

#### C60VR40xxx

#### C60VRT40xxx

GAS PRESSURE SWITCH FOR VR400, VRB, V4730 AND V4734 COMBINATION GAS CONTROLS

#### **INSTRUCTION SHEET**



#### **APPLICATION**

The gas pressure switch C60VR(T)40xxx functions as a minimum inlet gas pressure supervision with a safe start interlock. In combination with VR400, VRB, V4730 or V4734 gas control an SPDT contact is operated as a part of a safe start check circuit. Burner will not be allowed to operate unless the gas inlet pressure is above the set point.

#### **DESCRIPTION**

The gas pressure switch C60VR(T)40xxx is designed to be fitted directly on the body of a VR400, VRB, V4730 or V4734 combination gas control by means of two mounting screws and an O-ring.

#### **SPECIFICATION**

#### Material

Diaphragm: NBR

Housing: PBT glass fiber reinforced

Bottom: AlSi 12 Contacts: AgNi **Dimensions** 

See fig. 2

**Ambient temperature** 

-15 ... 60 °C (+5 ... 140 °F).

Maximum test pressure

2 bar (29 psig), < 15 min.

Maximum operating pressure

See table 1.

**Terminals** 

Conform DIN 43650

**Electrical connection** 

AMP fast on 6.3 x 0.8 mm Din plug conform DIN 43650

**Enclosure** 

IP 00

**Accessories** 

Cable plug (conform DIN 43650): 45.900.429-050

Tabel 1 Models gas pressure switch C60VR(T)40xxx.

Type	Approved	Range mbar		Hysteresis		Pmax		Electrical rating	Switch	Contact Resistance
		mbar	Inch wc	mbar	Inch wc	mbar	Inch wc	resistive duty*	type	initial
C60VR40040	CE	5 - 40	2 - 16	1.5 2.5	0.6 - 1	600	8.5	24 250 Vac, 5(0.5)A	SPDT	<80mΩ
C60VRT40040	UL	5 - 40	2 - 16	1.5 2.5	0.6 - 1	600	8.5	24 250 Vac, 5(0.5)A	SPDT	<80mΩ
C60VR40110	CE	30 - 110	12 - 44	4 12	1.6 – 4.8	600	8.5	24 250 Vac, 5(0.5)A	SPDT	<80mΩ
C60VRT40110	UL	30 - 110	12 - 44	4 12	1.6 – 4.8	600	8.5	24 250 Vac, 5(0.5)A	SPDT	<80mΩ
C60VR40300	CE	100 - 300	40 – 12-	15 30	6 - 12	600	8.5	24 250 Vac, 5(0.5)A	SPDT	<80mΩ
C60VRT40300	UL	100 - 300	40 – 12-	15 30	6 - 12	600	8.5	24 250 Vac, 5(0.5)A	SPDT	<80mΩ

<sup>\*</sup> Values between brackets (..) valid for  $\cos \varphi = 0.6$ .

# INSTALLATION, ADJUSTMENTS AND FINAL CHECKOUT

#### **A** WARNING

Improper installation, adjustment, modification, operation or maintenance could lead to injury or damage. All adjustments must be made by a qualified technician.

#### **IMPORTANT**

Be sure the product is suitable for your application, otherwise consult Honeywell application engineers. Installer must be a trained experienced service man Turn off gas supply before starting installation. Disconnect power supply to prevent electrical shock and/or equipment damage. Do not turn sealed adjustment screw. Adjustments should be made by qualified persons only.

#### Mounting (See fig. 3., 4., 5. and 6.)

- Mounting position arbitrary, but preferably with horizontal or vertical diaphragm – with clear view to the scale disk.
- The housing must not touch its surrounding walls minimum distance 25 mm (1 inch).
- Remove concerning pressure tap plug from the gas valve body.
- Position the gas pressure switch with O-ring.
- Place the mounting screws and tighten with a torque of 3.5 Nm.

#### **CAUTION**

Do not turn mounting screw more tightly than specified above because of possible damage.



## **A** WARNING

Wiring must comply with local codes and the National electrical codes. To prevent the possibility of property damage turn off electrical power, depressurize installation, vent fluid to a safe area before servicing. Avoid locations where terminals can be exposed to splashes of water.

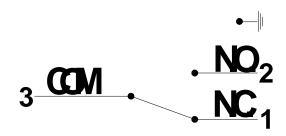


Figure 1 Terminal Connection.

#### Lead colors

- 1 = normally closed (NC) = bleu
- 2 = normally open (NO) = red
- 3 = common (COM) = black
- 4 = ground = yellow/green

## ADJUSTING THE REQUIRED SWITCHING PRESSURE

The set switching pressure is obtained: with ambient temperature 0 °C to 60 °C (32 °F to 140 °F) with increasing pressure.

- With vertical diaphragm: No deviation from the set pressure.
- With horizontal diaphragm (male connection side upside): the switching pressure is approximately -0.2 mbar (-0.08 inch wc) less than reading.
- With horizontal diaphragm (male connection side downside): the switching pressure is approximately +0.2 mbar (+0.08 inch wc) higher than reading.

#### Adjustment

- Remove cover.
- Turn adjustment knob to the appropriate pressure setting.
- Mount cover.

#### Checkout

Before leaving, set appliance in operation and observe through a complete cycle to ensure that burner system components function correctly.

## **A** WARNING

Tightness test after installation

- Spray all pipe connections and gaskets with a good quality gas leak detection spray.
- Start the appliance and check for bubbles. If a leak is found in a pipe connection, remake the joint. A gasket leak can usually be stopped by tightening the mounting screws, otherwise, replace the gas valve.

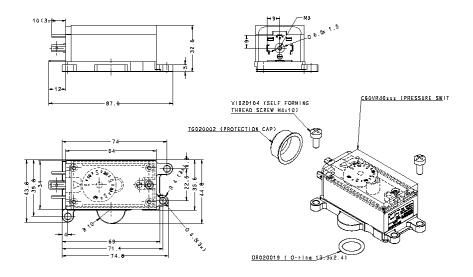


Figure 2 Dimensions C60VR(T)xxx

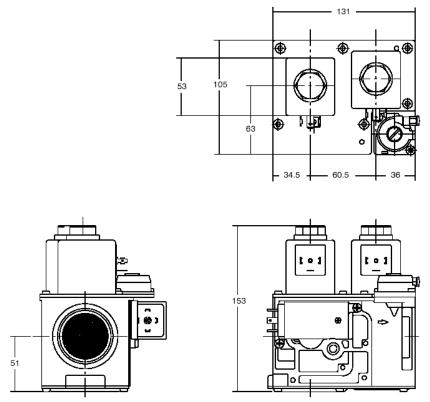


Figure 3 VRB15/VRB20/VRB25 series with gas pressure switch.

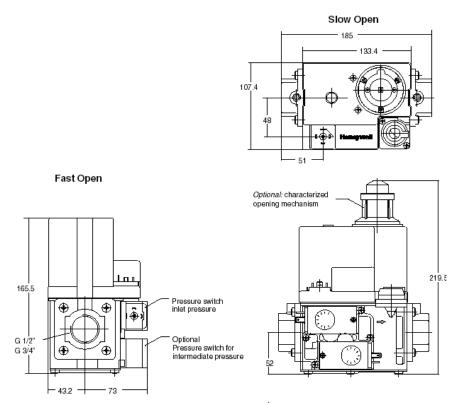


Figure 4 VR415/VR420, VR815/VR820 and V4730 (1/2" and 3/4") series with gas pressure switch.

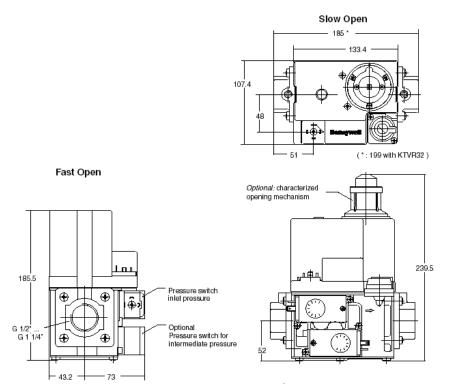


Figure 5 VR425/VR432, VR825/VR832 and V4730 (1" and  $1^{1}/_{4}$ ") series with gas pressure switch.

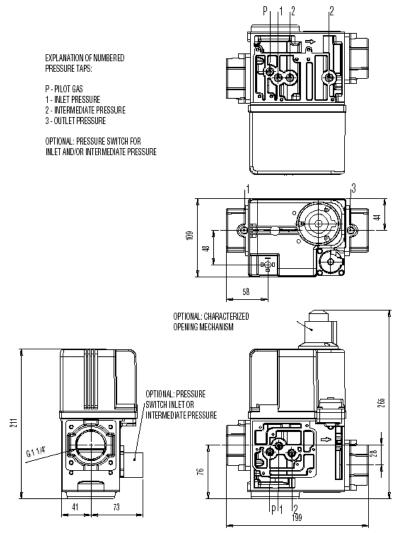


Figure 6 VR434, VR834 and V4734 series with gas pressure switch





### EU – Konformitätserklärung EU Declaration of Conformity

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Gültig ab 21. April 2018, valid from 21 April 2018

**Produkt** Product

Gas-Druckwächter Pressure Switches for gas

Typ, Ausführung

Type, Model

DG..15 C, .17 VC, .30 VC, ..35 C, ..40 VC, ..45 VC, ..60 VC, ..110C ..110 VC, .150 VC, .250 C, .300 VC, .360 C, ... 500 VC (Kromschröder)

C60VR40..040, ..110, ...300; 45900438...(Honeywell)

Markenname Branding

krom schroder oder or

Produkt-ID-Nummer

Product ID number

CE-0085AQ0753 (EU) 2016/426

**EU-Rechtsvorschriften** 

EU Acts

2014/30/EU 2014/35/EU

**GAR EMC** LVD

Normen

EN 13611:2015+AC:2016 FN 1854:2010

Standards

EU-Baumusterprüfung

EU-Type Examination

(EU) 2016/426 Annex III paragraph 1 Deutscher Verein des Gas- und Wasserfaches e.V. (DVGW),

Notified Body 0085

Überwachungsverfahren

Surveillance Procedure

(EU) 2016/426 Annex III paragraph 3

Kiwa Nederland B.V. Notified Body 0063

#### Wir erklären als Hersteller:

Die entsprechend gekennzeichneten Produkte erfüllen die Anforderungen der aufgeführten Richtlinien, Verordnungen und Normen. Sie stimmen mit dem geprüften Baumuster überein. Die Herstellung unterliegt dem genannten Überwachungsverfahren.

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#### In our capacity as manufacturer, we hereby declare:

Products labelled accordingly meet the requirements of the listed directives, regulations and standards. They correspond to the tested type samples. The production is subject to the stated surveillance procedure. This products comply with the substance restrictions of RoHS II, but they are not in the scope of the directive RoHS II (2011/65/EU). The corresponding operating instructions are included with the product or can be downloaded from http://docuthek.kromschroeder.com.

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