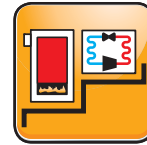


tekmar® Submittal

Boiler Control 284



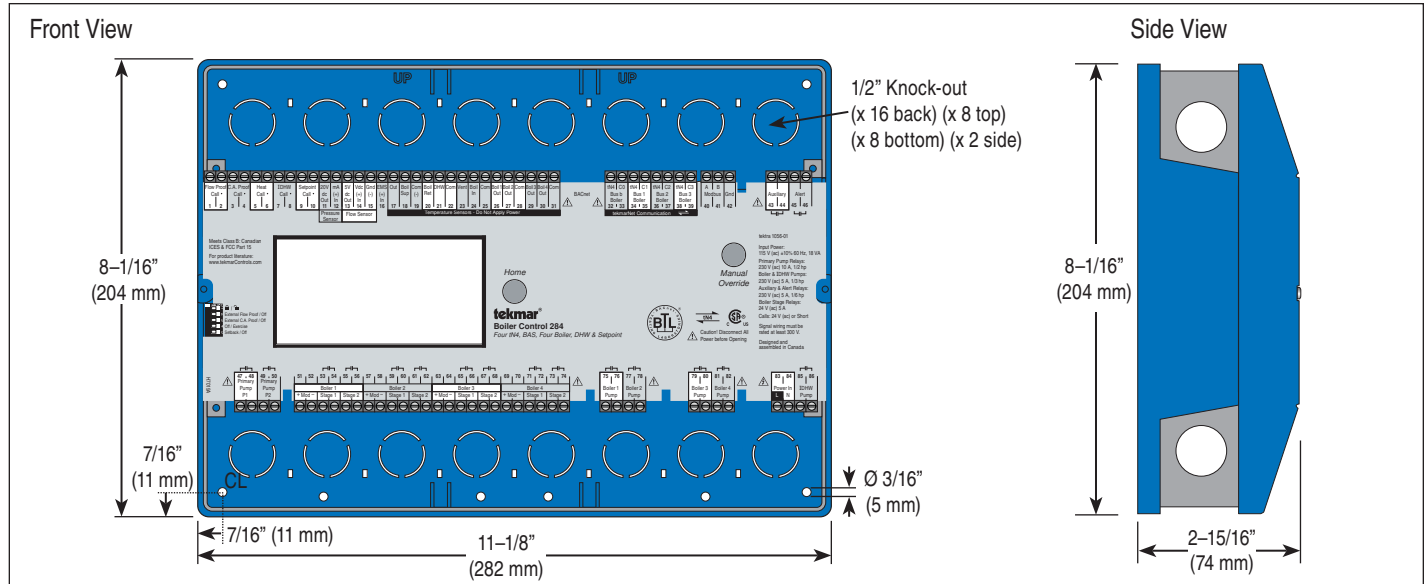
284_C

06/13

Multi-Staging 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 & IDHW pump relays	230 V (ac) 5 A, 1/3 hp
Auxiliary & Alert Relays	230 V (ac) 5 A, 1/6 hp
Boiler Stage Relays	24 V (ac) 5 A
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)

SPECIAL REQUIREMENTS

N / A

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
- DHW priority
- Setpoint operation
- Combustion air damper control
- Energy, flow & pressure monitoring

Member of
BACnet
International



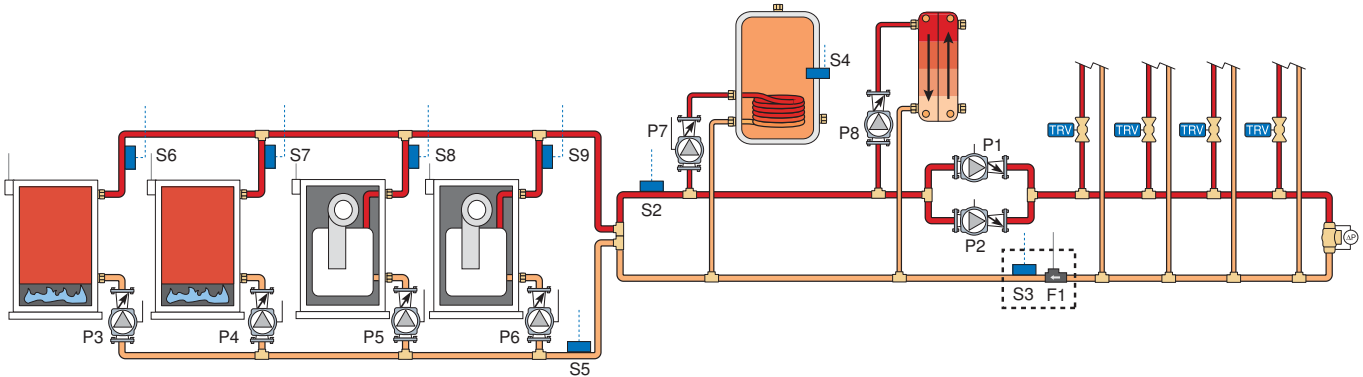
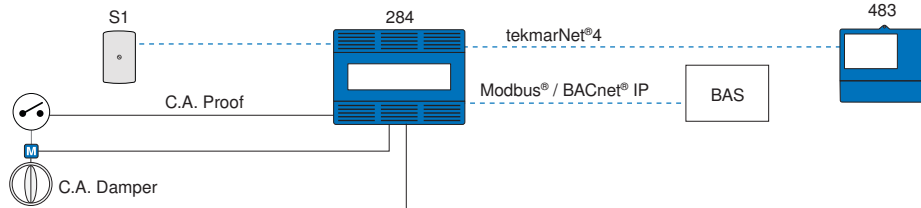
Scan code for quick link to product page on tekmarControls.com



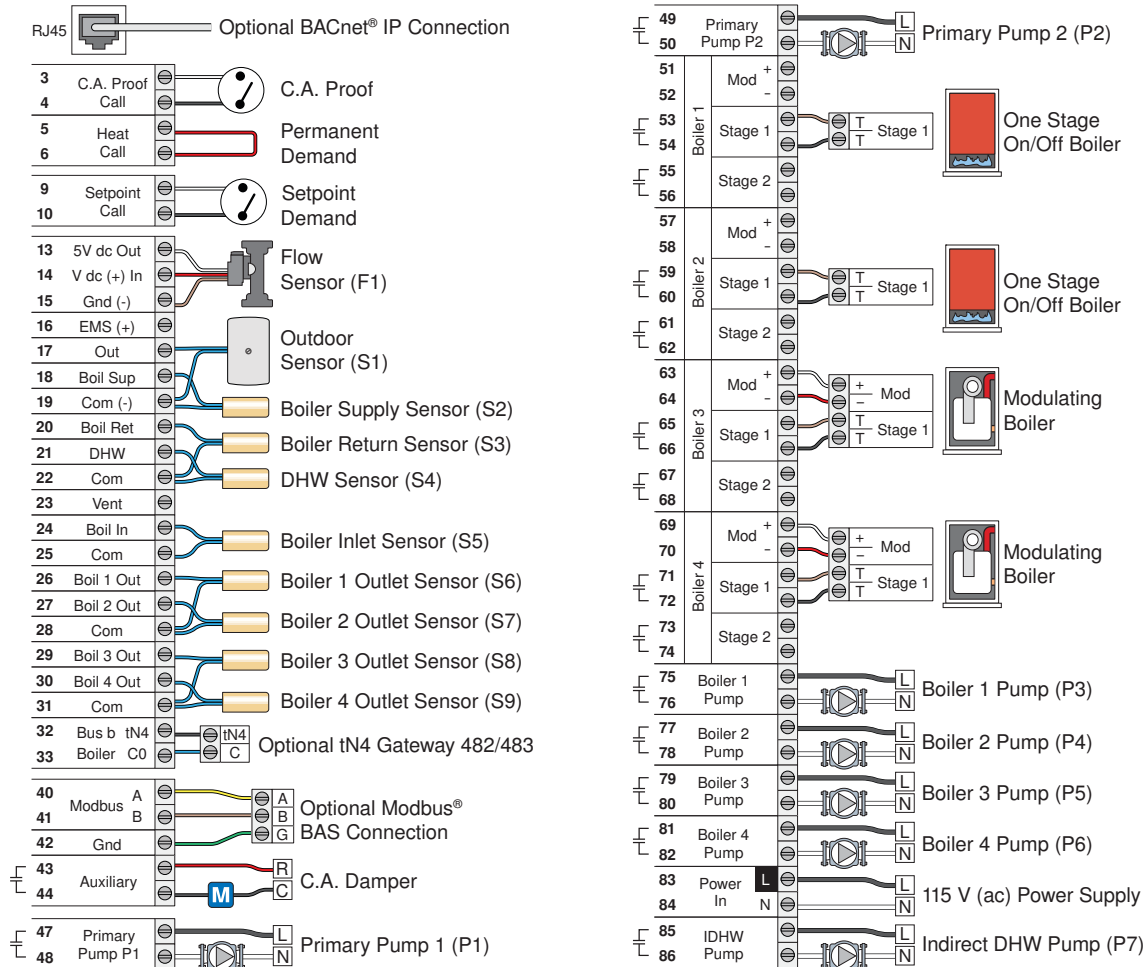
Sample Application Drawing

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



Sample Electrical



tekmar Control Systems Ltd., A Watts Water Technologies Company. Head Office: 5100 Silver Star Road, Vernon, B.C. Canada V1B 3K4, 250-545-7749, Fax. 250-545-0650 Web Site: www.tekmarControls.com

