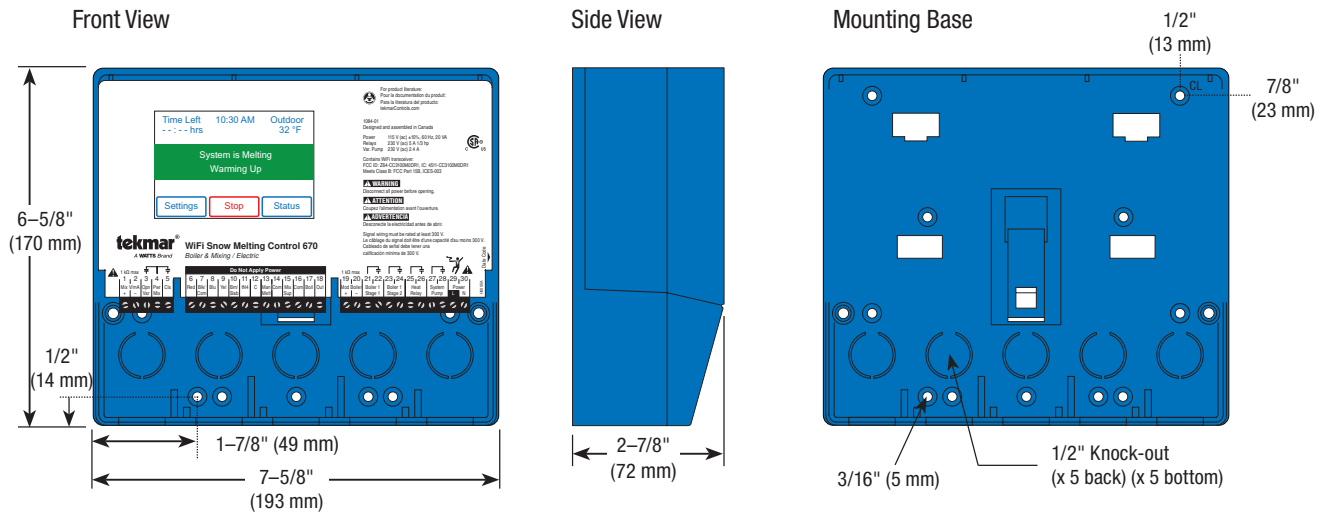


Job \_\_\_\_\_ Designer \_\_\_\_\_ Contact \_\_\_\_\_

# WiFi Snow Melting Control 670

The WiFi Snow Melting Control 670 operates hydronic and electric heating equipment designed to melt snow and/or ice from roads and walkway surfaces. The control works with the tekmar Snow/Ice Sensor 090 or Snow Sensor 095 to automatically detect snow or ice and operates a single boiler, steam valve, or electric cable to supply heat to the slab. Boiler return protection is provided to non-condensing boilers using a mixing valve or variable speed injection mixing pump. When connected to the Internet, the Watts® Home mobile app allows the 670 to be controlled remotely.



## Features

- Mobile app for iOS and Android
- Automatic software updates
- Automatic snow/ice detection
- Supports both inslab & retrofit aerial sensors
- Supports multiple zones with priority
- Idling
- Auto Storm
- Warm Weather Shut Down
- Cold Weather Cut Off
- EconoMelt
- Slab Protection
- Tandem Snow/Ice Detection
- Equipment exercising

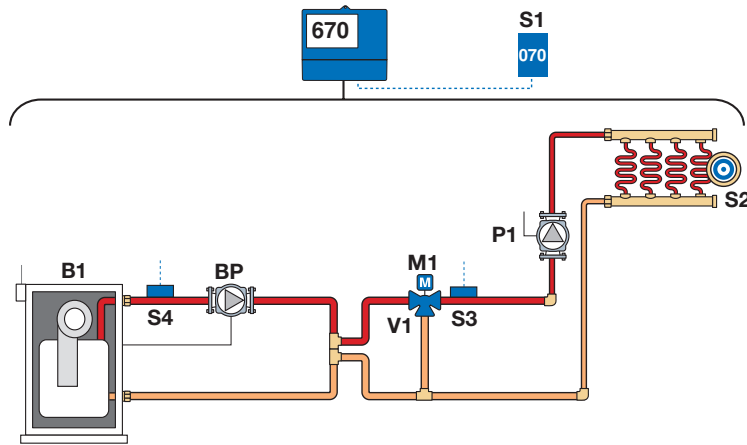
## Specifications

<b>WiFi Snow Melting Control 670 Boiler &amp; Mixing / Electric</b>	
Literature	670_A, 670_C, 670_D, 670_J, 670_U
Control	Microprocessor control. This is not a safety (limit) control
Packaged weight	4.3 lb. (1960 g)
Dimensions	6-5/8" H x 7-9/16" W x 2-13/16" D (170 x 193 x 72 mm)
Display	3.5" color touchscreen
Enclosure	Blue PVC plastic, NEMA type 1
Approvals	CSA C US, meets Class B: ICES & FCC Part 15
Ambient conditions	-4 to 122°F (-20 to 50°C), < RH 90% non-condensing, outdoor use permitted when installed inside a NEMA 3 enclosure
Power supply	115 V (ac) ±10%, 60 Hz, 20 VA
Relays	230 V (ac), 5 A, 1/3 hp
Boiler modulation output	0-10 V (dc) 500 Ω min impedance / 4-20 mA 1 kΩ max impedance
Injection mixing output	230 V (ac), 2.4 A, 1/6 hp, fuse T2.5 A 250V
Floating mixing output	230 V (ac), 5 A
Analog mixing output	0-10 V (dc) 500 Ω min impedance / 4-20 mA 1 kΩ max impedance
Manual melt call	Short or 0 - 32 V(ac)
Communications	WiFi 802.11n, 2.4 GHz, WPA2 encryption
Mobile app	Apple iOS 12 or higher, Android 8 or higher
Sensor	NTC thermistor, 10 kΩ @ 77°F (25°C ±0.2°C) β=3892
-Included	Outdoor Sensor 070 and 2 of Universal Sensor 082
-Optional	tekmar type # 072, 073, 082, 087, 090, 094, 095
Warranty	Limited 3 Year (See 670_D for full warranty)

tekmar product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact tekmar Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on tekmar products previously or subsequently sold.

# Sample Application Drawing

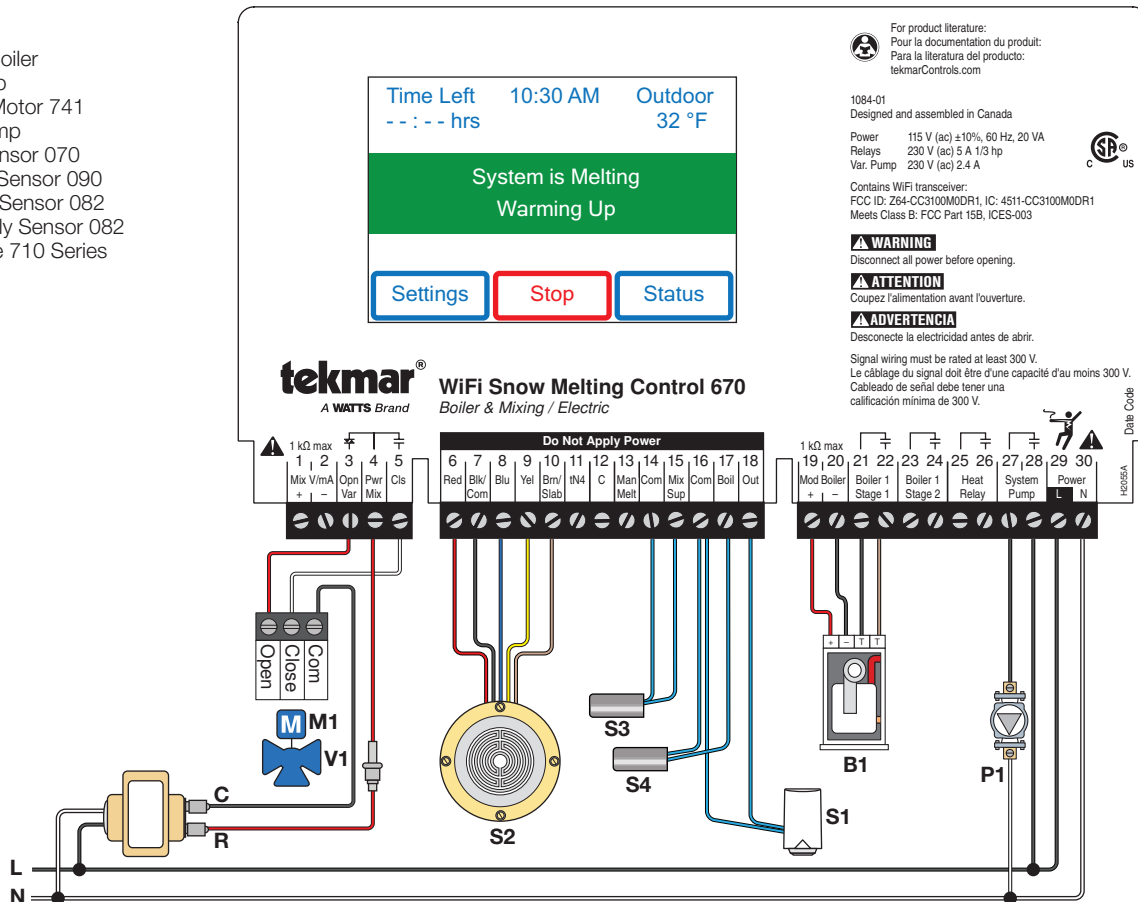
Sample Mechanical diagram



Sample Electrical diagram

**Legend**

- B1 = Mod-Con Boiler
- BP = Boiler Pump
- M1 = Actuating Motor 741
- P1 = System Pump
- S1 = Outdoor Sensor 070
- S2 = Snow / Ice Sensor 090
- S3 = Mix Supply Sensor 082
- S4 = Boiler Supply Sensor 082
- V1 = Mixing Valve 710 Series



**NOTICE**

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.