
- Backlight
- Freeze Protection
- Equipment Exercising
- 3 Auxiliary Sensor inputs

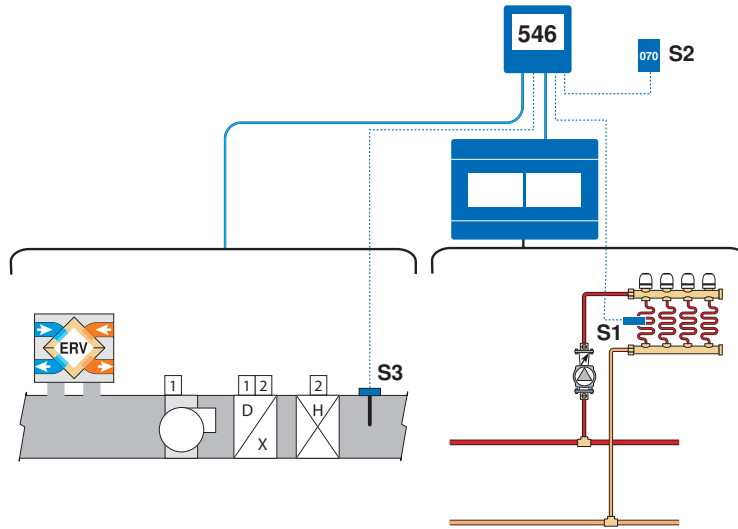
SPECIAL REQUIREMENTS

This thermostat is designed to be used with a tekmarNet®4 Wiring Center or Zone Manager for power and communication. It can be used in stand alone applications also.

Sample Application Drawing

Below is a sample application drawing for this product. This application may include other tekmar products that are required for installation. More sample applications can be found at www.tekmarcontrols.com.

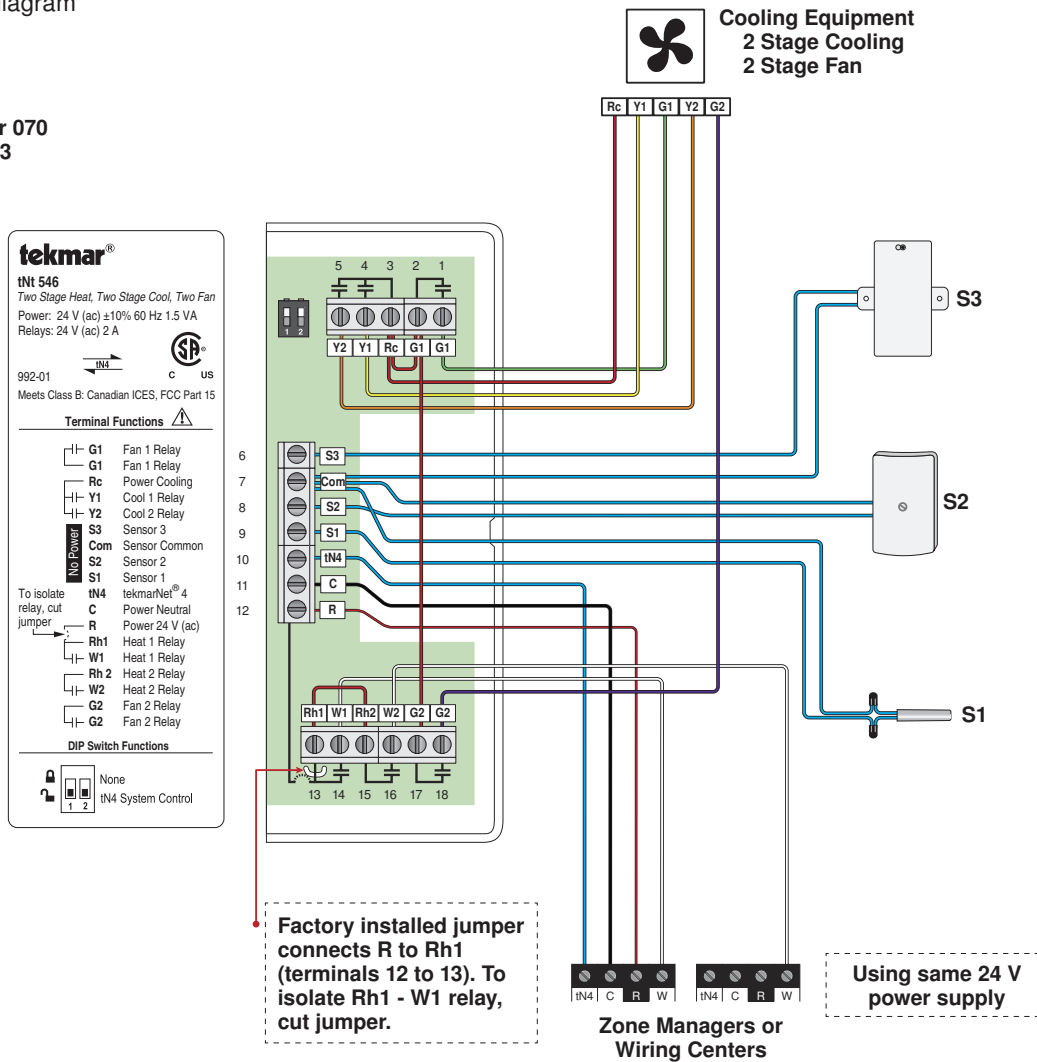
Sample Mechanical diagram



Sample Electrical diagram

Legend

- S1 = Slab Sensor
- S2 = Outdoor Sensor 070
- S3 = Duct Sensor 083



tekmar Control Systems Ltd., Canada, tekmar Control Systems, Inc., U.S.A. Head Office: 5100 Silver Star Road, Vernon, B.C. Canada V1B 3K4, 250-545-7749, Fax. 250-545-0650 Web Site: www.tekmarcontrols.com

