# Prestige 47 - 64 - 85

Installation, Operating and Servicing Instructions





excellence in hot water

INDEX INTRODUCTION

# INTRODUCTION

Intended users of these instructions Symbols Applicable standards Warnings

# **FUNCTIONING**

General

Functioning of domestic hot water Functioning ofcentral heating

### **INSTALLATION**

Mounting boiler
Circuit connections
Gas connection
Air + fluedas ducts
Frost protection
Setting Gas-Air ratio control
Electrotechnical connection
Put into operation
Put out of operation

### **USER GUIDE**

Using the boiler Control Settings

# MAINTENANCE

# DESCRIPTION

# **DIMENSIONS**

# **ELECTRICAL WIRING**

Electrical wiring prestige 47/64 Electrical wiring prestige 85

# **BOILER FEATURES**

# SERVICE RECORD

Installation record

# INTENDED USERS OF THESE INSTRUCTIONS

These instructions are intended for

- specifying engineers
- installing engineers
- users
- servicing technicians

# **SYMBOLS**

The following symbols are used in these instructions:



Essential instruction for operating the system correctly.



Essential instruction for personal safety and environmental protection.

# APPLICABLE STANDARDS

The products have received the "EC" certificate in accordance with the standards prevailing in different countries (European Directives 92/42/EEC, "efficiency", 90/396/EEC "gas appliances"). These products have also received the Belgian "HR+" (gas boilers) marks.





### **WARNINGS**

These instructions are an integral part of the equipment to which they refer and must be supplied to the user.

The product must be installed and serviced by qualified engineers, in compliance with the prevailing standards.

ACV accepts no liability for any damage resulting from incorrect installation or from the use of components or fittings not specified by ACV.



Failure to observe instructions regarding tests and test procedures can result in personal injury or pollution risks.

Note

ACV reserves the right to modify the technical specifications and components of its products without prior notice.

FUNCTIONING INSTALLATION

### **GENERAL**

The PRESTIGE boiler is a room-sealed boiler. The boiler has an aluminum heat exchanger, which is mounted in the room-sealed lacket

When there is heat-request, the electronic control will activate the pump, fan and the burner.

The combustion air will be aspirated by the fan trough the air-supply ducts from outside. The air is sucked into a venturi, which creates a vacuum

This vacuum is a size for the amount of air, which is being aspirated, and this signal is transmitted through an internal channel to the gas valve.

The gas valve will then automatically supply the exact amount of gas, which is injected into the venturi and mixed with the air. This mixture is supplied to the burner. Ignition and ionization-control is done by means of an electrode, which is mounted underneath the burner

Temperature- and safety-control is performed by means of NTC's. The information of these sensors is processed by the electronic control, which also secures general functioning and safety of the boiler.

### FUNCTIONING OF DOMESTIC HOT WATER

With separate hot water tank

Heat-request for DHW has always priority above CH.

In case a hot water tank with a thermostat is connected to the boiler, heat-request for DHW is generated by the switch of this thermostat. This thermostat then also determines the hysteresis. If the duration of the heat-request is long enough, the flow-temperature will arrive at the set-value. If the flow-temperature exceeds this set-value, the boiler will switch off.

In case a hot water tank with a NTC is connected to the boiler, The NTC will control the heat-request for DHW, witch is settable between 10 to 60  $^{\circ}\text{C}.$ 

# FUNCTIONING OF CENTRAL HEATING

### Room thermostat

On heat-request of the room-thermostat (and absence of DHW-request), the 3-way-valve will be activated immediately. During the change of the position of the 3- way-valve (15 seconds) the pump is not activated. After this the pump is activated and the control will set the modulating burner to arrive at the flow-temperature setting.

This flow-set-value can be adjusted; the standard setting is 75 °C. In case an out-door sensor has been connected, the flow-set-value is automatically adjusted according the heating curve which is standard foreseen in the electronic control.

### **Out-door sensor**

The boiler can also be controlled by means of an out-door sensor. This sensor with installation prescription can be ordered separately. This control is easy to use and can be programmed for all heating situations. For more information take contact with our local distributor.

### MOUNTING BOILER

The boiler should be installed in accordance with all the local and regional regulations.

- The boiler has to be installed in an appropriate place. Make sure this place is free of any risk of frost.
- Mount the bracket horizontally to a flat surface. Maintain at least 10 cm space to the left and right side of the boiler to enable maintenance of the boiler.
- 3. Hang the boiler onto the bracket on the wall.
- 4. Remove the protective caps from the tubes. Be careful! It is possible that dirty water comes out of the tubes.
- 5. Fill the siphon with fresh water.

# CIRCUIT CONNECTIONS

- The pump is integrated in the appliance and has a switch with 3
  positions to adjust the performance of the pump. Set this switch
  to the need of the installation.
- 2. Mount the separate automatic purge on top of the boiler.
- 3. Flush the entire installation thoroughly with fresh water.
- 4. Mount a fill and drain tap on a suitable position in the installation.
- Fill the installation with clean, fresh water. The pH must be between 4 and 8,5. It is not allowed to add any chemicals (e.g. anti-freeze) to this water.
- 6. The connections for central heating are 5/4" conical thread.
- 7. The connection for gas is 3/4" conics thread.
- A pressure relief valve and an expansion vessel have to be foreseen in the installation, near the boiler. Make sure the expansion vessel has enough capacity for the installation.
- Discharge the condensate via a funnel and a siphon to the sewer
- 10. In case an extra pump is mounted in the installation, make sure this additional pump does not cause any pressure difference over the boiler.
- 11. A purge device has to be foreseen at the highest point in the installation.
- Mount the exhaust pipes in such a way that any condensate built in these tubes will drain towards the boiler.

# **GAS CONNECTION**

- 1. The gas connection must be the actual regulations.
- Check the gas pipe for any dirt, in order to prevent malfunctioning of gas controls of the boiler.
- 3. Maximum pressure for the gas valve is 50 mbar.
- 4. Check the load of the boiler.

### AIR + FLUEGAS DUCTS

**Exhaust Connection** 

Application possibilities

The possible applications are drawn in figure...

The boiler is approved for categories B23 B33 C13x C33x C43x C53x C63x C83x

It is possible to combine the air supply and flue gas exhaust with other appliances. The design of such a combination has to be approved in advance by the local gas authorities (so before actually mounting the boiler)

Mount the exhaust pipes in such a way that any condensate built in these tubes will drain towards the boiler.

Calculation of maximum flue length;

Maximum allowable total air and flue pipe resistance is 1,4 mbar. It is not allowed to connect air-supply + exhaust ducts with higher resistance. The maximum length in meters for parallel and concentric systems is given in the table below.

	Ø 80 /	Ø 100 /	Ø 80 /	Ø 100 /
	Ø 80	Ø100	Ø 125	Ø 150
Prestige 47	13	47	17	34
Prestige 64	9	33	12	24
Prestige 85	-	-	-	25



### Note:

- A 90 ° bend is considered to have the same resistance as 1 m straight tube.
- The air-supply and exhaust system has to fulfill the local and national regulations.

# FROST PROTECTION

The boiler is protected against frost. During long absence in the winter the installation must be protected from freezing by partially opening all convector valves. In this case the room thermostat is not to be setted at a temperature under 15 °C.

When the flow sensor diminishes to 7  $^{\circ}$ C, the pump will be activated. If the flow temperature decreases further, the boiler will light when the flow sensor detects a temperature of 3  $^{\circ}$ C. The burner will remain on until the flow temperature has risen to 10  $^{\circ}$ C. After this the pump will run for another 15 minutes.



# WARNING:

This is only an automatic protection of the boiler. This does not prevent the installation from freezing. Convectors, which are likely to freeze, can be equipped with a frost thermostat, which is to be connected parallel to the room thermostat.

### SETTING GAS-AIR RATIO CONTROL

The boiler is equipped with a gas-air-ratio control. This means that the amount of gas is automatically controlled depending on the amount of air. The advantage is that the %CO2 is more or less constant over the whole modulation level of the boiler.

The  $\%\text{CO}_2$  is, depending of the type of gas, setted according the table below:

Type of gas	supply	% CO <sub>2</sub>	% CO2
	pressure	(max. load)	(min. load)
E-group / G20	20 mbar	$9.0 \pm 0.2$	$8.7 \pm 0.2$
LL-group / G25	20 mbar	$9.0 \pm 0.2$	$8.7 \pm 0.2$
LPG / G30	50 mbar	$11.6 \pm 0.2$	$11.3 \pm 0.2$
LPG / G31	50 mbar	$10.6 \pm 0.2$	$10.3 \pm 0.2$

The manufacturer has setted the boiler for - E-group / G20. This is indicated by means of a sticker, which is mounted below the type-plate.

Checking of the %CO<sub>2</sub> has to be done both on max load and min load:

- · Open the appliance by removing the front cover
- Light the boiler in max load by means of the servicemode H (mode and + button)
- Wait for equilibrium
- Now the  $CO_2$  has to be 8.9 ± 0.2 %
- In case the %CO<sub>2</sub> is not correct, you can adjust it by turning the brass screw near the venturi (clockwise = lower CO<sub>2</sub>, counter clockwise = higher CO<sub>2</sub>)
- Set the boiler to the min load by means of the servicemode L (mode and - button)
- · Wait for equilibrium
- Now the CO<sub>2</sub> has to be 8,7 ± 0,2 %
- In case the %CO<sub>2</sub> is not correct, you can adjust it by turning the
  white plastic screw on the gas valve (clockwise = higher CO<sub>2</sub>,
  counter clockwise = lower CO<sub>2</sub>)

In case the installation is supplied with a different type of gas, the boiler has to be re-adjusted by the installer according the procedure mentioned above.



### NOTE:

- For setting to LL-group, the brass screw near the venturi has to be turned a few times counter clockwise.
- For setting to LPG, the brass screw near the venturi has to be turned a few times clockwise.



### IMPORTANT:

Subsequently the enclosed sticker "setted for LL group" or "setted for LPG" has to be put over the original sticker "setted for E-group»!!!

### **ELECTROTECHNICAL CONNECTION**

- 1. The electrical installation has to meet the actual regulations
- The wall socket has to be mounted in an easy accessible position near the boiler.
- 3. It is not allowed to modify the internal wiring of the boiler.
- The appliance is equipped with an earthed plug.
- i. The connection of the room thermostat is in the control box. This contact is standard foreseen with a bridge. To replace this bridge by the wires of the room thermostat, hinge the lower front cover down. Unscrew the display cover and open the control box by hinging the display cover down as well. The room thermostat has to be connected at the pos 12 + 14 of the screw terminals. The maximum cross section of the wires is 0.75 mm2.
- The contact of the room thermostat has to be potentialfree.
- To connect timers which need 24 V supply from the boiler, there is 2,4 VA available on the pos 11 and 13 of the screw terminals.
- To connect a sanitary thermostat, sanitary NTC, 3-wayvalve or sanitary pump, there are screw terminals available.

# Out-door temperature control

The out-door sensor has to be mounted to the northern wall of the house at a height of approximately 2 m.

The boiler is standard set to operate with a room thermostat.

The MCBA will automatically detect when an out-door sensor is connected. The control will automatically be adapted to operate with room-thermostat + out-door sensor.

### Personal computer connection

For service and maintenance purposes it is possible to connect a personal computer to the control of the boiler.

Please contact the manufacturer to receive more information about this.

INSTALLATION USER GUIDE

### Separate hot water tank

In case a separate hot water tank is connected to the boiler, you must use an electrical 3-way-valve 24 V (Honeywell VC 8010, "2 wire + common), a spring assisted 3-way-valve or an external sanitary pump.

The wiring has to be done according the diagram in figure .....

If using a sanitary thermostat or sanitary NTC, it has to be connected to pos 20 + 21 of the screw terminals.

The standard flow temperature for loading the hot water tank is 80 °C.

# **PUT INTO OPERATION**

- Fill and purge the installation. The water pressure in the boiler has to be between 1,5 and 2 bars. The boiler (not the installation) is purged by the automatic purge, which is mounted on top of the boiler.
- 2. Check all gas and water connections for leakages. Purge the gas tube.
- Check if the type of gas and the nominal supply pressure, as mentioned on the sticker below the typeplate, are present.
- 4. Connect the plug in the wall-socket. Turn on the main switch on the boiler. After a few moments the boiler will automatically ignite.
- Set the room thermostat to the highest value and heat up the installation. After this set the room thermostat to the lowest value
- 6. Purge the installation again and refill if necessary.

# PUT OUT OF OPERATION

By pushing the - button for 3 seconds, the boiler is off. The display will show: OFF.

The anti-frost protection is still enabled.



To put the boiler back to normal operation again, push the - button for 3 seconds again.

### USING THE BOILER



Your system should be serviced at least once a year by a qualified engineer.

If the boiler is subject to heavy use, it may require servicing more than once a year - consult your service engineer for advice.

### Starting the burner:

In normal operation, the burner starts automatically whenever the boiler temperature falls below the set temperature.

After the mains is connected, or after a reset, the 3-way valve (if present) will be activated for 15 seconds in direction central heating. During this time the pump is off.

Subsequently the pump is activated for 1 minute. Finally the 3-way-valve is diverted to sanitary. If there is no heatrequest within 24 hours, this procedure will be repeated to prevent blocking of the 3-way-valve and pump.

The control panel contains 6 buttons and a 4-digit display (see figure)

### Heating system pressure

Your system is fitted with a heating safety valve set to 3 bar, with a pressure gauge. Read the heating circuit pressure on the combined temp/pressure gauge on the control panel:

Ensure that the water in the system is always pressurised. When cold, and the air in the system has been vented, the pressure gauge must show a pressure between 1 and 2 bar, depending on the height of the building. (1 bar = 5 m / 1.5 bar = 10 m et 2 bar = 15 m). To add water, open the filling valve. Close the filling valve tightly after filling. Vent the air in the system to get an accurate water pressure reading. (See chapter, page 10: filling the hot water and heating circuits).

# **Safety Valves**

If water discharges from any of the safety valves, switch the boiler off and call a service engineer.

# **CONTROL SETTINGS**

The boiler is controlled by the MCBA (microprocessor), with the control panel housed behind the front panel.

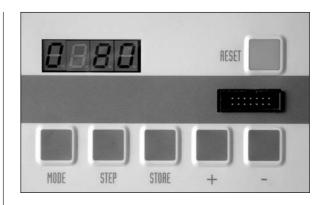
### Standby Mode

Standby Mode is the normal operation display setting.

The first digit shows the boiler sequence. This sequence relates to current boiler status. The last two digits show the boiler temperature.

Sequence	Boiler status	
0	Stand By, no heat request	
1	Pre-purge, post-purge	
2	Ignition	
3	Burning in CH-mode	
4	Burning in DHW-mode	
5	Waiting for opening of Air pressure switch (max. 1 Min.)	
	Waiting for closing of Air pressure switch (max. 2 x 1 Min.)	
6	Burner off because the set-value has been reached	
7	Overrun time pump in CH-mode	
8	Overrun time pump in DHW-mode	
9	Burner off because of protection:	
	"b08": airflowsensor did not close	
	• "b18": T1 > 95 °C	
	• "b19": T2 > 95 °C	
	• "b24": T2 - T1 > 10,20 or 40 °C after 19 minutes	
	• "b25": dT1/dt > Maximum Gradient T1	
	• "b26": Minimum gas or water pressure switch not closed	
	• "b28": no fan signal	
	"b29": fan signal, incorrect fan rotation	
	• "b30": T1 - T2 > Max. delta	
	• "b33": NTC3 short circuit	
	• "b35": NTC5 short circuit	
	• "b38": NTC3 open circuit	
	• "b40": NTC5 open circuit	
	• "b52": T5 > T5max	
	"b61": airflowsensor closed	
	• "b65": wait for fanstart	
А	Internal control	
G	Burner on for holding boiler warm	
Н	Burner-high function: Testmode max. RPM in CH-mode	
L	Burner-low function: Testmode min. RPM in CH-mode	
t	Burner on for manual fanspeed (servicing)	

If the burner is turned off because of an extra protection, the display shows boiler-sequence 9 and the flow-temperature. This alternates with the error code eg. b26



# Changing the MCBA settings: Parameter mode Proceed as follows:

- Press the "MODE" button once; the display will show "PARA".
   Press the "STEP" button once; the first digit is "1" and the last two show the setting for the first parameter.
- To change these last two, press "+" to increase and "-" to decrease.
- Save the new setting selected with the "STORE" button.
- To access the next parameter, press "STEP"
- Press the "MODE" button twice to return to standby mode.

# List of accessible parameters:

Parameter N°	Description	Range
1	hot water setting	20 - 90 °C
2	"Hot water" system status	O = OFF; 1 = ON
3	"Heating" system status	O = OFF; 1 = ON
4	Heating setting	60 - 90 °C

# Temperature measurement display: Info mode Proceed as follows:

- Press the "MODE" button twice; the display will show "INFO".
- Press the "STEP" button once; the first digit is the measurement number and the last two its value.
- Press the "STEP" button to display the next measurement.
- To return to standby mode, press the "MODE" button once.

### List of measurements available:

Measurement N°	Description
1	Temperature T1 - primary
2	Temperature T2 - primary
3	Temperature T3 - secondary
4	Outside temperature T4
5	Flue gas temperature T5
6	Setting for T1
7	Variation of T1 - °C/s
8	Variation of T2 - °C/s
9	Variation of T3 - °C/s

# USER GUIDE

# Safety shutdown

If an operating error develops, the system locks and the display flashes: the first digit shows the sequence the burner was in when the error occurred, the last two digits show the error code (see table below); the first digit and the next two flash alternately.



- To reset the system:
   Press the "RESET" button on the MCBA display.
   If an error occurs again, call an approved heating engineer.

# Table of error codes and corrective action

codes	Error description	Fault repair
00	No flame detected	- check wiring / - change electrode / - change MCBA
02	No ignition after 5 attempts	- check ignition electrode and its positioning
03-07	Internal error	- if the problem persists after 2 resets, change the MCBA
11	Eprom error	- if the problem persists after 2 resets, change the MCBA
12	24V fuse failure	- call engineer to check fuse
13-17	Internal error	- if the problem persists after 2 resets, change the MCBA
18	Primary temperature 1 > 110 °C	- check that sensor NTC1 is propely housed in its pocket
		- if so, change sensor NTC1
19	Primary temperature 2 > 110 °C	- check that sensor NTC2 is propely housed in its pocket
		- if so, change sensor NTC2
25	Primary temperature 1 gradient too high	- check that the shunt pump is operating, and if so vent the boiler
28	No fan signal	- if the fan is turning:
		check the PWM connection
		if the problem persists after 2 resets, change the fan
		• if the problem persists after 2 resets, change the MCBA
		- if the fan is not turning:
		check the 230 Volt power to the fan
31	Short circuit in temperature 1 sensor	- change sensor NTC1
32	Short circuit in temperature 2 sensor	- change sensor NTC2
33	Short circuit in temperature 3 sensor	- change sensor NTC3
35	Short circuit in temperature 5 sensor	- change sensor NTC5
36	Temperature 1 sensor: circuit open	- check the connection of sensor NTC1 to the terminal strip
		- if the problem persists, change sensor NTC1
37	Temperature 2 sensor: circuit open	- check the connection of sensor NTC2 to the terminal strip
		- if the problem persists, change sensor NTC2
38	Temperature 3 sensor: circuit open	- check the connection of sensor NTC3 to the terminal strip
		- if the problem persists, change sensor NTC3
40	Temperature 5 sensor: circuit open	- check the connection of sensor NTC5 to the terminal strip
		- if the problem persists, change sensor NTC5
44	Internal error	- if the problem persists after 2 resets, change the MCBA
52	Flue gas temperature too high	
60	Error reading parameters	- if the problem persists after 2 resets, change the MCBA

Select an official installer to do the maintenance after 1 year of operation. This installer can, depending of the inspection and installation circumstances, determine the interval for future maintenance.

- Pull the plug. Remove the siphon, clean it, refill it with water and mount it again.
- Remove the inspection panel from the cover on top of the boiler.
- Remove the connectors from the fan and the gas valve.
- Unscrew the brass gas coupling near the gas valve.
- Unscrew the four M5 nuts, which fix the fan to the burner hood.
   Now the fan can be removed complete with gas valve and venturi.
- Unscrew the 8 nuts M6 of the burner hood en remove the burner hood.
- Now the burner can be removed. Inspect the fire chamber and the burner. The burner can be cleaned with a nylon brush (never use a steel brush) on the inside (so not on the side of the flame!)
- Replace the burner hood gasket if necessary.
- To finish mount all parts in reverse order.
- Pay attention to the right position of the burner, burner hood and fan.
- Light the boiler and check the %CO2 both at max load and min load. If necessary re-adjust the %CO2 (see procedure at page 10)

# Resistance table temperature sensors

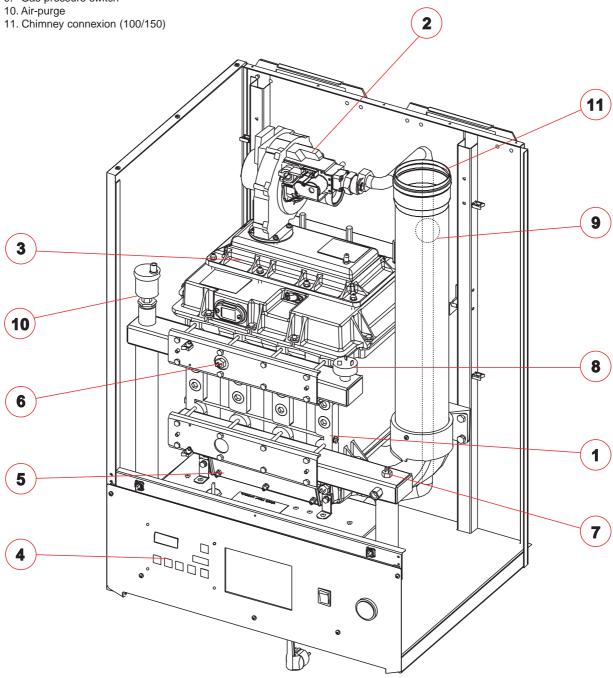
Temp. °C	RΩ	Temp. °C	<b>R</b> Ω
-20	98200	40	6650
-15	75900	45	5520
-10	58800	50	4610
-5	45900	55	3860
0	36100	60	3250
5	28600	65	2750
10	22800	70	2340
15	18300	75	1940
20	14700	80	1710
25	12000	85	1470
30	9800	90	1260
35	8050	95	1100
		100	950

The manufacturer may change parts of this manual without prior notice.

# DESCRIPTION

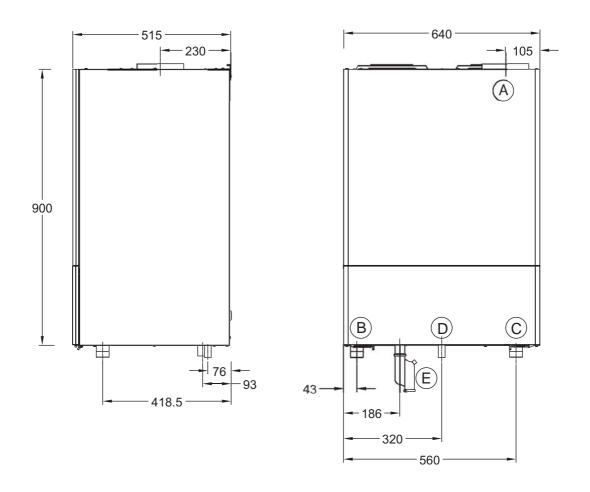
# **PLANS**

- 1. Aluminium-Silicium heat exchanger
- 2. Burner unit with fan, gas valve and venturi
- 3. Burner cover
- 4. Display5. Inspection trap
- 6. Flow sensor7. Return sensor
- 8. Water pressure switch9. Gas pressure switch



# DIMENSIONS

			Prestige 47	Prestige 64	Prestige 85
Α	Chimney	mm	100/150	100/150	100/150
В	Heating flow	Ø	5/4"	5/4"	5/4"
С	Heating return	Ø	5/4"	5/4"	5/4"
D	Gas supply	Ø	3/4"	3/4"	3/4"
Е	Siphon	Ø mm	25	25	25



# APPLIANCE CATEGORY

Type Country	Prestige 47	Prestige 64	Prestige 85
BE	I2E(S)B , I3P	I2E(S)B, I3P	I2E(R)B , I3P
FR	II2Esi3P	II2Esi3P	II2Esi3P
GB	II2H3P	II2H3P	II2H3P
IE	II2H3P	II2H3P	II2H3P
PT	II2H3P	II2H3P	II2H3P
DE	II2ELL3B/P	II2ELL3B/P	II2ELL3B/P
LU	II2E3B/P	II2E3B/P	II2E3B/P
IT	II2H3B/P	II2H3B/P	II2H3B/P
AT	II2H3B/P	II2H3B/P	II2H3B/P
DK	II2H3B/P	II2H3B/P	II2H3B/P
GR	II2H3B/P	II2H3B/P	II2H3B/P
ES	II2H3P	II2H3P	II2H3P

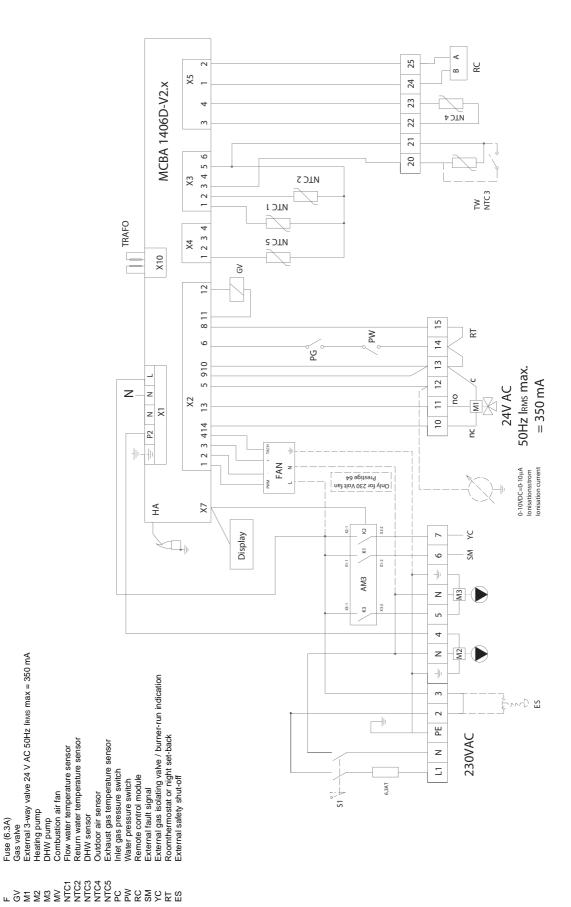
# ELECTRICAL WIRING PRESTIGE 47/64

Components

Fuse (6.3A) Gas valve External 3-way valve 24 V AC 50Hz IRMs max = 350 mA

Flow water temperature sensor

DHW pump Combustion air fan Heating pump



⋖ R

В

4 DTN

TW NTC 3

25

24

23

22 71 20

9

S O

# **ELECTRICAL WIRING PRESTIGE 85**

### TRAFO X10 11 12 15 $\infty$ 9 PG P.W 7 LDS $\mathbb{F}$ 910 7 13 50Hz IRMS max. 12 $= 350 \, \text{mA}$ 2 24V AC z = 2 z× 13 Σ 10 123414 P2 EAN ≥ 0-10VDC=0-10μA lonisationsstrom lonisation current X ¥ Ş Display ⊽ SM 9 X1-2 -||1 AM3 **E** z 2 4 Fuse (6.3A) Gas valve External 3-way valve 24 V AC 50Hz IRMs max = 350 mA z External fault signal External gas isolating valve / burner-run indication Roomthermostat or night set-back External safety shut-off 40 ~ ₽~~ S Return water temperature sensor DHW sensor Outdoor air sensor Exhaust gas temperature sensor Inlet gas pressure switch Water pressure switch 7 Flow water temperature sensor PE 230V AC z Remote control module \_\_ Combustion air fan Heating pump DHW pump 6,3AT Components

X5

123456 Х3

VTC 2

I DTN

S DTN

MCBA 1406D-V2.x

# **BOILER FEATURES**

Central heating		Prestige 47	Prestige 64	Prestige 85
Nominal input max load	kW	45,0	60,0	80
Nominal input min load	kW	13,0	13,0	20
Nominal output max load 80/60	kW	43,7	58,9	78,2
Nominal ouput min load	kW	12,6	12,6	19,5
Efficiency max load 80/60	%	97,0	98,1	97,7
Efficiency min load 80/60	%	96,7	96,7	97,5
Efficiency max load 50/30	%	104,2	103,9	103,4
Efficiency min load 50/30	%	107,3	107,3	106,8
Efficiency max load 40/30	%	106,4	105,7	104,7
•	%	106,7	106,1	105,6
Norm efficiency 75/60 (RAL-UZ 61)	%	· ·	·	
Norm efficiency 40/30 (RAL-UZ 61)	76	110,0	109,8	108,5
Flue gas		Prestige 47	Prestige 64	Prestige 85
Norm emission CO/Nox (RAL-UZ 61)	Mg/kwh	14/45	27/55	30/60
Nom emission CO/Nox (Gaskeur SV)	Mg/kwh	20/23	29/27	35/25
Temperature max load 75/60	°C	58	64	64
Temperature max load 40/30	°C	40	63	-
·		68	91	121
Mass flow flue gas max load	Kg/h			
Max flue resistance	mbar	1,00	1,40	1,5
Max concentric flue lengh Ø 100 / Ø 150	m	34		25
Max concentric flue lengh Ø 80 / Ø 125	m	17	12	-
Gas		Prestige 47	Prestige 64	Prestige 85
appliance category	(1)	see page 9	see page 9	see page 9
Supply pressure for E-Gas	mbar	20	20	20
Supply pressure for LL-Gas	mbar	20	20	20
Supply pressure for LPG	mbar	50	50	50
Gas cpnsumption G20	m³/h	1,4 - 4,7	1,4 - 6,3	2,1 - 8,3
Gas consumption G25	m³/h	1,6 - 5,4	1,6 - 7,2	2,4 - 9,7
Gas consumption GPL	kg/h	1,0 - 3,5	1,0 - 4,7	1,5 - 6,0
Setting max load / min load for natural gas	% CO <sub>2</sub>	8,9 / 8,7	8,9 / 8,7	9,2 / 9,0
Setting max load / min load for propane	% CO <sub>2</sub>	10,6 / 10,3	10,6 / 10,3	10,6 / 10,3
Setting max load / min load for butane	% CO2	11,6 / 11,3	11,6 / 11,3	11,6 / 11,3
(1) Depending on country of destination				
Water		Prestige 47	Prestige 64	Prestige 85
Max flow temperature	°C	90	90	90
Contents boiler	L	8	8	10
Max water pressure boiler	bar	4	4	4
Pressure drop heat exchanger (ΔT=20 / ΔT=10		20 / 70	50 / 180	70 / 270
Weight		Prestige 47	Prestige 64	Prestige 85
	Kg	87	88	101
<b>D</b> 'manatana		Bus office 47	Bus etting 04	Donatina 05
Dimensions		Prestige 47	Prestige 64	Prestige 85
Width	mm	640	640	640
Depth	mm	490	490	490
Height	mm	900	900	900
Electrics		Prestige 47	Prestige 64	Prestige 85
Protection classification		IP 40	IP 40	IP 40
Mains	V/Hz	230 / 50	230 / 50	230 / 50
	****	_00,00	_00 / 00	

# SERVICE RECORD

# INSTALLATION RECORD

Date installed:	Flue gas T° :	Model:	
% CO <sub>2</sub> (min. load) :	Efficiency :	Serial number :	
% CO2 (max. load):	Gas pressure :	Heating system pressure setting :	
☐ Gas			
LPG	Name and signature :		
Date installed:	Flue gas T° :	Model :	
% CO2 (min. load) :	Efficiency :	Serial number :	
% CO2 (max. load):	Gas pressure :	Heating system pressure setting :	
☐ Gas			
LPG	Name and signature :		
Date installed:	Flue gas T° :	Model:	
% CO2 (min. load) :	Efficiency :	Serial number :	
% CO2 (max. load):	Gas pressure :	Heating system pressure setting :	
☐ Gas			
☐ LPG	Name and signature :		
Date installed:	Flue gas T° :	Model:	
% CO2 (min. load) :	Efficiency :	Serial number :	
% CO2 (max. load):	Gas pressure :	Heating system pressure setting :	
☐ Gas			
LPG	Name and signature :		
Date installed:	Flue gas T° :	Model:	
% CO2 (min. load):	Efficiency :	Serial number :	
% CO2 (max. load):	Gas pressure :	Heating system pressure setting :	
☐ Gas			
☐ LPG	Name and signature :		
Date installed:	Flue gas T° :	Model:	
% CO <sub>2</sub> (min. load) :	Efficiency :	Serial number :	
% CO <sub>2</sub> (max. load) :	Gas pressure :	Heating system pressure setting :	
☐ Gas			
☐ LPG	Name and signature :		

# SERVICE RECORD

Date installed:	Flue gas T° :	Model:	
% CO2 (min. load) :	Efficiency :	Serial number :	
% CO2 (max. load):	Gas pressure :	Heating system pressure setting :	
☐ Gas			
☐ LPG	Name and signature :		
Date installed:	Flue gas T° :	Model:	
% CO2 (min. load) :	Efficiency :	Serial number :	
% CO2 (max. load):	Gas pressure :	Heating system pressure setting :	
☐ Gas			
☐ LPG	Name and signature :		
Date installed:	Flue gas T° :	Model :	
% CO <sub>2</sub> (min. load) :	Efficiency :	Serial number :	
% CO2 (max. load):	Gas pressure :	Heating system pressure setting :	
☐ Gas			
LPG	Name and signature :		
Date installed:	Flue gas T° :	Model:	
% CO <sub>2</sub> (min. load) :	Efficiency :	Serial number :	
% CO2 (max. load):	Gas pressure :	Heating system pressure setting :	
☐ Gas			
LPG	Name and signature :		
Date installed:	Flue gas T° :	Model:	
% CO2 (min. load) :	Efficiency :	Serial number :	
% CO2 (max. load):	Gas pressure :	Heating system pressure setting :	
☐ Gas			
LPG	Name and signature :		
Date installed:	Flue gas T° :	Model:	
% CO <sub>2</sub> (min. load) :	Efficiency :	Serial number :	
% CO2 (max. load):	Gas pressure :	Heating system pressure setting :	
☐ Gas			
LPG	Name and signature :		



# excellence in hot water

INTERNATIONAL ACV international n.v KERKPLEIN, 39 B-1601 RUISBROEK - BELGIUM TEL.: +32 2 334 82 20 FAX: +32 2 378 16 49 E-MAIL: international.info@acv-world.com

### ACV BELGIUM nv/sa

ACV BELGIUM NVSA KERKPLEIIN, 39 B-1601 RUISBROEK-BELGIUM TEL.: +32 2 334 82 40 FAX: +32 2 334 82 59 E-MAIL: belgium.info@acv-world.com

### ALBIN TROTTER Y ACV LTDA

SAN PABLO 3800 QUINTA NORMAL - SANTIAGO - CHILE TEL::+56 2 772 01 69 FAX:+56 2 772 92 62/63 E-MAIL: chile.info@acv-world.com

### **CZECH REPUBLIC**

ACV CR SPOL. S.r.o NA KRECKU 365 CR-109 04 PRAHA 10 - CZECH REPUBLIC TEL::+420 2 720 83 341 FAX:+420 2 720 83 343 E-MAIL: ceskarepublika.info@acv-world.com

### DEUTSCHI AND

ACV WÄRMETECHNIK GMBH & CO KG GEWERBEGEBIET GARTENSTRASSE D-08132 MÜLSEN OT. JACOB - DEUTSCHLAND TEL::+49 37601 311 30 FAX:+49 37601 311 31 E-MAIL: deutschland.info@acv-world.com

C/ANTONIO GAUDI, 3 E-08349 CABRERA DE MAR - ESPANA TEL.:+34 937 595 451 FAX:+34 937 593 498 E-MAIL: spain.info@acv-world.com

FRANCE sa
31, RUE AMPERE - Z.I MI - PLAINE
F-69680 CHASSIEU - FRANCE
TEL:+33 4 72 47 07 76
FAX:+33 4 72 47 08 72
E-MAIL: france.info@acv-world.com

# ITALIA ACV ITALIA

VIA MALPIGHI 6
I-48018 FAENZA (RA) - ITALIA
TEL.:+39 0546 62 25 15
FAX:+39 0546 62 25 05
E-MAIL: italia.info@acv-world.com

### NEDERI AND

# ACV NEDERLAND by

POSTBUS 350 NL-2980 AJ RIDDERKERK - NEDERLAND TEL.:+31 180 42 10 55 FAX:+31 180 41 58 02 E-MAIL: nederland.info@acv-world.com

ACV POLSKA sp. z.o.o. UL. WITOSA 3 87 - 800 WWOCWAWEK - POLAND TEL.:+48 54 412 56 00 FAX:+48 54 412 56 01 E-MAIL: polska.info@acv-world.com

PORTUGAL
BOILERNOX LDA
RUA OUTEIRO DO POMAR
CASAL DO CEGO, FRACÇÃO C,
POVILHÃO 3 - MARRAZES
2400-402 LEIRIA - PORTUGAL
FEL:-351 244 837 239/40
FAX:-351 244 837 358
FAMAL : DOIERTON SMILERNON POMILERNON POMILER E-MAIL: boilernox@mail.telepac.pt

### ACV RUSSIA

1/9, MALYI KISELNYI 103031 MOSCOW - RUSSIA TEL.:+7 095 928 48 02 / +7 095 921 89 79 FAX:+7 095 928 08 77 E-MAIL: russia.info@acv-world.com

# SLOVAK REPUBLIC ACV SLOVAKIA s.r.o.

PLUHOVÁ 49 831 04 BRATISLAVA - SLOVAK REPUBLIC TEL.:+421 2 444 62 276 FAX:+421 2 444 62 275 E-MAIL: slovakia.info@acv-world.com

OK
ACV UK Ltd
ST. DAVID'S BUSINESS PARK
DALGETY BAY - FIFE - KY11 9PF
TEL::+44 1383 82 01 00
FAX:+44 1383 82 01 80
E-MAIL: uk.info@acv-world.com

TRIANGLE TUBE PHASE III
FREEWAY CENTER - 1 TRIANGLE LANE
BLACKWOOD NJ 08012 - USA TEL.:+1 856 228 8881 FAX:+1 856 228 3584 E-MAIL: sales@triangletube.com

### **ARGENTINA**

ARGENTINA
TECNOPRACTICA
ALFEREZ BOUCHARD 4857
1605 CARAPACHAY - BUENOS AIRES
TEL.: +54 11 47 65 33 35
FAX: +54 11 47 65 43 07
E-MAIL: jchas@tecnopractica.com

# SIMETAL INDUSTRIA E COMERCIO DE FERRAMENTAS LTDA RUA GERSON ANDREIS 535

95112 - 130 CAXIAS DO SUL - BRAZIL TEL.: +55 54 227 12 44 FAX: +55 54 227 12 26 E-MAIL: export@simetall.com.br

### BIII GARIA

PROXIMUS ENGINEERING LTD
7 BIAL KREM STR.
9010 VARNA - BULGARIA TEL.:+359 52 500 070 FAX:+359 52 301 131 E-MAIL: info@proximus-bg.com

### CHINA

CHINA
BEJJING HUADIAN HT POWER TECHNOLOGY
DEVELOPMENT CO. LTD
ROOM B-912, TOWER B, COFCO PLAZA
N°. 8, JIANGUOMENNEI AVENUE
BEJJING 100005 - PEOPLE'S REPUBLIC OF CHINA
TEL:-86 10 652 30 363/393 EXT 101
FAX:-86 10 652 27 071 E-MAIL: li.zheng@acv-world.com

### DENMARK

# VARMEHUSET FRICHSVEJ 40 A

8600 SILKEBORG - DENMARK TEL::+45 86 82 63 55 FAX:+45 86 82 65 03 E-MAIL: vh@varmehuset.dk

### **ESTONIA** TERMOX AS

TAHE 112A 51013 TARTU - ESTONIA TEL::+372 736 73 39 FAX:+372 736 73 44 E-MAIL: termox@termox.ee

# GREECE

GREECE ESTIAS MARASLI STREET 7 54248 THESSALONIKI - GREECE TEL.:+30 23 10 31 98 77 / +30 23 10 32 03 58 FAX:+30 23 10 31 97 22 E-MAIL: info@genikithermanseon.gr

### ÎLE MAURICE

SOTRATECH
29, RUE MELDRUM
BEAU BASSIN - ÎLE MAURICE
TEL.:+230 46 76 970
FAX:+230 46 76 971
E-MAIL: stech@intnet.mu

# LITHUANIA

# UAB "GILIUS IR KO" SAVARNORIU PR. 192 3000 KAUNAS - LITHUANIA

TEL.:+370 37 308 930 FAX:+370 37 308 932

# CASATHERM

PLACE EL YASSIR 20300 CASABLANCA - MAROC TEL.:+212 22 40 15 23 FAX:+212 22 24 04 86

### **MOLDAVIA**

### STIMEX - PRIM S.R.L.

STIMEX - PRIM S.R.L.
STR BUCURESTI, 60A
2012 CHISINAU - MOLDAVIA
TEL.:+37 32 22 46 75
FAX:+37 32 27 24 56
E-MAIL: stimex@slavik.mldnet.com

### ÖSTERREICH

OSTERREICH
PROTHERM HEIZUNGSTECHNIK Gmbh
TRAUNUFERSTRASSE 113
4052 ANSFELDEN - ÖSTERREICH
TEL.:+43 7229 804 82
FAX:+43 7229 804 92
E-MAIL: protherm@nextra.at

ROMANIA
SC TRUST EURO THERM SA
D.N PIATRA NEAMT - ROMAN
km 2 C.P 5 O.P 3 jud. Neamt
5600 PIATRA NEAMT - ROMANIA
TEL.::+40 233 20 62 06
FAX:+40 233 20 62 00 E-MAIL: office@eurotherm.ro

### SLOVENIA

### Z\*MAJ d.o.o. CESTA OF 49

1420 TRBOVLJE - SLOVENIA TEL.:+386 356 32 830 FAX:+386 356 32 831 E-MAIL: jjeraj@zmaj.si

# **SWEDEN**

### WÄRMEPRODUKTER I KLIPPAN AB TEMPLAREGATAN 7

26435 KLIPPAN - SWEDEN TEL.:+46 435 184 10 FAX:+46 435 184 02 E-MAIL: warmeprodukter.se@telia.com

# THNISIE

SO.CO.ME CHAUMAX BOÎTE POSTALE N°44 1002 TUNIS - TUNISIE TEL.:+216 71 78 15 91 FAX:+216 71 78 87 31

### UKRAINE

# UKRTEPLOSERVICE LTD

PR. LAGUTENKO 14 83086 DONETSK - UKRAINE TEL.:+38 062 382 60 47/48 FAX:+38 062 335 16 89 E-MAIL: ges@kias.net

VWW.