



# KICKSPACE® 500, 600 600-12V, 800, 80S & 80D INSTALLATION & OPERATING MANUAL

PLEASE LEAVE THIS MANUAL WITH THE END USER



**COMPLETE HEATING SOLUTIONS** 

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### 1.0 Safety Information

The KICKSPACE<sup>®</sup> 500, 600, 600-12V, 800, 80S & 80D MUST NOT be installed in a bathroom or other similar high humidity area.

WARNING: KICKSPACE<sup>®</sup> 500, 600, 800, 80S & 80D models must be earthed.

For MYSON KICKSPACE<sup>®</sup> 500, 600, 600-12V, 800, 80S & 80D, a fused (3A) electrical spur with a switch having 3mm separation on all poles must be provided in an easily accessible position adjacent to the unit.

For the KICKSPACE<sup>®</sup> 600-12V, a fused electrical spur having 3mm separation on all poles must be provided in an easily accessible position adjacent to the transformer. Both the fused spur and the transformer must not be positioned in a bathroom or other similar high humidity area.

If the supply cord to the KICKSPACE<sup>®</sup> 500, 600, 600-12V, 800, 80S & 80D is damaged, it must be replaced by the manufacturer, its service agent or similar qualified persons in order to avoid a hazard. This appliance can be used by children aged from 8 years and above and persons with reduced physical or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children unless they are older than 8 years and supervised.

Keep the appliance and its cord out of reach of children aged less than 8 years.

Children of less than 3 years should be kept away from the unit unless continuously supervised.

Children aged from 3 years and less than 8 years shall only switch on / off the appliance provided that it has been placed or installed in its normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.

Children aged from 3 years and less than 8 years shall not plug in, clean the appliance or perform user maintenance.

### 2.0 Installation

- Before proceeding with the installation, the heating system design must be considered and the unit correctly sized to meet the heat loss requirements of the room.
- Before proceeding with the installation, unpack the carton contents and check against the checklist below:
  - 1. KICKSPACE<sup>®</sup> unit.
  - 2. Flexible hoses including isolating valves (1 pair).
  - 3. Instruction manual.
  - **4.** Warranty card.
  - 5. Grille.
  - 6. Screw fixing kit (with grille).
  - 7. Transformer (12V model only).
  - 8. Connector (12V model only).
- This MYSON KICKSPACE<sup>®</sup> fan convector is designed for installation in the cavity beneath kitchen cupboards on the vacant floor space, or other similar locations.
- For KICKSPACE<sup>®</sup> 500, 600, 600-12V & 800 a minimum of 25mm clear headroom is required above the top of the KICKSPACE<sup>®</sup> when fitted.
- The unit should be mounted on a clean and level floor area under the cupboard base.
- KICKSPACE<sup>®</sup> 80S & 80D models can only be installed if there is a minimum height of 80mm from the top of the floor covering to the underside of the kitchen unit (see Fig. 1).
- KICKSPACE<sup>®</sup> 500, 600, 600-12V & 500 floor mounting (see Fig. 2a) - The KICKSPACE<sup>®</sup> is normally fitted directly onto the floor and the base of the unit is fitted with four mounting feet.

- KICKSPACE<sup>®</sup> 500, 600, 600-12V & 500 plinth mounting (see Fig. 2b) -
  - As an alternative to floor mounting the unit may be fitted into the plinth.
  - A suitable support must be securely fitted to the floor.
  - The top of the support must be level with the lower edge of the cut-out when fitted.
- KICKSPACE<sup>®</sup> 80S & 80D floor mountings (see fig. 2c) Applies to 80S & 80D units in 80mm plinth height kitchen unit.
- Decide the position of the KICKSPACE<sup>®</sup>, mark out and cut the plinth to the dimensions using table on page 6.
- Position the KICKSPACE<sup>®</sup> under the cupboard in the required location, with the front edge just behind the line of the plinth.
- Replace the plinth and bring the KICKSPACE<sup>®</sup> forward into the opening so the front edge projects approximately 10mm through the plinth.
- Align the grille and secure it to the unit with two screws supplied (use the shorter screws). (See Fig. 3).
- Secure the unit/grille to the plinth with two screws supplied (use the longer screws). (See Fig. 3).
- Complete the electrical installation, switch on and test the KICKSPACE<sup>®</sup> (see Fig. 3).
- When installed in a kitchen consideration should be given to storage of perishable goods in the cupboard above.

### 3.0 Water Connection

- The KICKSPACE<sup>®</sup> should only be used on closed circulation, two pipe, pump assisted central heating systems.
- For optimum fan convector heating performance the system must be capable of providing sufficient hot water through the heat exchanger. This means that:
  - 1. The minimum pipe size from boiler to fan convector must be at least 15mm. Microbore pipe **MUST NOT** be used.
  - 2. Where the unit is fitted on to a system with other emitters a separate circuit for the fan convector should be considered to provide adequate water flow.
  - 3. The system water temperature on the return of the KICKSPACE<sup>®</sup> must be above 43°C for the fan to switch on.
  - 4. This unit is NOT suitable for one-pipe systems.
  - **5.** Optimum performance will require effective balancing of the whole system.
  - This unit must not be used to replace a radiator in an existing system unless an adequate flow of water can be guaranteed.

Pipework must be positioned correctly to ensure flexible hoses are not kinked when installed (see Figs. 5a & 5b). Only use the hose sets supplied with this unit. Do not use old or alternative hose sets.

Connect valve ends of the flexible pipes to the KICKSPACE<sup>®</sup>.

**Note:** The direction of the arrows on the valves are not significant in this application (see Fig. 4).

• Open valves fully, check pipe connections for leaks and vent the heat exchanger. A vent screw is provided to vent the heat exchanger.

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3.0

## 4.0 Electrical Connection

WARNING: KICKSPACE<sup>®</sup> 500, 600, 800, 80S & 80D models must be earthed.

- The electrical installation must comply with local or national wiring regulations.
- This unit is supplied fitted with a 2 metre 0.75mm<sup>2</sup> cord.
- For KICKSPACE<sup>®</sup> 500, 600, 600-12V, 800, 80S & 80D a fused (3A) electrical spur with a switch having 3mm separation on all poles must be provided in an easily accessible position adjacent to the unit (see Fig. 6a).
- For the KICKSPACE<sup>®</sup> 600-12V, a fused electrical spur having 3mm separation on all poles must be provided in an easily accessible position adjacent to the transformer. Both the fused spur and the transformer must not be positioned in a bathroom or other similar high humidity installation (see Fig. 6b).
- If the supply cord to KICKSPACE<sup>®</sup> models 500, 600, 800, 80S and 80D is damaged, it must be replaced by the manufacturer, its service agent or similar qualified persons in order to avoid a hazard.
- If the supply or outlet cord to KICKSPACE<sup>®</sup> 600-12V transformer is damaged, it must be replaced by the manufacturer, its service agent or similar qualified persons in order to avoid a hazard.
- For the KICKSPACE<sup>®</sup> 600-12V, a connector block is supplied to connect the low voltage supply from the transformer to the supply cord fitted to the unit.

Do not energise the electrical supply until the remaining stages of the installation have been completed.

#### 5.0 Controls

This unit is controlled by the switches on the front of the unit (see Fig. 3).

Ensure the electricity supply is switched on.

#### Heating Mode

- Set the heating/fan only switch to heating
- Set fan speed control to position I
- The unit will now run on low fan speed.

The system water temperature on the return of the KICKSPACE<sup>®</sup> must be above  $43^{\circ}$ C for the fan to switch on\*

\*Eg. When the mean water temperature is greater than 43°C the fan will switch on, then when the water temperature drops below 43°C the fan will switch off.

Performance will depend on the water temperature at the coil and the flow through the coil.

The fan speed can be set to boost by switching the fan speed switch to II.

A low speed setting is recommended for normal operation with the higher speeds for boost heating when required.

#### **Off Position**

Set the fan speed selector switch to the off (O) position.

#### Fan Only Mode

If required, the  ${\rm KICKSPACE}^{\circledast}$  can be used in summer for air circulation without heat.

- Set the heating/fan only switch to fan only  $\clubsuit$
- Adjust fan speed to required setting.

#### 6.0 Troubleshooting

Once installed this fan convector becomes an integral part of a complete heating system that includes boiler, pump, other emitters such as radiators and fan convectors, and a number of heating controls, dependent on system complexity. An apparent problem with this unit may be the result of system controls being incorrectly set and can be solved easily without calling out your installer. Before calling your installer, please carry out the checks listed below.

Problem	Possible Causes	Remedy
	Unit switched off	Turn on
	Room thermostat not calling for heat	Turn up room thermostat
	Unit not switched on at fused spur	Switch on at spur
Fan not working in	Fuse blown at fused spur	Replace fuse
heating mode	Unit isolating valves shut	Open valves
	Water temperature of	Ensure boiler, pump and other central
	KICKSPACE <sup>®</sup> below 43°C	heating equipment is working correctly, if not contact your installer
		<b>Note:</b> Operation of fan can be checked by switching to fan only setting

If the fan convector is still faulty after checking the above, call your installer.

KICKSPACE<sup>®</sup> may have poor performance/cycle if a low water temperature/flow rate is supplied, please refer to your installer as this could be from the following:

- Unit incorrectly sized for heat loss of room
- Lack of flow to KICKSPACE<sup>®</sup> from heating system
- Pipe sizes/pump sized incorrectly
- System incorrectly balanced

## 7.0 Appendix

# Heating Performance Data

	Fan	Temperature Difference (°C)									
Model	Speed	Heat Output (Watts)			Heat Output (Btu/h)						
		∆T20	ΔT30	∆T40	ΔT50	∆T60	∆T20	ΔT30	∆T40	ΔT50	ΔT60
500	Normal	393	566	733	896	1056	1340	1930	2501	3057	3603
500	Boost	447	683	923	1166	1412	1524	2331	3150	3980	4817
(00	Normal	467	729	1000	1278	1562	1592	2486	3412	4361	5330
600	Boost	607	939	1279	1625	1977	2072	3203	4363	5545	6744
400 121/	Normal	467	729	1000	1278	1562	1592	2486	3412	4361	5330
000-12V	Boost	607	939	1279	1625	1977	2072	3203	4363	5545	6744
800	Normal	747	1077	1396	1707	2012	2550	3675	4763	5824	6864
	Boost	845	1289	1738	2192	2649	2885	4397	5930	7478	9039
000	Normal 304 455 605 755 905	1037	1552	2064	2576	3088					
805	Boost	331	509	691	876	1062	1129	1737	2358	2989	3624
000	Normal	421	624	824	1023	1221	1436	2129	2811	3490	4166
80D	Boost	475	707	938	1169	1399	1621	2412	3200	3989	4773

# Heat outputs tested in accordance with BS 4856 Part 1.

Flow Rate: 340 ltr/h (75 gal/h).

Flow Rate Correction Factors: 455 ltr/h (100 gal/h) multiply output by 1.03. 227 ltr/h (50 gal/h) multiply output by 0.96. 113 ltr/h (25 gal/h) multiply output by 0.85. Test Pressure 20 bar

Maximum Working Pressure 10 bar

# Approximate Hydraulic Resistance through Fan Convectors

Litroc/b	mm wg					
Littes/II	500	600	600-12V	800	80S	80D
455	788	1046	1046	911	592	613
340	488	625	625	544	372	439
227	231	326	326	258	207	295
113	82	95	95	82	95	176
Litros/b		kPa				
Littes/II	500	600	600-12V	800	80S	80D
455	7.7	10.3	10.3	8.9	5.8	6.0
340	4.8	6.1	6.1	5.3	3.6	4.3
227	2.3	3.2	3.2	2.5	2.0	2.9
113	0.8	0.9	0.9	0.8	0.9	1.7

# Sound Levels

Model	Sound Pressures at 2.5m (dBA)				
	Normal	Boost			
500	25.7	38.1			
600	26.4	37.2			
600-12V	29.4	39.0			
800	28.5	49.8			
80S	24.5	31.4			
80D	21.8	35.6			

Sound levels tested in accordance with EN 23741.

# Weight, Water Content and Motor Power

Model	Motor Power (W)	Water Content (I)	Unit Weight (kg)
500	25	0.26	4.3
600	40	0.30	5.0
600-12V*	40	0.30	7.9*
800	40	0.34	5.5
80S	13	0.17	3.83
80D	17	0.25	5.13

\*Includes transformer.

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## 7.0 Appendix (continued...)



#### Dimensions

	Dimensions (mm)		
Model	А	В	
500	466	93	
600 & 600-12V	520	93	
800	573	93	
805	530	80	
80D	730	80	

A = Width of cutout B = Height of cutout For corresponding diagrams please refer to Figs. 2a, 2b & 2c overleaf.

Fig. 1

80mm



Chassis Earth

Fig. 6a KICKSPACE<sup>®</sup> 500, 600, 800, 80S & 80D wiring diagram

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Fig. 6b KICKSPACE<sup>®</sup> 600-12V wiring diagram

LOW LIMIT THERMOSTA



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Product Serial	Product co serial numb Number:	de and per location

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