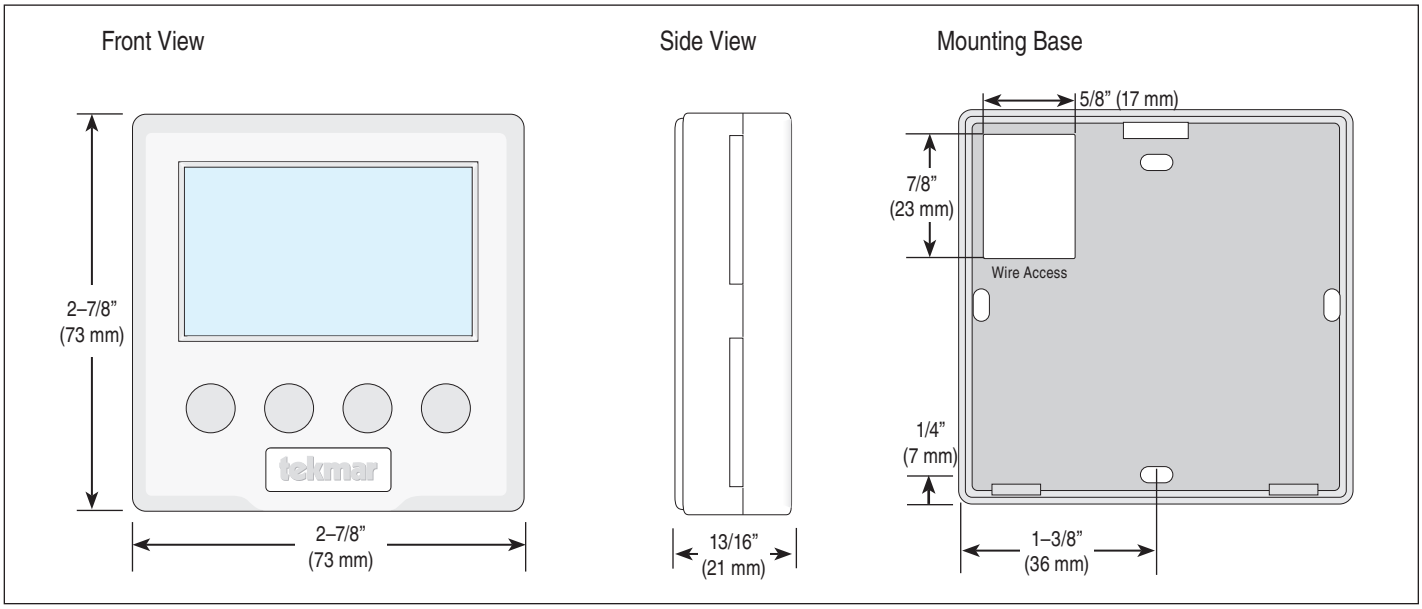
tekmar® Submittal
Programmable Thermostat 510

Zoning

C 510
02/12
Replaces: 01/11

Job _____ Designer _____ Contact _____

The Programmable Thermostat 510 is a micro-processor based control designed to operate mechanical equipment to deliver heat to a single zone within a hydronic heating system. It can be used with any terminal unit type, including radiant floor, baseboard, and fan coils. This product maintains very accurate and even air temperature with Pulse Width Modulation and Auto Cycling. It is capable of controlling a zone valve or zone pump directly or through a tekmarNet® 4 Wiring Center or Zone Manager to maintain air temperature and 2 auxiliary temperatures. These temperatures could be floor or remote air.



Specifications

Programmable Thermostat 510 *One Stage Heat*	
Literature	D510, U510. C510
Control	Microprocessor control. This is not a safety (limit) control
Packaged weight	0.5 lb. (230 g)
Dimensions	2-7/8" H x 2-7/8" W x 13/16" D (73 x 73 x 21 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 ≤90% Non-condensing
Power supply	24 V (ac) ±10%, 60 Hz, 3 VA
Relays	24 V (ac) 2 A max, Class 2
Sensors	NTC thermistor, 10 kΩ @ 77°F (25°C ±0.2°C) ß=3892
–Included	None
–Optional	tekmar type #: 070, 072, 073, 076, 077, 079, 083, 084
Warranty	Limited 3 Year (See D510 for full warranty)

Energy Saving Features

- Programmable Setback Schedule

Additional Features

- Auto Heating Cycle
- Pulse Width Modulation
- CSA C US Approved for use in USA and Canada
- Freeze Protection
- 2 auxiliary sensor inputs
- Slab max. and min. settings with installed slab sensor

SPECIAL REQUIREMENTS
N / A

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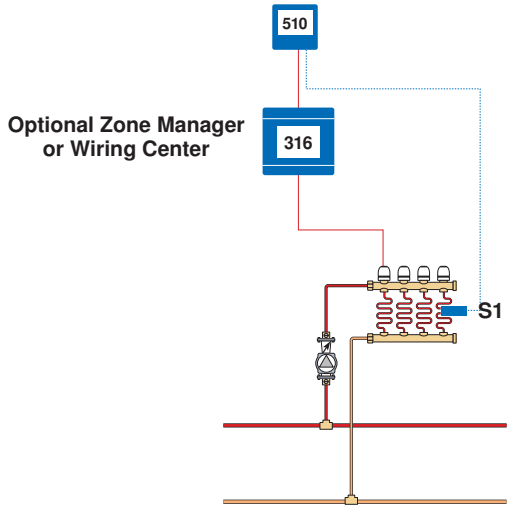
Sample Application Drawing

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.

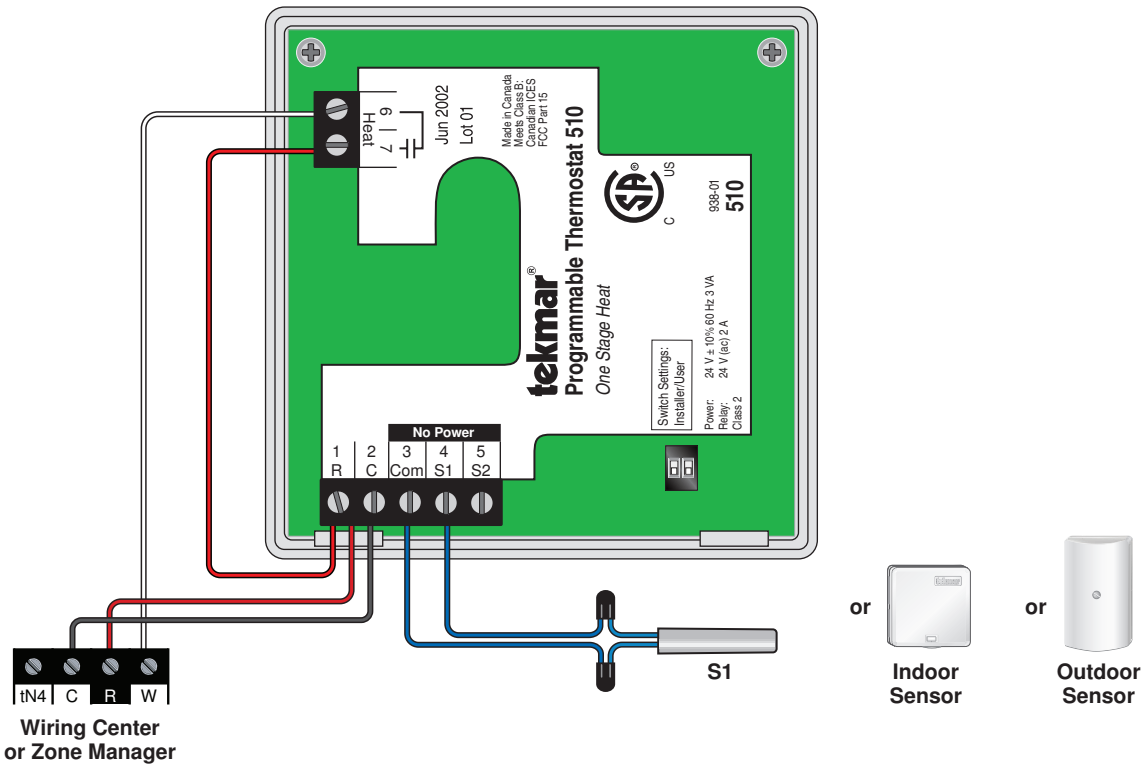
Sample Mechanical diagram



Sample Electrical diagram

Legend

S1 = Slab Sensor



tekmar Control Systems

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