

Quinta Ace S 50

Technical data sheet



BY BAXI

This is a quick reference technical data sheet, full details can be found within the Quinta ACE installation and user manual via www.baxi.co.uk

Date: September 2025

Overview	
Model: Quinta Ace S 50	PIN ID No: 0085DP0589
Rated Output (80/60°C)	45.0 kW
Rated Output (50/30°C)	48.6 kW
Weight (dry) without packaging	35.5 kgs (without front casing)
Overall Dim WxHxD	500x766x560 mm
No of sections	One piece casting
SBEM Seasonal Efficiency %: GCV ⁽¹⁾	95.3
Efficiency - Full Load 100%: NCV ⁽⁴⁾	97.4
Efficiency - Part Load 30%: NCV ⁽⁵⁾	107.8
Stand-by Heat Loss	0.089 kW
Burner type pre-mix	
Standard Fuel Available	Natural Gas
Fuel Consumption (max) NG	4.90 m3/h
Fuel Consumption (max) LPG	1.89 m3/h
Flame Protection	Ionisation
Ignition	Electronic
Acoustic level at 1 metre	53.3 dB(A)
Optional Fuel (*)	Propane
Gas Connection size BSP	3/4" (M)
Min/Max Gas pressure - NG	17-25 mbar
Min/Max Gas pressure - LPG	30-50 mbar
NOx Annual Emissions - NG BREEAM (EN15502)	19 mg/kWh (dry, 0% O2) - Class 6
Concentric flue/air inlet	
Flue diameter I/D (**)	80 mm
Air inlet diameter I/D (#)	125 mm
Mass flue gas flow rate	7.2 - 75.6 kg/hr
Flue gas temperature	92oC
Maximum counter pressure	185 Pa

Erp Data: ^Energy Label / ^^Eco Design	
Seasonal Space Efficiency % ⁽²⁾	92
Energy Efficiency Class ⁽²⁾	A
Sound Power Levels Lwa	64 dB^ (indoors)
Annual Energy Consumption Gj	141
Useful Efficiency - Full Load (GCV)% ⁽³⁾	87.8^
Useful Efficiency - Part Load (GCV)% ⁽³⁾	97.1^
Hydraulics	
Water contents	4 ltrs
Resistance @ 15°C	836 mbar
Resistance @ 20°C	470 mbar
Nominal Flow Rate @ 15°C	0.72 l/s
Nominal Flow Rate @ 20°C	0.54 l/s
Condensate Connection	22mm OD
Flow Connection Size BSP	1 (M)
Return Connection Size BSP	1 (M)
Standard Operating Temp.	20-90°C
Maximum Operating Temp.	90°C
High Limit Set Point	110°C
Maximum operating pressure	4 bar
Minimum operating pressure	0.8 bar
Minimum operating pressure	N/A (Open Vent)
Electrical	
Electrical	230v - 1ph - 50hz
Full Load Current (max)	0.43 amps
Power Consumption	21 - 102 W
Modulating input	0-10 v dc
Controls Voltage-Potential free Contact	0 v
Insulation Class IP	X5D

Standard

On/Off, 0-10v dc, Open Therm, R-Bus
High limit protection and low water protection
Volt free common alarm and boiler run indication
Manual Override
Hot water priority facility (3 way valve or pump)
Two Safety Interlocks
Hours run indication
Flue concentric connection (**) (#)
LIN-Bus (Pump protocols)
Quick connect external sockets

Optional

Optimising compensator for single and multiple boilers
Cascade kits multiple boiler pipework kits
Low loss headers
Plate heat exchangers
Air dirt separators
ModBus & BACNet communications gateway
Outside sensor for simple weather compensation
Hot water priority
Pump and valve kits
Relay kits for single and multiple controls where a 230v switching relay is required

1) In accordance with the Approved Document Part L2 Building Regulations 2021 Edition - For use in England
(2) In accordance with EU 811 & 812 / 2013 Energy Labeling Regulations
(3) In accordance with EU 813 & 814 / 2013 Eco Design Regulations
(4) @ 80/60°C Nett (EN 15502-1 & - 2)
(5) @ 50/30°C Nett (EN 15502-1 & - 2)

(*) See installation and service manual
(**) For conventional or room sealed operation
(#) Flue adaptor available for CLV systems
GAR (EU) 2016/426
BED 92/42/EEC
EMC 2014/30/EU
LVD 2014/35/EU
ErP 2009/125/EC