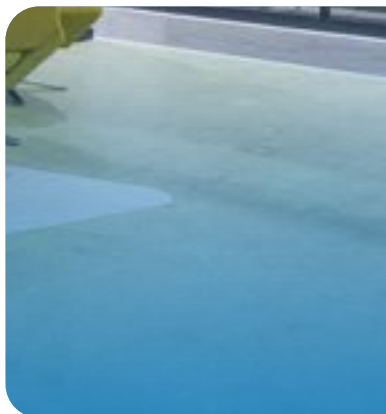
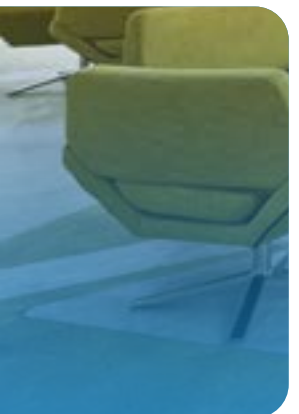


# ICEBOX



# FAN COIL UNITS

Low profile, double  
skin EC fan coil units

# FAN COIL UNITS



*IceBox double skin fan coil units (FCUs) are designed and built for Australian and New Zealand conditions. Incorporating all Australian standards applicable to FCUs whilst providing a robust, low noise and flexible solution that can achieve the strictest design criteria of any individual project.*

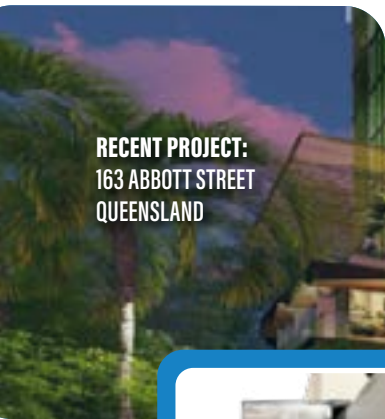
IceBox FCUs are a low profile, double skin construction unit with high static EC ebm-papst plug fans. With AHRI certified coils for cooling and heating applications, the units are suitable for a wide range of commercial and industrial applications.

The double skin, compact design provides efficiencies using electronically commutated fans. This is the ideal solution for balancing airflow and acoustically sensitive projects.

Hospital and health facilities, shopping centres, tenancy fit-outs, hotels and apartments, office buildings, schools and universities are all benefiting from working with IceBox.

IceBox is committed to providing comfort and assurance with a certified and quality solution for your next project or design.

**RECENT PROJECT:**  
163 ABBOTT STREET  
QUEENSLAND



### **MOUNTING BRACKETS**

Brackets for under ceiling mounting are standard. Optional 100mm base for floor mounted installations.



### **DOUBLE SKIN PANEL**

The standard offer will be 25mm thick polyurethane panel with 0.5mm internal galvanised and 0.5mm external prepainted galvanised sheet metal (PPGI).



### **FILTERS AND FRAMES**

G4 Filters are standard. Optional 50mm panel filters F5/F7 or 100mm V Form or bag filters with mixing box available upon request.



### **WATER COILS**

AHRI certified water coils. Cooling coil 4 row standard with 6 row optional. Heating 1 row standard with 2 row optional.



### **DRAIN PAN**

SS304 inclined drain pan as standard. AS3666 compliant.



### **HEATERS**

Electrical heaters are optional, wiring to double safeties (Auto/Manual) junction box rated to IP56. Airflow switch and SCR/SSR by others.



### **EC PLUG FANS**

Single or multiple EC ebm papst plug fans 240V/SOHZ/IPh.



### **DUCT CONNECTIONS**

Hard or flexible connections, flanged edge or spigots can be provided to suit the installation requirements.



### **ADDITIONAL FEATURES**

Access doors and service lights.

# 4 ROW TECHNICAL PERFORMANCE

	<b>Air flow rate</b>	l/s	300	380	530	750	1100	1300
	<b>Ext static pressure</b>	Pa	250	250	250	250	250	250

<b>Cooling</b>	<b>Coil rows</b>	#	4	4	4	4	4	4
	<b>Fin/in</b>	#	12	12	12	12	12	12
	<b>Face vel</b>	m/s	2.2	2.2	2.2	2.2	2.2	2.2
	<b>On coil temp (°c)</b>	DB	25.0	25.0	25.0	25.0	25.0	25.0
		WB	18.0	18.0	18.0	18.0	18.0	18.0
	<b>Off coil temp (°c)</b>	DB	12.8	13.1	13.0	13.1	12.7	12.4
		WB	12.0	12.3	12.2	12.3	11.9	11.6
	<b>Capacity (kw)</b>	TOTAL	6.0	7.2	10.3	14.3	22.3	27.5
		SENSIBLE	4.2	5.1	7.2	10.1	15.3	18.6
	<b>Water in</b>	°C	6.0	6.0	6.0	6.0	6.0	6.0
	<b>Water out</b>	°C	12.0	12.0	12.0	12.0	12.0	12.0
	<b>Water flow</b>	l/s	0.24	0.29	0.41	0.57	0.89	1.09
<b>Water speed</b>	m/s	0.94	0.76	0.81	0.75	1	1.24	
<b>Water pd</b>	kPa	30	29	12	11	25	30	
<b>Pipe conn</b>	BSP	1/2	1/2	1	1	1	1-1/4	

<b>Heating</b>	<b>Coil row</b>	#	1	1	1	1	1	1
	<b>On coil temp (°c)</b>	DB	20.0	20.0	20.0	20.0	20.0	20.0
	<b>Off coil temp (°c)</b>	DB	33.2	33.6	34.1	34.1	34.4	33.7
	<b>Capacity (kw)</b>	TOTAL	4.8	6.3	9.2	12.9	19.5	21.9
	<b>Water in</b>	°C	80	80	80	80	80	80
	<b>Water out</b>	°C	60	60	60	60	60	60
	<b>Water flow</b>	l/s	0.06	0.08	0.11	0.16	0.24	0.27
	<b>Water pd</b>	kPa	2	4	11	11	30	19
<b>Pipe conn</b>	BSP	1/2	1/2	1/2	1/2	1/2	1/2	

<b>Fan</b>	<b>Fan speed contrl</b>	#	EC	EC	EC	EC	EC	EC
	<b>Drive type</b>	#	DD PLUG	DD PLUG	DD PLUG	DD PLUG	DD PLUG	DD PLUG
	<b>Fan+mtr qty</b>	#	1	1	1	2	2	2
	<b>Fan model</b>	#	280	280	280	2x280	2x280	2x280
	<b>Motor power</b>	W	500	500	500	2x500	2x500	2x500
	<b>Power rating</b>	V/Ph/Hz	220-1-50	220-1-50	220-1-50	220-1-50	220-1-50	220-1-50

<b>Dimensional</b>	<b>Model</b>	25mm PU PANEL CASING	PFU-45-067	PFU-45-079	PFU-45-102	PFU-45-135	PFU-50-163	PFU-50-191
	<b>Weight (kg)</b>		75	83	98	129	156	173
	<b>Dimension(mm) h-w-l</b>		450-670-800	450-790-800	450-1020-800	450-1350-800	500-1630-800	500-1910-800
	<b>Model</b>	50mm PU PANEL CASING	PBU-50-073	PBU-50-084	PBU-50-107	PBU-50-140	PBU-55-168	PBU-55-196
	<b>Weight (kg)</b>		88	97	114	148	178	198
	<b>Dimension(mm) h-w-l</b>		500-730-800	500-840-800	500-1070-800	500-1400-800	550-1680-800	550-1960-800

# 6 ROW TECHNICAL PERFORMANCE

	<b>Air flow rate</b>	l/s	300	380	530	750	1100	1300
	<b>Ext static pressure</b>	Pa	250	250	250	250	250	250

<b>Cooling</b>	<b>Coil rows</b>	#	6	6	6	6	6	6
	<b>Fin/in</b>	#	12	12	12	12	12	12
	<b>Face vel</b>	m/s	2.2	2.2	2.2	2.2	2.2	2.2
	<b>On coil temp (°c)</b>	DB	25.0	25.0	25.0	25.0	25.0	25.0
		WB	18.0	18.0	18.0	18.0	18.0	18.0
	<b>Off coil temp (°c)</b>	DB	10.9	10.4	10.5	10.4	10.8	10.4
		WB	10.6	10.2	10.2	10.1	10.5	10.1
	<b>Capacity (kw)</b>	TOTAL	7.2	9.6	13.3	19.0	26.9	33.1
		SENSIBLE	4.8	6.4	8.8	12.6	17.9	21.8
	<b>Water in</b>	°C	6.0	6.0	6.0	6.0	6.0	6.0
	<b>Water out</b>	°C	12.0	12.0	12.0	12.0	12.0	12.0
	<b>Water flow</b>	l/s	0.29	0.38	0.53	0.76	1.07	1.31
<b>Water speed</b>	m/s	0.76	1.01	0.93	1	0.8	1	
<b>Water pd</b>	kPa	30	29	29	25	16	26	
<b>Pipe conn</b>	BSP	1/2	1	1	1	1-1/4	1-1/4	

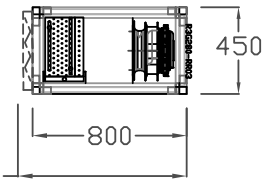
<b>Heating</b>	<b>Coil row</b>	#	1	1	1	1	1	1
	<b>On coil temp (°c)</b>	DB	20.0	20.0	20.0	20.0	20.0	20.0
	<b>Off coil temp (°c)</b>	DB	33.2	33.6	34.1	34.1	34.4	33.7
	<b>Capacity (kw)</b>	TOTAL	4.8	6.3	9.2	12.9	19.5	21.9
	<b>Water in</b>	°C	80	80	80	80	80	80
	<b>Water out</b>	°C	60	60	60	60	60	60
	<b>Water flow</b>	l/s	0.06	0.08	0.11	0.16	0.24	0.27
	<b>Water pd</b>	kPa	2	4	11	11	30	19
<b>Pipe conn</b>	BSP	1/2	1/2	1/2	1/2	1/2	1/2	

<b>Fan</b>	<b>Fan speed contrl</b>	#	EC	EC	EC	EC	EC	EC
	<b>Drive type</b>	#	DD PLUG	DD PLUG	DD PLUG	DD PLUG	DD PLUG	DD PLUG
	<b>Fan+mtr qty</b>	#	1	1	1	2	2	2
	<b>Fan model</b>	#	280	280	280	2x280	2x280	2x280
	<b>Motor power</b>	W	500	500	500	2x500	2x500	2x500
	<b>Power rating</b>	V/Ph/Hz	220-1-50	220-1-50	220-1-50	220-1-50	220-1-50	220-1-50

<b>Dimensional</b>	<b>Model</b>	25mm PU PANEL CASING	PFU-45-067	PFU-45-079	PFU-45-102	PFU-45-135	PFU-50-163	PFU-50-191
	<b>Weight (kg)</b>		75	83	98	129	156	173
	<b>Dimension(mm) h-w-l</b>		450-670-800	450-790-800	450-1020-800	450-1350-800	500-1630-800	500-1910-800
	<b>Model</b>	50mm PU PANEL CASING	PBU-50-073	PBU-50-084	PBU-50-107	PBU-50-140	PBU-55-168	PBU-55-196
	<b>Weight (kg)</b>		88	97	114	148	178	198
	<b>Dimension(mm) h-w-l</b>		500-730-800	500-840-800	500-1070-800	500-1400-800	550-1680-800	550-1960-800

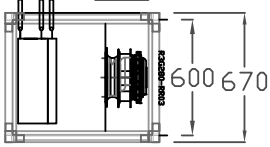
## 25MM PU PANEL

875  
WITH OPTIONAL  
50MM FILTER



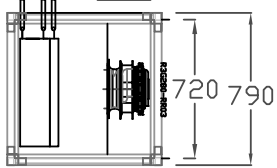
PFU-45-067

MAX FLOW: 330L/S



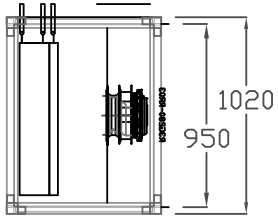
PFU-45-079

MAX FLOW: 430L/S



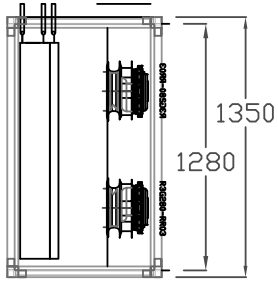
PFU-45-102 (ONE FAN)

MAX FLOW: 600L/S

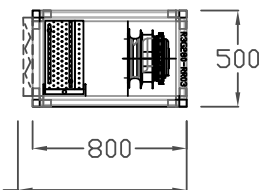


PFU-45-135

MAX FLOW: 850L/S

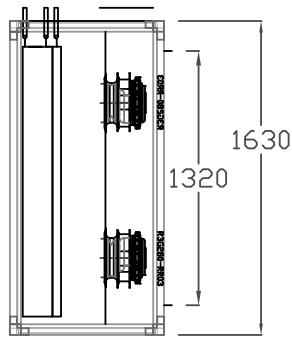


875  
WITH OPTIONAL  
50MM FILTER



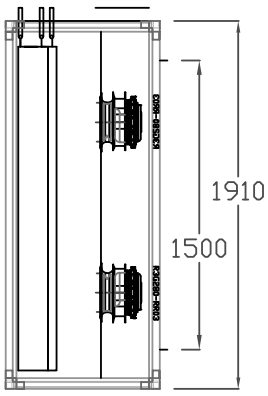
PFU-50-163

MAX FLOW: 1250L/S



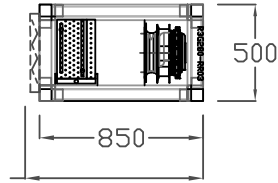
PFU-50-191

MAX FLOW: 1250L/S



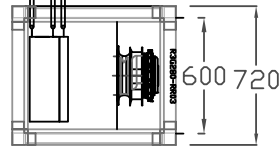
## 50MM PU PANEL

925  
WITH OPTIONAL  
50MM FILTER



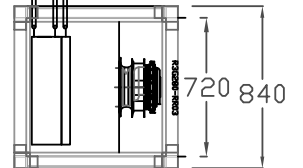
PBU-50-072

MAX FLOW: 330L/S



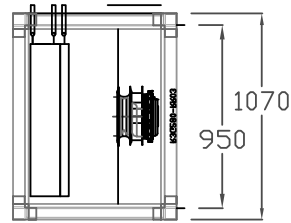
PBU-50-084

MAX FLOW: 430L/S



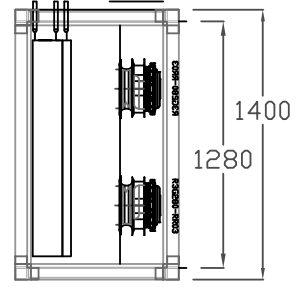
PBU-50-107 (ONE FAN)

MAX FLOW: 600L/S

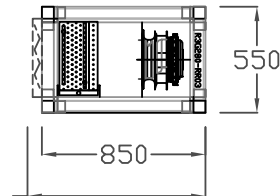


PBU-50-140

MAX FLOW: 850L/S

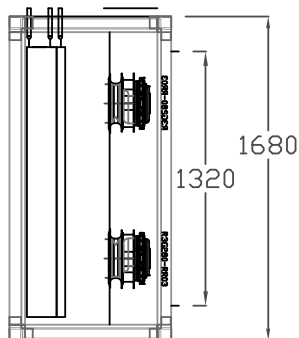


925  
WITH OPTIONAL  
50MM FILTER



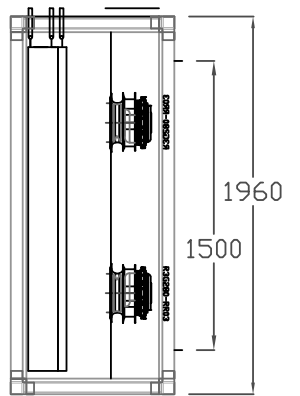
PBU-55-168

MAX FLOW: 1250L/S



PBU-55-196

MAX FLOW: 1250L/S



Coil handing can be left or right as required for the installation.

MORE FROM THE ICEBOX RANGE

# ICEBOX AIR HANDLING UNITS

IceBox modular AHUs can be used for both indoor and outdoor installations, with the proven ability to perform in tropical to below freezing temperatures.

To suit your thermal bridging requirements, non-cold tracking options are available. All units are manufactured in accordance with EN1886:2007 and built to comply with Australian Standards AS/NZS 3666, with particular attention to access for cleaning and maintenance.

With features and benefits that can be included as standard, IceBox modular AHUs are available today and ready for your next project.

# ICEBOX ENERGY RECOVERY UNITS

IceBox ERVs boast a compact design for innovative energy recovery, proven to be perfect for acoustically sensitive projects.

Designed as a low profile, double skin constructed unit with high static EC plug fan technology, it comes with the option of including AHRI certified coils for additional supplementary cooling and heating applications. IceBox ERV flexible solutions can make a difference on your projects and are available today.



# RECENT PROJECTS



For more information on IceBox,  
visit [www.iceboxoceania.com](http://www.iceboxoceania.com)

PO Box 429  
Cannon Hill QLD 4170

(07) 3399 1516  
[info@oceaniahvac.com](mailto:info@oceaniahvac.com)

[www.iceboxoceania.com](http://www.iceboxoceania.com)