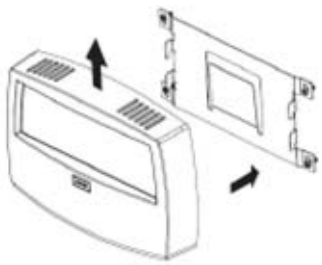
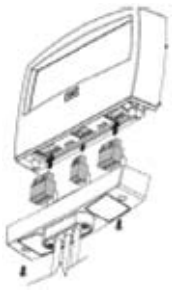
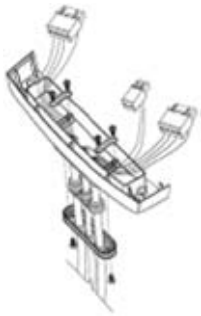
ECO^{3TM} Quick Installation Guide

Installation Steps to Follow:

1. Mount the back plate of the ECO^{3TM} to a flat surface with 4 screws.
2. Remove the base / bottom of the ECO^{3TM} to reveal the terminals.
3. Connect 24VAC from the transformer to the middle "24VAC" terminal of ECO^{3TM}. The inputs to the ECO^{3TM} must be the same voltage & the same phase. Maximum permissible voltage to be applied to ECO^{3TM} terminals is 240V.
4. Three low current capacity wiring (min. of 1.5 mm) cables is required to connect each channel.
5. Connect one wire form the control thermostat or low pressure control to the IN terminal on the ECO^{3TM} channel.
6. Connect one wire from the N/C terminal on the ECO^{3TM} channel to the oil safety switch or directly to the motor starter if an oil safety switch is not fitted.
7. Finally connect the reference wire from the (N) terminal on the ECO^{3TM} channel to the return/Neutral side of the contactor coil.







What You Need:

1. Transformer (24 VAC/15A)
2. Fuse Holders x 3
3. Fuses (5A 250V) x 1 (2 for dual)
4. Fuses (1A 250V) x 1
5. Wire (3 wire insulated, min. 20AWG, 7mm)
6. Wire (2 wire insulated, min. 20AWG, 6mm)
7. Self tapping metal screws
8. Relays (recommended to eliminate potential back feed voltage issues)

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Wiring Notes:

The wiring between different systems, manufacturers and types of units can differ significantly. Knowing where and how to insert the ECO^{3TM} into the control circuit correctly is important for the success of the project. Is it important to remember that:

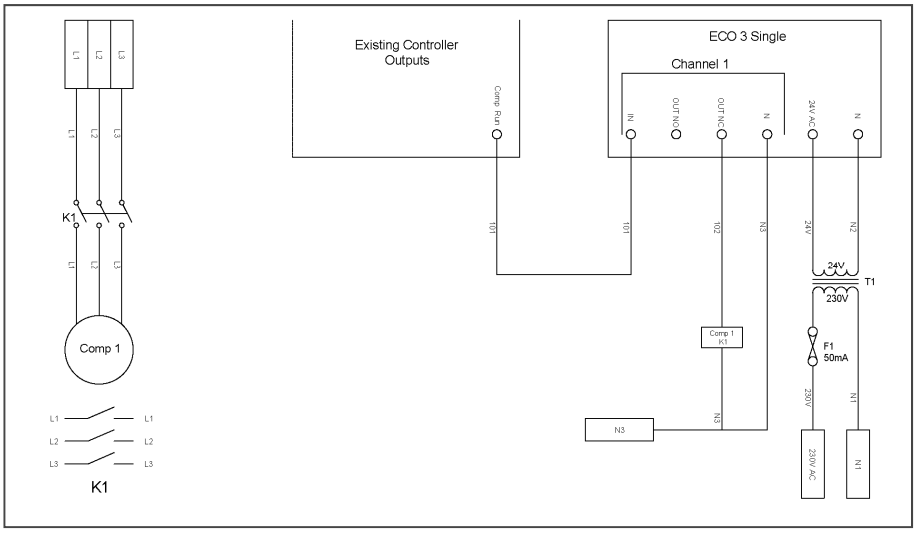
1. The ECO^{3TM} must know all the times when capacity is being utilized by the primary controller (thermostat). If power to a channel drops off as additional capacity is added, a relay can be used to ensure the ECO^{3TM} sees all the capacity that is being used.
2. The ECO^{3TM} looks for a constant signal. If the existing controller uses a pulse signal, then timers and/or relays must be used to ensure it still seems a signal when the ECO^{3TM} has put a unit into save.
3. The ECO^{3TM} should be wired before the safety circuits to ensure they continue to operate as expected. Some examples of these are high or low pressure switches, oil pressure switches and compressor proofing relays.
4. The Normally Closed contact on the ECO^{3TM} is the preferred contact as it helps ensure that the unit "fails to safe" should there is a malfunction of power issue of the ECO^{3TM}.

Safety Warning

Installation and maintenance of the ECO$^{3™}$ must be carried out at all times by suitably qualified persons. The ECO$^{3™}$ must be installed in strict compliance with the national wiring rules.

Wiring Diagrams

ECO3TM Single Channel



ECO3TM Dual Channel

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