

# Instructions



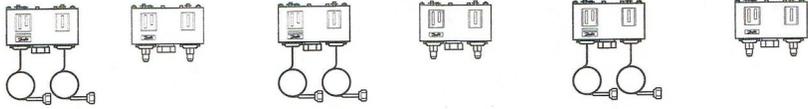
## Pressure Controls KP 15, KP 17W, KP 17B, KP 25

060R9747

### Types

The controls can be used with CFC, HFC, HCFC refrigerants.

**CAUTION:** Do not install these controls on ammonia systems

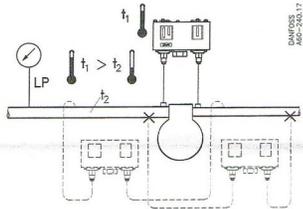


KP 15 man. (LP) / man. (HP) reset

KP 15, KP 17B auto. (LP) / man. (HP) reset

KP 15, KP 17W, KP 25 auto. (LP) / auto (HP) reset

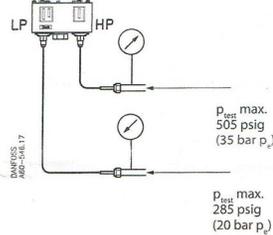
### Ambient temperatures



$t_1$  min. KP 15, KP 25:  $-40^{\circ}\text{F}$  ( $-40^{\circ}\text{C}$ )  
 KP 17W, KP 17B:  $-13^{\circ}\text{F}$  ( $-25^{\circ}\text{C}$ )  
 $t_1$  max.  $150^{\circ}\text{F}$  ( $65^{\circ}\text{C}$ )

**CAUTION:** Do not mount the control in a position where dirt, sediment, or oil will affect the operation of the control.

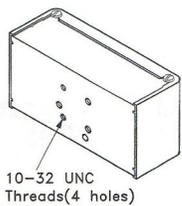
### Test pressure ( $p_{\text{TEST}}$ )



$p_{\text{TEST}}$  max. 505 psig (35 bar  $p_g$ )

$p_{\text{TEST}}$  max. 285 psig (20 bar  $p_g$ )

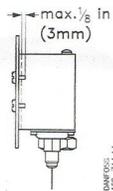
### Enclosure



10-32 UNC Threads(4 holes)



Drip proof IP33 (IEC 529)

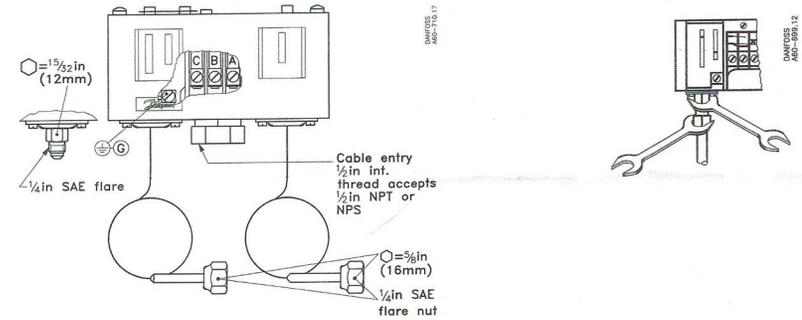


max.  $\frac{1}{8}$  in (3mm)

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



### Connections



### Wiring

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

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

### SPDT

Controls with low pressure (LP) signal

Controls with low pressure (LP) and high pressure (HP) signal

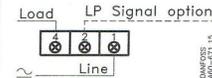
KP 15 and KP 17W. Only code nos.:  
 060-2024060-2027 060-2030  
 060-2026060-2029 060-2031  
 (stamped on top of control)

### Contact load ratings

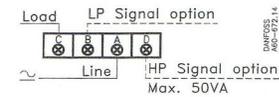
120 V a.c.	16 FLA, 96 LRA
240 V a.c.	8 FLA, 48 LRA
240 V d.c.	12 W pilot duty

See label inside cover

### Terminal block



### Terminal block



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

Low pressure (LP) side:  
 A-C close on LP rise  
 A-C open on LP drop

High pressure (HP) side:  
 A-C open on HP rise  
 A-C close on HP drop

LP signal option:  
 A-B close on LP drop

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

Low pressure (LP) side:  
 A-C close on LP rise  
 A-C open on LP drop

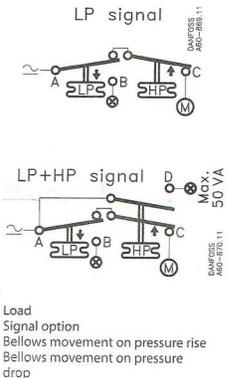
High pressure (HP) side:  
 A-C open on HP rise  
 A-C close on HP drop

LP signal option:  
 A-B close on LP drop

HP signal option:  
 A-D close on HP rise

See label for current wiring inside cover

### Function

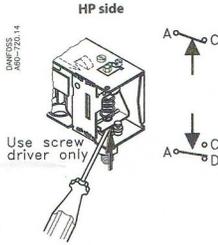
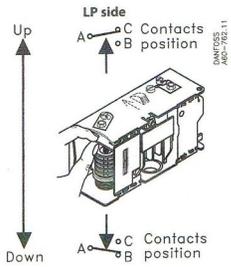


### Note!

- ⊗ = Load
- ⊙ = Signal option
- ⬆ = Bellows movement on pressure rise
- ⬇ = Bellows movement on pressure drop

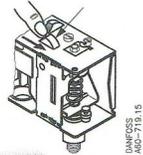
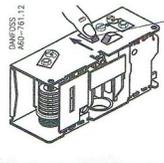
**Manual tripping**  
(Electrical contacts/wiring test)

TRIP  
use FINGERS  
ONLY!  
(Do NOT use  
screwdriver)



Note:  
On controls with LP and/or HP man. reset, push corresponding LP and/or HP man. reset knob during tripping.

**Manual tripping**

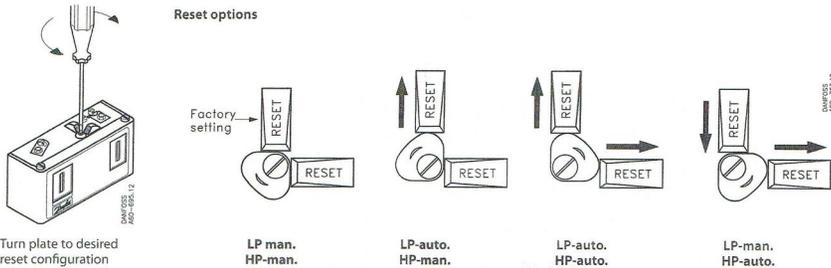


To resume control operation after safety cut-out, push man. reset knob as indicated.

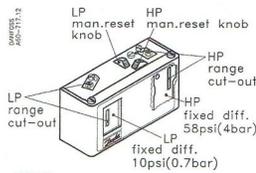
Note:  
LP man. reset is possible only after system pressure has risen above cut-in value.

HP man. reset is possible only after system pressure has dropped below cut-out value.

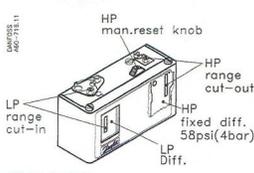
**Convertible reset**  
KP 15, code nos.: 060-2025, 060-2028



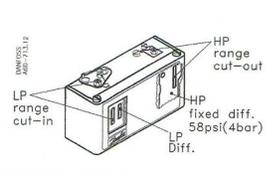
**Adjustment spindle(s) location**



**KP 15**  
A. MAN./MAN. RESET



**KP 15, KP 17B**  
B. AUTO/MAN. RESET



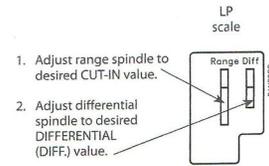
**KP 15, KP 17W, KP 25**  
C. AUTO/AUTO. RESET

**Setting**

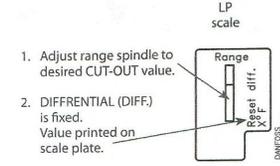
**Low pressure (LP) side setting**

KP 15, KP 17W, KP 17B and KP 25 with LP auto. reset only

KP 15 with LP man. reset only  
(KP 15 with convertible LP auto.) man. reset



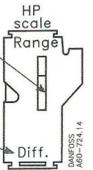
1. Adjust range spindle to desired CUT-IN value.
2. Adjust differential spindle to desired DIFFERENTIAL (DIFF.) value.



1. Adjust range spindle to desired CUT-OUT value.
2. DIFFERENTIAL (DIFF.) is fixed. Value printed on scale plate.

**High pressure (HP) side setting**

KP 15, KP 17W, KP 17B and KP 25 with HP auto. or man. reset



1. Adjust range spindle to desired CUT-OUT value.
2. DIFFERENTIAL (DIFF.) is fixed. Value printed on scale plate.

CUT-IN minus DIFFERENTIAL equals CUT-OUT

Example:  
CUT-IN - DIFF. = CUT-OUT  
30 psig - 10 psi = 20 psig  
(2.1 bar) (0.7 bar) (1.4 bar)

CUT-IN equals CUT-OUT plus DIFFERENTIAL

Example:  
CUT-OUT + DIFF. = CUT-IN  
12 psig + 10 psi = 22 psig  
(0.8 bar) (0.7 bar) (1.5 bar)

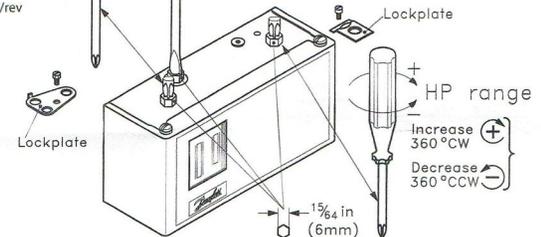
CUT-OUT minus DIFFERENTIAL equals CUT-IN

Example:  
CUT-OUT - DIFF. = CUT-IN  
203 psig - 58 psi = 145 psig  
(14 bar) (4 bar) (10 bar)

**Adjustment**

**LP range**  
Increase 360 °CW (+) KP 15: 10 psi (0.7 bar)/rev  
Decrease 360 °CCW (-) KP 25: 7 psi (0.5 bar)/rev

**LP diff.**  
Increase 360 °CCW (+) KP 15: 2 psi (0.15 bar)/rev  
Decrease 360 °CW (-) KP 25: 1.5 psi (0.1 bar)/rev



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