



terrasSchwank+

Patio gas-infrared-heater

- terrasSchwank+ 4 (manual control)
- terrasSchwank+ 4A (single-stage automatic control)
- terrasSchwank+ 7/2A (two-stage automatic control)



*terrasSchwank+ 7/2A
with housing*

Technical Manual NL (English)



0085BR0505



Terrasheater.nl
de terrasverwarming experts

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General

The set-up and operation of this infrared gas heater complies with the standards and safety regulations valid in Europe.

Please read these technical instructions carefully before using this device. Consideration of the stated instructions and pre-set requirements is a pre-condition for our warranty and is necessary for proper installation and trouble-free operation.

The patio heater terrasSchwank+ is exclusively designed for heating outdoor areas or well ventilated rooms (at least 1/4 of the surrounding surface is open). An operation which is different or goes beyond this, is not considered as the intended operation. For any possible damage resulting from this, Schwank will not be liable. Any risk resulting from this will be borne by the user alone.

Safety instructions

This device has been designed by recognized safety rules. However, in case of improper operation, dangers may arise for the user or for third parties or damage may arise to the device and other properties.

In order to avoid this, it is important that you carefully read and follow the following safety instructions.

General safety instructions

- Use only the device as intended and in a technical perfect condition.
- Ensure that all persons who operate, fit, install, commission, service or repair this device have read this Technical Manual. Keep the Technical Manual at the same place of operation.
- Consider all generally valid legal and other mandatory rules related to accident prevention.
- Don't make any alterations, additions or conversions of the device without the express approval of Schwank GmbH.
- All spare parts must comply with the technical requirements. Therefore apply only original spare parts delivered by Schwank GmbH.

Safety Instructions on electrical fittings

- Risk of electrical shock!
You can be fatally be injured by electrical shocks. Any working on electrical fittings may be only done by an electrical specialist or by trained persons under the guidance and supervision of an electrical specialist in accordance with the rules of electrical engineering.
- Check the electrical fittings regularly. Damaged cables etc. must be replaced immediately.
- When working on the electrical fittings, the device must be set to a zero potential. Ensure that the device cannot be accidentally switch-on during the working.

Safety by handling the device

Assembly, installation, commissioning, repair and maintenance working may only be carried out by competent persons for these purposes. If you have questions on this, please contact the after-sales service of SCHWANK GmbH Germany
Tel.: +49 (0) 221 7176 220.

- We recommend that these installation guidelines have to be followed together with national rules in force, any local byelaws and the current IEE wiring regulation. This affects specially:

Gas installation
Heater installation
Electrical installation
Ventilation installation.

Notwithstanding their limited scope, the appliance must be installed by a competent person in accordance with the relevant provisions of the relevant gas safety regulations. Full compliance with all relevant regulations, including amendments, in force at the time of installation is a pre-requisite of our warranty.

- Fire risk !
Observe the safety distances to combustibles (see page 4 and 5).
- Ensure in assembly and mounting that the ignition part is easy to access.
- Lay the gas lines and electric cables so that they cannot be heated by the rising waste gases or by direct thermal radiation of the heater. Use heat resistant cables near the heater.

Mounting and Commissioning

- This heater can be mounted on a rain-protected wall or under a roof. For outdoor installation please install additionally the housing (accessory).
- Start mounting by fixing the bracket of the heater on the wall. Use the metal links between bracket and reflector. Consider the safety distances to combustibles to the top and to both sides.
- In that case you want to install the housing (accessory), then please fix first the second bracket for the housing at the wall (the vertical distance to the heater bracket is 123 mm).
- Now mount the heater by two metric screws / washers / nuts M8 at the bracket link and by fixing the screws adjust the radiant angle of the heater (30°– 60°).
- For gas supply connect the flexible hose to the gas valve.
- For electrical supply of the automatic heaters 4A and 7/2A connect the line 230 V, 50 Hz to the control unit. For the 7/2A connect additionally the second electrical supply cable to the solenoid.

The ionisation and ignition cable are already connected.

- Check the gas inlet pressure:
 - Natural gas L: 25 mbar for Type 4
 - Natural gas L: 22 mbar for Type 4A and 7/2A
 - Propane: 50 mbar.

In that case you have a higher line pressure then apply a governor (accessory). Ensure that all gas connections are tight.

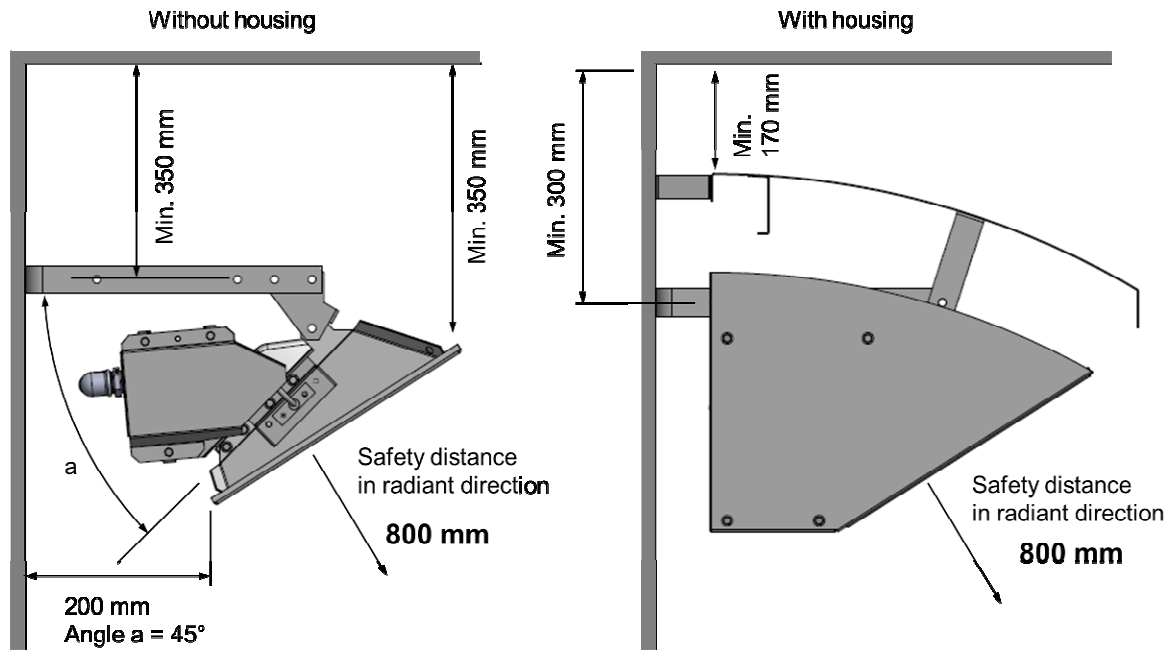
- Now start the heater and check all functions.

Safety distances to combustibles

terrasSchwank+ 4 und 4A

The heater can be angled (by two screws, washers and nuts) at the wall bracket.

Permissible range of angling: min 30° – max 60° (between burner and horizontal)



Max. temperatures of ceilings or walls: 85°C – with air flow min. 0,25 m/s

Safety distance to the side: 250 mm (measured from outer edge of reflector)



The noted safety distances on top of the heater are only valid for the installation of heater and housing as shown.

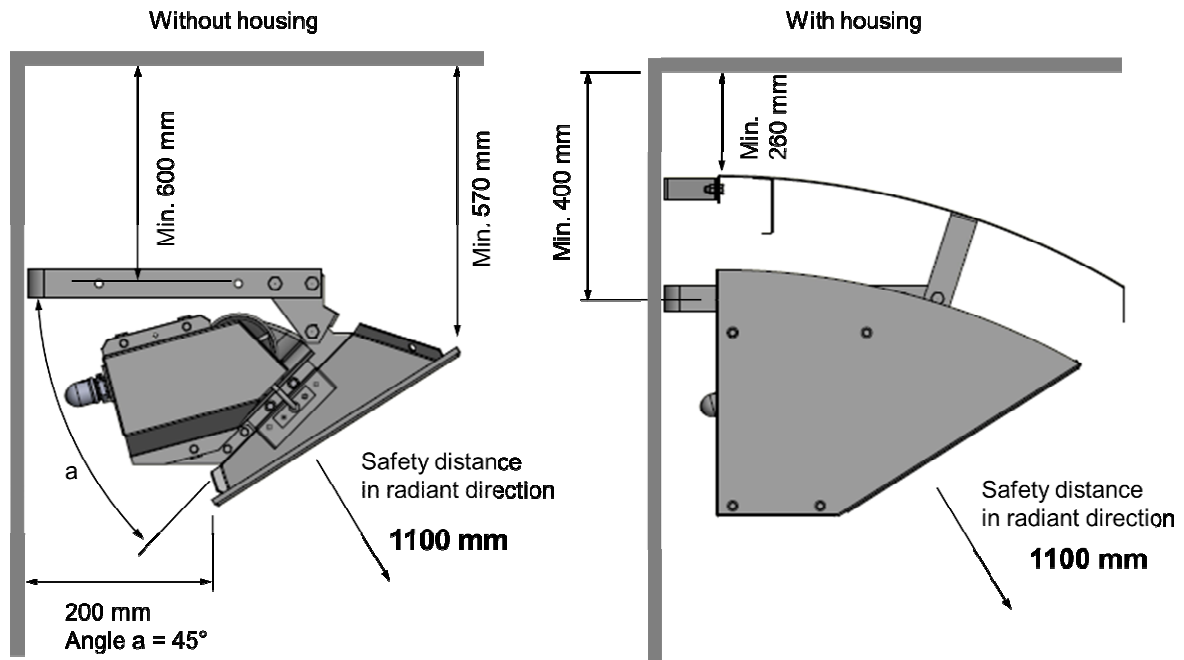
Minimum hanging height and angle

Range of angling (a)	30 – 60°
terrasSchwank 4 and 4A	2100 mm

terrasSchwank+ 7/2A

The heater can be angled (by two screws, washers and nuts) at the wall bracket.

Permissible range of angling: min 30° – max 60° (between burner and horizontal)



Max. temperatures of ceilings or walls: 85°C – with air flow min. 0,25 m/s

Safety distance to the side: 250 mm (measured from outer edge of reflector)



The noted safety distances on top of the heater are only valid for the installation of heater and housing as shown.

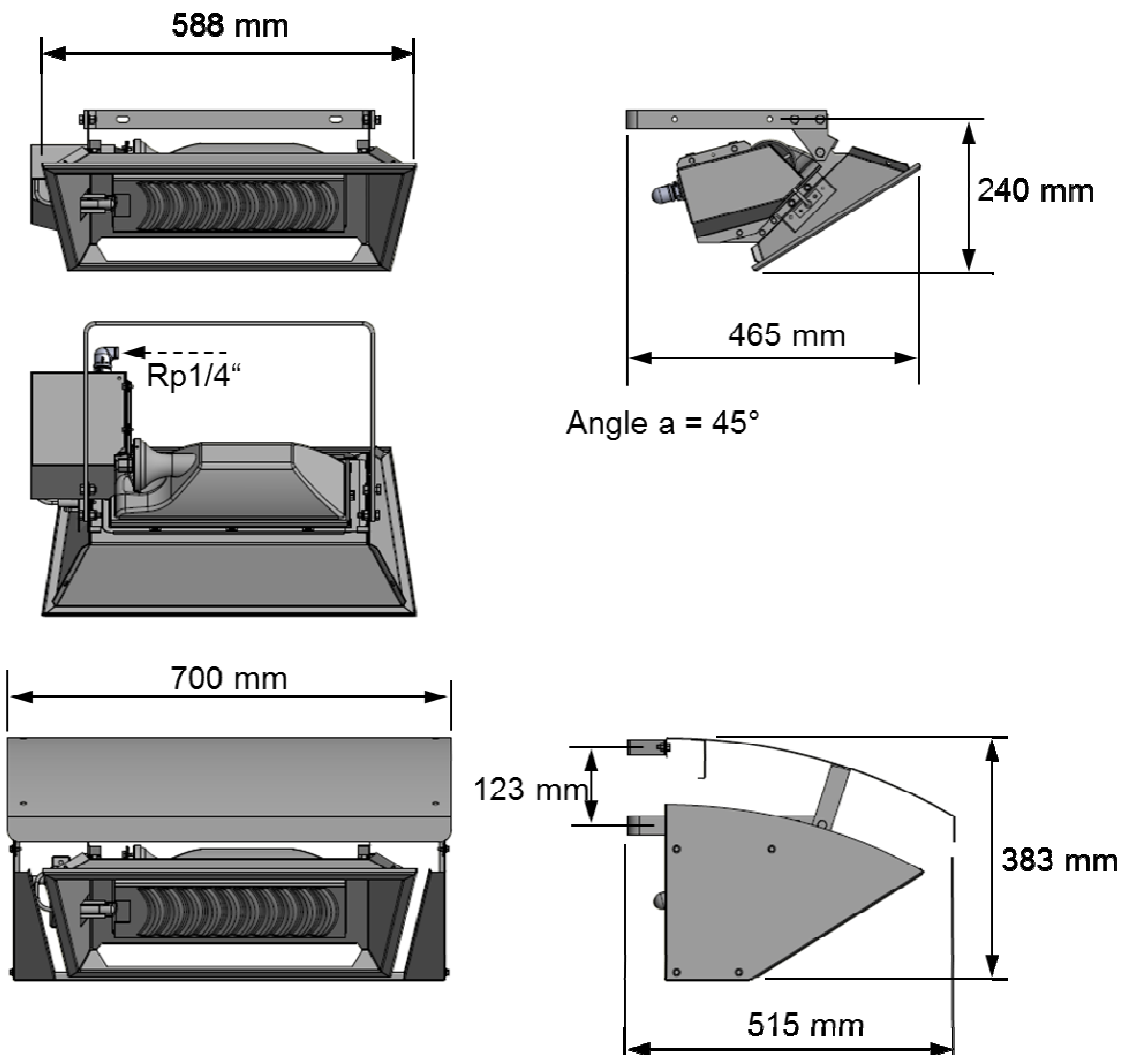
Minimum hanging height and angle

Range of angling (a)	30 – 60°
terrasSchwank 7/2A	2500 mm

Technical data and dimensions

terrasSchwank+ 4

Gas connection:	Burner Rp 1/4" (inside), flexible hose Rp 1/2" (inside)
Gas / nominal input load	Natural gas L (G25) / 3,9 kW / 25 mbar / 0,35 m ³ /h
/ inlet pressure:	Propane (G31) / 3,5 kW / 50 mbar / 0,28 kg/h
/ consumption	
Weight without housing:	3,2 kg
Weight with housing:	8,9 kg
Burner:	8/16 (with ceramic tile 14/4 EF)



Delivery scope:

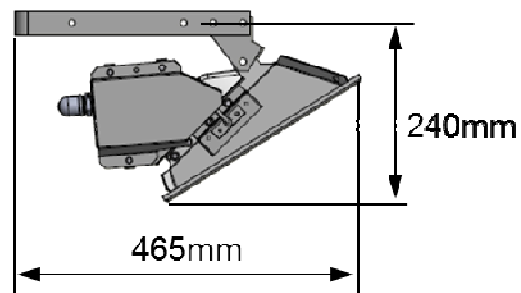
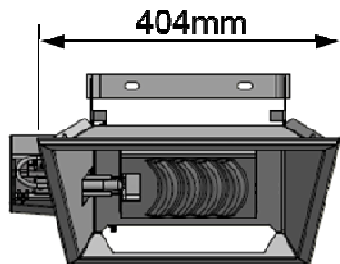
- Burner with radiant grid and reflector
- Thermoelectric safety device (assembled completely)
- Wall bracket

Accessoires:

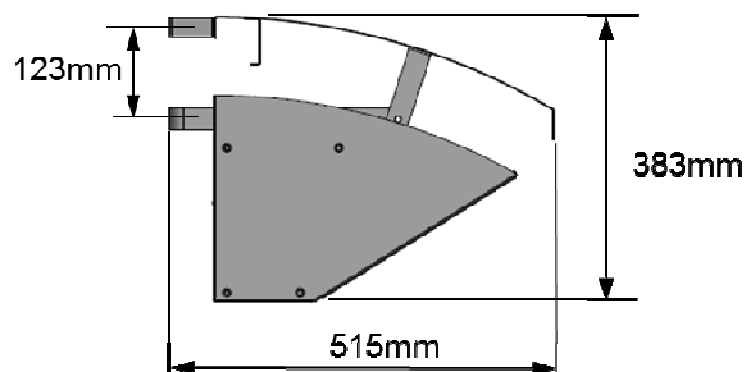
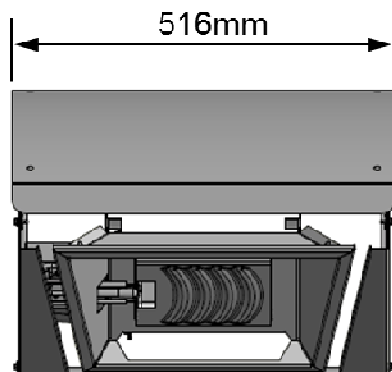
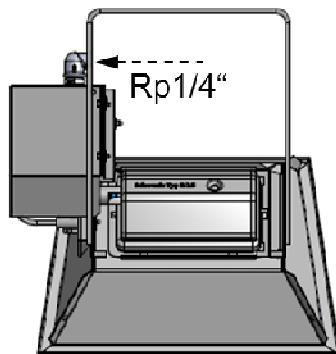
- Housing (against rain and for reduced safety distances on top)
- Connection hose with gas cock (Rp 1/2", length 500 mm) and thermally activated shut-off device
- Gas governor

terrasSchwank+ 4A

Gas pipeline:	Burner Rp 1/4" (inside), flexible hose Rp 1/2" (inside)
Max. inlet pressure:	100 mbar
Min. inlet pressure:	Natural gas L (G25): 22 mbar, Propane and Butane: 50 mbar
Gas / nominal input load	Natural gas L (G25) / 3,5 kW / 20 mbar / 0,35 m ³ /h
 / orifice pressure:	Propane (G31) / 3,5 kW / 48 mbar / 0,28 kg/h
 / consumption	
Weight without housing:	5,2 kg
Weight with housing:	10,9 kg
Burner:	8/16 (with ceramic tile 14/4 EF)



Angle $\alpha = 45^\circ$

**Delivery scope:**

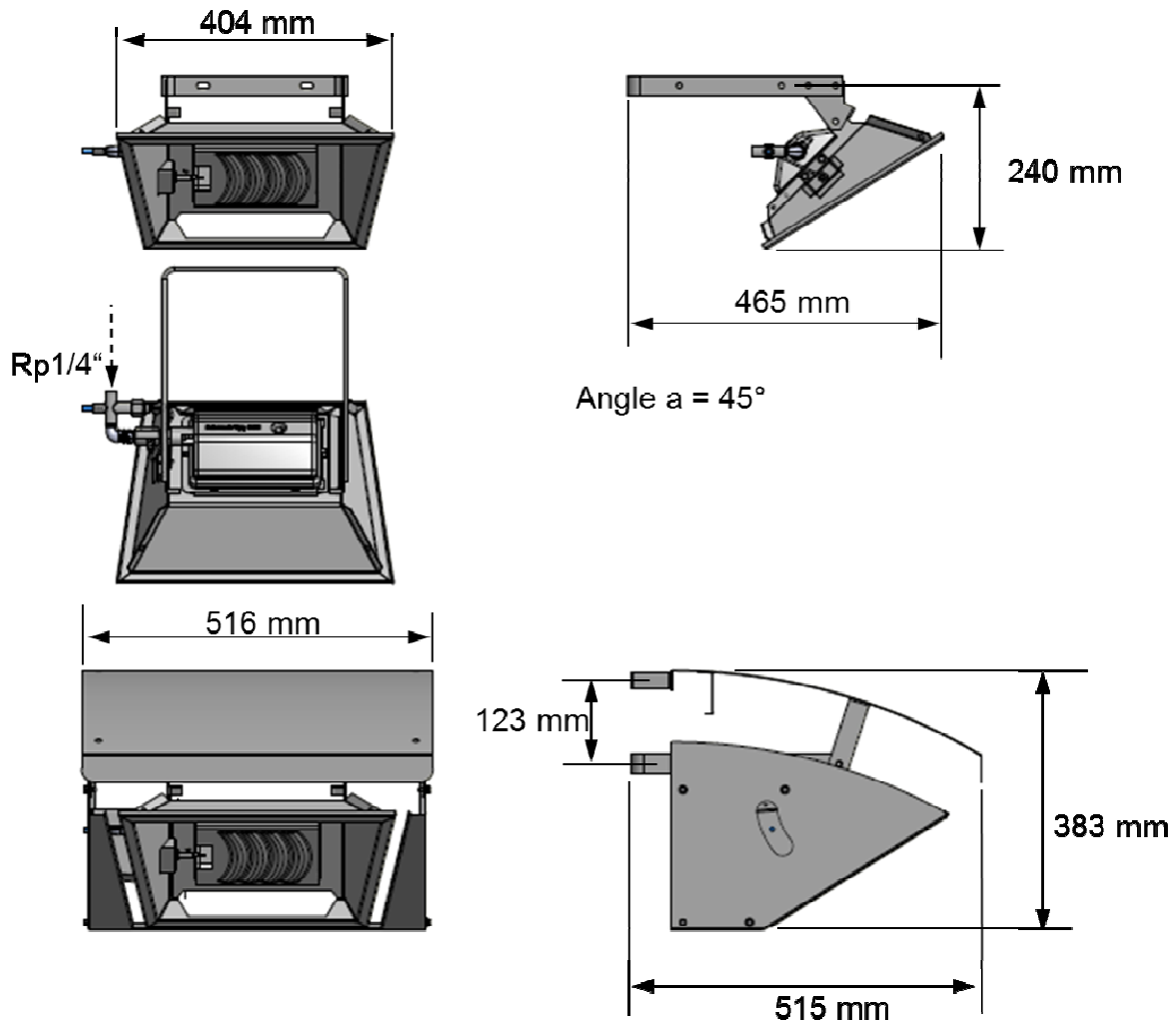
- Burner with radiant grid and reflector
- Solenoid valve, pilot burner electrical ignition (assembled completely), automatic control
- Electric supply cable for the control unit
- Wall bracket

Accessoires:

- Housing (against rain and for reduced safety distances on top)
- Connection hose with gas cock (Rp 1/2", length 500 mm)
- Control box with 1 or 3 switches
- Gas governor

terrasSchwank+ 7/2A

Gas pipeline:	Burner Rp 1/4" (inside), flexible hose Rp 1/2" (inside)
Max. inlet pressure:	100 mbar
Min. inlet pressure:	Natural gas L (G25): 22 mbar, Propane and Butane: 50 mbar
Gas / nominal input load	Natural gas L (G25) / 6,7 – 4,7 kW / 20 – 10mbar / 0,67 m ³ /h
/ orifice pressure:	Propane (G31) / 6,7 – 4,7 kW / 48 – 24 mbar / 0,52 m ³ /h
/ consumption	
Weight without housing:	7,6 kg
Weight with housing:	14,5 kg
Burner:	16/2 (with ceramic tile 14/4 EF)

**Delivery scope:**

- Burner with radiant grid and reflector
- Solenoid valve, pilot burner electrical ignition (assembled completely), automatic control
- Electric supply cable for the control unit and the solenoid
- Wall bracket

Accessoires:

- Housing (against rain and for reduced safety distances on top)
- Connection hose with gas cock (Rp 1/2", length 500 mm)
- Control box with 1 or 3 switches
- Gas governor

User instruction

terrasSchwank+ 4 (manual control)



**Never light up the heater directly
at the gas orifice or injector!**

Switching on

- (1) Open the gas cock.
- (2) Press the ignition safety device and at the same time hold a lighter at the ceramic burner.
- (3) Keep the ignition safety device pressed for 30 seconds after the heater has ignited.
- (4) If the heater extinguish after you have released the ignition safety device, then repeat the procedure up to item (2).

Switching off

- (1) Close gas cock.

Faults

After you have released the ignition safety device, the heater extinguish again:

- Check the position of the thermo-couple. The head of the thermo-couple has to be circa 10 mm inside the ceramic burner surface. The distance of the head to the ceramic tile has to be circa 12 mm.
- The thermo-couple is defective.
- The ignition safety device is defective.

Heater burns towards inside, uniformly or only partially:

- Ceramic tiles are damaged or polluted. Close the gas cock and call for an installer.

terrasSchwank+ 4A und 7/2A (automatic control)

Switching on

- (1) Open gas cock.
- (2) Switch on heater by switching on the electrical supply.
- (3) Approximate 2 seconds after this the ignition process starts. The ignition process lasts max. 30 seconds. As soon as the valve opens and the flame appears, so the control unit monitors the flame by the ionisation electrode.
- (4) If after 30 sec. no flame appears, then the control unit stops the ignition process and starts a second attempt after a pause of 20 seconds.

Switching off

- (1) Switch off the heater using the electrical supply device.
- (2) Close the gas cock in case of long term off time.

Faults

No ignition spark present:

- Automatic control, ignition electrode or ignition cable defect.
- No voltage present.

Flame appears, but is not monitored by the control and heater shuts down after 30 seconds

- Automatic control defect or connections are not correct.
- Ionisation electrode or ionisation cable defect.
- Distance between ionisation electrode and pilot burner head too large (max. 7 mm).

Heater does not get gas:

- Gas cock closed or solenoid valve defect.

Heater burns towards inside, non-uniformly or only partially:

- Ceramic tiles are damage or polluted. Close the gas cock and call installer.

Adjusting nominal thermal load

terrasSchwank+ 4A (single stage)



Caution!
Pressure regulators are not adjusted at the factory. The system may not be put into operation until adjustment has been carried out

- ⇒ Determine the related orifice pressure (**table page 13**). This table is for natural gas with a calorific value $H_{i,n}$. If the calorific value of the used natural gas is different, determine the related orifice pressure with the pressure-Wobbe-diagram (**diagram on page 14**). Please get information about the Wobbe-Index of your district from your gas supply company.

Select the heater which is installed furthest away from the inlet of the gas to carry out the following works:

Determine inlet pressure

- ⇒ Open first the gas cock which is at the end of the flexible gas hose.
- ⇒ Open the test nipple (**1**) (Fig. 1)
- ⇒ Connect a pressure measuring device to the test nipple and determine the inlet pressure. The inlet pressure must be at least 2 mbar higher than the related orifice pressure.

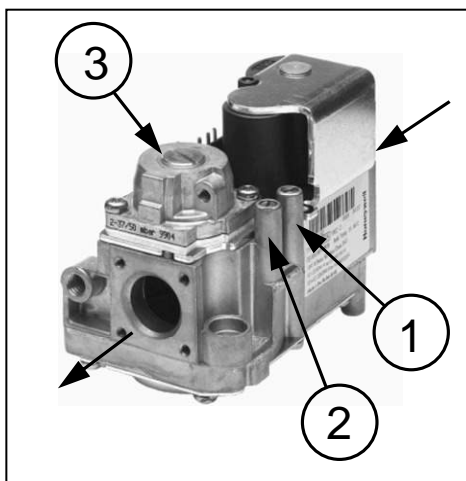


Fig. 1: Solenoid valve (single-stage)

- ⇒ Close the test nipple



Check the test nipple after every measurement. The test nipple must be closed!

Adjustment of the orifice pressure

- ⇒ Open the test nipple (**2**) (Fig. 1)
- ⇒ Connect a pressure measuring device to the test nipple (**2**) and determine the orifice pressure.
- ⇒ Remove the sealing screw on the pressure regulator (**3**) and turn the adjustment screw (**4**) until the screw is flush with the valve housing (**5**) (Fig. 2).

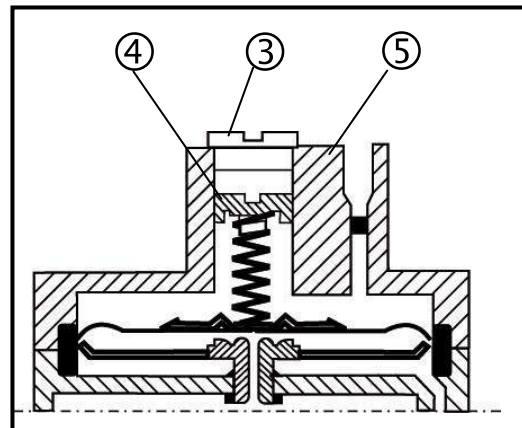


Fig. 2: Sectional view of the valve with set screw

- ⇒ Put the heater into operation.
- ⇒ Slowly screw in the adjustment screw (**4**) while continuously watching the pressure measuring device.
- ⇒ As soon as the required orifice pressure is reached, be sure not to turn the screw further.
- ⇒ Close the test nipple.



Check the test nipple after every measurement. The test nipple must be closed!

- ⇒ Mount the sealing screw (**3**).
- ⇒ Check all connections for gas-tightness when the heater is in operation (use a leak detector).

terrasSchwank+ 7/2A (two-stage)



Caution!

Pressure regulators are not adjusted at the factory. The system may not be put into operation until adjustment has been carried out.

- ⇒ Determine the related orifice pressure (**table page 13**). This table is for natural gas with a calorific value $H_{i,n}$. If the calorific value of the used natural gas is different, determine the related nozzle pressure with the pressure-Wobbe-diagram (**diagram page 14**). Please get information about the Wobbe-Index of your district from your gas supply company.

Choose the heater which is installed furthest away from the inlet of the gas to carry out the following works:

Determine inlet pressure

- ⇒ Open first the gas cock which is at the end of the flexible gas hose.
- ⇒ Open the test nipple (1) (Fig. 3).
- ⇒ Connect a pressure measuring device to the test nipple and determine the inlet pressure. The inlet pressure must be at least 2 mbar higher than the related orifice pressure.

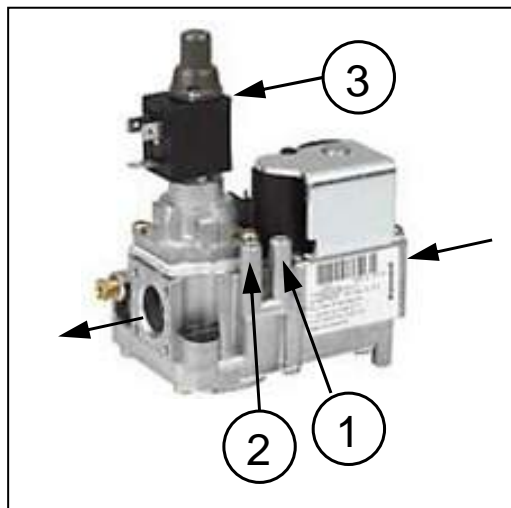


Fig. 3: Solenoid valve (two-stage)

- ⇒ Close the test nipple.



Check the test nipple after every measurement. The test nipple must be closed!

Adjustment of the orifice pressure

- ⇒ Open the test nipple (2) (Fig. 3).
- ⇒ Connect a pressure measuring device to the test nipple (2) and determine the orifice pressure.
- ⇒ Use a small screwdriver (5) to remove the housing (4) of the plug (3). Put the screwdriver into one of the gaps and lift the housing with the screwdriver and the hand (Fig. 4).

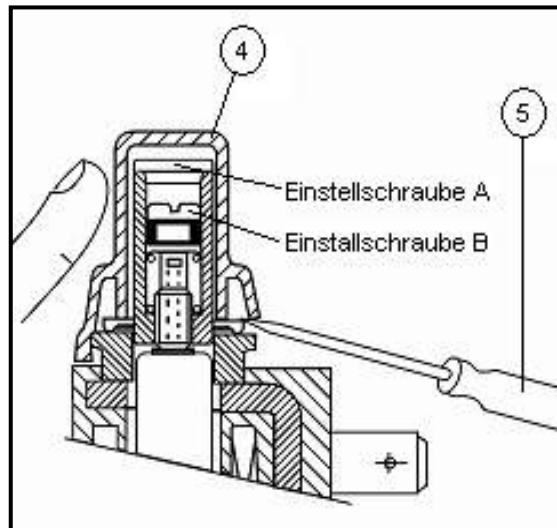


Fig. 4: Sectional view of the valve with set screw

Orifice pressure for max. load:

In **table page 13 (or diagram page 14)** you can find the relevant orifice pressure for max. and min. load for different heaters and gas types.

- ⇒ Determine the orifice pressure for your heating system for max. load.
- ⇒ Switch the power supply for regulator and control on.
- ⇒ Turn the adjustment screw A (width 8 mm) until you slightly exceed the needed nozzle pressure and then reduce to the correct value.

Clock-wise: gas pressure increase,
Counter-clockwise: gas pressure decrease

Orifice pressure for min. load:

- ⇒ Determine from **Table page 13** the relevant orifice pressure for your heating system for min. load.
- ⇒ Switch the power supply for regulator I on (**see wiring diagram page 15**).
- ⇒ Disconnect the power supply to the solenoid.
- ⇒ Turn the adjustment screw B with the screwdriver until you reach the needed orifice pressure.

- ⇒ Check the adjustment, described above.
- ⇒ Close the test nipple



Check the test nipple after every measurement. The test nipple must be closed!

- ⇒ Mount the housing **(4)** of the plug **(3)**.
- ⇒ Put the heating system into operation.
- ⇒ Check the inlet orifice pressure in full operation. Carry out the check at a heater installed furthest away from the inlet of the gas. The connection pressure must be at least 2mbar above the actual nozzle pressure.

Service / Maintenance

Regular maintenance is a requirement for trouble-free operation. For safety reasons the maintenance of gas heaters is therefore required and recommended. The maintenance is to be carried out annually. Depending on the operation conditions (e.g. dusty air or sea side) we recommend maintenance in shorter intervals.

Checks during service:

- Check the heater with gas connections and electrical connections concerning damage or pollution, clean if necessary.
- Check tightness of all gas connections, fittings and components.
- Check the safety function of the gas valve, control unit, ignition and flame sensor.
- Check the gas line pressure.
- For faults read page 9.
- Check the safety distances to combustibles.

Technical operation data (NL)

Determine the pressure for terrasSchwank+ 4 (manual control)

Type	Gas ⁽¹⁾	Gas category	Nominal heat load [kW]	Inlet pressure [mbar]	Orifice Ø size [mm]	Air baffle	Orifice type for pilot burner
4	Natural Gas L	2L	3,9	25	1,50	none	none
	Propane	3P	3,5	50	0,85	none	none

Determine the pressure for terrasSchwank+ 4A (single-stage automatic control)

Type	Gas ⁽¹⁾	Gas category	Nominal heat load [kW]	Orifice pressure [mbar]	Orifice Ø size [mm]	Air baffle	Orifice type for pilot burner
4A	Natural Gas L	2L	3,5	20	1,50	none	26.2
	Propane	3P	3,5	48	0,85	none	24.1

Determine the pressure for terrasSchwank+ 7/2A (two-stage automatic control)

Type	Gas ⁽¹⁾	Gas category	Nominal heat load [kW] max. – min.	Orifice pressure [mbar] max. – min.	Orifice Ø size [mm]	Air baffle	Orifice type for the pilot burner
7/2A	Natural Gas L	2L	6,7 - 4,7	20 – 10	2,10	2x 60	26.2
	Propane	3P	6,7– 4,7	48 – 24	1,18	2x 60	24.1

Minimal Inlet pressure for single-stage and two-stage devices:

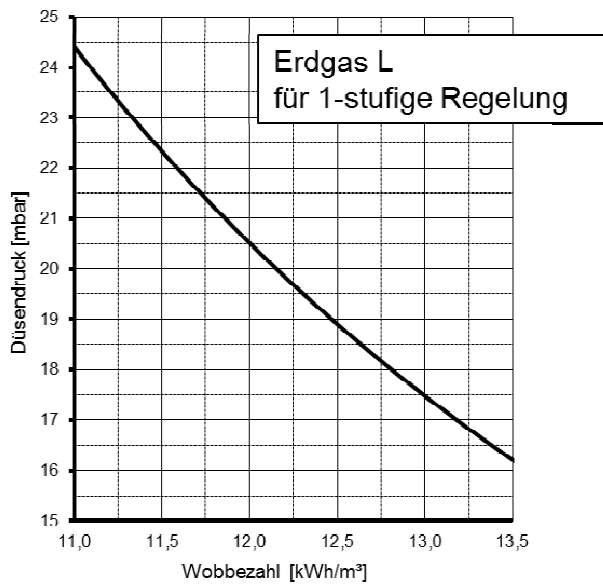
Natural gas L (G25): 22 mbar

Propane (G31): 50 mbar

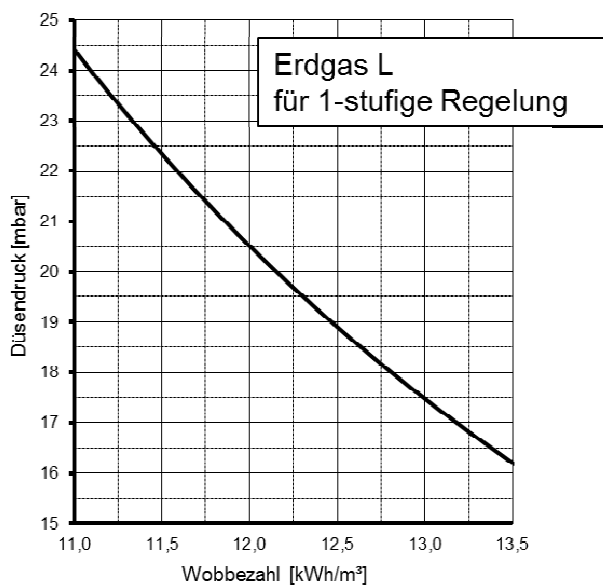
(1) Nat. gas H (G20): $H_{i,n} = 9.97 \text{ kWh/m}^3$ / $W_{s,n} = 14.8 \text{ kWh/m}^3$ (for 0°C / 1013 mbar)

(2) Max. inlet pressure = 100 mbar

Wobbe-index and orifice pressure for terrasSchwank+ 4A (single-stage)

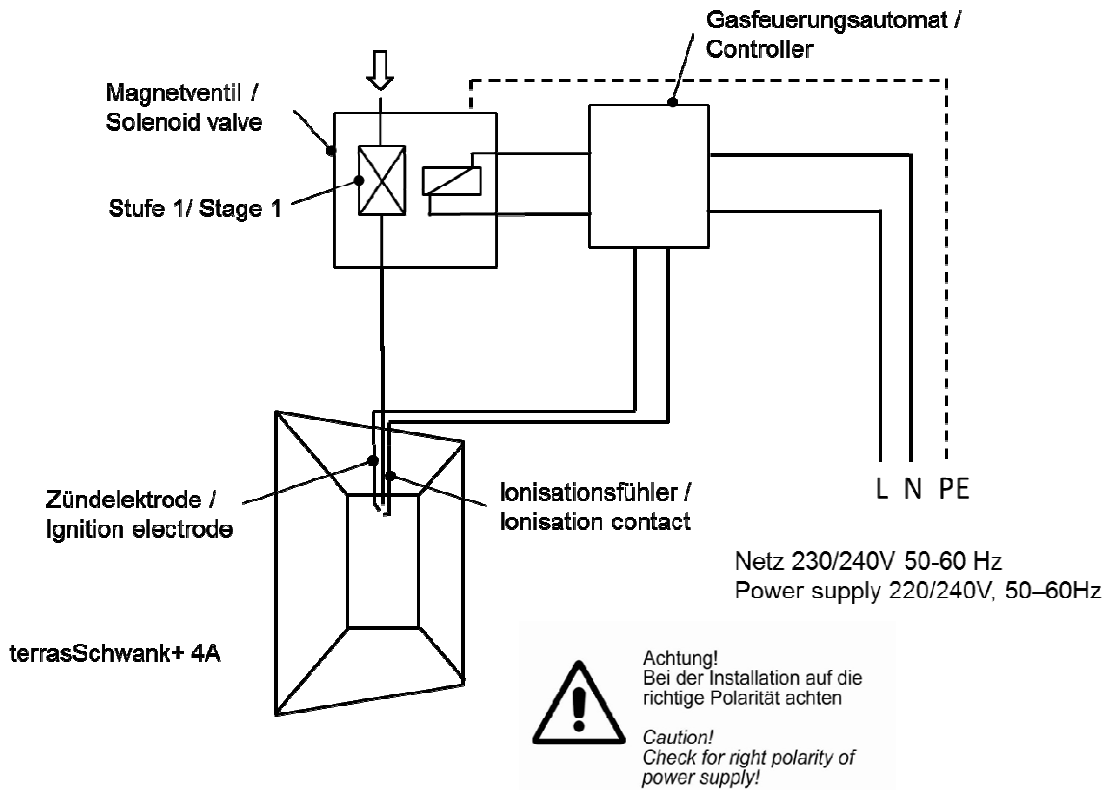


Wobbe-index and orifice pressure for terrasSchwank+ 7/2A (two-stage)

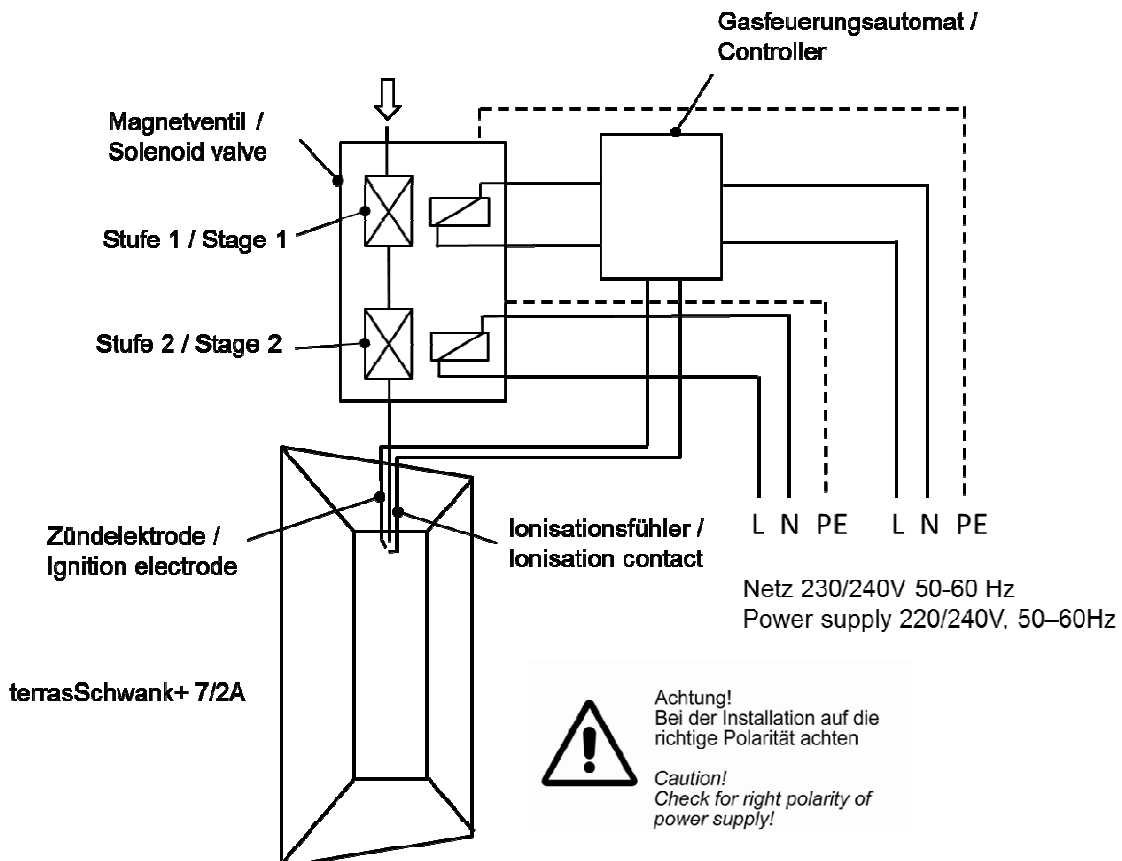


Electrical wiring of the ignition and control unit

terrasSchwank+ 4A

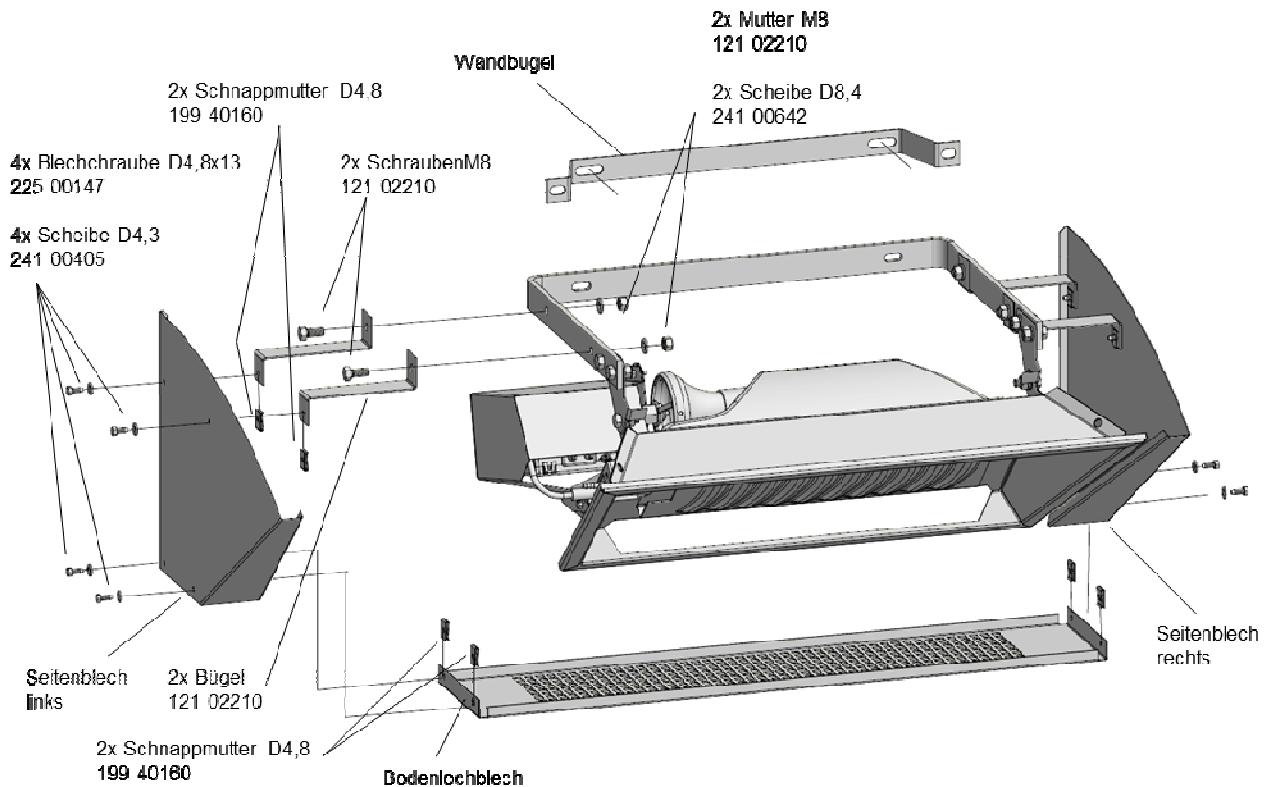


terrasSchwank+ 7/2A

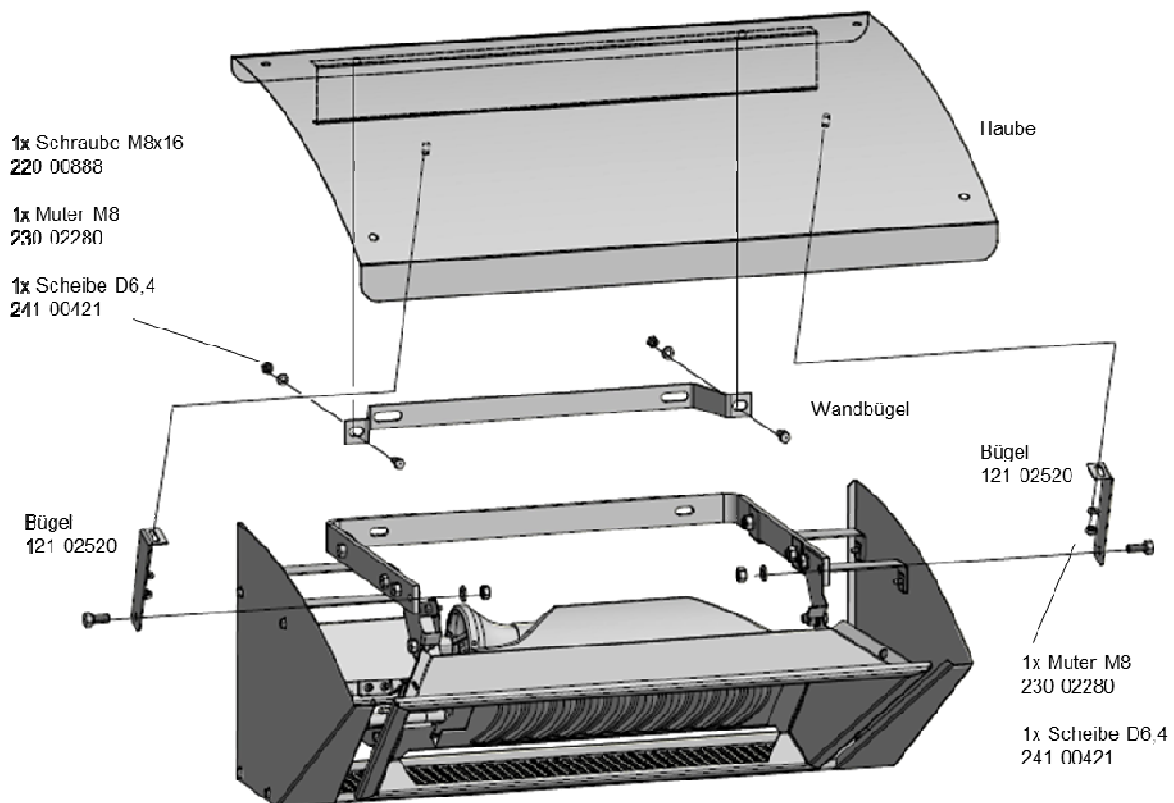


Installation of the housing

Wall bracket, side housing plates, bottom plate:



Top cover:



Spare parts

Gerät / Device	Artikel-Num. / Item number	Bezeichnung / Name of item
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4	121 02600	Gasanschluß Bgrp. terrasSchwank+ 4 Handzündung
4	122 30370	Sechskantmutter für Thermoelement
4	121 02250	Seitenblech links terras+ (mit Schlitz)
4	192 06009	Thermoelement CT 101 034 320 Ig.Gew. M8x1
4	121 02196	Verlängerungsglasche Aufhängung R terras+ 4

4A	121 02144	Blechkonsole Regelstr. terrasSchwank+ 4 email.
4A	121 02154	Schutzblech Regelstr. terrasSchwank+ 4 email.
4A	192 11386	Gas-Kombiventil VK4115A mit Gasanschluss (1-stufig) (ohne Kabel !)
4A	192 11382	Zünd/Regeleinheit ESYS 1-stufig terrasSchwank+ (komplett mit Kabel !)
4A	121 02228	Zündgasleitung terrasSchwank+ 4A

7/2A	121 02585	Anschlussstück terras 7 komplett offen
7/2A	121 02140	Blechkonsole Regelstr. terrasSchwank+ 7 email.
7/2A	121 02130	Bodenlochblech terrasSchwank+ 7 email.
7/2A	192 11420	Kabel III zweite Stufe ESYS Automat terrasSchwank+ Gas-Kombiventil VK4115P mit Gasanschluss (2-stufig) (ohne Kabel !)
7/2A	192 11384	Zünd/Regeleinheit ESYS 2-stufig terrasSchwank+ (komplett mit Kabel !)
7/2A	121 02186	Montagebügel Schutzhaube terrasSchwank+ 7
7/2A	121 02220	Montagebügel terrasSchwank+ 7
7/2A	121 02162	Reflektor terrasSchwank+ 7 email.
7/2A	121 02150	Schutzblech Regelstr. terrasSchwank+ 7 email.
7/2A	121 02124	Schutzhaube terrasSchwank+ 7 email.
7/2A	140 30476	Schwank-Brenner 16/2 14/4 E-F cera
7/2A	121 02050	Streckmetallnetz terrasSchwank+ 7
7/2A	140 05358	Überwurfschraube Kochstellenbrenner
7/2A	192 11380	Zünd/Regeleinheit ESYS 2-stufig terrasSchwank+ (komplett mit Kabel !)
7/2A	121 02230	Zündgasleitung für terrasSchwank+ 7/2A

4, 4A	121 02136	Bodenlochblech terrasSchwank+ 4 email.
4, 4A	121 02164	Reflektor terrasSchwank+ 4 email.
4, 4A	121 02283	Montagebügel Schutzhaube terrasSchwank+ 4
4, 4A	121 02222	Montagebügel terrasSchwank+ 4
4, 4A	121 02126	Schutzhaube terrasSchwank+ 4 email.
4, 4A	140 30484	Schwank-Brenner 8/16 B 14/4 E-F cera m.A
4, 4A	121 02052	Streckmetallnetz terrasSchwank+ 4

Gerät / Device	Artikel-Num. / Item number	Bezeichnung / Name of item
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4A, 7/2A	192 11416	Automatendeckel ESYS Automat (ohne Schraube !)
4A, 7/2A	193 03058	Doppelkegelring 6 DIN 3862 MS
4A, 7/2A	193 03055	Doppelkegelring 8 DIN 3862 MS
4A, 7/2A	192 10560	Gasfeuerungsautomat ESYS S4965R2027B
4A, 7/2A	192 11400	Ionisationskabel Kabellänge 220mm (mit Rundstecker)
4A, 7/2A	192 11410	Kabel I Netzanschluss ESSYS Automat (Stecker X1)
4A, 7/2A	192 11414	Kabel II Kabelbrücke ESYS Automat (Stecker X3)
4A, 7/2A	199 40160	Schnappmutter 4,8 SNU 5594 Edelstahl
4A, 7/2A	226 00830	Schraube 7500 CE (08.95) GEW.FU. LINSKO. A2K M4x10
4A, 7/2A	121 02120	Seitenblech links terrasSchwank+ email.
4A, 7/2A	121 02844	Überwurfschraube Zündbrenner M10 x 1
4A, 7/2A	121 02530	Zündbrenner Bgrp. terrasSchwank+
4A, 7/2A	192 11404	Zündkabel Kabellänge 220mm (mit Rundstecker)

4, 4A, 7/2A	199 40349	Anschweissmutter M4 Typ 912 Wst.Nr. 1.4301
4, 4A, 7/2A	420 01330	Aufkleber "Schwank" 80mm x 12mm Farbe Orange
4, 4A, 7/2A	121 02520	Haltelasche für Schutzhaube terrasSchwank+
4, 4A, 7/2A	121 02210	Montagebügel für Seitenblech terrasSchwank+
4, 4A, 7/2A	121 02020	Schraubenschutzkappe SRM 5SW8 PE schwarz
4, 4A, 7/2A	225 00147	Sechskant-Blechschrabe St 4,8 x 13
4, 4A, 7/2A	121 02110	Seitenblech rechts terrasSchwank+ email.
4, 4A, 7/2A	121 02175	Unterlegleiste für Brenner terrasSchwank+
4, 4A, 7/2A	121 02190	Verlängerung für Aufhängung links terrasSchwank+

Düsen und LDS / Orifices and air baffles:

4, 4A	143 00770	Düse-Kochstellenbrenner Ø 0,77 mm
4, 4A	143 00856	Düse-Kochstellenbrenner Ø 0,85 mm
4, 4A	143 01356	Düse-Kochstellenbrenner Ø 1,35 mm
4, 4A	143 01496	Düse-Kochstellenbrenner Ø 1,50 mm

4A, 7/2A	192 05169	Düse 24.1 für Zündbrenner Flüssiggas G 24.1
4A, 7/2A	192 05150	Düse 26.2 für Zündbrenner Erdgas G 26.2

7/2A	143 01127	Düse-Kochstellenbrenner Ø 1,12 mm
7/2A	143 01186	Düse-Kochstellenbrenner Ø 1,18 mm
7/2A	143 01941	Düse-Kochstellenbrenner Ø 1,95 mm
7/2A	143 02107	Düse-Kochstellenbrenner Ø 2,10 mm

7/2A	140 04211	Luftdrosselscheibe Ø 54 mm
7/2A	140 04203	Luftdrosselscheibe Ø 60 mm

EC type examination certificate

CE 0085



CERT

EG-Baumusterprüfbescheinigung

EC type examination certificate

CE-0085BR0505

Produkt-Identnummer
product identification no.

Anwendungsbereich <i>field of application</i>	EG-Gasgeräte-Richtlinie (2009/142/EG) EC Gas Appliances Directive (2009/142/EC)
Zertifikatinhaber <i>owner of certificate</i>	Schwank GmbH Bremerhavener Straße 43, D-50735 Köln
Vertreiber <i>distributor</i>	Schwank GmbH Bremerhavener Straße 43, D-50735 Köln
Produktart <i>product category</i>	Camping- und Freizeitgeräte: Terrassen-Heizstrahler (1618)
Produktbezeichnung <i>product description</i>	Ortsfester Terrassen-Heizstrahler zur Wandmontage
Modell <i>model</i>	terrasSchwank
Bestimmungsländer <i>countries of destination</i>	AT, BE, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR
Prüfberichte <i>test reports</i>	Ergänzungsprüfung: B13/02/1598EU vom 15.02.2013 (DBI)
Prüfgrundlagen <i>test basis</i>	EU/2009/142/EG (30.11.2009) DIN EN 419-1 (01.07.2009) DIN 3372-2 (01.01.1980) DIN EN 14543 (01.12.2005)- in Anlehnung DIN 3372-4 (01.04.1983)
Aktenzeichen <i>file number</i>	12-0775-GER

70098 04-A-DE

25.03.2013 Rie A-1/2

Datum, Bearbeiter, Blatt, Datum der Zertifizierungsstelle
date, issued by, sheet, head of certification body

DVGW CERT GmbH ist von der DAkkS nach DIN EN 45011:1998 akkreditierte und von der Deutschen Bundesregierung benannte Stelle für die Zertifizierung von Gasgeräten gemäß EG-Richtlinie 2009/142/EG.

DVGW CERT GmbH is an accredited body by DAkkS according to EN 45011:1998 and notified by the government of the Federal Republic of Germany for certification of gas appliances under EC Directive 2009/142/EC.



Deutsche
Akkreditierungsstelle
D-ZE-16028-01-01

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A-2/2

CE-0085BR0505

Elektrische Daten: 230 V AC, 50 Hz, P = 45 VA
electrical data

Gerätekategorien <i>appliance categories</i>	Versorgungsdrücke <i>supply pressures</i>	Bestimmungsländer <i>countries of destination</i>	Bemerkungen <i>remarks</i>
I2E+	20/25 mbar	BE	
I3+	28-30/37 mbar	BE, IT, PT	
I3+	50/67 mbar	BE	
I3B/P	28-30 mbar	IS	
I3B/P	30 mbar	CY, MT	
I3B/P	50 mbar	CY, MT	
I3P	37 mbar	BE	
II2E Lw3P	20, 37 mbar	PL	
II2E+3+	20/25, 28-30/37 mbar	FR	
II2ELL3B/P	20, 50 mbar	DE	
II2ELL3P	20, 50 mbar	DE	
II2H3B/P	20, 30 mbar	DK, FI, LU, SE, SI	
II2H3B/P	20, 50 mbar	AT, CH, CZ, GR, LU, RO	
II2H3B/P	25, 50 mbar	HU	
II2H3P	20, 30 mbar	CZ, DK, EE, GR, LT, LV, NO, RO, SK	
II2H3P	20, 37 mbar	ES, FR, GB, GR, IE, IT, PT, SI, TR	
II2H3P	20, 50 mbar	CH, CZ, ES, FR, GB	
II2HS3B/P	25, 50 mbar	HU	
II2L3P	25, 50 mbar	NL	

Installationsarten <i>installation codes</i>	Bestimmungsländer <i>countries of destination</i>	Bemerkungen <i>remarks</i>
A1	AT, BE, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR	

Typ <i>type</i>	Technische Daten <i>technical data</i>	Bemerkungen <i>remarks</i>
terrasSchwank 4A/2	Wärmebelastung (Hi): 2,9...3,5 bzw. 2,9...3,9 (L, 25 mbar) kW	
terrasSchwank 4, terrasSchwank 4A	Nennwärmebelastung (Hi): 3,5 bzw. 3,9 (L, 25 mbar) kW	
terrasSchwank 7A/2	Wärmebelastung (Hi): 4,7...6,7 kW	
terrasSchwank 7, terrasSchwank 7A	Nennwärmebelastung (Hi): 6,7 kW	

Ausführungsvariante <i>type variation</i>	Erläuterungen <i>explanations</i>
...4, ...7	Strahler mit manueller Zündung und thermoelektrischer Flammenüberwachung
...4A, ...7A	Strahler mit automatischer Zündung (Zündbrenner) und Ionisationsflammenüberwachung mit Gasfeuerungsautomat
...4A/2, ...7A/2	Strahler mit automatischer Zündung und Ionisationsflammenüberwachung mit Gasfeuerungsautomat in zweistufiger Ausführung

Verwendungshinweise / Bemerkungen <i>hints of utilization / remarks</i>
Zusätzlich geprüfte Bestimmungsländer, Gerätekategorien und Anschlussdrücke: FR: I1c (11,5 und 17,5 mbar) LT, SK, EE und LV: II2H3P (20, 30 mbar)



EC declaration of conformity



EC Declaration of Conformity for type examined heaters

We declare that the following heaters are in conformance with the basic security and health requirements according to EC directives due to their conception and design.

Changes or modifications of the heaters without our authorization terminate the validity of this declaration.

Description:	Gas-fired Patio Heater
Model / Type:	terrasSchwank 4 / 4A / 7 / 7A
Applied EC-Directives:	EC-Machinery Directive 2006/42/EG EC-Low Voltage Directive (LVD) 2006/95/EG EC-Electromagnetic Compatibility Directive (EMC) 2004/10//EG EC-Gas Appliance Directive (GAD) 90/396/EWG
EC-Type Examination Certificate:	CE-0085 BR 0505
Issued by:	DVGW Bonn / Germany
Basis of Harmonized Standards:	DIN EN 419-1
Basis of National Standards:	DIN 3372-1 [01.01.1980] DIN 3372-4 [01.04.1983]

SCHWANK GMBH
Cologne, 2013-01-28

O. Schwank
Managing Director