



**KP 15 Pressure
Switch and
Combustion
Controls**



Danfoss KP 15 Pressure Switch and Combustion Controls Installation Guide

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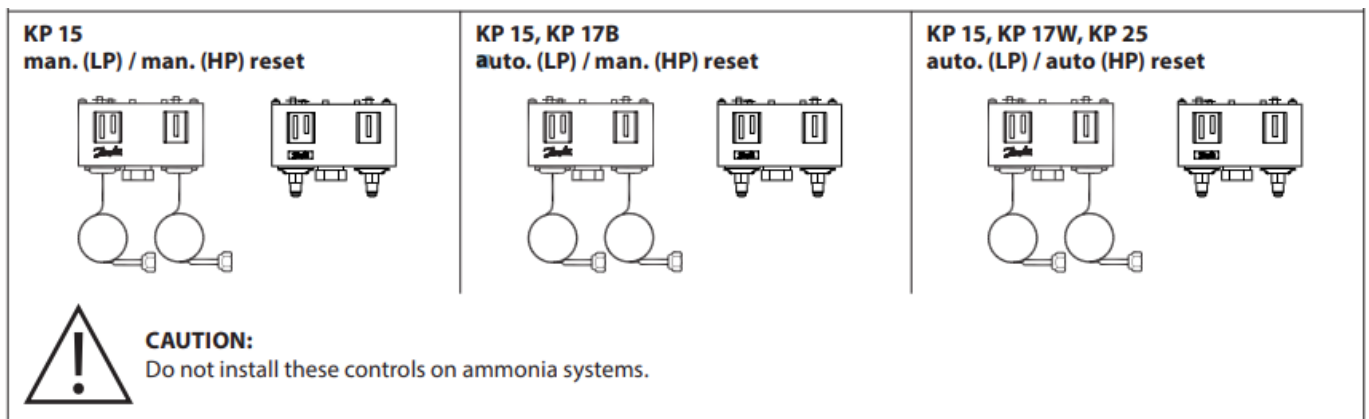
Danfoss KP 15 Pressure Switch and Combustion Controls



Refrigerants:

R22, R134a, R404A, R407A, R407C, R407F, R422B, R422D, R448A, R449A, R450A, R452A, R507A, R513A

For complete list of approved refrigerants, go to <http://products.danfoss.com/all-products/>



CAUTION:

Do not install these controls on ammonia systems.

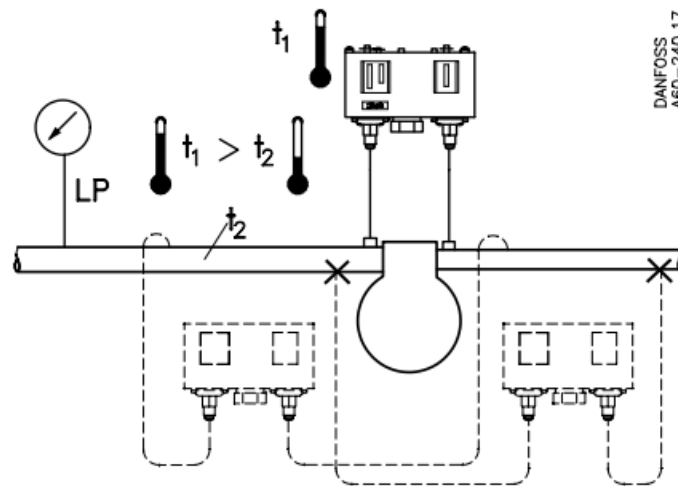
Ambient temperatures / Mounting requirements

t1 min.: -40 °F (-40 °C)

– 13 °F (-25 °C) (PED approved products)

t1 max.: 149 °F (65 °C)

t_1 min.: -40 °F (-40 °C)
 -13 °F (-25 °C) (PED approved products)
 t_1 max.: 149 °F (65 °C)



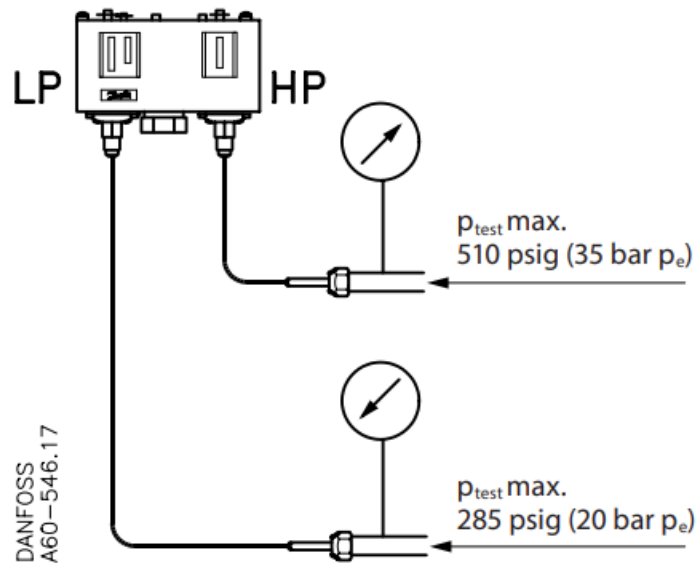
DANFOSS
A60-240.17



CAUTION:

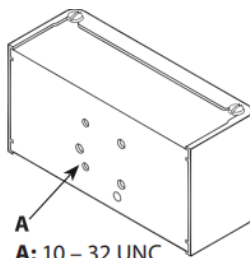
Do not mount the control in a position where dirt, sediment, or oil will affect the operation of the control.

Test pressure (Ptest)

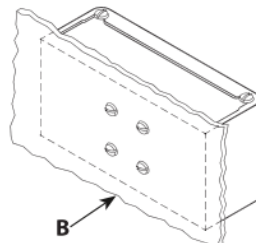


DANFOSS
A60-546.17

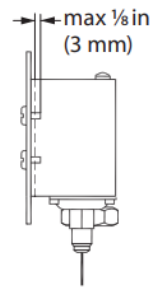
Enclosure



A: 10 – 32 UNC
Threads (4 holes)



B: Enclosure ~NEMA1



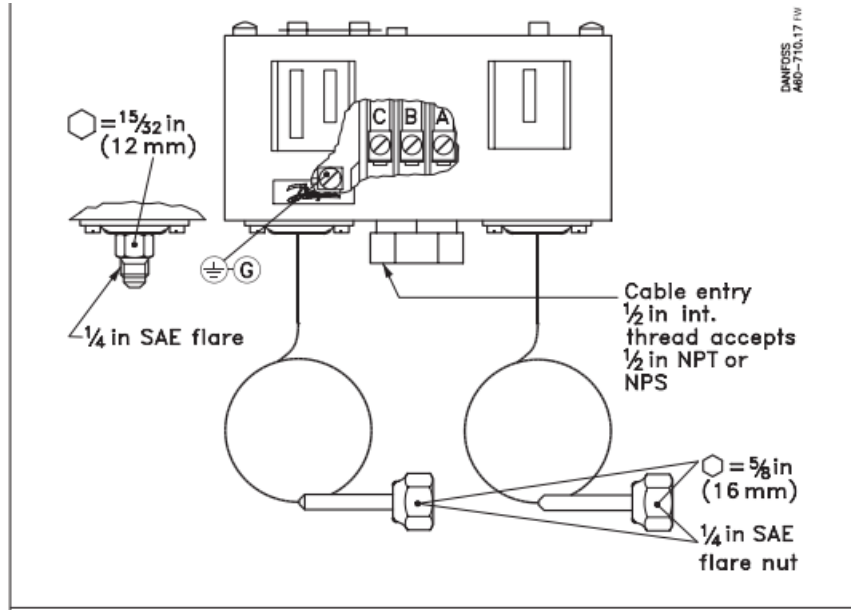
Danfoss
60-714, 141W



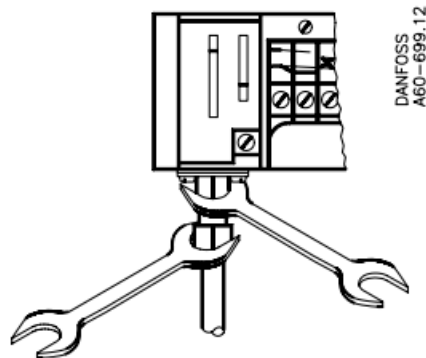
CAUTION:

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

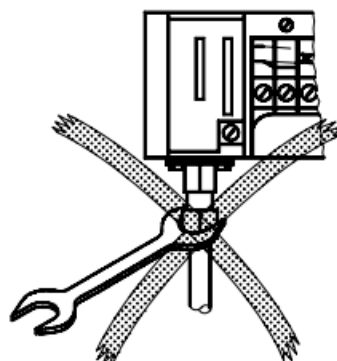
Connections



Assembly



**DANFOSS
A60-699, 12**



**DANFOSS
A60-468, 12**

CAUTION:

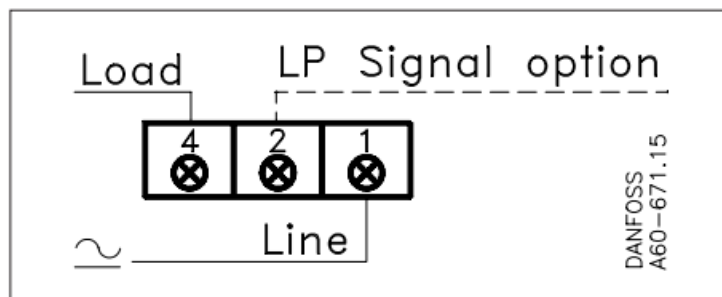
Disconnect power supply before wiring connections are made or service to avoid possible electrical shock or damage to equipment. Do never touch live parts with your fingers or with any tool.

Wiring

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:

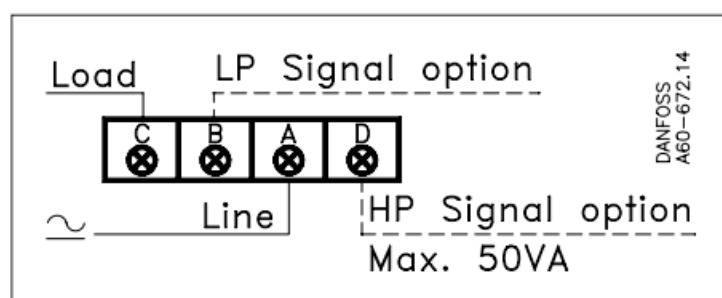
A-C close on LP rise
A-C open on LP drop

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)**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:

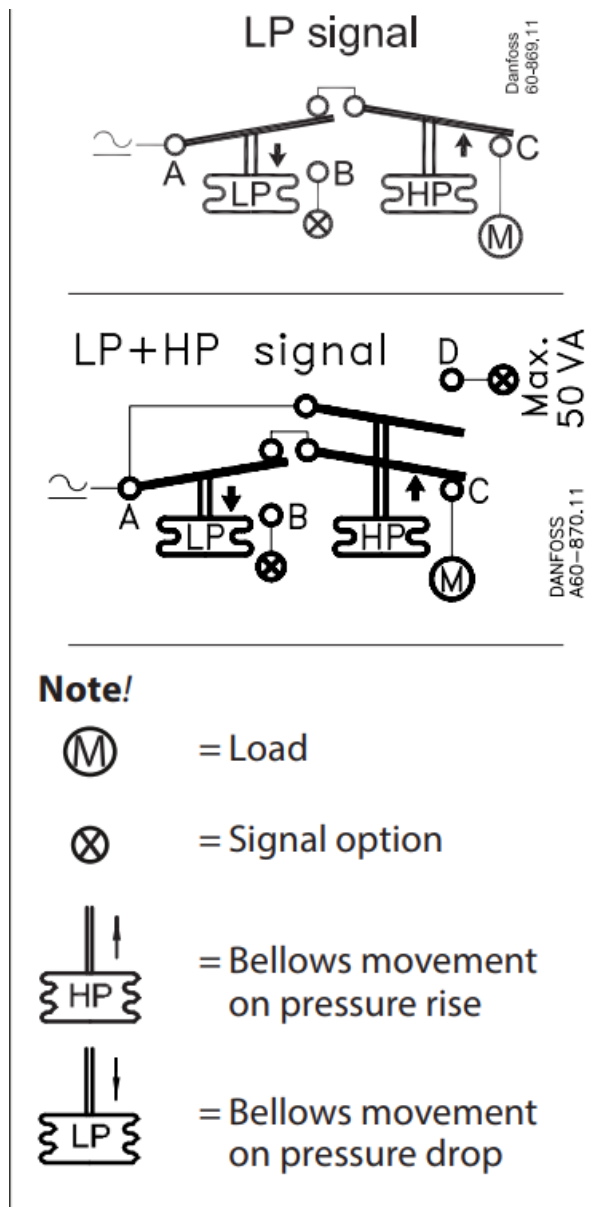
A-D close on HP rise

Contact load ratings

120 V AC	16 FLA, 96 LRA
240 V AC	8 FLA, 48 LRA
240 V DC	12 W pilot duty

See label inside cover

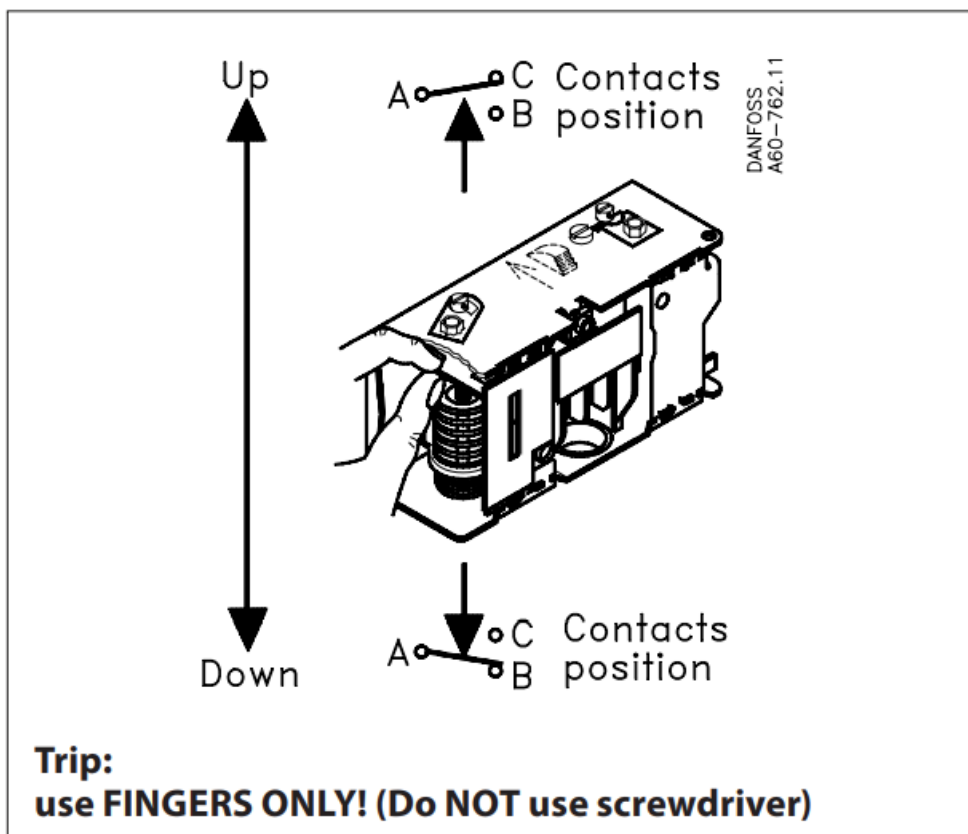
Function



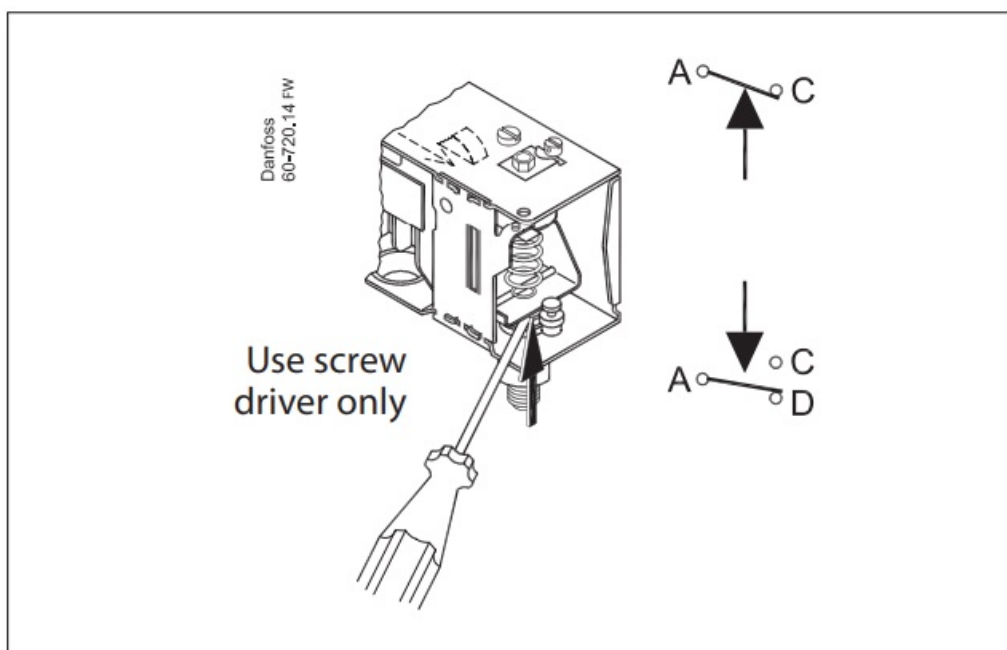
Manual tripping

(Electrical contacts/wiring test)

LP side



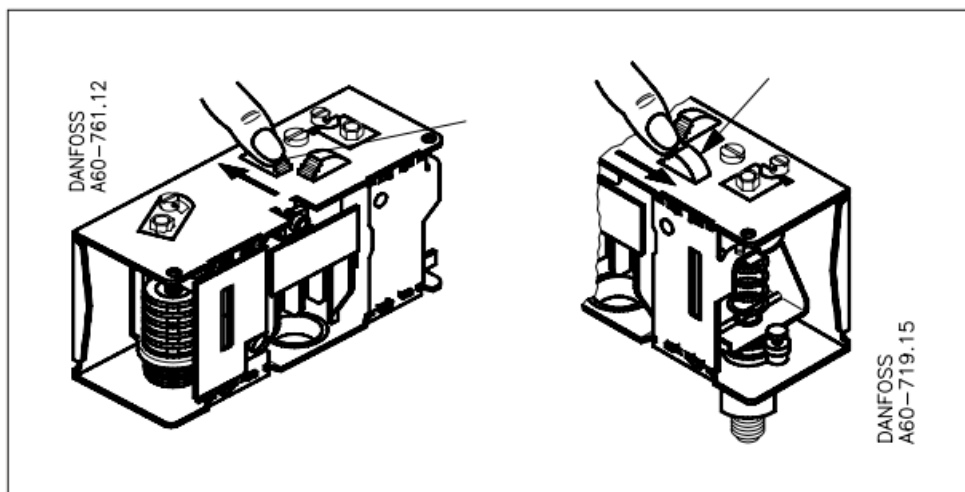
HP side



Note:

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

Manual reset



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

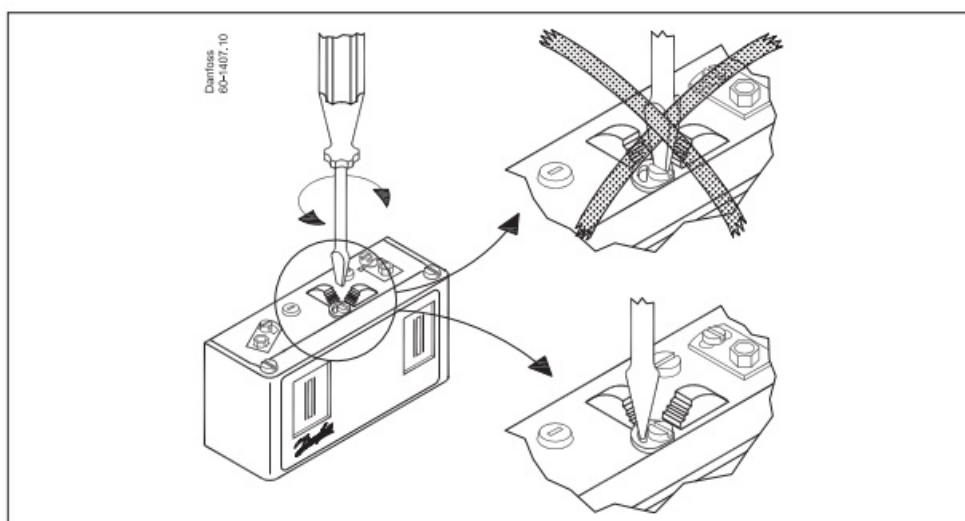
Note:

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

Insert a screwdriver into the slot on the lock disc and turn it to desired reset configuration. Do not turn the screw on the lock disc as it may damage the convertible reset mechanism.



Reset options

LP man.	LP auto.	LP auto.	LP man.
HP man.	HP man.	HP auto.	HP auto.

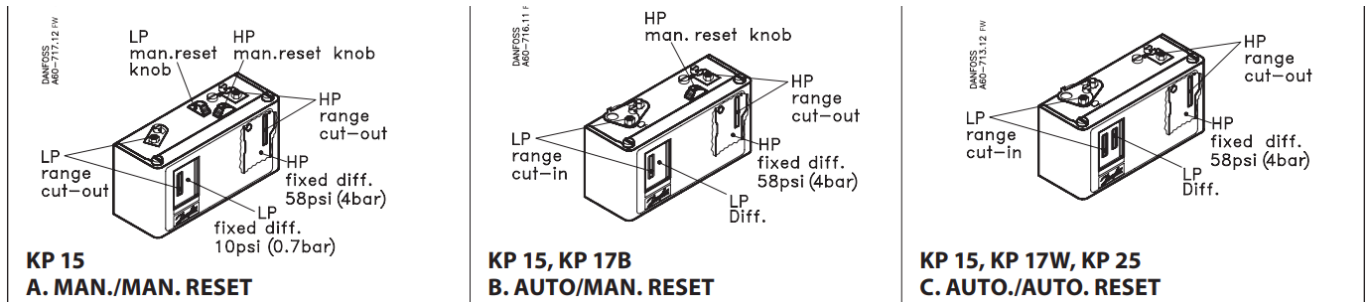
Note:

Do not select automatic reset if safety of the system requires manual reset.

Note:

Selected reset configuration may be protected against unauthorized actions applying a seal.

Adjustment spindle(s) location



Setting

Low pressure (LP) side setting

High pressure (HP) side 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 15A with LP man. reset only KP 15A with convertible LP auto. man. reset

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

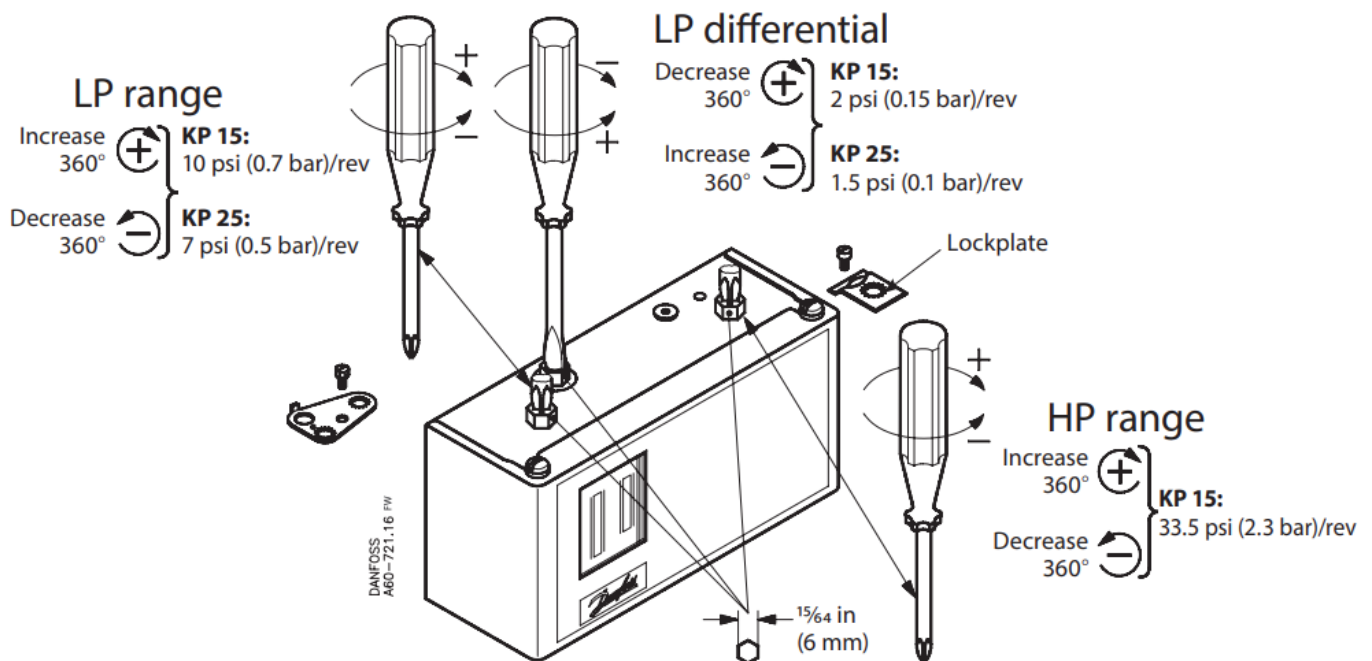
1. Adjust range spindle to desired CUT-OUT value.
2. DIFFERENTIAL (DIFF.) is fixed. Value printed on scale plate.

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)

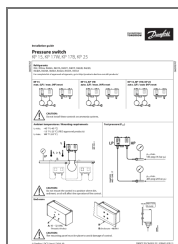
Adjustment



Note:

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

Documents / Resources



[Danfoss KP 15 Pressure Switch and Combustion Controls](#) [pdf] Installation Guide
 KP 15, KP 17W, KP 17B, KP 25, KP 15 Pressure Switch and Combustion Controls, KP 15, Pres
 sure Switch and Combustion Controls, Combustion Controls

References

- [User Manual](#)

[Manuals+](#). [Privacy Policy](#)

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