

Physical Data		Qudos 28h and 28hP	Qudos 28s and 28sP	Qudos Duet 120/150/210	Qudos Solar Duet 210
Cabinet Height	mm	680	700	1780	2050
Cabinet Width	mm	390	435	625	625
Cabinet Depth	mm	280	280	915	915
Top Clearance	mm	150	150	150	150
Side Clearance	mm	5	5	5	5
Base Clearance	mm	200	200	N/A	N/A
Front Clearance (for servicing)	mm	300	300	300	300
Weight - Full	kg/(lbs)	39/(86)	47/(104)	261/296/373	408
Weight - Empty	kg/(lbs)	35/(77)	43/(95)	121/126/137	154
Flow and Return Connection		G3/4	G3/4	22mm	22mm
DHW and CWS Connection		N/A	N/A	22mm	15mm
Gas Connection		G1/2	G1/2	G1/2	G1/2
Condensate Connection Overflow		22mm plastic	22mm plastic	22mm plastic	22mm plastic
Safety Valve Connection Discharge		15mm copper	15mm copper	22mm (D2)	22mm (D2)
IP Rating		IP20 (IPX0)	IP20 (IPX0)	IP20 (IPX0)	IP20 (IPX0)

Flue and Air Intake Material : 50mm muPVC (BS5255)/BSEN1566-1 (pipe) & BSEN1329 (fittings)

Max. Flue Outlet Length	m	20	20	20	20
Max. Total Flue Outlet and Air Intake Length	m	40	40	40	40

Flue and Air Intake Material : 75mm Keston Composite

Max. Flue Outlet Length	m	60	60	60	60
Max. Total Flue Outlet and Air Intake Length	m	120	120	120	120

Performance Data

		Qudos 28h	Qudos 28hP	Qudos 28s	Qudos 28sP
Max. CH Input (Gross CV)	kW/(Btu/h)	29.4/(100,300)	27.8/(94,850)	29.4/(100,300)	27.8/(94,850)
Max. Output to Water (80/60C Flow/Return)	kW/(Btu/h)	26.4/(90,500)	25.5/(87,000)	26.4/(90,500)	25.5/(87,000)
Max. Output to Water (50/30C Flow/Return)	kW/(Btu/h)	28.4/(96,900)	28.4/(96,900)	28.4/(96,900)	28.4/(96,900)
Min. Output to Water (80/60C Flow/Return)	kW/(Btu/h)	7.0/(24,900)	7.8/(26,600)	7.0/(24,900)	7.8/(26,600)
Max Gas Cons After 10 mins	l/s/(ft ³ /hr)	0.76/(96.6)	0.35/(45.0)	0.76/(96.6)	0.35/(45.0)
Max Operating Flow Temp.	C	82	82	82	82
Max Pressure (Sealed System)	bar	2.5	2.5	2.5	2.5
Inlet Gas Pressure	mbar/(in wg)	20.0/(8.0)	20.0/(8.0)	20.0/(8.0)	20.0/(8.0)
Electrical Supply		230V 50Hz	230V 50Hz	230V 50Hz	230V 50Hz
Power Consumption (Max)	W	84	84	150	150
Power Consumption (Standby)	W	8.5	8.5	8.5	8.5
Type of Gas		G20 Nat Gas	G31 LPG	G20 Nat Gas	G31 LPG
Optimum Flue Gas CO ₂ Level (at max rate, case on) %		9.1	10.5	9.1	10.5
SEDBUK Efficiency*	%	91.1 (A)	93.1 (A)	91.1 (A)	93.1 (A)
NO _x Class		5	5	5	5
Safety Valve	bar/(lbf/sq in)	N/A	N/A	3/(43.5)	3/(43.5)
Expansion Vessel Capacity	litre	N/A	N/A	8	8
Expansion Vessel Charge Pressure	bar/(lbf/sq in)	N/A	N/A	1.0/(14.5)	1.0/(14.5)
GC Number		41-930-19	41-930-20	41-930-17	41-930-18
CE PI Number		87BR36	87BR36	87BR36	87BR36

*Subject to confirmation

For higher output applications, Keston offers a complete range of commercial heating products including made-to-order multiple boiler rigs - refer to the Keston Commercial brochure for more details.

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In accordance with our policy of constant improvement we reserve the right to alter the design and specification without prior notice.

KESTON BOILERS

Exhibition
Launch
Edition

NEW QUDOS RANGE –
A RANGE OF INTELLIGENT HIGH EFFICIENCY BOILERS
BRINGING TOMORROW'S TECHNOLOGY TO TODAY'S MARKET

Solar Ready

integral controller for seamless integration with a renewable system,
such as solar.

User Ready

easy to operate attractive LCD display to harness full performance potential.

Future Ready

advanced control options fitted as standard with the flexibility to
upgrade to enhanced controls at a later date.

NATURAL HEATING

COMMERCIAL HEATING TECHNOLOGY IN A SIMPLE TO USE DOMESTIC BOILER

QUDOS



QUDOS 28H • QUDOS 28S • QUDOS DUET • QUDOS SOLAR DUET

OPTIMISING CAPABILITY AND PROVIDING THE ULTIMATE IN CONTROL AND SIMPLICITY

KESTON QUDOS 28

INTELLIGENT FUTURE-READY CONDENSING BOILERS – SYSTEM OR OPEN VENT FORMAT



BASIC FEATURES

- SEDBUK A rated*
- 50mm muPVC flue system as expected from Keston Boilers Ltd (NB BSEN1566-1 (pipe) and BSEN1329 (fittings)).
- Attractive LCD user display indicating full product operation status at all times
- No compartment ventilation due to the very low casing temperatures
- Two stage frost protection
- Pump and fan exercise during extended periods of inactivity
- Full diagnostics and information display
- Variable speed circulating pump for increased operating efficiencies (Qudos 28S only)
- Lockout "avoidance" technology to prevent nuisance lockouts
- Fully programmable setting – can be tailored to each individual users needs
- Logging of historical data
- Optional back frames for routing pipes behind boiler
- Natural and LP Gas models

'FUTURE READY' CONTROL CAPABILITY FITTED AS STANDARD, PROVIDING A RANGE OF OPTIONS TO SUIT ALL APPLICATIONS:

- Integral Solar Controller for direct control of 'auxiliary energy' such as solar thermal
- Keston 'Dual Stat' facility allowing two different operating temperatures depending upon the source of the demand
- Opentherm control connection for intelligent room control
- 0–10V DC input control for BMS connection controls
- Facility for hot water modulating control and legionella protection
- Weather compensation
- Optional remote fascia unit

SEDBUK 'A' listed *

The Keston Qudos 28 offers today's domestic market the ultimate in tomorrow's technology. A range of fully modulating gas condensing boilers with advanced yet simple integral controls that provide a suite of options for the user/installer to select to ensure optimum performance is delivered at all times. For ultimate performance optimising, the Qudos 28s also features an integral speed-controlled pump to ensure water flow rate and burner rate are perfectly matched.

The Qudos 28 units feature an integral control system for 'auxiliary energy' such as solar thermal, thereby providing a 'future proof' solution. This ensures seamless integration of the renewable energy source with the high efficiency boiler operation to maximise the energy efficiency benefits available.

The wall mounted Keston Qudos 28 boilers are available in system (Qudos 28s) or open vented (Qudos 28h) formats. The Qudos 28s has dimensions of H700 x W435 x D280 and weighs 43kg. The Qudos 28h has dimensions of only H680 x W390 x D280 and weighs just 35kg. Both models can be sited virtually anywhere – even in a standard kitchen cupboard if required, with no compartment ventilation.

THE KESTON QUDOS DUET

Keeping in line with Keston's unswerving commitment to cost efficiency, innovation and simplifying installation, the company have pioneered the ultimate domestic heating system. The Keston Qudos Duet incorporates technology normally associated only with the most advanced commercial boiler systems into a domestic system with full functionality, which optimises capability and provides the ultimate in control and simplicity.

The Keston Qudos Duet offers a harmonised blend of the Qudos 28s and the Keston Spa unvented water storage cylinder with full 'future ready' control options fitted as standard, including a revolutionary facility for hot water modulating control and legionella protection. The Keston Qudos Duet is available in one compact ready-to-install unit, all contained in a pre-assembled, pre-plumbed and pre-wired floor-standing rig. The integrated Qudos 28s is fully modulating from 7kW to 28.4kW output. The unvented Spa water storage cylinder in this rig is available in 120l, 150l and 210l volumes and larger sizes are available on request. No anode is required and the cylinder offers rapid heat recovery with dramatic savings through reduced boiler cycling.

SIMPLIFYING FOR THE INSTALLER

The Keston Qudos Duet has all the cost and energy-saving benefits of condensing technology, combined with speedy, uncomplicated and clear installation.

HOW TO INSTALL

Site the unit where convenient, connect to the radiators or the underfloor heating system, all hot and cold services and the gas supply. Connect 230V permanent electrical supply into a switched fused spur box fitted on the unit and finally connect to any choice of 230V AC room thermostat. All servicing is from the front and the water cylinder is fitted with a 3kW (21/4") immersion heater as backup. As with all Keston boilers, the Qudos 28s carries the Energy Efficiency logo*. Additionally, the Keston Qudos Duet is designed to fully comply with CHES HR7 recommended Best Practice system specification. In addition, for multiple installations, Keston is able to modify the design to provide a bespoke solution to meet any customer needs.



Power Points

HEATING FEATURES

- Keston Qudos 28s intelligent system fully modulating gas condensing boiler
- Filling loop included
- Automatic bypass valve
- 22mm 2-port CH valve
- Sealed system discharge tundish
- Flow and return isolation valves

HOT WATER FEATURES

- Spa unvented cylinder made from ultra durable Duplex stainless steel
- 22mm 2-port DHW valve
- Potable water expansion vessel
- Cylinder control/overheat thermostat
- 3kW immersion heater
- CWS pressure-reducing valve set
- CWS expansion relief valve
- Potable discharge tundish

ELECTRICAL FEATURES

- Wiring centre
- 2-channel programmer
- Switched fused spur

Larger capacity units available on request

SEDBUK 'A' listed *

THE KESTON QUDOS SOLAR DUET



The Keston Qudos Solar Duet, as part of the Keston Renewables range, is the ultimate premium quality pre-piped, pre-wired solar thermal heating system. The innovative integral control system ensures that the Qudos Solar Duet has the ability to use the Qudos 28s as the main driver, coordinating itself to operate in conjunction with solar energy input to the system.

The Keston Qudos Solar Duet incorporates the Qudos 28s and 210-litre Spa Twin double coil cylinder. Full functionality control options are fitted as standard, including a speed controlled pump and a revolutionary facility for hot water modulating control, and legionella protection option for hot water. The Qudos Solar Duet, in combination with Keston's state of the art titanium coated selective surface absorber solar panels, makes Keston Solar the first choice for a maximum performance, energy efficient solar thermal system.



Keston Qudos Solar Duet includes:

- Keston Qudos 28s intelligent high efficiency boiler
- Keston Spa Twin 210 litre stainless steel rapid recovery unvented double coil cylinder
- Keston's state of the art titanium coated selective surface absorber solar panels (optional)
- Full system controls (excluding room thermostat)
- Full solar controls pre-wired

SIMPLIFYING FOR THE INSTALLER

The Keston Qudos Solar Duet has all the cost and energy saving benefits of condensing technology and solar thermal renewables, combined with speedy and uncomplicated installation. For higher output variations, please contact the Keston Sales Department.

HOW TO INSTALL

Site the unit where convenient, connect to the radiators or the underfloor heating system, all hot and cold services, solar collection panels and the gas supply. Connect 230V permanent electrical supply into a switched fused spur box fitted on the unit and finally connect to any choice of 230V AC room thermostat. All servicing is from the front and the water cylinder is fitted with a 3kW (21/4") immersion heater as backup. As with all Keston boilers, the Qudos 28s carries the Energy Efficiency logo*. Additionally, the Keston Qudos Solar Duet is designed to fully comply with CHES HR7 recommended Best Practice system specification. In addition, for multiple installations, Keston is able to modify the design to provide a bespoke solution to meet any customer needs.

Power Points

HEATING FEATURES

- Qudos 28s intelligent gas condensing boiler
- Filling loop included
- Automatic bypass valve
- 22mm 2-port CH valve
- Sealed system discharge tundish
- Flow and return isolation valves

HOT WATER FEATURES

- Spa Twin unvented cylinder made from ultra durable Duplex stainless steel
- 22mm 2-port DHW valve
- Potable water expansion vessel
- Cylinder control/overheat thermostat
- 3kW immersion heater
- CWS pressure-reducing valve set
- CWS expansion relief valve
- Potable discharge tundish

ELECTRICAL FEATURES

- Wiring centre
- 2-channel programmer
- Switched fused spur

SOLAR FEATURES

- Solar differential control
- Solar hydraulic control unit
- 18 litre solar expansion vessel
- 6 bar solar safety valve
- Glycol anti-freeze
- Also available with 2 Keston solar panels (optional)

SEDBUK 'A' listed *