

tekmar® Submittal

Boiler Control 284



Multi-Staging

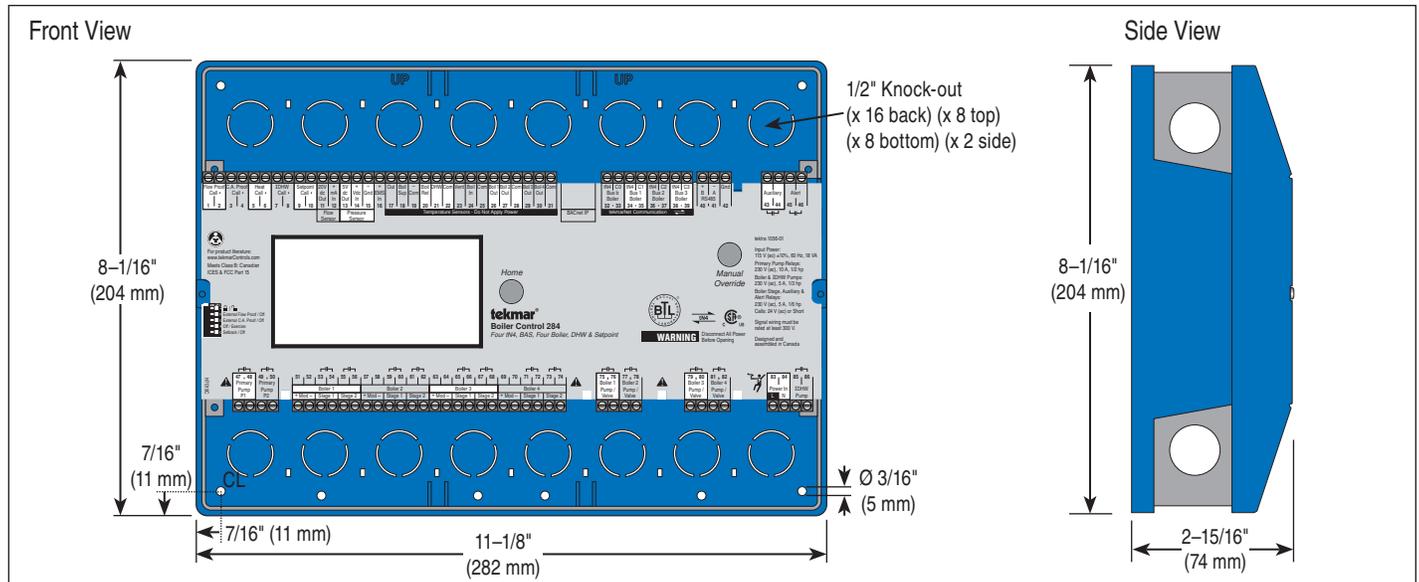
284_C

08/14

Replaces: 02/13

Job _____ Designer _____ Contact _____

The Boiler Control 284 is designed to operate up to four boilers to accurately maintain a target water temperature. The 284 operates both condensing & non-condensing boilers that are either modulating, single stage or two stage to provide a flexible, cost effective mixed boiler plant solution with better system performance. The target water temperature is based on outdoor temperature reset or a fixed setpoint for space or process heating applications. Additional loads supplied by the 284 include domestic hot water & setpoint heating. Boiler equal run-time rotation, stand-by primary pump operation & pump exercising all increase boiler plant reliability. The 284 communicates with a Building Automation System (BAS) using BACnet® IP or Modbus® for remote monitoring & adjustment capability. tekmarNet® Thermostats or a tN4 Gateway 483 can be added to optimize system performance & provide remote monitoring capability.



Specifications

Boiler Control 284 Four tN4, BAS, Four Boiler, DHW & Setpoint	
Literature	284_A, 284_B, 284_C, 284_D
Control	Microprocessor control. This is not a safety (limit) control
Packaged weight	5.5 lb. (2490 g)
Dimensions	8-1/16" H x 11-1/8" W x 2-15/16" D (204 x 282 x 74 mm)
Enclosure	Blue PC+ABS plastic with metal top and bottom conduit connection walls, NEMA type 1
Approvals	CSA C US, meets class B: ICES & FCC Part 15, BTL Listed
Ambient conditions	Indoor use only, 32 to 122°F (0 to 50°C), < 90% RH non-condensing
Power supply	115 V (ac) ±10%, 60 Hz, 18 VA
Primary Pump relays	230 V (ac) 10 A, 1/2 hp
Boiler Pump / Valve & IDHW Pump relays	230 V (ac) 5 A, 1/3 hp
Boiler Stage, Auxiliary & Alert relays	230 V (ac) 5 A, 1/6 hp
Modulating outputs	4 x 0-10 V (dc) 500 Ω minimum load impedance / 4-20 mA 1 kΩ max load impedance
Calls	24 V (ac) or Short
Sensors	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: 071, 078, 082
Warranty	Limited 3 Year (See 284_D for full warranty)

Features

- Outdoor temperature reset
- Programmable schedules
- tekmarNet® 4 compatible
- Control up to four boilers
- Condensing & non-condensing boiler groups
- Modulating, single stage or two stage
- BACnet® IP or Modbus® communication
- Primary pump sequencing
- Boiler isolation valves
- DHW priority
- Setpoint operation
- Combustion air damper control
- Energy, flow & pressure monitoring

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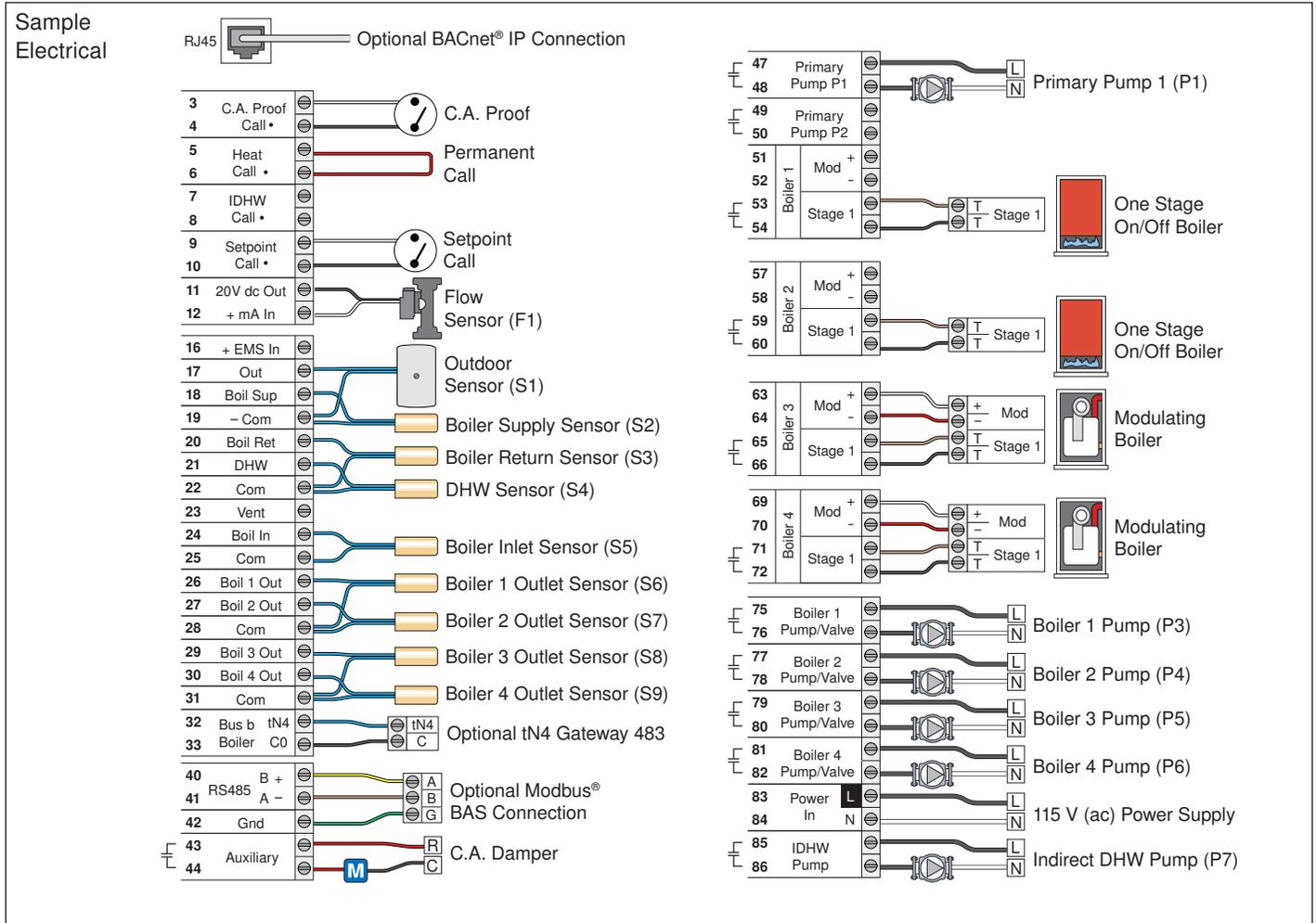
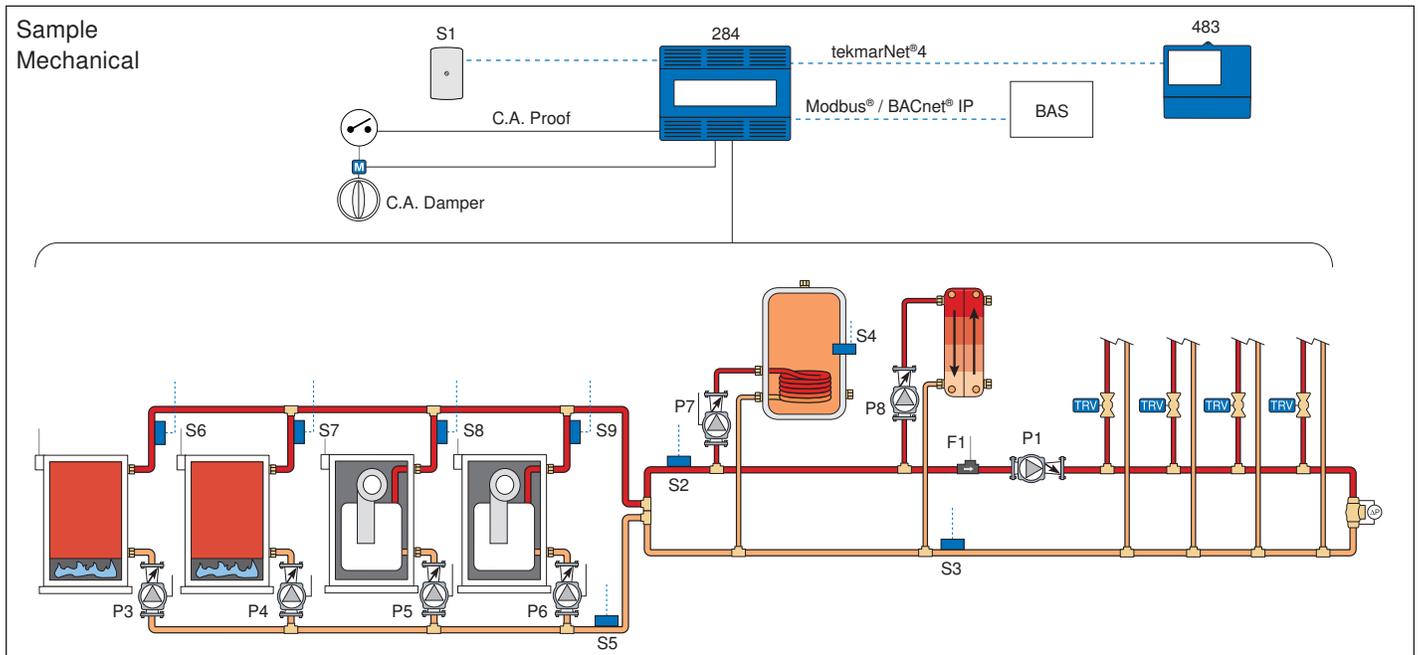


SPECIAL REQUIREMENTS

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.



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