

Data Sheet

Pressure switch Type **CKB**

Pressure switch for R744 (CO₂)

Safety pressure switch CKB are compact disc type pressure switches with fixed set-points for long-standing use in all CO₂ refrigeration systems.

CKB safety pressure switch is used to protect compressor and the system against too high pressure.

CKB safety pressure switch provides excellent performance, ensuring minimal drift of setting and extremely stable operation over the entire lifetime. It provides automatic or manual reset limit protection.

The small size, lightness and high degree of protection means that it can be mounted directly on the refrigeration systems. The switch is available with different pressure settings to suit customer requirements.

ЮГОВ - Проект

інженерно-виробниче підприємство

Офіційний дистриб'ютор
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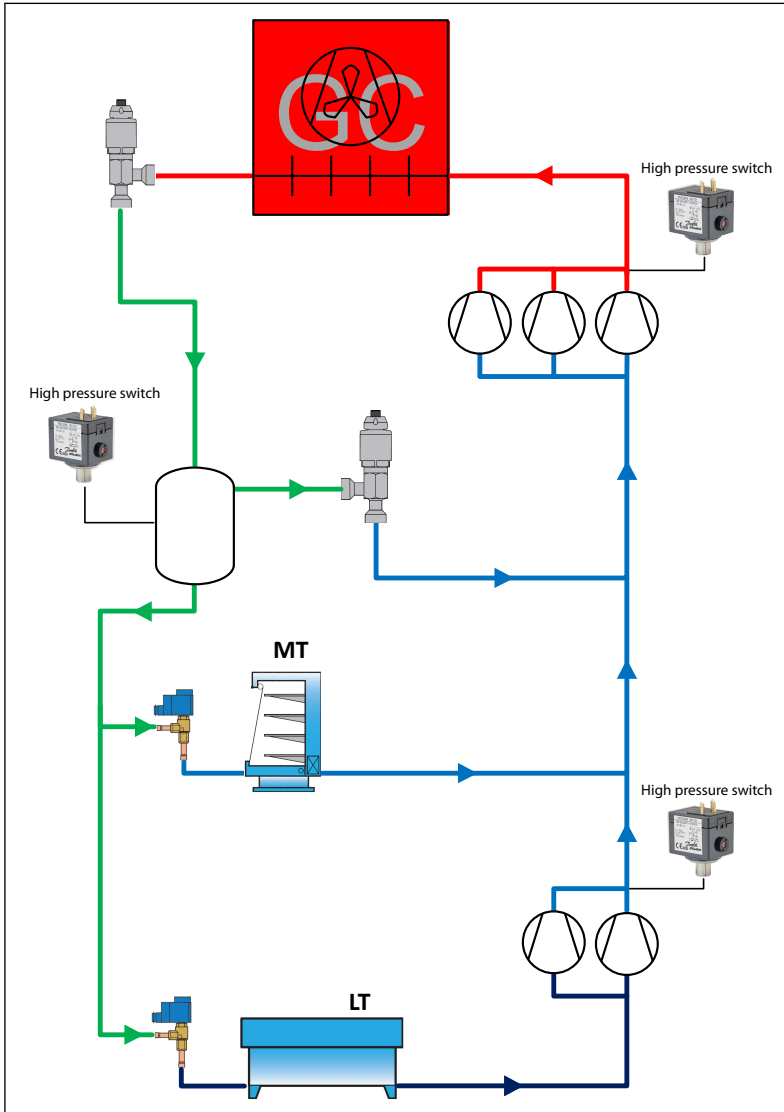
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Features

- Electromechanical design with diaphragm as sensing element
- Fixed pressure set points
- SPDT contact system
- Automatic (PSH) or manual reset (PZH / PZHH)
- Electrical connection with DIN plug
- Water-proof enclosure (IP65)
- For use as high pressure cut out
- For CO₂ subcritical and transcritical CO₂ systems up to 143 bar
- Compact design and easy to install
- PED 2014/68/EU Category IV according to EN 12263

Applications

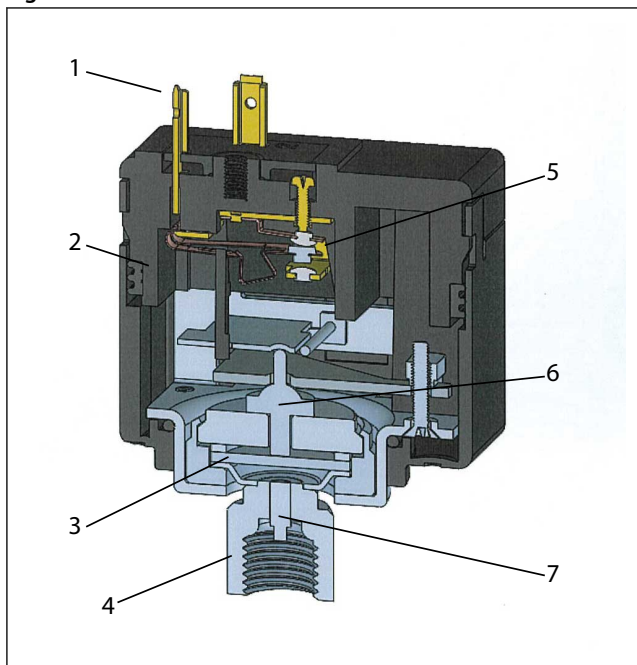
Figure 1: Safety pressure switch in subcritical and transcritical CO₂ systems



Product specification

Design and materials

Figure 2: CKB



1	Electrical connector
2	Water-proof casing
3	Diaphragm
4	Pressure connection (1/4 in female flare)
5	Micro-switch
6	Shaft
7	Depressure pin

As pressure is applied through the connection on to the diaphragm, the diaphragm is pushed up against the operation shaft.

When the operation shaft rises, it pushes up the contact plate in the micro-switch, so that contacts become connected or disconnected.

As the pressure in the connection decreases, the diaphragm returns to its original state, and the operation shaft lowers, causing the contact plate to return to its original position.

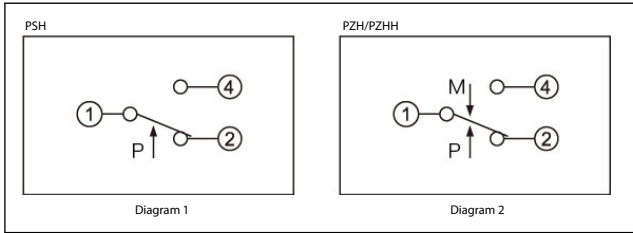
Technical data

Table 1: Type CKB

Type	CKB
Medium	R744 (CO ₂)
Range (fixed settings)	40 - 130 bar
Accuracy of setting	0/-8% (EN 12263)
Differential	10 bar (auto reset) / 25 bar (manual reset)
Contact function	SPDT
Electrical connections	DIN plug (to be ordered separately)
Contact load	Full Load: Cosφ= 0,75 1 to 6A 240V AC Inrush current: Maximum 36A 240V AC
Pressure connections	7/16"-20UNF female thread with Schrader opener
Maximum working pressure PS / MWP	143 bar
Media temperature	-40 to +150°C (do not freeze)
Ambient humidity	30% RH to 85% RH (do not condense)
Vibrations resistance	4G (at 20 - 250Hz)
Ambient temperature for storage, transport and using	-40 to +70°C
Enclosure	IP65, if used with DIN plug (EN175301-803-A (ISO 4400))

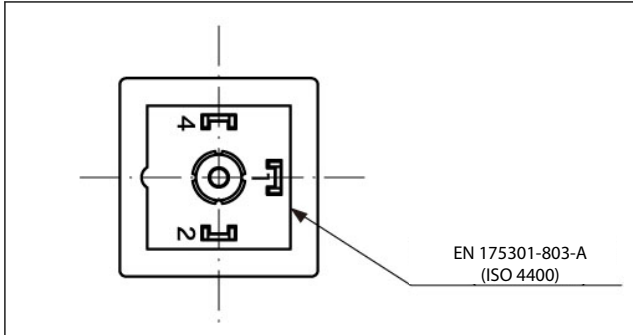
Electrical connections

Figure 3: Contact functions



P	Operating direction on press. increase at high press. side
M	Operating direction on manual reset

Figure 4: Wirings



Dimensions and weight

Figure 5: PSH-PZH-PZHH

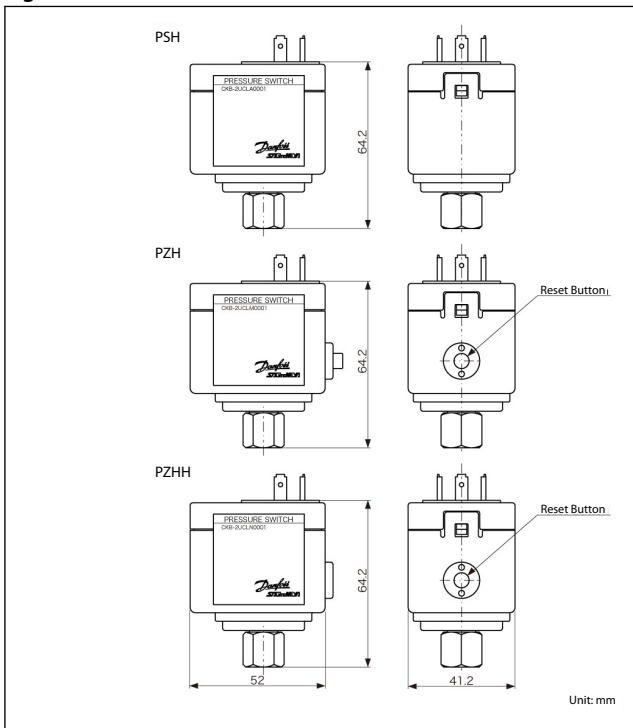
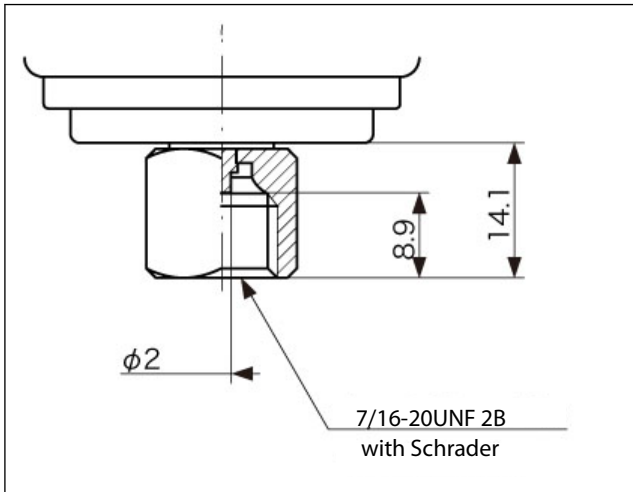


Figure 6: Pressure admission port (Details)



Ordering**Standard models**

Table 2: PSH-PZHH

Reset type		Set pressure [bar]	Code number
PSH	Automatic	40	061Z1001
PSH	Automatic	46	061Z1002
PSH	Automatic	48	061Z1003
PSH	Automatic	105	061Z1004
PSH	Automatic	108	061Z1005
PSH	Automatic	110	061Z1011
PZH	Manual	40	061Z2001
PZH	Manual	108	061Z2002
PZH	Manual	110	061Z2003
PZHH	Manual with tool	120	061Z3001
PZHH	Manual with tool	130	061Z3002

Certificates, declarations, and approvals

The list contains all certificates, declarations, and approvals for this product type. Individual code number may have some or all of these approvals, and certain local approvals may not appear on the list.

Some approvals may change over time. You can check the most current status at danfoss.com or contact your local Danfoss representative if you have any questions.

Table 3: Certificates, declarations, and approvals

Document name	Document type	Document topic	Approval authority
Declaration No.CE-PL-0071	Declaration of conformity	2014/68/EU & 2014/35/EU & RoHS	SAGINOMIYASEISAKUSHO,INC.

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