Submittal Data Information

101-057

Add-On Power Controls

Effective: June 1 2000 **Supersedes:** October 1, 1997

Job: _____ Engineer: _____ Contractor: _____ Rep: _____

ITEM NO.	MODEL NO.	

PC700 & PC702: Boiler Reset Controls

Control:	Microprocessor PI Control; This is not a safety (limit) control
Dimensions:	4 3/4" H x 2 7/8"W x 7/8" D
Approvals:	CSA NRTL/C; Meets ICES & FCC regulations for EMI/RFI
Ambient Cond.:	Indoor use only
Power Supply:	24 VAC 3VA (Powered by -EXP Control)
Relays:	24 V (ac) 5 A, pilot duty 240 VA
Sensors:	1 Outdoor Air and 1 Supply Water
Boiler Start:	35 to 150°F (2 to 66°C)
Outdoor Start:	35 to 85°F (2 to 29°C)
Boiler Design:	70 to 220°F (21 to 104°C)
Outdoor Design:	-60 to 32°F (-51 to 0°C)
Boiler Minimum:	Off, 80 to 180°F (27 to 82°C)
Differential:	Auto, 2 to 42°F (1 to 24°C)
WWSD:	Off, 35 to 100°F (2 to 38°C)
Units:	°F, °C
PC702 Only:	
DHW Demand:	20 to 260 V (ac) 2 VA
Interstage Delay:	0:30 to 4:00 minutes

PC705: Variable Speed Pump Injection Mixing Control

Control:	Microprocessor PID Control; This is not a safety (limit) control
Dimensions:	43/4" H x 2 7/8"W x 1 7/8" D
Approvals:	CSA CVS; Meets ICES & FCC regulations for EMI/RFI
Ambient Cond.:	Indoor use only
Power Supply:	24 VAC 3VA (Powered by -EXP Control)
Variable Pump:	120 V (ac) 1.8 A 1/2 hp, fuse 2.5 A 250 V
Relays:	24 V (ac) 5 A, pilot duty 240 VA
Sensors:	1 outdoor air and 2 supply water
Mix Start:	35 to 150°F (2 to 66°C)
Outdoor Start:	35 to 85°F (2 to 29°C)
Mix Design:	70 to 220°F (21 to 104°C)
Outdoor Design:	-60 to 32°F (-51 to 0°C)
Boiler Minimum:	Off, 80 to 180°F (27 to 82°C)
WWSD:	Off, 35 to 100°F (2 to 38°C)
Units:	°F, °C

PC700: Boiler Reset Control

The Taco Boiler Reset Control is a microprocessor-based control designed to regulate the supply water temperature from a single boiler based on the outdoor temperature. To avoid boiler short cycling and large temperature swings, the PC700 is able to continuously adjust the boiler differential. Standard functions include warm weather shut down, minimum boiler supply temperature setting, and a starting water temperature setting. The updated Boiler Reset Control utilizes an easy-to-use automatic reset ratio calculation to set the relationship between outdoor temperature and supply water temperature (heating curve) to provide optimum control and comfort. The control has a liquid crystal display that clearly shows the boiler supply temperature as well as the other monitored temperatures and settings.

The operation of a hot water heating system can be improved by modulating the supply water temperature as the outdoor temperature changes. Using this approach, the heat lost from the building is matched by the heat input to the building.

PC702: Two Stage Boiler Reset Control

The Taco Two Stage Boiler Reset Control is a microprocessor-based control designed to regulate the supply water temperature from a two stage boiler system based on the outdoor temperature or domestic hot water requirements. The PC702 has all of the features of the PC700 yet also includes an adjustable interstage delay setting, boiler staging using proportional, integral and derivative (PID) logic, optional boiler rotation, and a domestic hot water demand output.

PC705: Variable Speed Pump Injection Mixing Control

The Taco Mixing Control regulates the supply water temperature to a heating system by simultaneously controlling a boiler and the speed of an injection pump. Based on the outdoor air temperature, the PC705 continuously adjusts the boiler differential to optimize the firing cycles of the boiler, prevent large water temperature swings, and increase the efficiency of the system. As the heating load increases, the Mixing Control speeds up the injection circulator and as the load decreases it slows down the injection circulator. The updated Mixing Control has a liquid crystal display that clearly shows the speed of the variable speed injection pump. It also features warm weather shut down, a maximum supply water temperature setting, and a boiler sensor that can be connected in order to prevent corrosion in the boiler due to flue gas condensation.

Do it Once. Do it Right.®

TACO INC., 1160 Cranston Street, Cranston, RI 02920 Telephone: (401) 942-8000 Fax: 942-2360
TACO (Canada), Ltd., 6180 Ordan Drive, Mississauga, Ontario L5T 2B3 Telephone: (905) 564-9422 Fax: (905) 564-9436
Visit our website at: www.taco-hvac.com