

JencoFan

SCO2-W (Wall Mount)

Carbon Dioxide Control for TRC500 & TRC800
Installation, Operation, and Maintenance Manual



READ AND SAVE THESE INSTRUCTIONS

The purpose of this manual is to aid in the proper installation and operation of fans manufactured by JencoFan. These instructions are intended to supplement good general practices and are not intended to cover detailed instruction procedures, because of the wide variety and types of fans manufactured by JencoFan.

Installation Instructions

SCO2-W



1. WARNINGS

READ AND SAVE THESE INSTRUCTIONS. FAILURE TO COMPLY WITH INSTRUCTIONS COULD RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE!

WARNING: TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR INJURY, OBSERVE THE FOLLOWING:

1. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
2. Before installing, servicing or troubleshooting the transformer/relay package, switch power off at service panel and lock service panel to prevent power from being switched on accidentally. CAUTION: more than one disconnect switch may be required to de-energize the equipment for servicing.
3. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
4. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
5. NEVER place a switch where it can be reached from a tub or shower.
6. Intended for use with 24VAC Class 2 power supplies only.

2. INSTRUCTIONS

These instructions cover only on-off control through the Relay Contacts. Two control parameters need to be set: **Relay Setpoint** and **Relay Hysteresis**.

When the control measures a CO₂ concentration above the **Relay Setpoint**, it will call for the ERV to operate. When the CO₂ concentration has dropped below the **Relay Setpoint** minus the **Relay Hysteresis**, the control will stop calling for ERV operation.

Selection of proper **Relay Setpoint** and **Relay Hysteresis**.

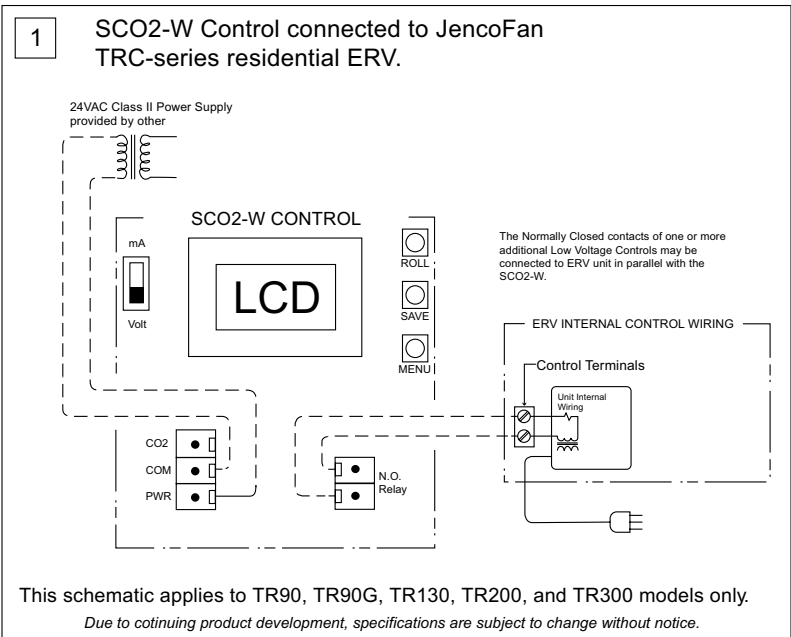
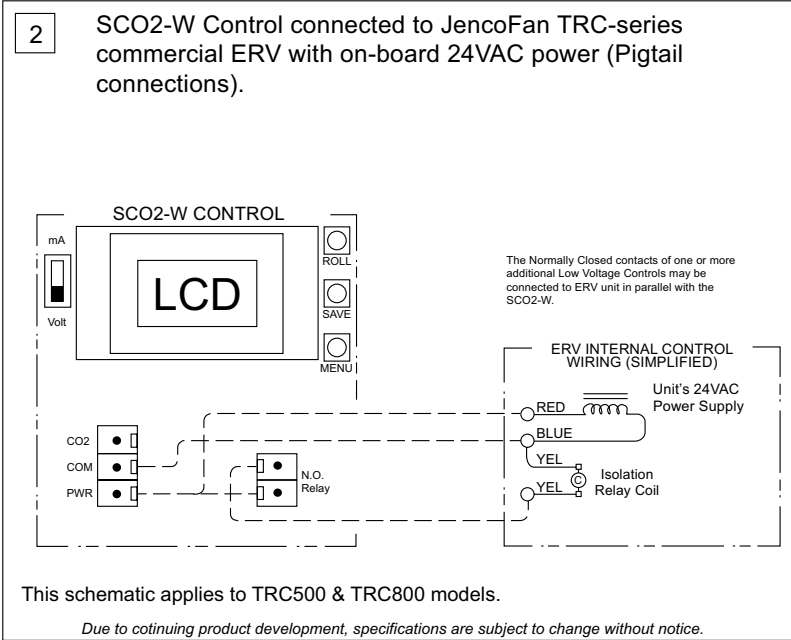
Relay Setpoint: Factory setpoint is 1000ppm. When the engineer responsible for designing the ventilation system has specified at what CO₂ concentration outside air ventilation should begin, set the Relay Setpoint accordingly.

The factory setpoint of 1000ppm is based on a typical value of 300ppm CO₂ concentration in the outside air plus 700ppm. For many applications, a Relay Setpoint of 700ppm above the outside air concentration will result in the ERV system (if properly sized) delivering a time-averaged value of 15 CFM of outside air per person¹. If the ERV is cycling off regularly, but the time-averaged ventilation rate is below requirements, reduce the Relay Setpoint. In some areas the outside air CO₂ concentration may be above 300ppm; if so, increase the Relay Setpoint accordingly in order to prevent the controller from calling for too much outside air.

Relay Hysteresis: Factory setpoint is 50ppm. This setting is generally recommended. Increase the Relay Hysteresis if ERV short-cycling occurs.

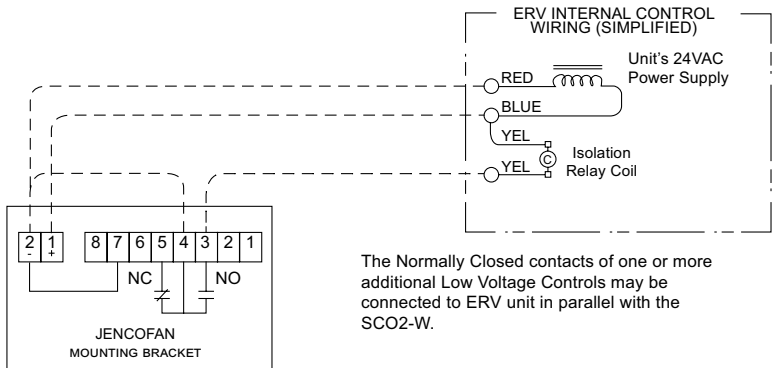
For information on how to recycle this product, see www.recyclethis.info

¹ See ASHRAE Standard 62.1-2010 *Ventilation for Acceptable Indoor Air Quality, Informative Appendix C* for more information.



Connection to mounting bracket:

SCO2-W Control connected to JencoFan TRC-series commercial ERV with on-board 24VAC power (Pigtail connections).



The Normally Closed contacts of one or more additional Low Voltage Controls may be connected to ERV unit in parallel with the SCO2-W.

This schematic applies to TRC500 and TRC800 models.

Due to continuing product development, specifications are subject to change without notice.

JencoFan

USA Division

6393 Powers Avenue
Jacksonville, FL 32217
P. 904-731-4711 · F. 904-737-8322
www.jencofan.com

Canada Division

6710 Maritz Drive Unit #7
Mississauga, ON L5W 0A1 - Canada
P. 416-744-1217 · F. 416-744-0887
www.jencofan.com