

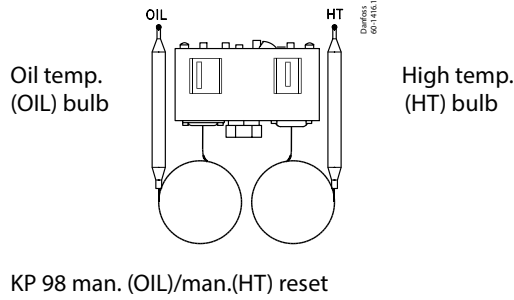
# Installation guide

## Thermostat

### Type KP 98 (cross ambient)

060R9749

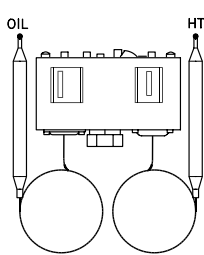
060R9749



**Note:**

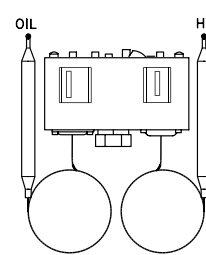
Code no. stamped on top of control.

**Ambient temperatures**



min. -40 °F (-40 °C)  
max. 150 °F ( 65 °C)  
(175 °F (80 °C) for max. 2 hours)

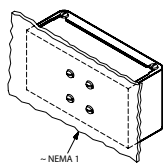
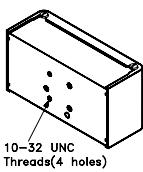
**Max. bulb temperatures**



max. 300 °F (150 °C)

max. 480 °F (250 °C)

**Enclosure**



max. 1/16 in (1.5mm)

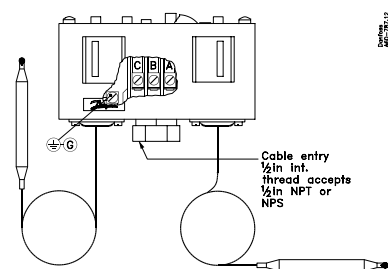
Danfoss 60-7986.12



**CAUTION:**

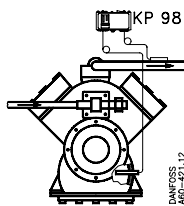
The mounting panel must be plane to avoid damage of control.

**Cable entry**



Danfoss 60-1418.10

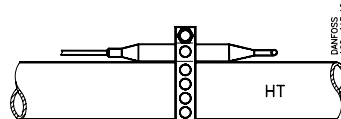
**Mounting**



DANFOSS 60-7441.12

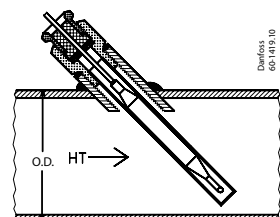
Mount OIL temperature bulb in compressor crankcase and the HT bulb on/in discharge line as shown.

*Small pipe size*



DANFOSS 60-7441.10

*Large pipe size  
OD > 3.5 in.*



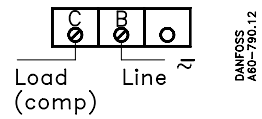
Danfoss 60-1418.10

### Wiring



**CAUTION:** disconnect power supply before wiring connections are made to avoid possible electrical shock or damage to equipment.

SPST  
Terminal block



All wiring should conform to the National Electrical Code and local regulations.



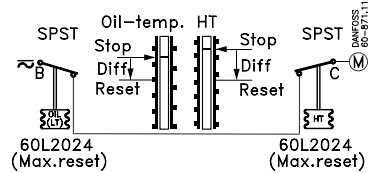
**CAUTION:** Use terminal screws furnished in the contact block. Use tightening torque 20 lb. in. (2.3 Nm). Use copper wire only.

#### Contact load ratings

120 V a.c.	16 FLA, 96 LRA
240 V a.c.	8 FLA, 48 LRA
240 V d.c.	12 W pilot duty

See label inside cover.

B-C open on oil temperature rise  
B-C open on discharge temperature rise  
A is not used



See label for current wiring inside cover.

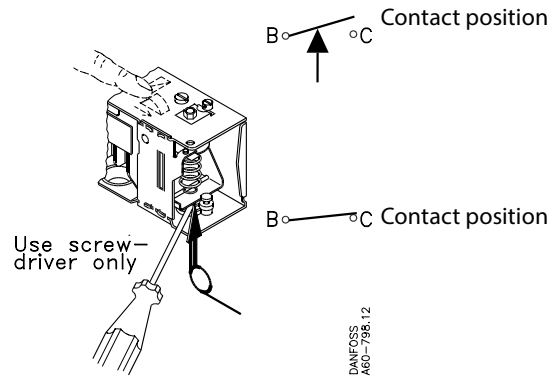
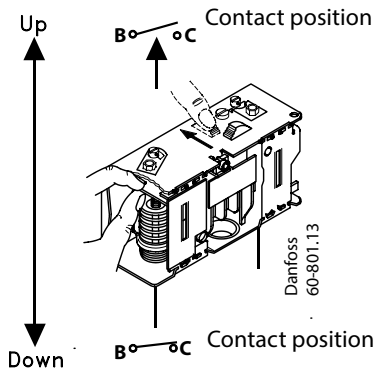
### Manual tripping

(Electrical contacts/wiring test)

OIL side

HT side

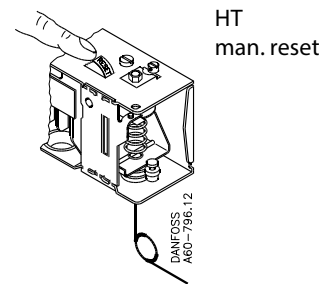
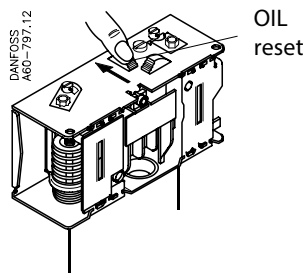
TRIP  
use FINGERS ONLY!  
(Do NOT use screwdriver)



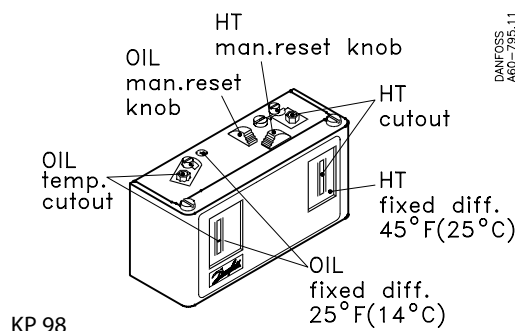
### Manual reset

To resume control operation after safety cut-out, push man. reset knob as indicated

**Note:**  
OIL/HT man. reset is possible only after oil or discharge temperature is equal to or has dropped below cut-in value.



### Adjustment spindle(s) location



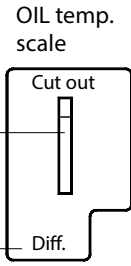
KP 98

**A. MAN./MAN. RESET**

## Setting

### Oil temp. (OIL) side setting

1. Adjust range spindle to desired CUT-OUT value (max. allowable oil temp.)
2. Differential (DIFF.) is fixed 25 °F (14 °C) Value printed on scale plate

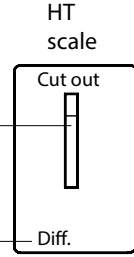


CUT OUT minus DIFFERENTIAL equals CUT-IN

Example:  
 CUT-OUT - DIFF. = CUT-IN  
 200 °F - 25 °F = 175 °F  
 (93 °C) (14 °C) (79 °C)

### High temp. (HT) side setting

1. Adjust range spindle to desired CUT-OUT value (max. allowable discharge temp.)
2. Differential (DIFF.) is fixed 45 °F (25 °C) Value printed on scale plate



CUT OUT minus DIFFERENTIAL equals CUT-IN

Example:  
 CUT-OUT - DIFF. = CUT-IN  
 325 °F - 45 °F = 280 °F  
 (163 °C) (25 °C) (138 °C)

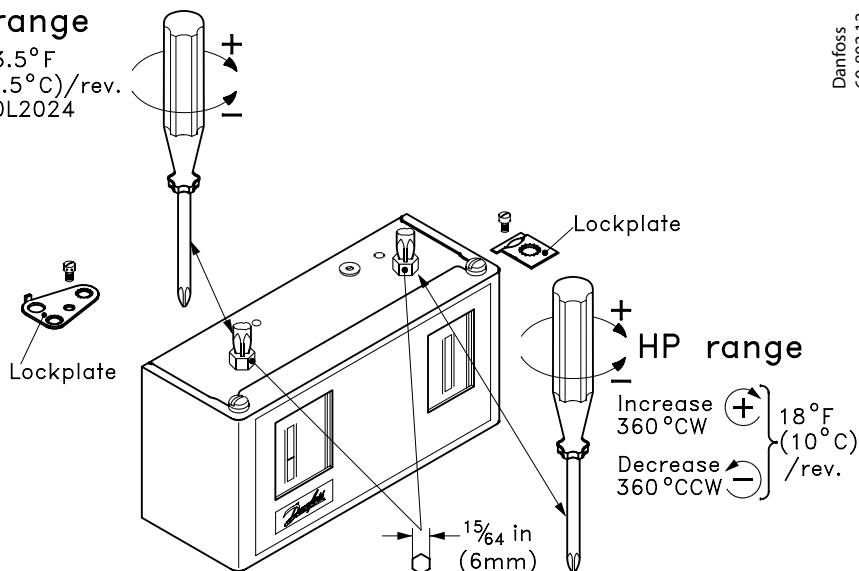
### Note:

CUT-OUT = compressor cut-out  
 CUT-IN = compressor cut-in

## Adjustment

### OIL temp.range

Increase  $\oplus$  13.5 °F (7.5 °C) / rev.  
 360 °CW } 60L2024  
 Decrease  $\ominus$  360 °CCW



Danfoss  
 60-802.12

### Note:

Remove lockplate before adjustment.  
 Replace lockplate after adjustment (if desired).