

Cassettair™
CASSETTE FAN CONVECTORS

The Concept

A Europe-wide research and development programme identified the need for a high performance cassette fan convector, powered by low pressure hot water and compatible with universal suspended ceiling systems. The result is the award-winning Cassettair ceiling fan convector from the European leader in climate control - Biddle Air Systems.



How Cassettair can benefit you

- Instant directional heat
- Increased environment comfort levels
- Saves valuable floor space
- Allows optimum usage of ground and wall space
- Available for up to 3.5m high ceilings
- European design award winner
- Easy to specify and install
- Low maintenance unit
- Stand-alone or multi-unit system
- Compliments other Biddle systems for total package solution
- Wall mounted touch controls

Applications

Cassettair is the ideal heating solution for the widest range of applications. In fact, anywhere that requires instant, unobtrusive, trouble-free heating can benefit from Cassettair.

Thousands of Cassettair units are in use throughout Europe in applications that include:

- Schools
- Shops
- Supermarkets
- Sales kiosks
- Showrooms
- Waiting and reception rooms

Selecting Cassettair

Using the wall controller Cassettair can be manually set to operate at one of three fan speeds. These three fan speeds should be selected at the time of ordering from the seven available, as detailed in the Performance Data table, to give low/medium/high fan speeds which best suit your application. Typically speed 1 is selected as low, speed 2 is selected as medium and speed 3 is selected as high.



Performance, Efficiency and Control

Cassettair has been designed with the air inlet and discharge located on the profiled face of the grille. Air entering the unit passes over the heating elements and is immediately redistributed through the outlet grille by 2 high performance, double inlet centrifugal fans. The configuration is exceptionally energy efficient as minimal “air handling” is required. All components in the Cassettair are selected for optimum output with minimal input energy requirement.



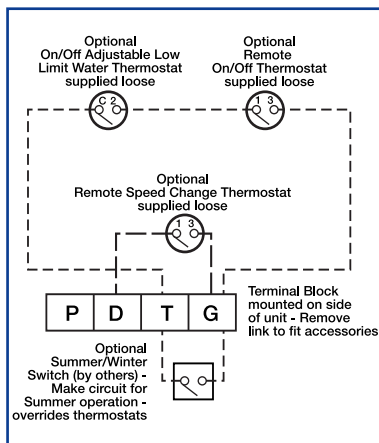
Further efficiencies are gained through the use of advanced control technologies using a remote mounted, touch sensitive electronic controller which simply plugs into the unit for single or group control.

Performance Data

The following table should be used to determine which three speed/voltage settings best suit your application.

Water @ 82/71°C EAT = 18°C 230v/1ph/50Hz

Wiring Diagram



All connections must be volt-free.

Cassettair KLV1

Speed	Voltage	Air Volume (l/s)	NR	Output (kW)	Flow Rate (l/s)	Pressure Drop (kPa)
1	100	96	30	5.1	0.11	6
2	115	127	34	6.3	0.14	10
3	140	151	40	7.1	0.15	12
4	155	183	43	8.0	0.17	16
5	180	215	47	8.9	0.19	20
6	200	235	49	9.5	0.21	23
7	220	265	53	10.0	0.22	26

Electrical Data

Cassettair KLV1

Speed	Voltage	Motor Output (W)	Running Current (A)	Starting Current (A)
1	100	77	0.35	0.36
2	115	101	0.46	0.47
3	140	141	0.66	0.68
4	155	172	0.78	0.83
5	180	242	1.06	1.11
6	200	273	1.28	1.35
7	220	321	1.51	1.64

What is Included?

Each Cassettair is boxed for transit and comes complete with:

- Main Cassettair unit
- Wall controller
- Low voltage controller cable
- Adjustable hanging rails
- Simple fixing instructions
- Moulded, earthed plug

If required a:

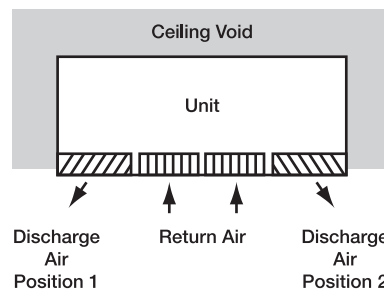
- Remote on / off thermostat
- Remote speed change thermostat
- Adjustable low limit pipe thermostat
- Summer/Winter switch

can also be supplied for site fitting.

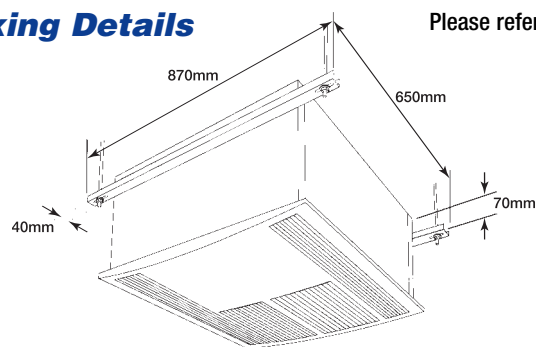


Key Dimensions

1: Styling Data KLV1

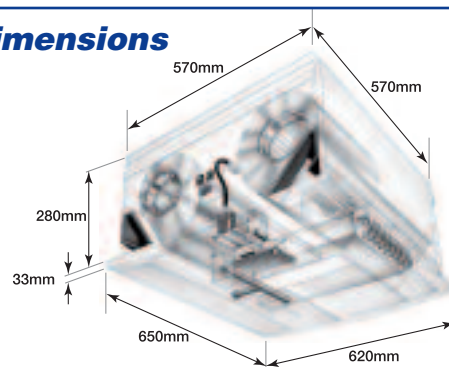


2: Fixing Details



3: Dimensions

Weight = 36kg



All dimensions are for general information only. For more specific details, fully dimensioned drawings are available on request.

Compatible with Universal Suspended Ceilings



Cassettair offers full compatibility with universal suspended ceiling grids. Designed to fit as a direct replacement for ceiling tiles in the sizes 600 x 600 to 625 x 625mm, it provides high performance heating in an aesthetically pleasing, unobtrusive manner.

Additionally, Cassettair is only 280mm deep and fits comfortably within virtually all ceiling voids.

Cassettair can be installed before or after installation of the ceiling system. The unit incorporates two adjustable hanging rails, allowing movement of the unit in one direction. Where the hanging rails are used in conjunction with FLAMCO or UNISTRUT rails already installed in the ceiling, units can be adjusted in any direction to enable accurate final positioning.

Unique Profiled Ceiling Grille

Cassettair's unique profiled inlet/outlet grille has been sympathetically designed to maintain the symmetry and aesthetic appeal of suspended ceiling installations. The combined inlet and discharge grilles are white (RAL 9010) and incorporate fixed plastic blades to give optimum warm air penetration.

Fast and Simple Installation

For ease of access and convenient installation and maintenance, the Cassettair water and electrical connections are located on the side panel of the unit. Connecting the electrical supply could not be simpler. Each unit incorporates a fixed cable with moulded, earthed plug ready for use.

The relative light weight and compactness of Cassettair means that installation of the KLV-1 unit can be carried out by a single person. The system's hanging rails allow the installer to position the unit in the ceiling and then adjust to fit the final position required. The height of the unit within the ceiling recess can be adjusted to the position of the false ceiling.

Easy Maintenance

Routine maintenance or inspection of the Cassettair does not require the removal of ceiling tiles. The convenient hinged design of the plastic grille panel allows fast and simple access to all components



The unit's filter can easily be removed once the grille has been opened. Cleaning using a vacuum cleaner is usually all that is required.

biddle

- Biddle Air Systems Limited
St. Mary's Road, Nuneaton
Warwickshire CV11 5AU

Tel: +44 (0)24 7638 4233
Fax: +44 (0)24 7637 3621
Email: sales@biddle-air.co.uk
<http://www.biddle-air.com>

- Biddle B.V.
P.O. Box 15
NL-9288 ZG Kootsterille
The Netherlands

Tel: +31 (0)512 335555
Fax: +31 (0)512 331424

- Biddle GmbH
Emil - Hoffmann - Straße 55-59
50996 Köln
Germany

Tel: +49 (0)2236 96900
Fax: +49 (0)2236 969010

- Biddle
21 Allée de Vendanges
77183 Croissy Beaubourg
France

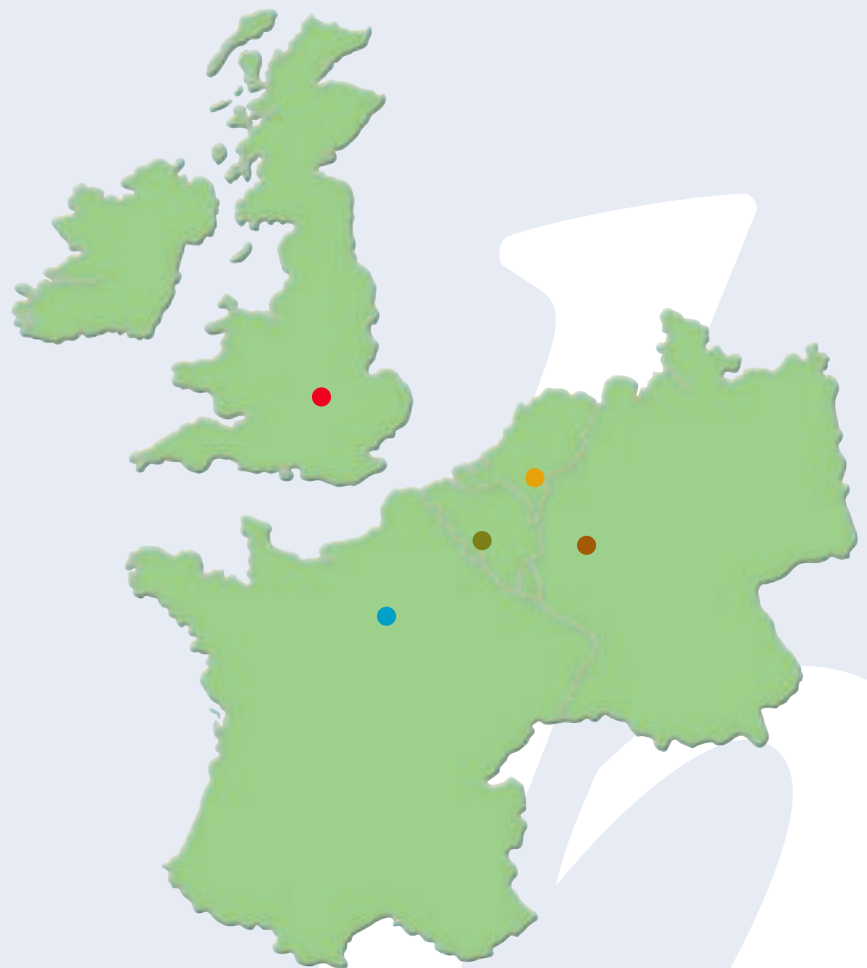
Tel: +33 (0) 1 64 11 15 55
Fax: +33 (0) 1 64 11 15 66

- Biddle NV
Business Park E19
Battelsesteenweg 455E
2800 Mechelen
Belgium

Tel: +32 (0) 15 287676
Fax: +32 (0) 15 287677



biddle
CLIMATE SOLUTIONS



The information given in this brochure is, to the best of our knowledge, correct at the time of going to print. However, Biddle Air Systems are constantly looking at ways of improving their products and services and therefore reserve the right to change without prior notice any of the data contained in this publication.
2.08