tekmar® Submittal
Difference Setpoint Control 156

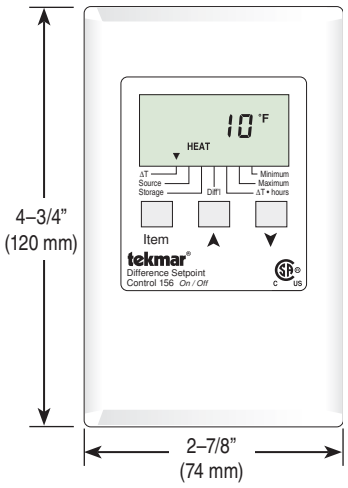
156_C
10/12

Alt. Energy | Replaces: 01/11

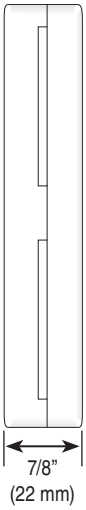
Job _____ Designer _____ Contact _____

The Difference Setpoint Control 156 is designed to transfer heat from an intermittent heat source to a storage tank. This control can be used in applications ranging from solar thermal to wood boiler systems. Two sensors are used to measure the temperature at the source and at the storage location, and begin heat transfer when there is a positive difference between them. This product uses a single 240 V (ac) rated relay to accomplish this.

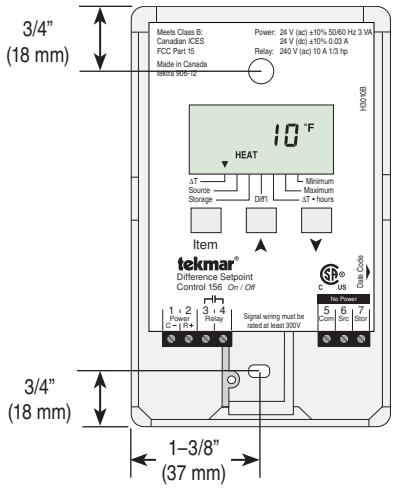
Front View



Side View



Cover Off



Specifications

Difference Setpoint Control 156 *On/Off*	
Literature	156_D, 156_A, D001, 070_D, 085_D
Control	Microprocessor control. This is not a safety (limit) control
Packaged weight	0.8 lb. (360 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) ß=3892
–Included	1 Universal Sensor 071 and 1 Solar Sensor 085
Warranty	Limited 3 Year (See 156_D for full warranty)

Features

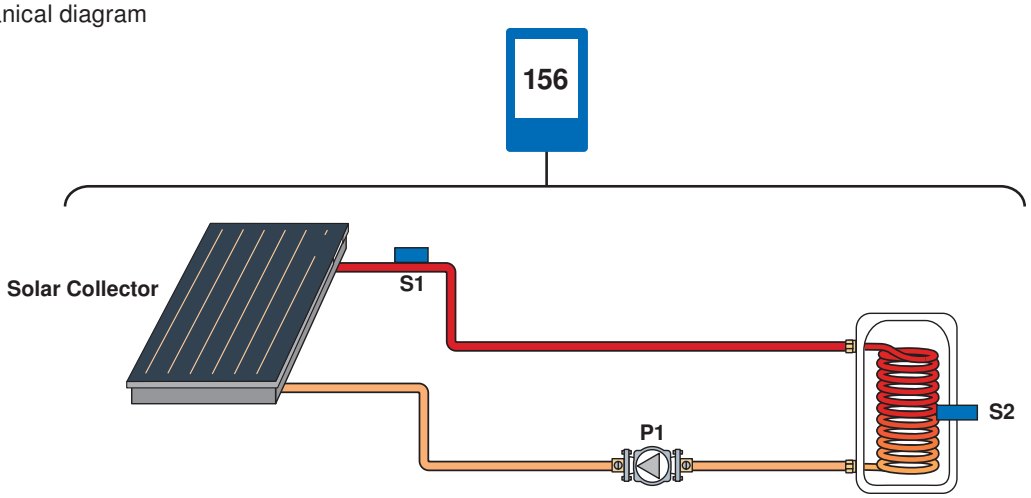
- 24 V (ac) or 24 V (dc) power supply
- Monitor minimum & maximum temperatures for source & storage
- Displays number of running hours of the relay
- Displays ΔT• hours to perform energy calculation
- CSA C US certified for use in the USA and Canada
- Solar Sensor 085 immersion type sensor included

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 = Source Sensor
S2 = Storage Tank Sensor
P1 = System Pump