

BTC Panel Mount Control Installation Instructions



For installation into ME50 (S2NA)
DeDietrich control panel for 120 and
230 series boilers

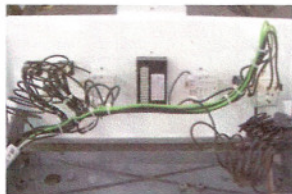
BTC Field kit includes:

- Tekmar BTC control
 - Outdoor sensor
 - Boiler sensor
- 24 vac transformer
- Wiring accessories

This insert is only meant to be used as a guide for the installation of the BTC panel mount control. For specific operation and technical information please refer to the enclosed manufacturer operating / technical manuals and wiring schematics for the ME50, BTC control and transformer. This installation should only be performed by a qualified burner technician



Remove the panel pre-cut BTC insert located on the front panel by clipping the tabs on the rear and then insert the BTC control. It is a press fit so there are no screws or brackets required.



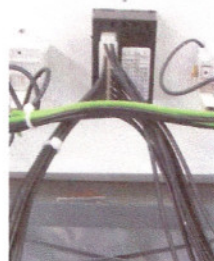
The wire cable provided with the installation kit plugs into the rear of the BTC control. Some of the wires have been grouped and strapped together as they will be terminated on

the opposite side of the terminal strip located on the ME50 control. Using the wire ties provided, organize the wiring to match the picture below. Make sure to provide enough slack at the plug connection to allow the front panel to swing open once installed.

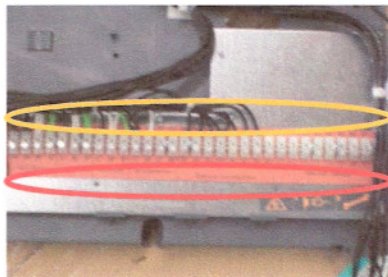
The wires on the harness that are tied



together as shown on the right side of the above picture, will be run on the left side on the picture to the direct right



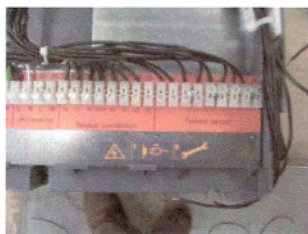
Each wire on the harness provided is labeled with a number. This number matches a terminal located on the ME50 control terminal strip on the inside edge in the area indicated in yellow to the right



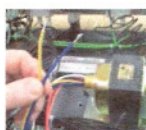
Caution: The numbers indicated on the opposite side (Indicated in red in the above picture) of the terminal strip do not match the wire numbers on the plug harness and should NOT be referenced when making the wiring connection from the harness to the terminal strip.



Terminate each wire on the terminal strip as shown to the corresponding number. Make sure you have a good electrical connection and the wire is secure. If the wires were cut to length, it is recommended to re-label each wire for future reference. Terminate the remaining wires on the opposite side of the terminal strip, making sure to use the same terminal strip numbers as indicated above.

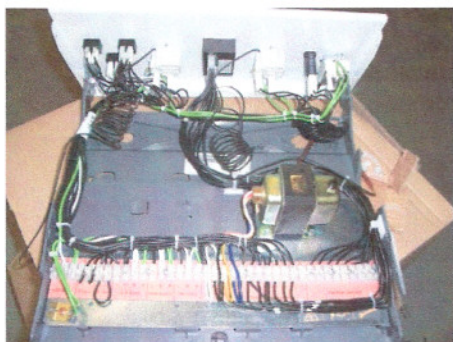
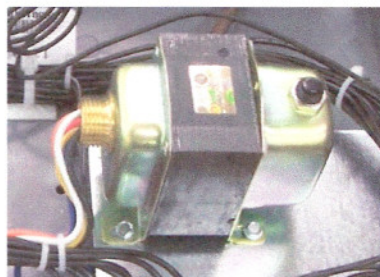


Mount the 24 volt transformer to the metal plate on the ME50 using 4 of ½ inch self tapping metal screws



The transformer wiring information may be found in the product sheet provided with the transformer. The leads are as follows:

- Black/White = 120 vac primary
- Orange/Red = 240 vac primary (not used)
- Yellow/Blue = 24 vac secondary



Make field connections to the ME50 terminal strip as indicated and required. The terminals for the Tekmar sensors are as follows:

- 31/32 = Outdoor sensor
- 31/33 = Blr Supply sensor
- 34/36 = Blr outlet sensor
- 36 = External input common
- 37 = External input V +