



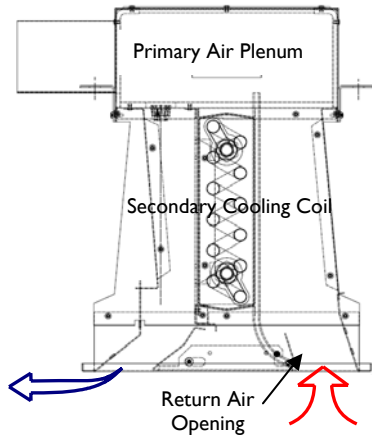
Active Chilled Beam - ACB60

Dadanco ACB60 1-way discharge Perimeter Active Chilled Beams incorporate new patented technologies to deliver a breakthrough for higher energy efficiency perimeter zone air conditioning using lower air quantities.

Dadanco ACB60 Active Chilled Beams provide efficient, effective and whisper-quiet air conditioning for almost any perimeter zone application.



Dadanco Pty Ltd Participates in the ECC programme for Active Chilled Beams
Check ongoing validity of the certificate:
www.eurovent-certification.com



ACB60 incorporates 1-way supply air discharge with one piece perforated return air centre grille and return air opening with a single vertical secondary cooling coil



Advantages of Active Chilled Beams

- Dadanco Active Chilled Beams supply cooling, heating and the outdoor air required for ventilation in the conditioned space.
- Compact dimensions and intrinsically smaller duct sizes offer real savings in ceiling space requirements for HVAC new construction and refurbishment projects.
- Fan power is dramatically reduced. The low primary air quantity is treated by the AHU and distributed at low pressure. The primary air is typically only 30% of the total air supplied by Dadanco Active Chilled Beams due to the use of efficient induction technology.
- Secondary air is induced over the secondary heat exchanger, delivering localized cooling, for NO FAN ENERGY REQUIREMENT
- ACB60 Active Chilled Beams provide 1-way supply air distribution, specifically designed for perimeter zones
- ACB60 Active Chilled Beams are designed for 'Lay-In' installation in ceiling tile systems or in plasterboard ceilings with or without builders' ceiling frames
- ACB60 Active Chilled Beams deliver more cooling capacity using less treated air than any all-air system.
- Active Chilled Beams offer 2-stage capacity control through control of secondary water flow separate from primary air control.
- Noise radiated from Dadanco Active Chilled Beams is very low...
- Active Chilled Beams require minimal maintenance (no moving parts).

Application Data – ACB60

COOLING	45 to 175 W/m ²
LENGTH	Nominal 300 x 1200 or 1500mm grille to suit standard suspended ceiling tile systems or plasterboard margins Unit lengths from 1100mm to 1800mm available on request for any application
FEATURES	Side entry primary air connection
HEIGHT	375mm
INSULATION	Thermal insulation for the primary air plenum is available
GRILLE	1-way discharge supply air grille with one piece hinged centre return air grille
CONTROLS	ACB60 units can be controlled individually or in groups of units

APPLICATIONS:

Dadanco Active Chilled Beam ACB60 is specifically designed for perimeter zone in-ceiling installations in:

- Commercial Office Buildings
- HVAC New Construction & Refurbishment Projects
- Healthcare Facilities
- Schools and Institutional Buildings
- Airports

Proudly Australian



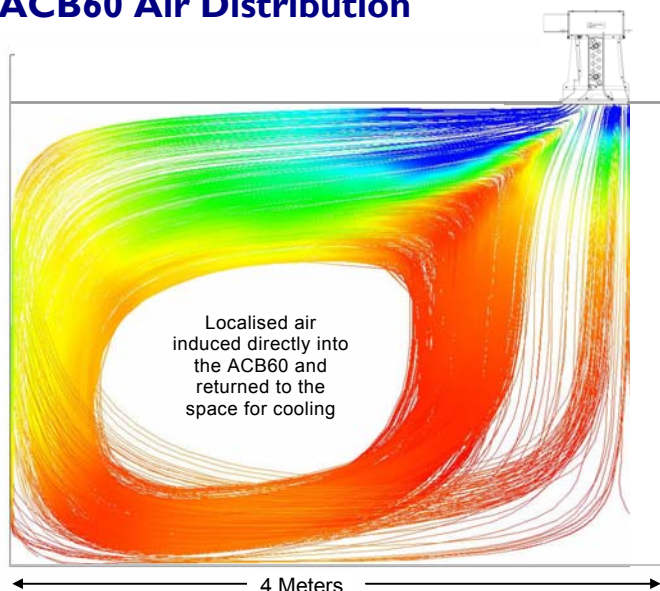
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Typical ACB60 Air Distribution

The 1-way discharge air flow characteristics of Active Chilled Beam ACB60, created by the induction of secondary air through the return air opening of the unit, produces a unique air flow pattern resulting in thorough purging of air in the occupied space compared to most conventional all-air ceiling diffusion characteristics.

Entrainment of secondary air from within the conditioned space reduces the potential for cross-contamination between different zones within the building.

Relatively low terminal velocities can be maintained in the conditioned space.



ACB60 1-Way discharge Active Chilled Beam is ideally suited to perimeter zones with supply air discharged away from the facade

Eurovent Certified Product to Rating Standard EN15116

General Product Technical Data

	1200mm ACB60-1100	1500mm ACB60-1400
Nominal Grille Face Size:	300 x 1200mm	300 x 1500mm
Nominal Active Coil Length	1100mm	1400mm
Primary Air Range $\leq 125\text{Pa}$:	16 ~ 32 L/s	22 ~ 42 L/s
Nominal Cooling Capacity Range:	557 ~ 986 Watts	787 ~ 1340 Watts
Configuration:	2-Pipe Only	2-Pipe Only

NOTE: Nominal cooling capacities based on 2-pipe cooling coil @ 24°C room air, 12°C primary air, 14°C Entering Secondary Chilled Water Temperature and Secondary Water Flow Rate to achieve average Leaving Water Temperature of 17°C ($\Delta T = 3^\circ\text{C}$) or minimum water flow of 0.03 L/s.

Primary Air Pressure $\leq 125\text{Pa}$.

Different performance results can be achieved for varying secondary water flow rates, entering water temperatures, primary air conditions and primary air pressures.

For selections at conditions and unit sizes other than those above please contact DADANCO for further assistance.

New Technologies

Dadanco's Starline™ multi-lobe high performance induction nozzles and superior fluid dynamics design are combined into Dadanco ACB60 Active Chilled Beams for improved performance and lower noise characteristics.

Rather than relying on natural convection as with passive chilled beams, Dadanco ACB60 Active Chilled Beams use primary air to deliver ventilation air and induce secondary room air through the secondary cooling coil within the unit, delivering enhanced performance in one simple ceiling mounted package.

All Dadanco Active Chilled Beams utilize modern Computational fluid dynamics (CFD) analysis in product design and development.

DISCLAIMER

While every effort is made to ensure the details contained herein are kept up to date, in the interests of ongoing product development, Dadanco reserves the right to alter the information without notice

Issue 120112_V.3



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