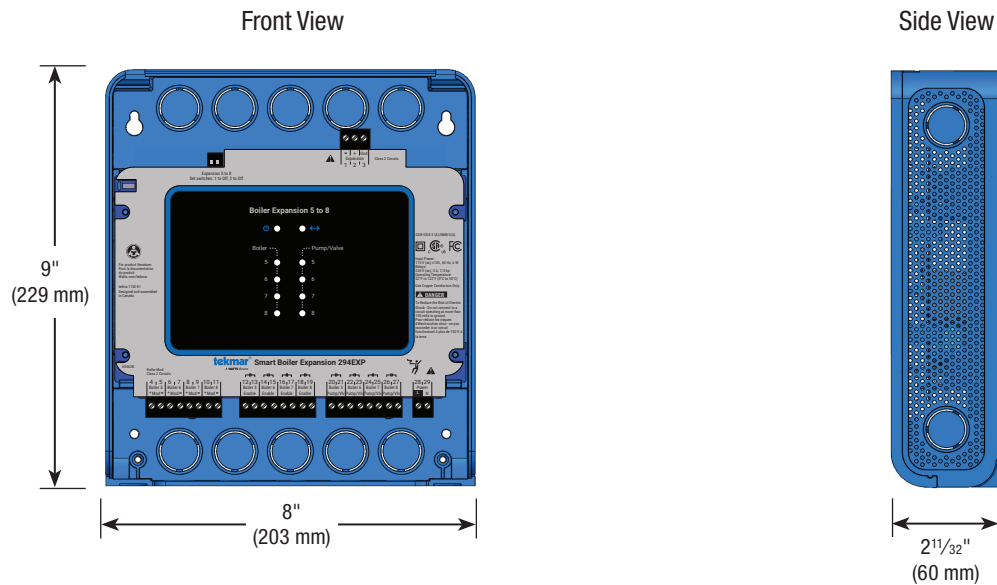


## Submittal

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

# Smart Boiler Expansion 294EXP

The Smart Boiler Expansion 294EXP expands the Smart Boiler Control 294 in groups of four boilers up to a maximum of sixteen boilers. The 294EXP connects to the Smart Boiler Control 294 through a three-wire communication cable.



## Features

- Expansion for 4 boilers
- LED status indicators
- 3-wire communication

## Specifications

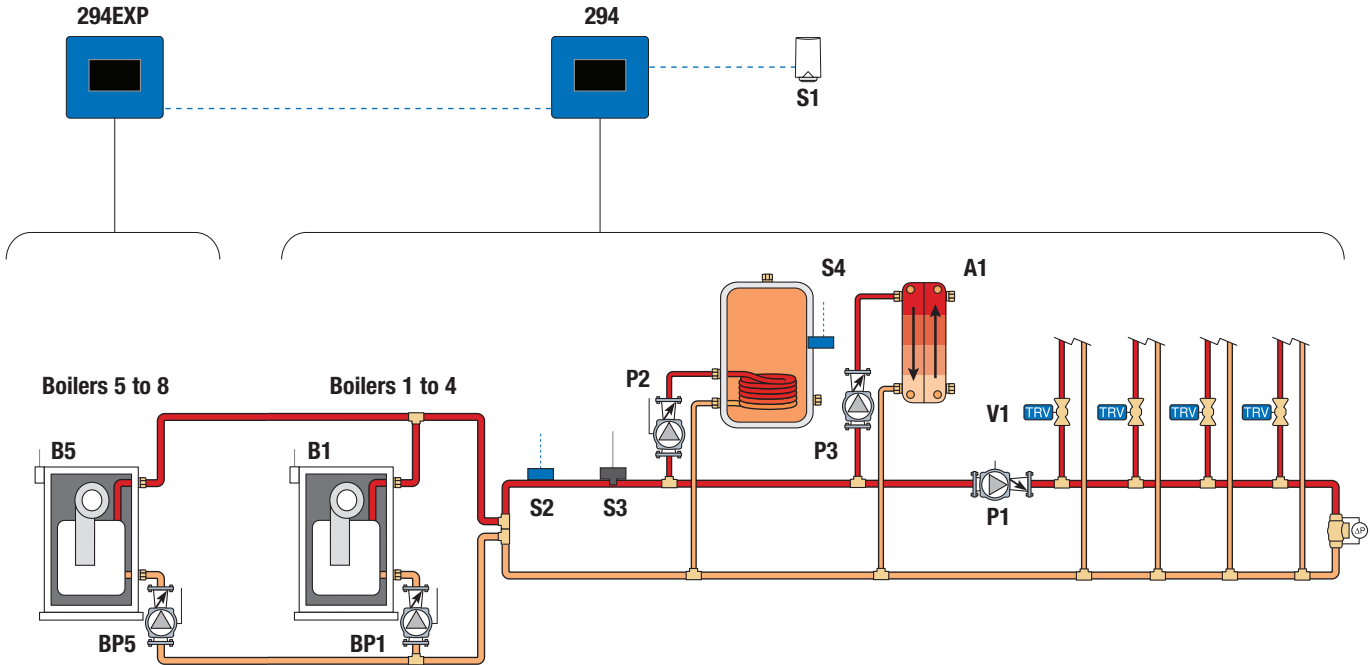
Smart Boiler Expansion 294EXP	
Literature	Submittal, Installation and Operating Manual
Packaged weight	2.4 lb. (1100 g)
Dimensions	9" H x 8" W x 2 <sup>11</sup> / <sub>32</sub> " D (229 x 203 x 60 mm)
Enclosure	Blue ABS plastic, NEMA type 1
Approvals	CSA C US, RoHS, Meets Class B: ICES & FCC Part 15
Ambient conditions	Indoor use only, 32 to 122°F (0 to 50°C), RH ≤90% non-condensing, Altitude < 6560 feet (2000 m), Installation Category II, Pollution Degree 2
Power supply	115 V (ac) ±10%, 60 Hz, 6 W
Relays	230 V (ac), 5A, 1/3 hp
Modulating outputs	0-10 V (dc) 500 Ω minimum load impedance or 4-20 mA 1 kΩ max load impedance
Warranty	Limited 3 Year (See IOM 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.

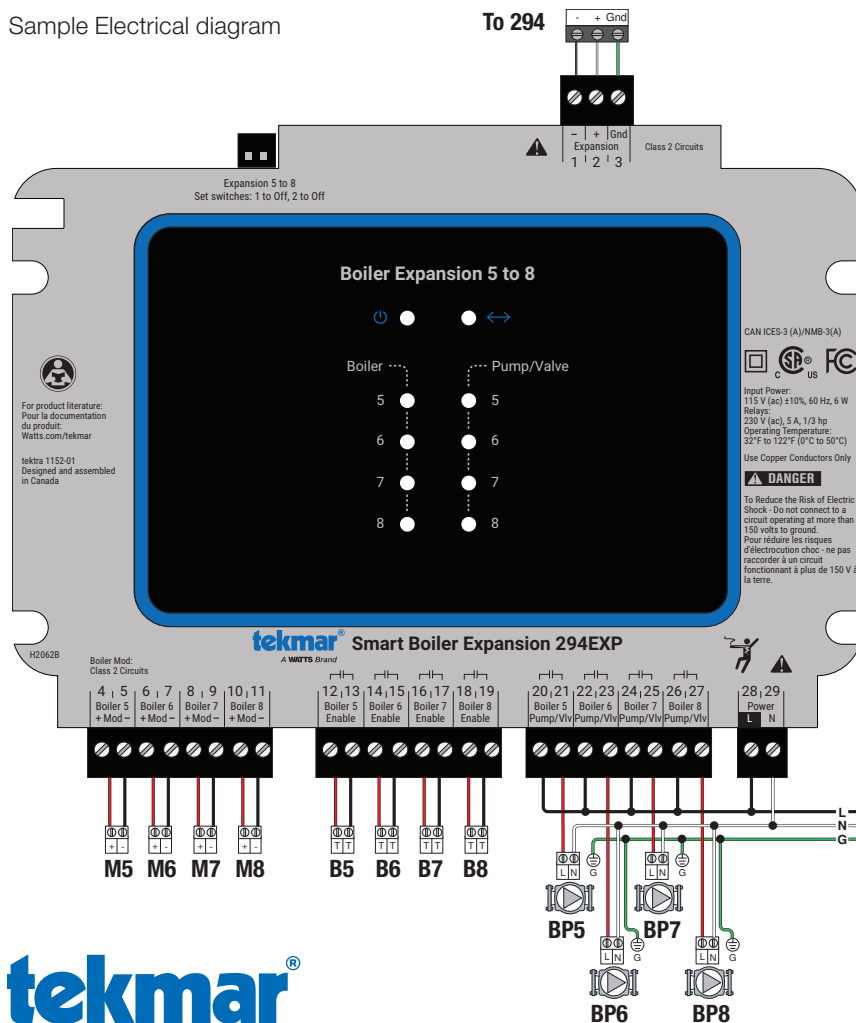
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# Sample Application Drawing

Sample Mechanical diagram



Sample Electrical diagram



## Legend

- A1 = Setpoint Load Call
- B1...B4 = Boiler On-Off Enable 1 to 4 (294)
- BP1...BP4 = Boiler Pumps 1 to 4 (294)
- M1...M4 = Boiler Modulation Signal 1 to 4 (294)
- B5...B8 = Boiler On-Off Enable 5 to 8 (294EXP)
- BP5...BP8 = Boiler Pumps 5 to 8 (294EXP)
- M5...M8 = Boiler Modulation Signal 5 to 8 (294EXP)
- S1 = Outdoor Sensor 070
- S2 = Boiler Supply Sensor 082
- S3 = Pressure Sensor 088 (Optional)
- S4 = DHW Sensor 078
- P1 = System Pump
- P2 = DHW Pump
- P3 = Setpoint Load Pump
- V1 = Zone Valves

## 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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