IR33 Digital Thermostat - Single probe

INSTALLING THE THERMOSTAT

The IR33 can be located anywhere as long as it is protected from water and spray. The leads to the probe may be extended if the connections are soldered and sealed with heat shrink. The IR33 thermostat has no off switch. The compressor must be installed with a power switch disconnect to be able to shut off the system.

WIRE ROUTING

The Red, white and blue wire harness connects at the compressor. The probe wire must enter the refrigerated space.

Thermostat Wiring

The Electronic Temperature Control operates on low voltage (24VAC) which is supplied by the transformer in the compressor cabinet.

A 15' wiring harness is fitted to the thermostat. Use red, blue, and white to extend this harness if a longer length is needed. Attach the wires to the terminal strip using #8 ring terminals, matching corresponding wire color.

OPERATION

The temperature of the probe is displayed when the thermostat head is powered. When the compressor is running the #1 and the ↑D↓ on the thermostat display will be illuminated.

To change the set point temperature.
Hold the SET button until ST1 appears. The display shows ST1 and then the current set temperature of 35 degrees.   Use the ↑ and ↓ arrows to navigate to the desired temperature. Press SET to accept the new value. The display will return to standard view.

To change the degrees of differential.
Hold the Program button for more than 5 seconds. Use the ↑ and ↓ arrows to navigate to the P-1. Press SET to view the current setting of 5 degrees. Use the ↑ and ↓ arrows to navigate to the desired temperature.   Press SET to accept.   This will bring you back to P-1. To save and exit hold the program button for 5 seconds.

PROGRAMMING THE HEAD

If you need to change all parameters back to factory default values
Power down the controller. Press PRG button. Power up the controller holding the PRG button until the message "std" is shown on the display. Then follow directions below to change the programming.

Enter the password for programming the head.
Hold the program (PRG) and select (SET) buttons at the same time for 5 seconds. Use the ↑ and ↓ arrows to navigate to the #77. Then press SET to accept. You are now in programming mode. A red wrench will light up.

C-O=1 (This sets the mode of operation – to direct- cooling mode.)
Use the ↑ and ↓ arrows to navigate to C-O. Press SET to accept. Use the ↑ and ↓ arrows to navigate to the #1. Press SET to accept.
This will brig you back to C-O.

C-13=0 (To change type of probe to NTC.)
Use the ↑ and ↓ arrows to navigate to C-13. Press SET to accept. Use the
↑ and ↓ arrows to navigate to the #0 (NTC Probe). Press SET to accept.
This will bring you back to C-13.

C-18=1 (To change the head from Centigrade to Fahrenheit.)
Use the ↑ and ↓ arrows to navigate to the C-18.   Press SET to accept.
Use the ↑ and ↓ arrows to navigate to the #1 for Fahrenheit.   Press SET to
accept. This will bring you back to C-18.

P-1=5 (To set the degrees of differential.)
Use the ↑ and ↓ arrows to navigate to the P-1. Press SET to accept. Use
the ↑ and ↓ arrows to navigate to the #5.   Press SET to accept.
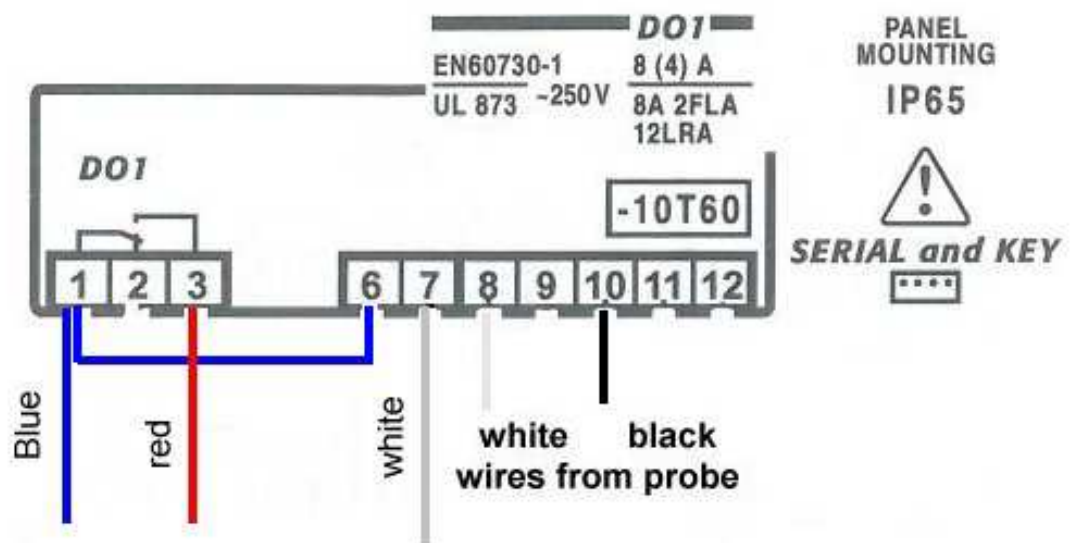This will bring you back to P-1.

C-52 =0 (To display the temperature of probe 1)
Use the ↑ and ↓ arrows to navigate to the c-52. Press SET to accept. Use
the ↑ and ↓ arrows to navigate to the #0. Press SET to accept.

To exit programming mode and save changes. Press the PRG button
and hold for 5 seconds. This will take you out of programming mode and
save all changes. The temperature will again be displayed.

ST1=35 (To set the set point temperature.)
Hold the SET button until ST1 appears. The display shows ST1 and then
the current set temperature. Use the ↑ and ↓ arrows to navigate to the
desired temperature. Press SET to accept the new value. The display will
return to standard view.

DO1

EN60730-1 / UL 873 ~250 V

8 (4) A
8A 2FLA
12LRA

PANEL MOUNTING

IP65

SERIAL and KEY

-10T60

DO1

| 1 | 2 | 3 | | 6 | 7 | 8 | 9 | 10 | 11 | 12 |

Blue

red

white

white

black

wires from probe

IR33 - BF Wiring