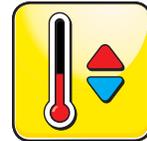


tekmar® Submittal

Two Stage Setpoint Control 152



Setpoint

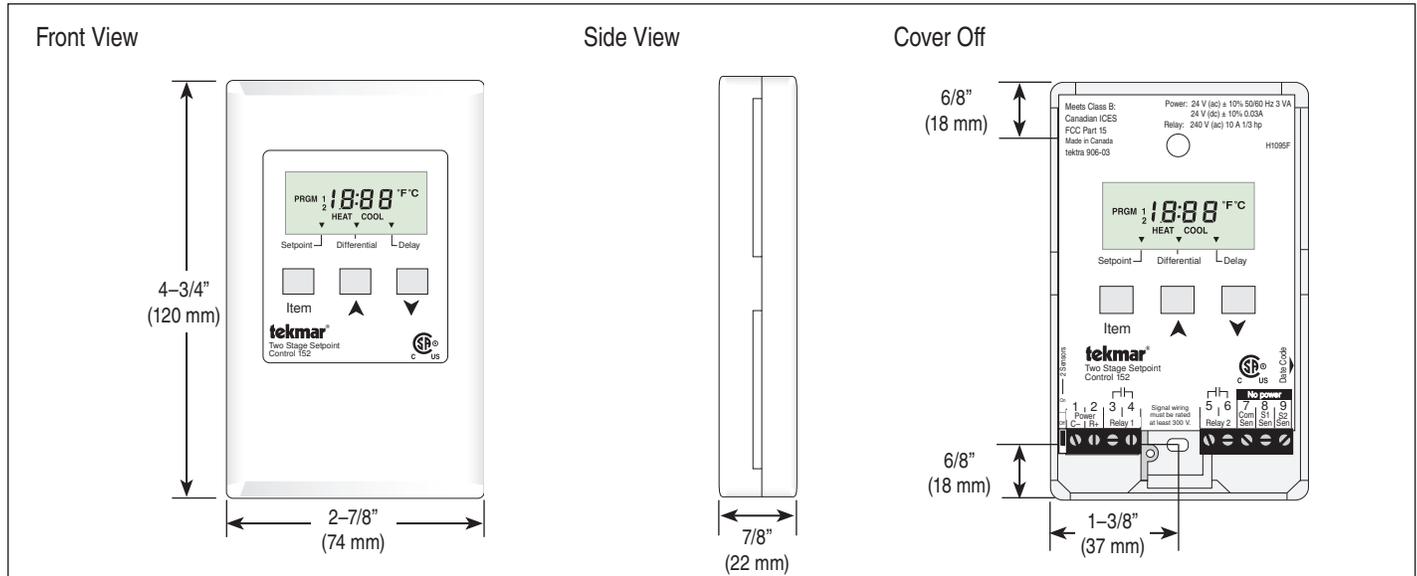
C 152

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Replaces: New

Job _____ Designer _____ Contact _____

The Two Stage Setpoint Control 152 is designed to operate heating or cooling equipment in order to maintain a set temperature. It can be used in applications ranging from heating a swimming pool with a 2 stage boiler to maintaining a hot water storage tank and a cold water storage tank at the same time. This product regulates a constant water temperature for either 2 stage heating or 1 stage heating and 1 stage cooling. It is capable of operating two relays to control either a single heat setpoint using one sensor, or a heat setpoint and cool setpoint using the 2 sensor inputs.



Specifications

Two Stage Setpoint Control 152	
Literature	152, A152, D001, D070
Control	Microprocessor control. This is not a safety (limit) control
Packaged weight	1.0 lb. (450 g)
Dimensions	4-3/4" H x 2-7/8" W x 7/8" D (120 x 74 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, -20 to 120°F (-30 to 50°C), RH ≤90% Non-condensing
Power supply	24 V (ac) ±10%, 50/60 Hz, 3 VA, 24 V (dc) ±10%, 0.03 A
Relays	240 V (ac) 10 A, 1/3 hp
Sensors	NTC thermistor, 10 kΩ @ 77°F (25°C ±0.2°C) β=3892
-Included	Universal Sensor 071
-Optional	tekmar type #: 070, 071, 072, 073, 076, 077, 078, 079, 082, 083, 084
Programmed settings	Ten year memory backup
Control accuracy	±0.5°F (±0.3°C) with up to 500 feet (150 m) of 18 AWG wire to sensors
Temperature display	-85 to 302°F (-65 to 150°C)
Setpoint 1 & 2	-40 to 239°F (-40 to 115°C)
Differential 1 & 2	1 to 40°F (1 to 22°C)
Differential 1 & 2	3 to 40°F (2 to 22°)
Time delay 1 & 2	0 to 19 min. 50 sec..
Operating mode 1 & 2	Heating / Cooling
Temperature display	Fahrenheit / Celsius
Warranty	Limited 3 Year (See D152 for full warranty)

Features

- 2 Stage operation or heat & cool control
- Control of up to 2 different setpoints (with additional sensor)
- Pulse Width Modulation
- Digital display
- 240V, 8A Relay

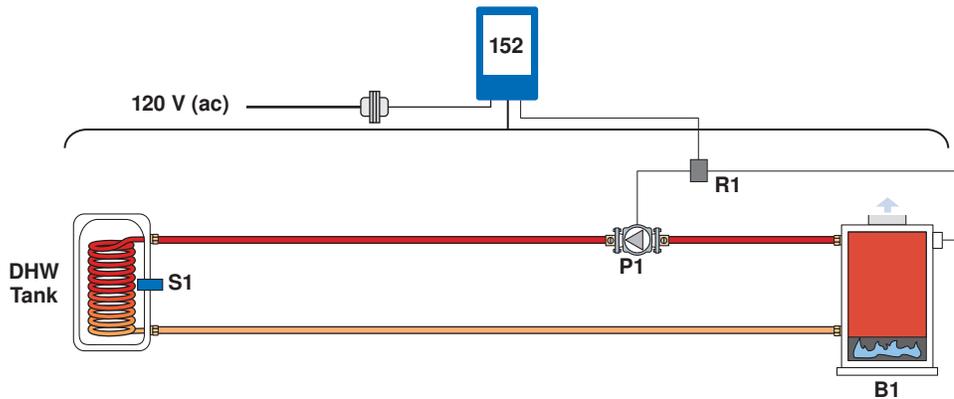
SPECIAL REQUIREMENTS

N / A

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 = Storage tank sensor**
- B1 = 2 Stage Boiler**
- P1 = Pump**
- R1 = Relay 003**

