

tekmar® Submittal

Snow Detector & Melting Control 664



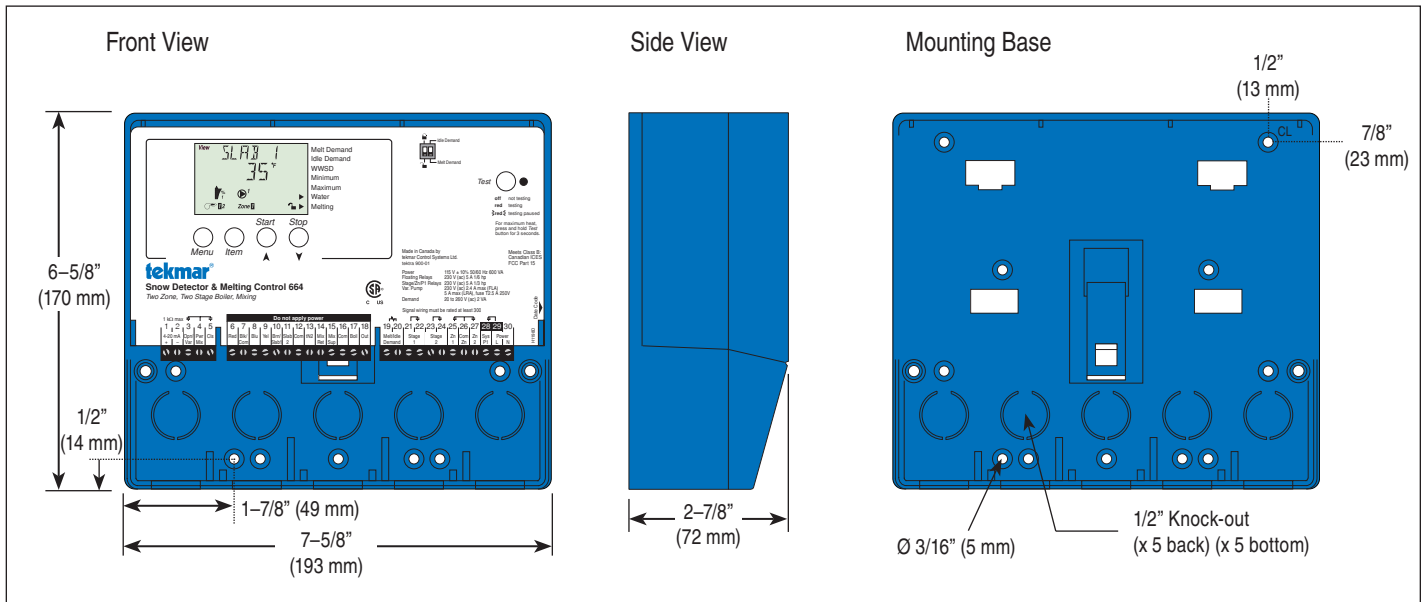
C 664

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Snow Melting Replaces: New

Job _____ Designer _____ Contact _____

The Snow Detector & Melting Control 664 is designed to operate mechanical equipment to melt snow off of up to 2 outdoor slabs. It can be used in hydronic snow melting applications consisting of up to 2 zones and 2 boilers where each zone can operate at an independent temperature. This product uses a tekmar snow/ice detection sensor in order to automatically melt snow in a priority sequence while protecting the boiler plant with a mixing device. It is capable of controlling up to 2 boilers, a variable speed or modulating (4-20 mA) mixing device, a mix system pump, and 2 zone pumps.



Specifications

Snow Detector & Melting Control 664 Two Zone, Two Stage Boiler, Mixing	
Literature	D664, A664, U664, D001, D070, E021
Control	Microprocessor control. This is not a safety (limit) control
Packaged weight	3.5 lb. (1600 g)
Dimensions	6-5/8" H x 7-9/16" W x 2-13/16" D (170 x 193 x 72 mm)
Enclosure	Blue 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	115 V (ac) ±10%, 50/60 Hz, 600 VA
Floating relays	230 V (ac) 5 A, 1/6 hp
Stage/Zn/P1 relays	230 V (ac) 5 A, 1/3 hp
Var. pump	230 V (ac) 2.4 A max (FLA) 5 A max (LRA), fuse T2.5 A 250 V
Demands	20 to 260 V (ac) 2 VA
Sensors	NTC thermistor, 10 kΩ @ 77°F (25°C ±0.2°C) β=3892
-Included	Outdoor Sensor 070 and 3 of Universal Sensor 082
-Optional	tekmar type #: 039, 040, 072, 073, 090, 091, 094, 741
Warranty	Limited 3 Year (See D664 for full warranty)

Features

- Automatic snow detection and melt control (with 090 Sensor)
- Control up to 2 zones
- Control up to 2 boilers
- Slab temperature control
- Mixing control (floating, variable speed, or proportional)
- Temporary Idle
- Optional priority zoning operation
- Slab protection for the snow melting system
- Boiler Protection
- Manual Override
- Warm Weather Shut Down
- Cold Weather Cut Out
- Remote display and adjustment capabilities
- Test sequence to ensure proper component operation
- Equipment Exercising
- CSA C US certified (approved to applicable UL standards)

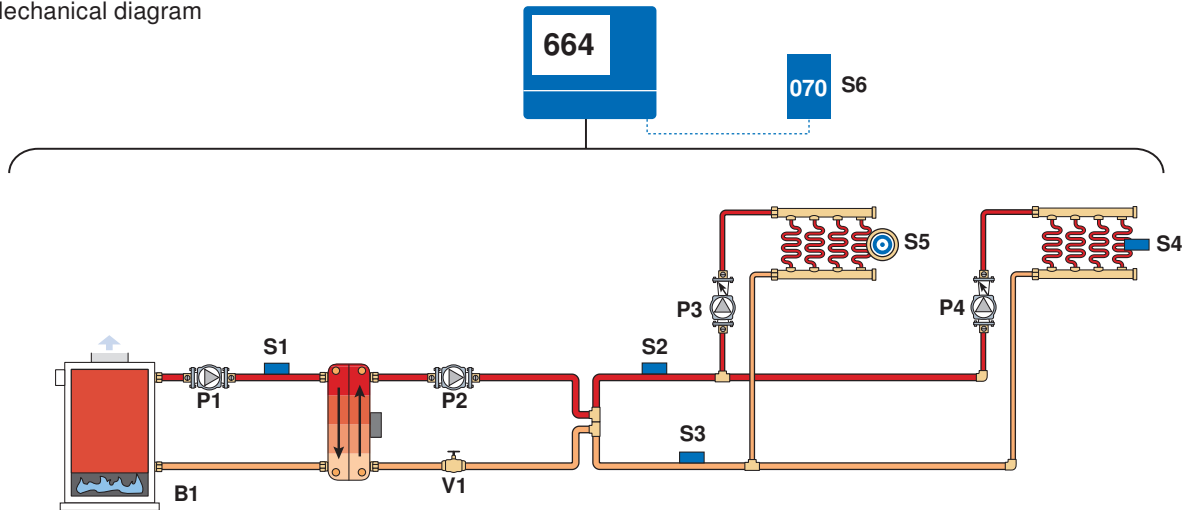
SPECIAL REQUIREMENTS

An 090 Snow/Ice Sensor or Slab Sensor.

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.

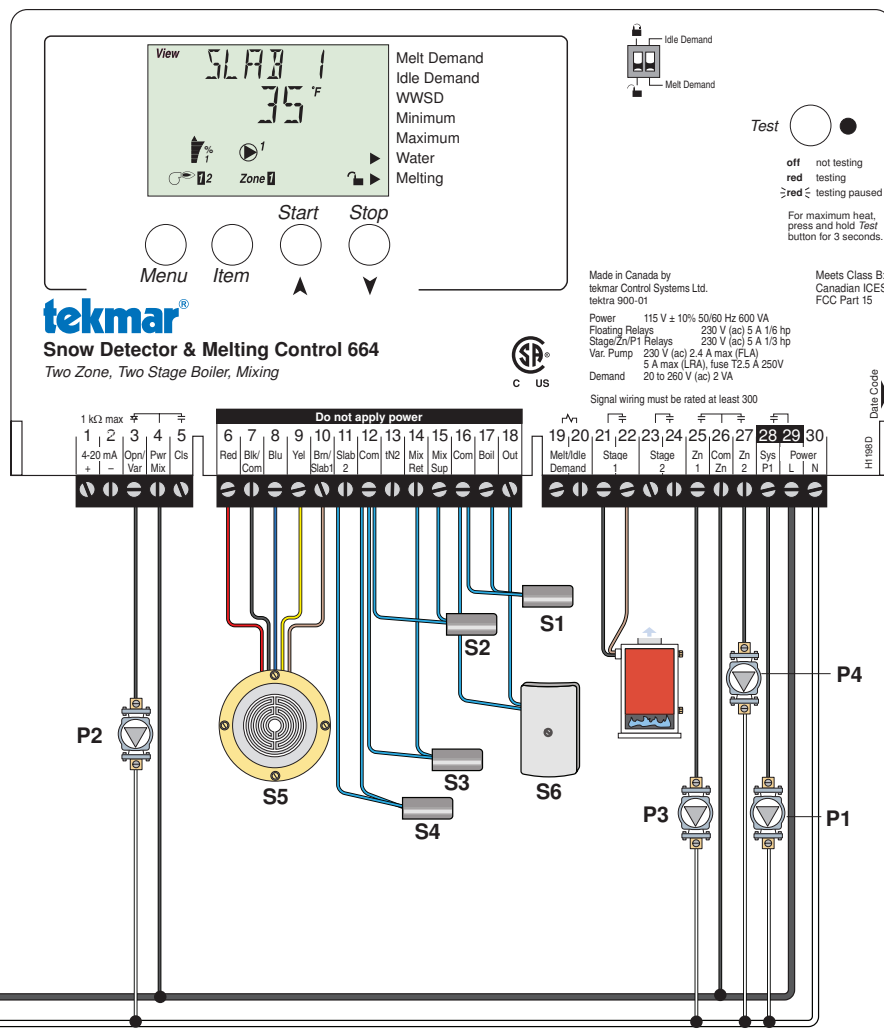
Sample Mechanical diagram



Sample Electrical diagram

Legend

- B1 = On/Off Boiler
- P1 = Primary Pump
- P2 = Variable Speed Pump
- P3 = Zone Pump
- P4 = Zone Pump
- S1 = Boiler Supply Sensor
- S2 = Mix Supply Sensor
- S3 = Mix Return Sensor
- S4 = Slab Sensor
- S5 = Snow / Ice Sensor
- S6 = Outdoor Sensor
- V1 = Balancing Valve



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