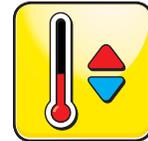


# tekmar® Submittal

## Mixing Setpoint Control 153

Available at: 888-470-2757  
**PEXHEAT.COM**



Setpoint

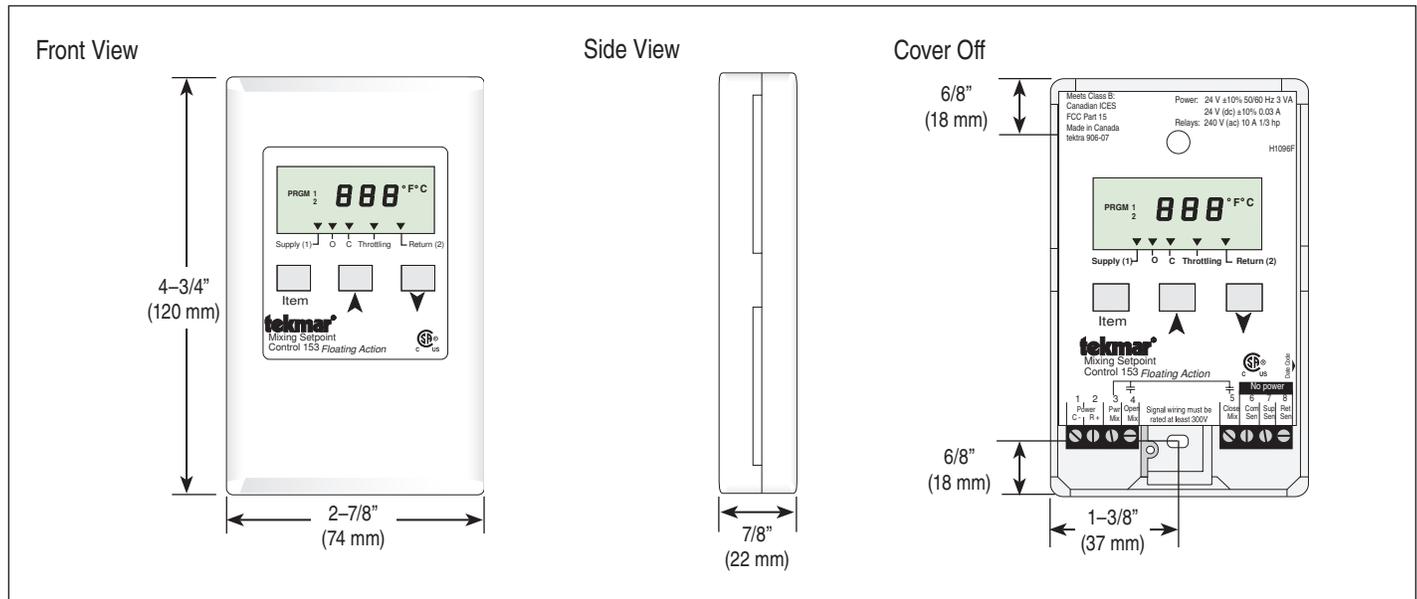
**C 153**

01/11

Replaces: New

Job \_\_\_\_\_ Designer \_\_\_\_\_ Contact \_\_\_\_\_

The Mixing Setpoint Control 153 is designed to operate a mixing device to maintain a setpoint water temperature. It can be used in applications ranging from boiler protection of cast iron boilers to maintaining setpoint in a heat pump system. This product is capable of operating a floating action motor for a mixing valve or damper through dry contact open and close relays.



### Specifications

Mixing Setpoint Control 153 Floating Action	
Literature	D153, A153, 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 max, 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 ft. (150 m) of 18 AWG wire to sensors
Temperature display	-85 to 302°F (-65 to 150°C)
Supply (1) setpoint	-40 to 239°F (-40 to 115°C)
Throttling range	16 to 66°F (9 to 37°C)
Boiler return (2)	-40 to 239°F (-40 to 115°C)
Temperature display	Fahrenheit / Celsius
Warranty	Limited 3 Year (See D153 for full warranty)

### Features

- Floating action mixing control
- Boiler protection
- Digital display

### SPECIAL REQUIREMENTS

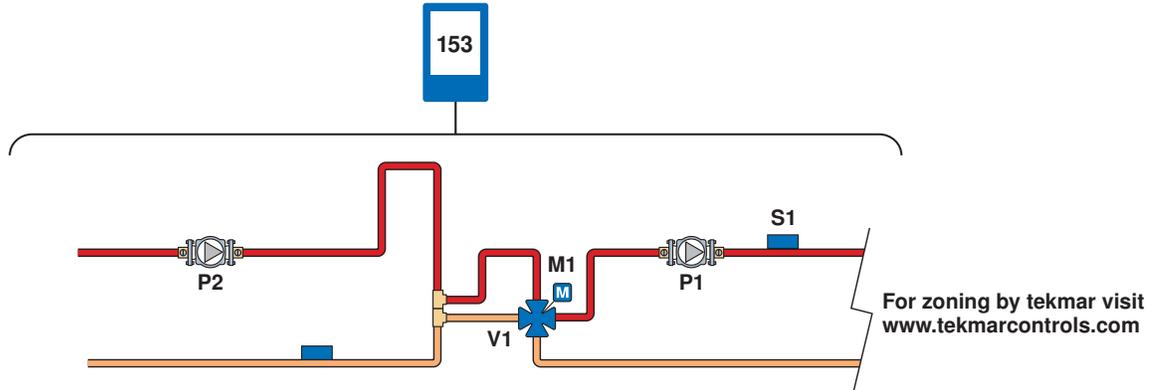
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# Sample Application Drawing



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](http://www.tekmarcontrols.com).

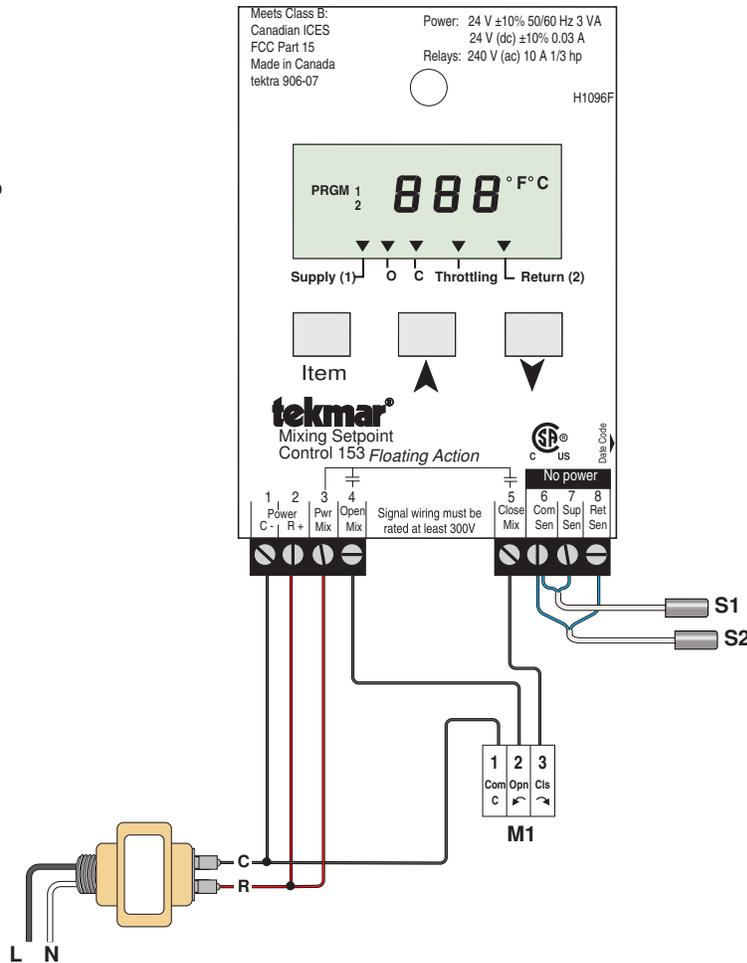
Sample Mechanical diagram



Sample Electrical diagram

**Legend:**

- S1 = Mix supply temperature**
- S2 = Return Sensor**
- V1 = 4-way mixing valve**
- M1 = Mixing valve actuator**
- P1 = Mix system pump**  
(Controlled by others)
- P2 = High Temperature pump**  
(Controlled by others)



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