

# Gas 320 Ace - 650

## technical data sheet.

Date: Sept 2023

This is a quick reference technical data sheet, full details can be found within the GAS 320 / 620 ACE installation and user manual 7734324-v.07-21092022 via [remeha.co.uk](http://remeha.co.uk)

### Overview

MODEL: GAS 320 ACE 650	CE ID No: 0063CU3937
Rated Output (80/60°C)	118.7 - 600.9 kW
Rated Output (50/30°C)	651.5 kW
Weight (dry) (without packaging)	570 kgs
Overall Dim WxHxD	707x1550x2172 mm
No of sections:	10
SBEM Seasonal Efficiency %: GCV <sup>(1)</sup>	95.75 %
Efficiency - Full Load 100%: NCV <sup>(3)</sup>	98.5 %
Efficiency - Part Load 30%: NCV <sup>(4)</sup>	108.1 %
Stand-by Heat Loss:*	537 W

### Burner type pre mix

Standard Fuel Available	Natural Gas
Fuel Consumption (max) NG	64.6 m <sup>3</sup> /h max G20
Fuel Consumption (max) LPG	N/A
Flame Protection	Ionisation
Ignition	Electronic
Acoustic level at 1 metre	55.7 dB(A)
Optional Fuel	N/A
Gas Connection size BSP	2" (M)
Min/Max Gas pressure - NG	17-25 mbar
Min/Max Gas pressure - LPG	N/A
NOx Annual Emissions**** EN15502 - NG (Class 6)	47 mg/kWh (dry, 0% O <sub>2</sub> )
NOx BREEAM Annual***** Emissions - NG	18 mg/kWh (dry, 0% O <sub>2</sub> )

### Concentric flue/air inlet

Flue diameter I/D	250 mm
Air inlet diameter I/D	250 mm
Mass flue gas flow rate	205-1027 kg/hr
Flue gas temperature	30 - 65 °C
Maximum counter pressure	150 Pa

#### Standard Controls –

SCB-01 provides two volt free contacts for status notification, 0 - 10v connection for PWM system pump.

SCB-02 provides functionality for a DHW and central heating zone.

Gateway GTW - 22 provides functionality to connect a boiler to an app via bluetooth.

(1) In accordance with the Non Domestic Building Services Compliance Guide 2013 Edition - For use in England

(2) In accordance with EU 813 & 814 / 2013 Eco Design Regulations

(3) @ 80/60 °C Nett (EN 92/42)

(4) @ 30 °C nett (EN 92/42)

### Erp Data: ^Energy Label / ^^Eco Design

Seasonal Space Efficiency % <sup>(2)</sup>	N/A
Energy Efficiency Class <sup>(2)</sup>	N/A
Sound Power Levels Lwa	N/A Above 400kW
Annual Energy Consumption	N/A
Useful Efficiency - Full Load (GCV)% <sup>(2)</sup>	N/A Above 400kW
Useful Efficiency - Part Load (GCV)% <sup>(2)</sup>	N/A Above 400kW

### Hydraulics

Water contents	104 ltrs
Resistance @ 11°C	430 mbar (43.0 kPa)
Resistance @ 20°C	130 mbar (13.0 kPa)
Nominal Flow Rate @ 11°C	13.0 l/s (47.0 m <sup>3</sup> /h)
Nominal Flow Rate @ 20°C	7.1 l/s (25.5 m <sup>3</sup> /h)
Condensate Connection	32 mm OD
Flow Connection PN10	DN80 Flanged
Return Connection PN10**	DN80 Flanged
Standard Operating Temp.***	20-90 °C
Maximum Operating Temp.	90 °C
High Limit Set Point	110 °C
Maximum operating pressure	7 bar
Minimum operating pressure	0.8 bar
Minimum operating pressure (o/v)	N/A (Sealed System Only)

### Electrical

Power Supply	230v - 1ph - 50hz
Power Consumption	10-720 W
Fuse Rating amps (Main)	10 AT
Fuse Rating CB01	6.3 AT
Fuse Rating CU-GH13	1.6 AT
Controls Voltage	24 v (max 4va)
Insulation Class IP	X1

\* With optional insulation kit.

\*\* **Important** The return flanged connection is DN80 however, the inner bore of the return flange is DN65. If fitting a butterfly valve or similar please ensure a spool piece is first fitted to avoid the valve fouling the inner DN65 mm bore of the return flange.

\*\*\* Important When operating above the 25K dT (Parameter GP021) the boiler will restrict the maximum flow temperature to 80 deg C.

\*\*\*\* NOx emissions with standard factory settings G20 EN15502

\*\*\*\*\* NOx emissions set to BREEAM settings at commissioning G20 EN15502.