Engineering Specification

Job Name _____

Job Location _____
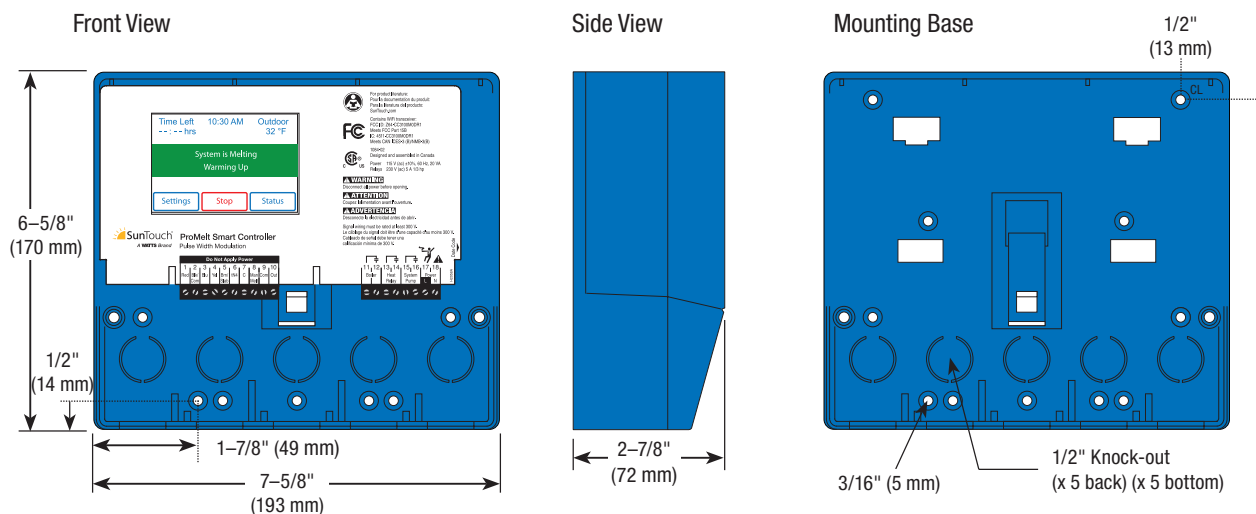
Engineer _____

Approval _____

Contractor _____

Approval _____

Contractor's P.O. No. _____

Representative _____

ProMelt Smart Controller

The ProMelt Smart Controller operates hydronic and electric heating equipment designed to melt snow and/or ice from roads and walkway surfaces. The control works with the 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. When connected to the Internet, the Watts® Home mobile app allows the ProMelt Smart Controller to be controlled remotely.

Front View

Side View

Mounting Base

6–5/8" (170 mm)
1/2" (14 mm)
1–7/8" (49 mm)
7–5/8" (193 mm)
2–7/8" (72 mm)
1/2" (13 mm)
1/2" Knock-out (x 5 back) (x 5 bottom)
3/16" (5 mm)

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
- Pump exercising

Specifications

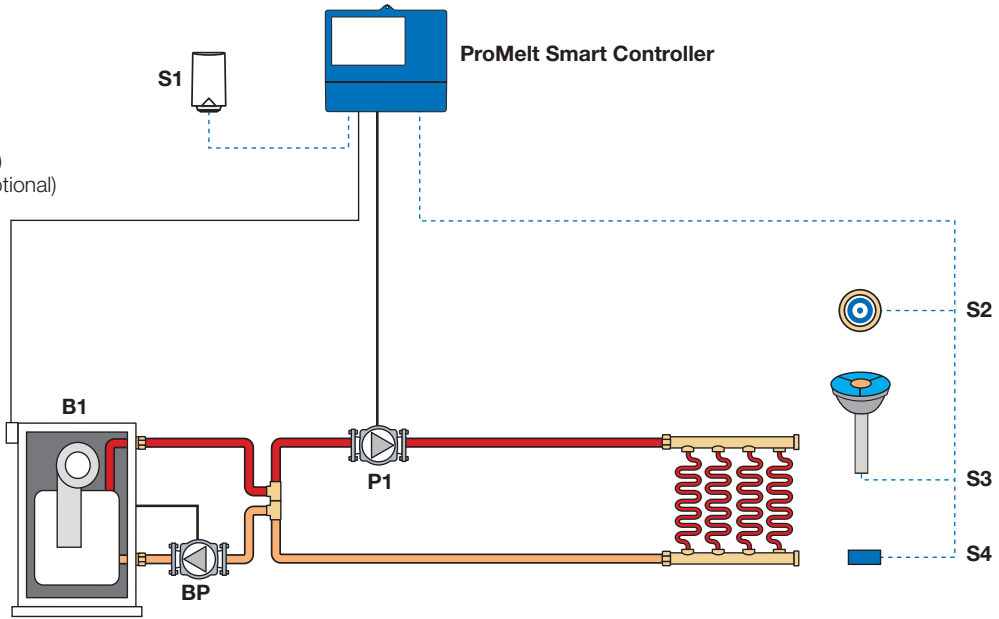| ProMelt Smart Controller	
Literature	PSC_A, PSC_C, PSC_D, PSC_U
Control	Microprocessor control. This is not a safety (limit) control
Packaged weight	4.3 lb. (1960 g)
Dimensions	6-5/8" H x 7-9/16" W x 2-13/16" D (170 x 193 x 72 mm)
Display	3.5" color touchscreen
Enclosure	Blue PVC plastic, NEMA type 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
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) ß=3892
–Included	Outdoor Sensor 070
–Optional	type # 072, 073, 087, 090, 094, 095
Warranty	Limited 3 Year (See PSC_D for full warranty)

SunTouch®

A WATTS Brand

Sample Application Drawing

Sample Mechanical diagram

Legend

B1 = Mod-Con Boiler
BP = Boiler Pump
P1 = System Pump
S1 = Outdoor Sensor 070
S2 = Snow / Ice Sensor 090
S3 = Snow Sensor 095 (optional)
S4 = Slab Sensor 072 or 073 (optional)

S1

ProMelt Smart Controller

S2

S3

B1

P1

S4

BP

Sample Electrical diagram

Legend
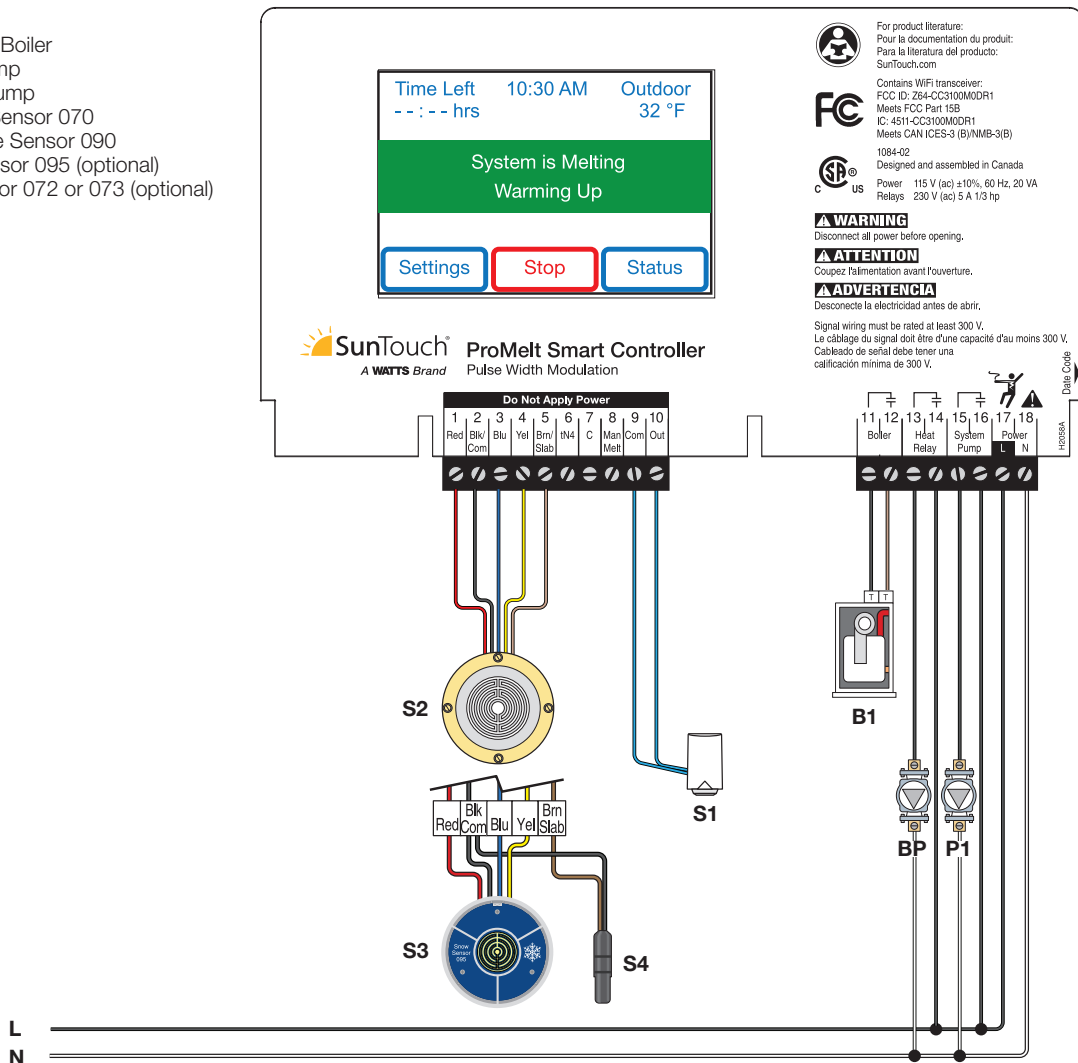
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S2 = Snow / Ice Sensor 090
S3 = Snow Sensor 095 (optional)
S4 = Slab Sensor 072 or 073 (optional)

Time Left	10:30 AM	Outdoor
-- : -- hrs		32 °F

System is Melting
Warming Up

| Settings | Stop | Status |

SunTouch® *A WATTS Brand* **ProMelt Smart Controller**
Pulse Width Modulation

For product literature:
Pour la documentation du produit:
Para la literatura del producto:
SunTouch.com

Contains WiFi transceiver:
FCC ID: Z64-CC3100MODR1
Meets FCC Part 15B
IC: 4511-CC3100MODR1
Meets CAN ICES-3 (B)/NMB-3(B)

1084-02
Designed and assembled in Canada
Power   115 V (ac) ±10%, 60 Hz, 20 VA
Relays   230 V (ac) 5 A 1/3 hp

⚠ **WARNING**
Disconnect all power before opening.

⚠ **ATTENTION**
Coupez l'alimentation avant l'ouverture.

⚠ **ADVERTENCIA**
Desconecte la electricidad antes de abrir.

Signal wiring must be rated at least 300 V.
Le câblage du signal doit être d'une capacité d'au moins 300 V.
Cableado de señal debe tener una
calificación mínima de 300 V.

Do Not Apply Power

| 1 Red | 2 Blk/Com | 3 Blu | 4 Yel | 5 Brn/Slab | 6 tN4 | 7 C | 8 Man Melt | 9 Com | 10 Out |

| 11 | 12 Boiler | 13 | 14 Heat Relay | 15 | 16 System Pump | 17 L | 18 N Power |

S2

S1

| Red | Blk Com | Blu | Yel | Brn Slab |

B1

S3

S4

BP   P1

L

N

Sample Electrical diagram

Legend
S1 = Outdoor Sensor 070
S2 = Snow / Ice Sensor 090
S3 = Snow Sensor 095 (optional)
S4 = Slab Sensor 072 or 073 (optional)

Time Left 10:30 AM **Outdoor**
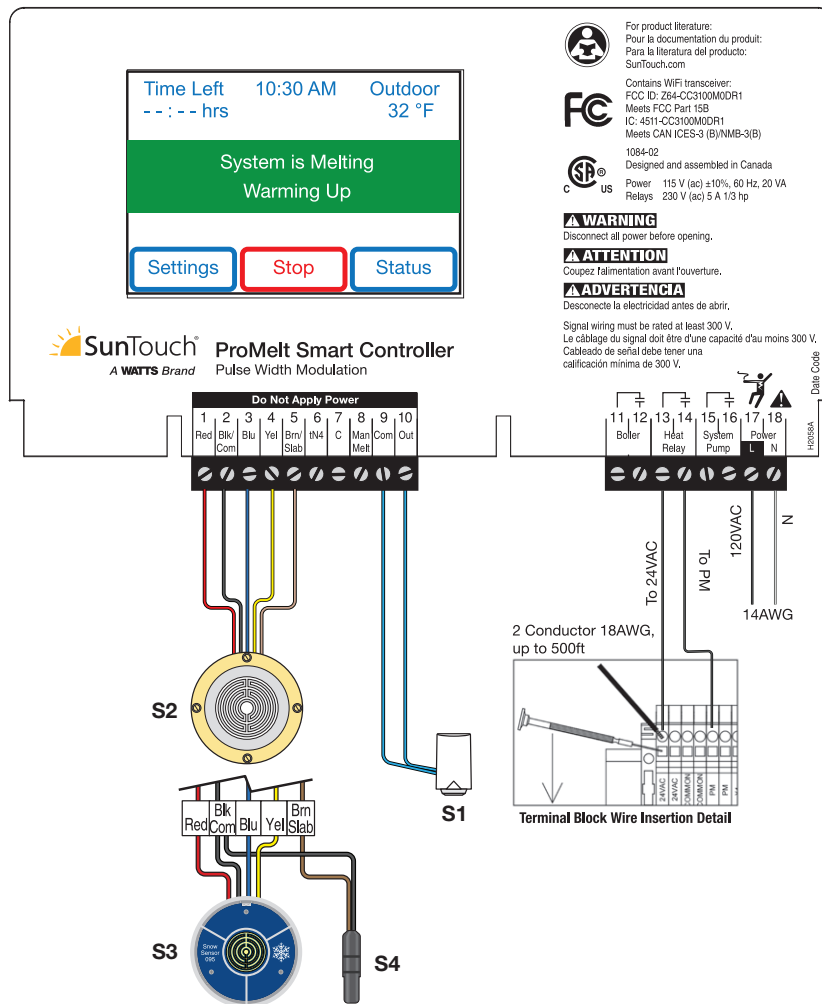- - : - - hrs 32 °F

System is Melting
Warming Up

Settings | Stop | Status

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Pulse Width Modulation

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Do Not Apply Power

1	2	3	4	5	6	7	8	9	10
Red	Blk/Com	Blu	Yel	Brn/Slab	tN4	C	Man Melt	Com	Out

11	12	13	14	15	16	17	18
Boiler		Heat Relay		System Pump		Power L	N

To 24VAC
To PM
120VAC
N
14AWG

S2

S1

Red | Blk Com | Blu | Yel | Brn Slab

S3 Snow Sensor 095

S4

2 Conductor 18AWG, up to 500ft

Terminal Block Wire Insertion Detail

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.

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