



INSTRUCTION SHEET

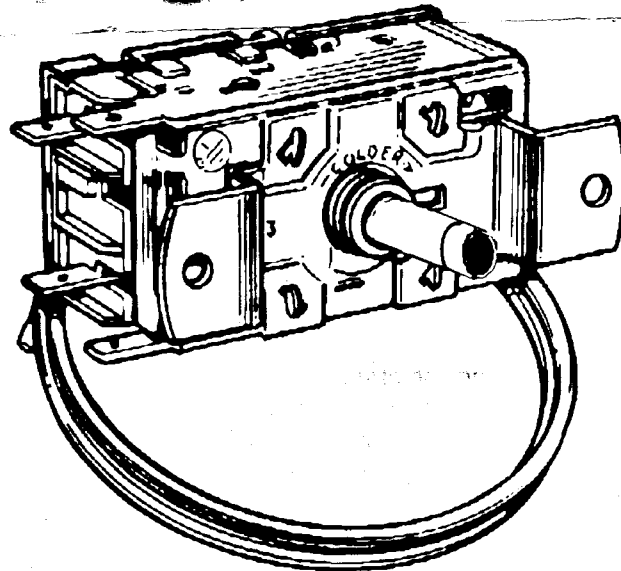
Bulletin No. 1531021 Rev A

"A12" Series Constant Cut-In Direct Replacement Cold Controls

APPLICATION/DESCRIPTION

RANCO "A12" series constant cut-in controls are designed for applications requiring the defrosting of the evaporator coil during the time when the compressor is in the off cycle. The control is used in vending machines, automatic beverage dispensers, reach-in coolers and various other medium temperature commercial equipment.

The "A12" series controls utilize a SPST snap-acting toggle switch which is temperature actuated to close on rise of temperature.

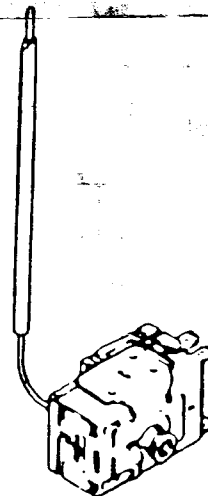


INSTALLATION

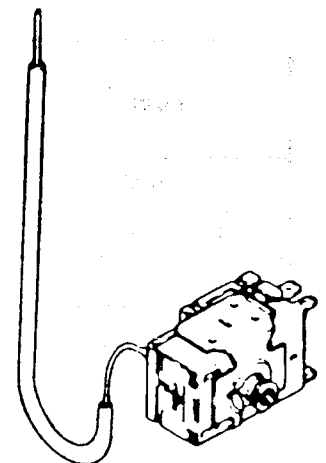
1. Disconnect electrical power.
2. Remove inoperative control. Be sure to save any fittings or parts which may apply to the direct replacement control, including the dial knob.
3. Install replacement control capillary tube in the same position as the original control.

A minimum of 6 inches of capillary tubing sensing surface is recommended for correct operation.

4. Avoid capillary touching any surface which can be colder than that to which the capillary sensor portion is clamped. Excess tubing should be coiled and taped to prevent chafing and rattling from vibration. Avoid sharp bends, kinks, strains and pinching of capillary. Provide a drip loop if water can follow the capillary to the control and its switch.



WITHOUT DRIP LOOP



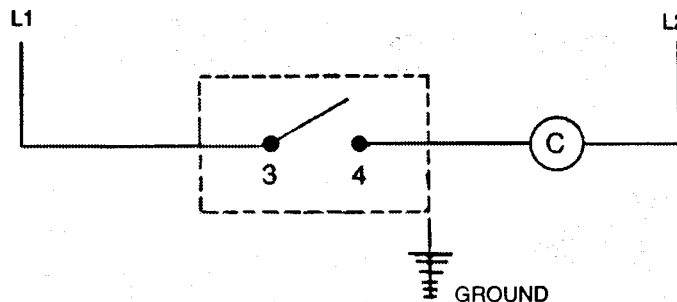
WITH DRIP LOOP

5. Mount the replacement control in the same location as the original control and attach dial knob.
6. Turn dial to normal or mid scale position. In the case of the A12 series controls, turning the dial changes the "cut-out" setting only while the "cut-in" setting remains constant. Turn the dial knob counterclockwise for warmer "cut-out" and clockwise for a colder "cut-out."
7. Turn on electrical power and check control operation. Allow sufficient time for the unit to reach normal operating temperature.

ELECTRICAL RATINGS

16 FLA AT 120V/240V A.C.
80 LRA AT 120V/240V A.C.

WIRING DIAGRAM



CARE IN WIRING

Total electrical load handled by the control must be within the limits of the control rating. (See Electrical Ratings below.)

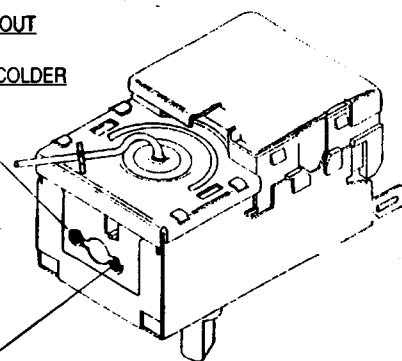
Do not reform, cut off, drill or tap the control's electrical terminals since resulting temperature setting changes may occur.

Electrical leads should be properly dressed, provided with slack to electrical terminals and have a drip loop if water can follow them.

Ranco recommends the use of snap-on terminal covers which are provided with all "A12" series controls. Proper grounding procedures should be followed.

ALTITUDE ADJUSTMENT

ALTITUDE ADJUSTMENT
PRIMARY ADJUSTMENT SCREW
CUT IN / CUT OUT
SCREW ADJUSTMENT
VARIES CUT IN AND CUT OUT
CLOCKWISE -- WARMER
COUNTERCLOCKWISE -- COLDER



CUT OUT SCREW
SCREW ADJUSTMENT
CLOCKWISE -- COLDER
COUNTERCLOCKWISE -- WARMER
(NORMALLY NOT REQUIRED)

ALTITUDE ADJUSTMENT
2000 FT 1/8 OF A TURN CW
4000 FT 3/8 OF A TURN CW
6000 FT 3/4 OF A TURN CW
8000 FT 1 TURN CW
10,000 FT 1 1/8 OF A TURN CW

POSITION CONTROL
AS SHOWN BEFORE
ADJUSTING

CUT OUT SCREW ADJ.

1 TURN = 3/4 F; MAX 3 TURNS

A12/K12 & K59 (CONSTANT CUT-IN)

SPECIFICATIONS

Part Number	°F Normal Off	°F Warm Off	°F Cold Off	°F Cut-In	Capillary Length
A12-1506	15°	22°	9°	38°	39x3/8x13/8"
A12-700	18°	26°	11.5°	37°	84"
A12-701	23.5°	31°	15°	41°	84"
A12-1560	24°	29°	19°	38°	72"



8115 U.S. Route 42 N. • Plain City, OH 43064

