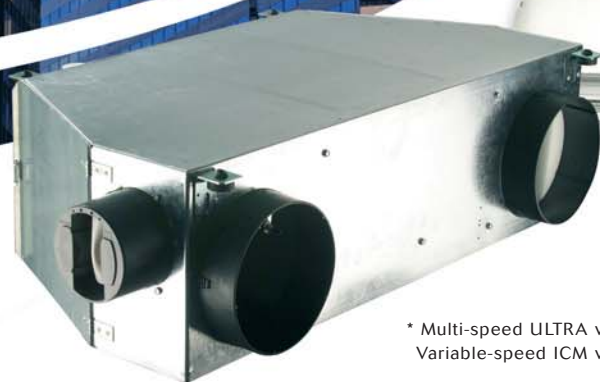




ULTRA/ICM^{TM*}

CHILLED-WATER
AIR TREATMENT TERMINALS



* Multi-speed ULTRA version
Variable-speed ICM version

INDIVIDUALISED COMFORT

FALSE CEILING - 42 BJ

INTELLIGENT INTEGRATION

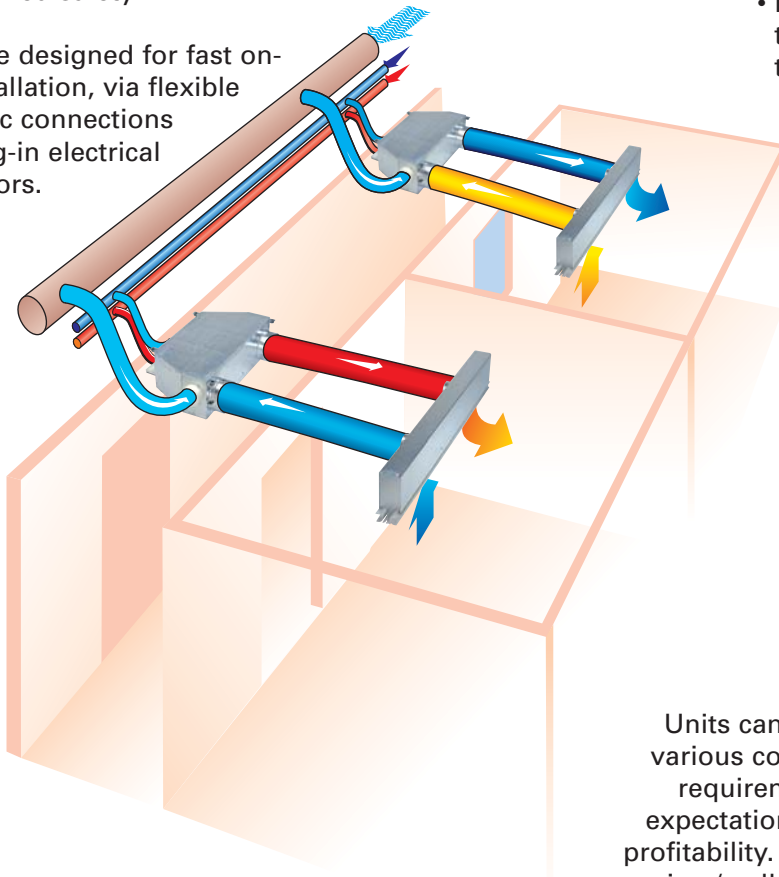
Units are installed into the false ceiling or floor void, opposite each office to be conditioned, and linked to the duct network of the building. Each module is connected to a Moduboot ceiling diffuser.

All active components (fans, motorised valves), fluids and energy sources are outside the air-conditioned zones.

The system architecture ensures:

- extremely quiet operation
- easy maintenance
- improved safety

Units are designed for fast on-site installation, via flexible hydraulic connections and plug-in electrical connectors.



A DIFFUSER THAT NEEDS NO MAINTENANCE

The high-induction Moduboot diffusers ensure distribution and return of the air in each office. The air flow is directed at high speed along the ceiling, preventing cold shower sensations. Based on the temperature of the distributed air a thermostat-controlled damper automatically determines the air flow direction:


- in the heating mode the warm air is directed to the perimeter of the building, in order to eliminate cold wall effects,
- in the cooling mode the air is directed towards the centre of the office space to provide enhanced comfort.

The Moduboot diffuser (270 mm deep) ensures exceptionally gentle air distribution, is practically invisible, easily integrated into false ceilings and completely frees the floor space.


COMFORT AT THE PUSH OF A BUTTON

Units can be equipped with various controllers to suit all requirements and meet all expectations for comfort and profitability. From the simplest version (wall thermostat) to the most sophisticated design (connection to a communications bus), Carrier always offers the right solution.


With the ICM each occupant has an individual, easy-to-use ergonomic control, regulating the unit and acting on all comfort parameters. Compact, but very practical: a phosphorescent key ensures that the control is easily found, even in the dark.




- Ambient temperature and fan speed. Choice between comfort mode (occupied office) and economical mode (unoccupied office).



- General lighting*.



- Lowering, raising and directional control of window blinds*.



- Control of additional lighting and light intensity (controlled at the power socket)*.

*Option

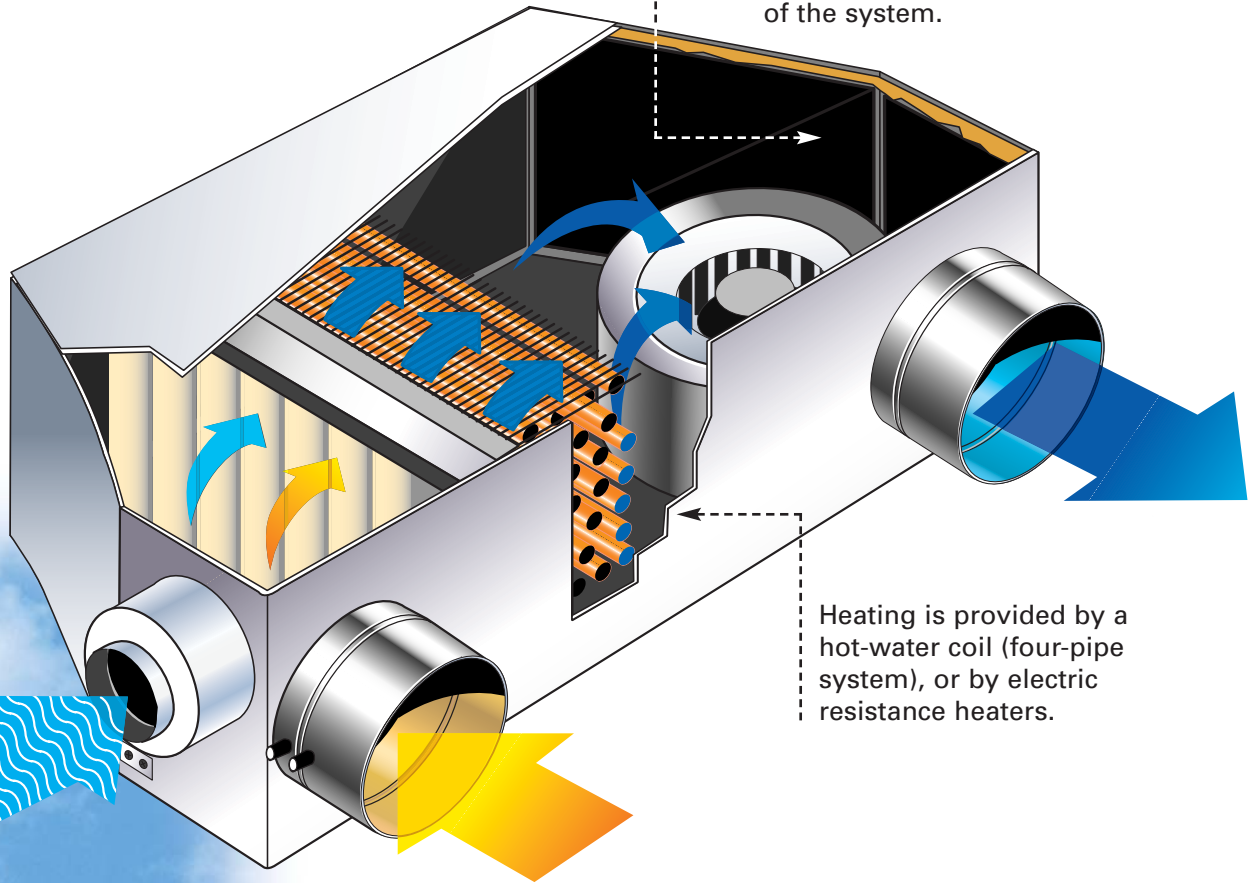
INDIVIDUAL AIR CONDITIONING

The Individual Comfort Modules ICM and ULTRA are small air treatment centres for air conditioning individual offices of between 25 and 50 m² in size, ensuring cooling, heating and fresh air supply. Air conditioning of individual offices ensures exceptional comfort and perfect air quality (no odours, no microbial transmission). Each module* is equipped with communicating control and individual control that act on all comfort parameters. With these units Carrier creates the desired comfort for everyone.

* ICM only

APPLICATION FLEXIBILITY FROM MULTI-SPEED TO VARIABLE VOLUME

The ULTRA is equipped with a centrifugal, three-speed fan, and for more demanding applications the ICM is equipped with a centrifugal, variable-speed fan. The control continuously adjusts the air flow required to maintain constant high comfort conditions. Variable volume also ensures an extremely low sound level in the air-conditioned space, as well as a significant reduction in power consumption of the system.



Heating is provided by a hot-water coil (four-pipe system), or by electric resistance heaters.

CONTINUOUSLY RENEWED AIR

The units are equipped with an automatically adjusted fresh air controller that introduces a controlled amount of fresh air into each office. All units are connected by ducts to a fresh air system. ICM units can include a CO₂ sensor* that continuously analyses the air quality and controls the fresh air intake with variable air volumes.

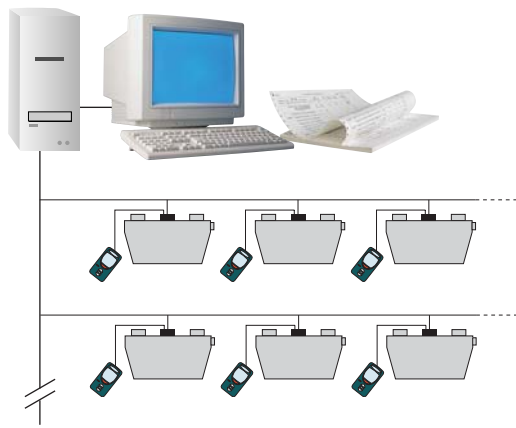
* CO₂ sensor option for ICM only

QUALITY AIR

The ULTRA air treatment modules are equipped EU3 filters, and the ICM units have a 55 mm thick pleated high-efficiency EU5 filter.

An optional new EU6 pleated paper filter is also available*. The units are installed outside the conditioned space, so that filter replacement can take place without disturbing the occupant. Side doors are provided for maintenance, slide rails enable units to be moved to facilitate access, if necessary.

* ICM only



EACH TERMINAL HAS ITS OWN CONTROL FOR OPTIMISED COMFORT

The ICM is connected to the communications bus and can easily be integrated into an intelligent system ensuring technical supervision of all air conditioning elements (liquid chillers, ICM fresh air treatment centres). Ease-of-use and the wide range of available functions optimise operation and make system maintenance child's play!

TECHNICAL DATA 42BJ ULTRA (MULTI-SPEED)		Size 1.6	Size 2.6	Size 4.7
Total cooling capacity*	kW	3.66	4.70	6.00
Heating capacity**	kW	1.90	2.60	3.80
Max. electric heater capacity (shielded with spiral fins)	W	1000	1600	1600
Air flow at high speed	l/s	166	194	264
Available static pressure at high speed	Pa	80	80	85
Power input at high speed***	W	219	245	183
Base unit H x L x D	mm	270 x 900 x 600	270 x 1100 x 750	345 x 1100 x 755
Operating weight (6-row water coil + control)	kg	31	40	60
Power supply (± 10%)	V-ph-Hz	← 230-1-50 →		

TECHNICAL DATA 42BJ ICM (VARIABLE-SPEED)		Size 1.3	Size 2.3	Size 4.4
Total cooling capacity*	kW	2.88	4.44	6.01
Heating capacity**	kW	1.68	2.50	3.79
Max. electric heater capacity (PTC)	W	1.7	1.9	1.76
Nominal air flow	l/s	125	189	264
Available static pressure	Pa	145	120	85
Max. power input***	W	175	240	81
Base unit H x L x D	mm	270 x 900 x 605	270 x 1100 x 755	345 x 1100 x 755
Operating weight (6-row water coil + control)	kg	31	40	60
Power supply (± 15%)	V-ph-Hz	← 230-1-50 →		

The values above refer to the following conditions:

* Based on an entering water temperature of 6°C, air temperature of 25°C db, 50% relative humidity, water temperature rise of 5 K at nominal air flow and high speed (for ULTRA models).

** Based on an entering water temperature of 50°C, air temperature of 19°C, water temperature rise of 10 K at nominal air flow and high speed (for ULTRA models).

*** For more detailed information please refer to the electrical data tables in the Product Selection data.

OPTIONS AND ACCESSORIES	42BJ ULTRA	42BJ MCI
EU5 filter	X	
EU6 filter		X
CO ₂ sensor and fresh air valve		X
Integrated control circuit	X	
Reversed air circulation*	X	X
Water connection on air discharge side	X	X

* Not available for size 4



Order No.: 18095-20-06/2005
 Supersedes order No.: 18095-20-10/1997
 Manufacturer reserves the right to change any product specifications without notice

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