Instructions

060R9747

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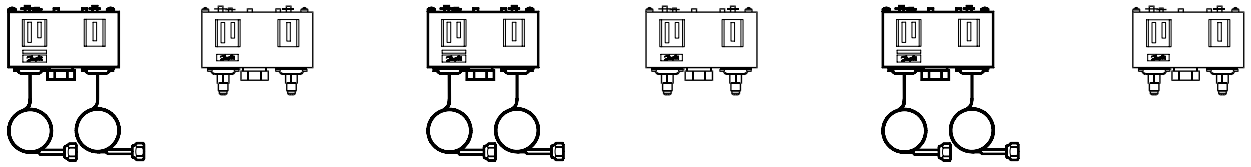
Pressure Controls
KP 15, KP 17W, KP 17B, KP 25

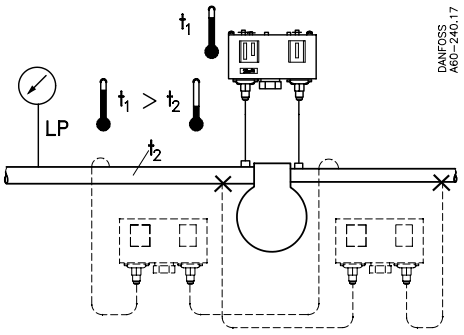
Types
The controls can be used with CFC, HFC, HCFC refrigerants.

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**

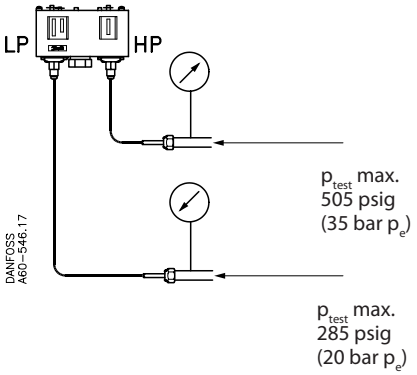
Ambient temperatures



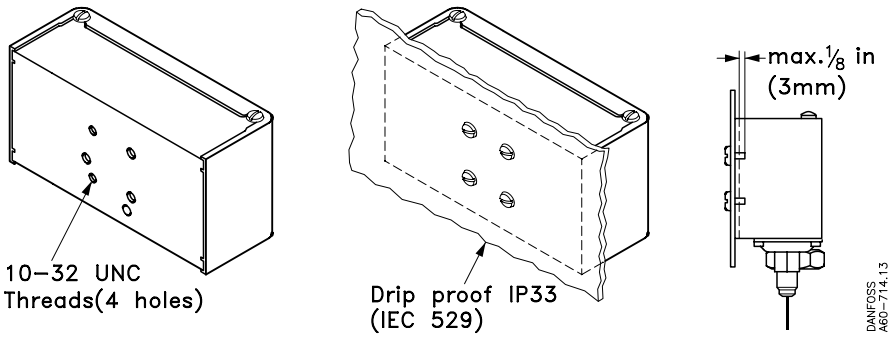
t_1 min.	KP 15, KP 25:	–40°F (–40°C)
	KP 17W, KP 17B:	–13°F (–25°C)
t_1 max.		150°F (65°C)

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

Test pressure (p_{TEST})

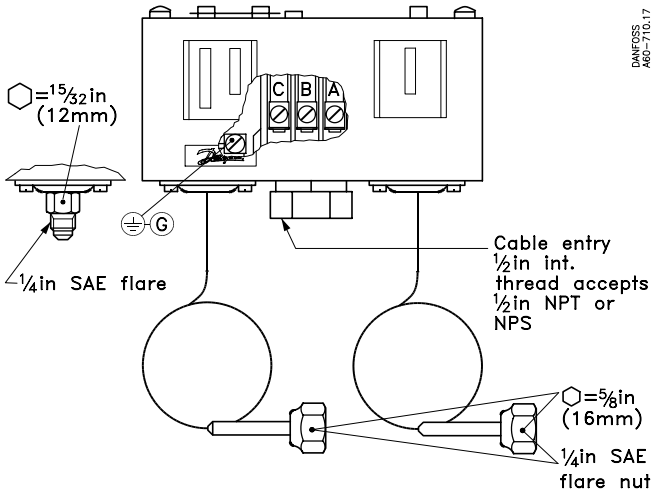


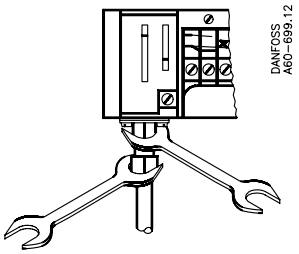
Enclosure



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

Connections





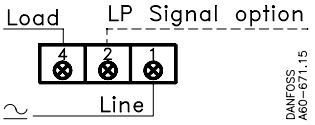
Wiring

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

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

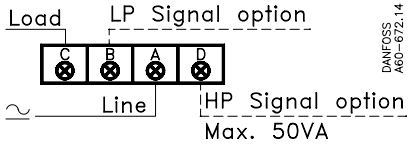
High pressure (HP) side.
A-C open on HP rise
A-C close on HP drop

LP signal option:
A-B close on LP drop

See label for current wiring inside cover

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)

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

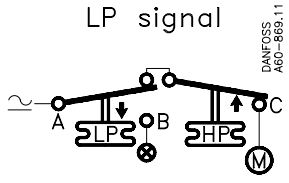
HP signal option:
A-D close on HP rise

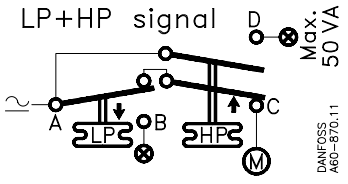
Contact load ratings

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

Function

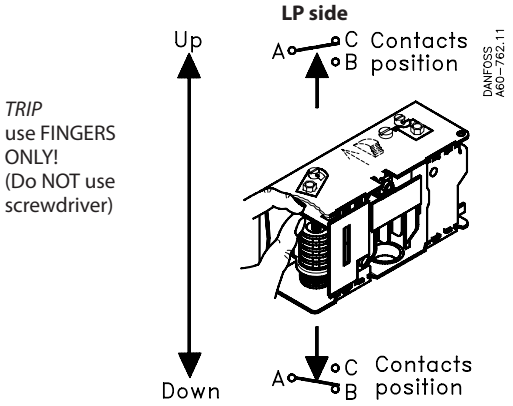


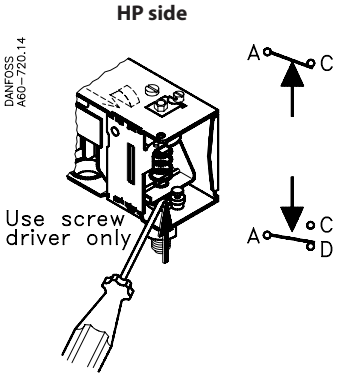


Note!
Ⓜ = Load
⊗ = Signal option
= Bellows movement on pressure rise
¬ = Bellows movement on pressure drop

Manual tripping

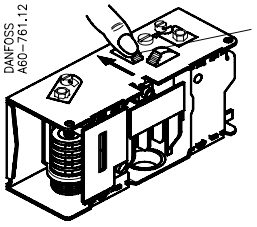
(Electrical contacts/wiring test)

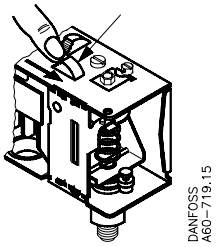




Note:
On controls with LP and/or HP man. reset, push corresponding LP and/or HP man. reset knob during tripping.

Manual tripping





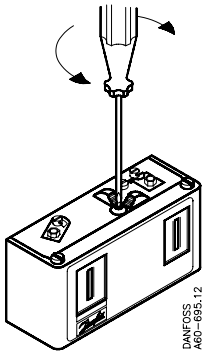
To resume control operation after safety cut-out, push man. reset knob as indicated.

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.

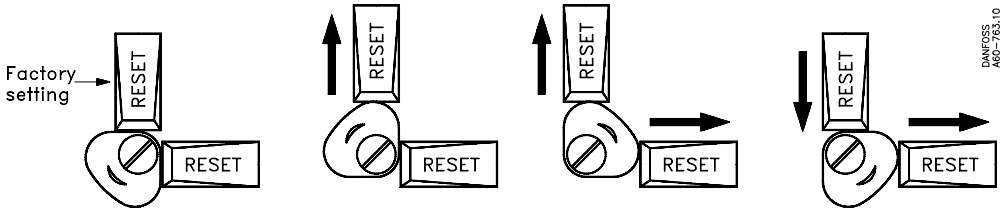
Convertible reset

KP 15, code nos.: 060-2025, 060-2028



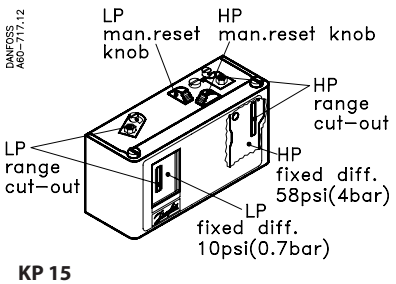
Turn plate to desired reset configuration

Reset options



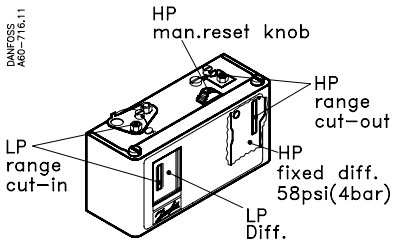
LP man. HP-man. | **LP-auto. HP-man.** | **LP-auto. HP-auto.** | **LP-man. HP-auto.**

Adjustment spindle(s) location



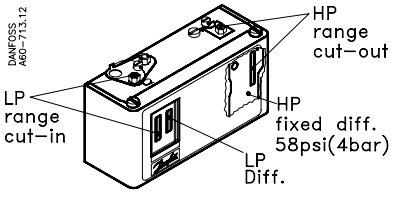
KP 15

A. MAN./MAN. RESET



KP 15, KP 17B

B. AUTO/MAN. RESET



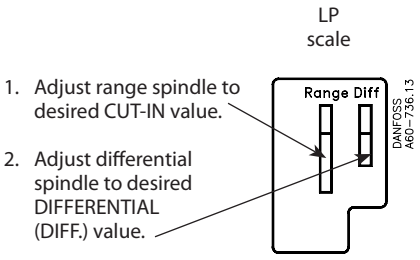
KP 15, KP 17W, KP 25

C. AUTO./AUTO. RESET

Setting

Low pressure (LP) side setting

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



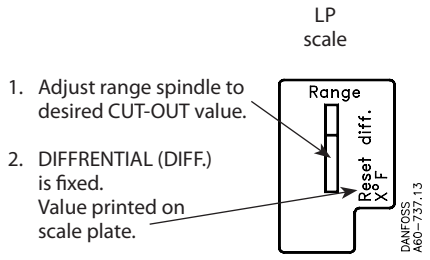
1. Adjust range spindle to desired CUT-IN value.
2. Adjust differential spindle to desired DIFFERENTIAL (DIFF.) value.

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)

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



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

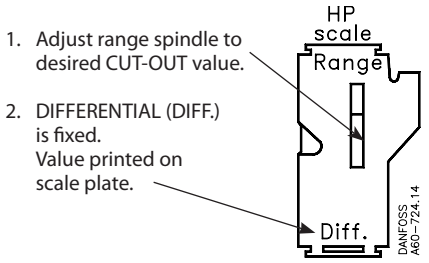
CUT-IN equals CUT-OUT plus DIFFERENTIAL

Example:

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

High pressure (HP) side setting

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



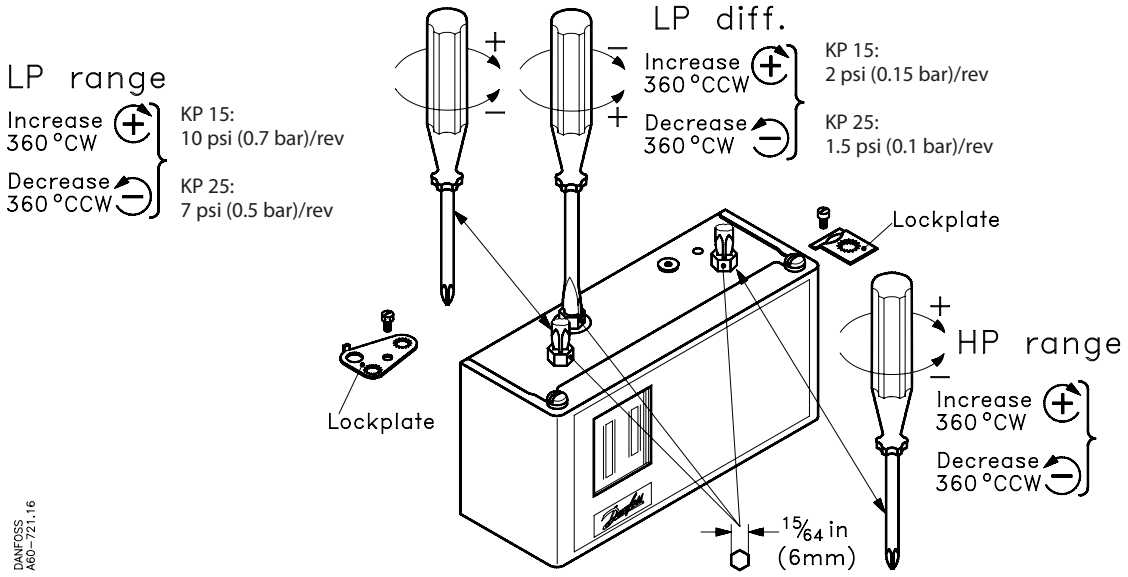
1. Adjust range spindle to desired CUT-OUT value.
2. DIFFERENTIAL (DIFF.) is fixed. Value printed on scale plate.

CUT-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



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