










Service Bulletin 087
September 4, 2015

Installing the 275 Modulating Boiler Control with Modulating Boilers

The following table lists the essential settings required for the Boiler Control 275 when installed with some of the most common modulating boilers on the market.

Table 1: Boilers with 0-10 Vdc Modulating Input for Firing Rate

Boiler Model	Relay Type	Fire Delay (min)	Mod Delay (min)	Motor Speed (sec)	Start Mod (%)	Minimum Mod (%)	Maximum Mod (%)	Required Equipment from Boiler Manufacturer	Boiler Control Setting		
									Parameter	Setting	Reference
Buderus GB142, 162, 312	Pump 	0:30	0:10	10	50	30	100	EM10 Module	None	None	None
Dunkirk Q95M-200	Pump 	0:15	2:00	10	50	18	100	HAM 0-10VDC Module	Parameter 34 [P .34]	[- - 04]	p.3 Ham Installation Instruction
HTP Elite	Pump 	0:14	0:10	24	16	16	100	None	Function 16	0-10 Volt	Pg. 57 of I/O Manual
									Function 17	Fan Speed	
Lochinvar Knight	Burner 	0:23	0:05	10	20	20	100	None	Control Modes	BMS = Active	Pg. 24 & 26 of Service Manual
									BMS	BMS Type = Power	
Lochinvar Sync	Pump 	0:35	0:05	10	20	20	100	None	Demand Config.	3	Pg. 19 of Service Manual
Peerless PureFire REV2	Pump 	0:15	0:00	50	20	20	100	Interface Adapter PFA-1	Heating Mode	5	Pg. 43 of I/O Manual
Triangle Tube Prestige Solo	Pump 	0:10	0:30	30	20	20	100	None	CH Demand Type	0-10V	Pg. 46 of I/O Manual
Triangle Tube Prestige Excellence	Pump 	0:10	0:30	30	20	20	100	None	CH Demand Type	0-10V	Pg. 43 of I/O Manual
Weil-McLain Ultra Series 3	Pump 	0:30	1:00	60	20	20	100	None	Additional Heat Demand	Type 4	Pg. 84 of I/O Manual

Boilers that require a 4-20mA signal may be connected to a tekmar Boiler Control 275 with the addition of a 3rd party converter module. Alternately, they may be controlled directly with the tekmar Boiler Control 284. Please contact Customer Technical Support for more information.

Fig 1: tekmar 275 to Buderus GB142/162/312

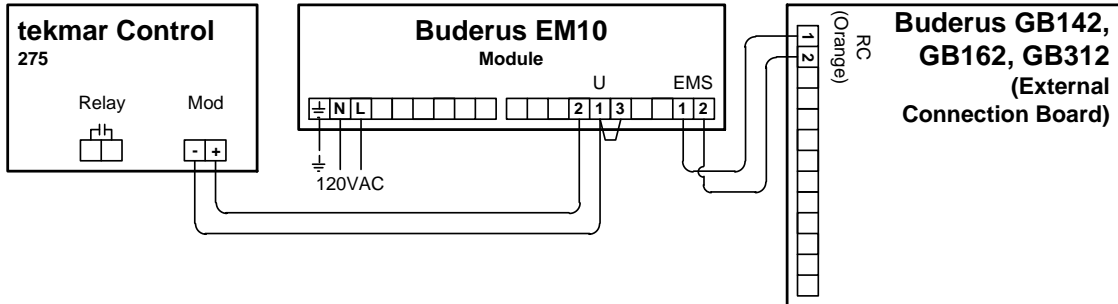


Fig. 2: tekmar 275 to Dunkirk Q95M-200

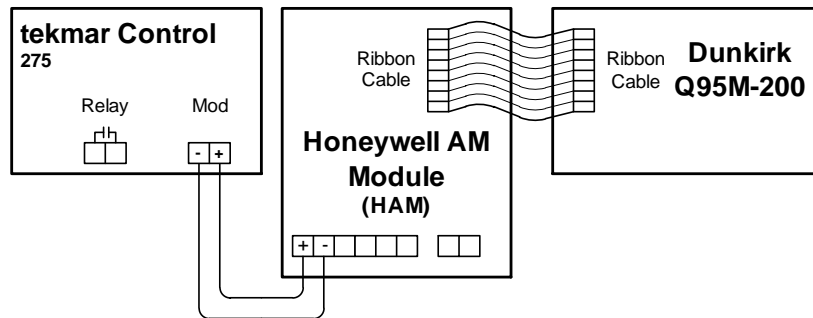


Fig. 3: tekmar 275 to HTP Elite

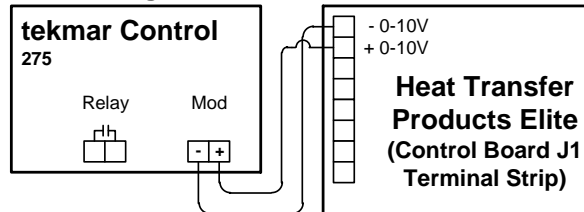


Fig. 4: tekmar 275 to Lochinvar Knight

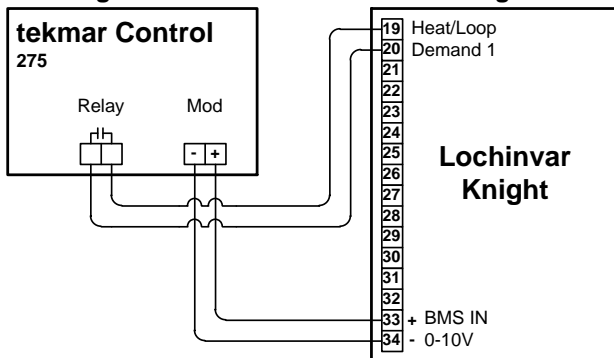


Fig. 5: tekmar 275 to Lochinvar Sync

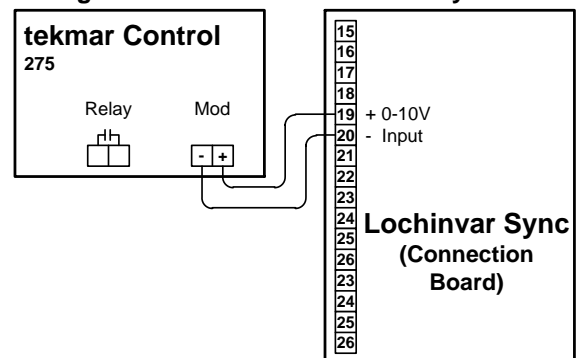


Fig. 6: tekmar 275 to Peerless PureFire

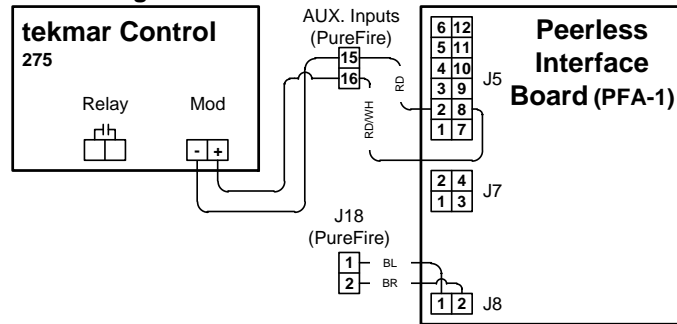


Fig.7: tekmar 275 to Triangle Tube Prestige Solo & Prestige Excellence

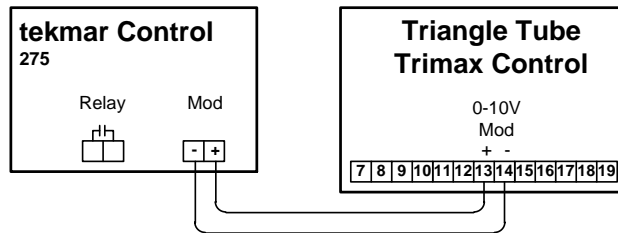
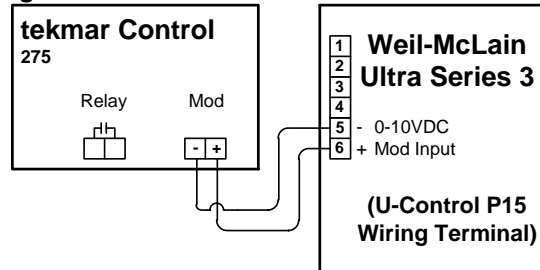


Fig. 8: tekmar 275 to Weil-McLain Ultra Series 3



PLEASE NOTE: Due to published changes made without notice by Boiler Manufacturers to their specifications and capabilities, tekmar Control Systems does not assume any responsibility for boiler manufacturers' amendments, modifications, deletions or changes nor does tekmar Control Systems accept any responsibility for the damage or personal injury due to unsafe and improper boiler operation that is guided by this 'Note' and by the manufacturer's installation and operating instructions.

