

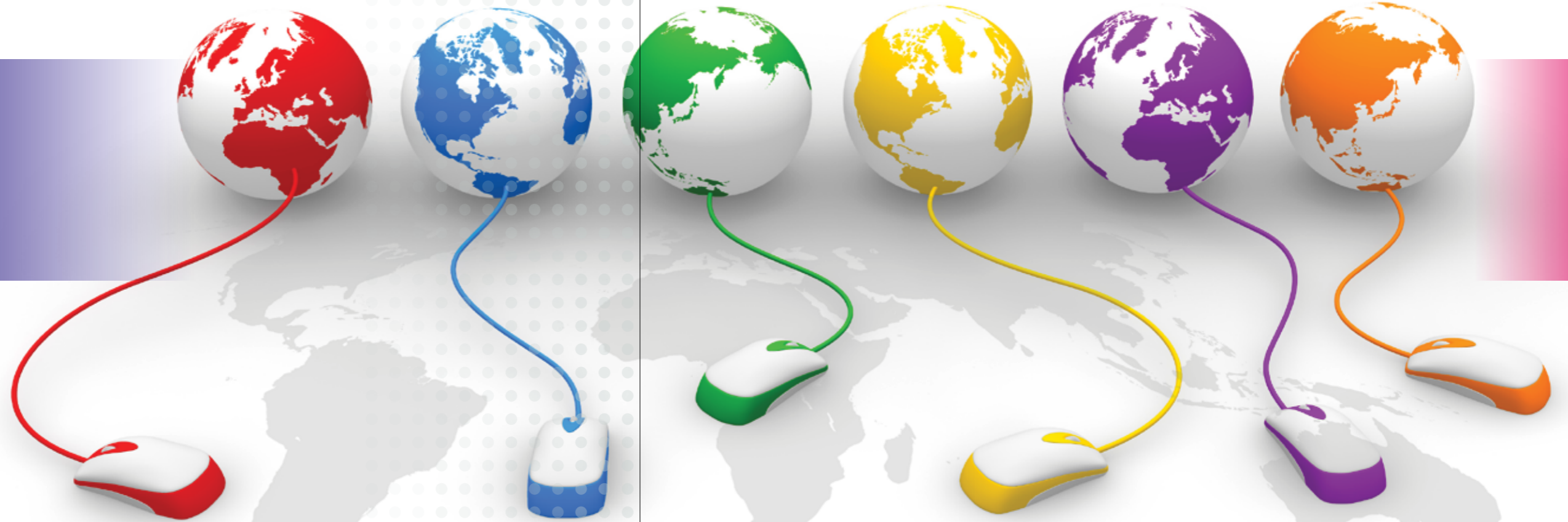
HydroTech
Chilled Water System



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For the most up-to-date product information, please go to www.acson-international.com.



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Chilled Water System Solution

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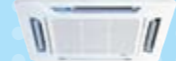






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● ● ● ● ● **PRODUCT LINE UP**

Mini Chiller

					
Model Range	R22	AMAC 20/25/30 C/CR			
	R407C	A4AC 25/30 C	AMAC 40/50/60 C/CR	AMAC 80/100/120/150 C/CR	
	R410A	A5AC 20/25 CR	A4AC 40/50/60/ C, A4AC 60CR	A4AC 80/100/120/150 C/CR	
Cooling Capacity (kW)		4.6 - 8.8	-	-	-
Heating Capacity (kW)		6.3 - 10.3	11.1 - 15.8	21.7 - 40.5	A5AC 30/40/50/55 CR
Electrical Supply		50Hz	12.6 - 16.1	26.4 - 42.2	7.3 - 13.2
			50Hz	50Hz	9.5 - 16.1
					50Hz

Fan Coil Unit

	Wall Mounted GW series	Wall Mounted 301W	Ceiling Cassette AW Series	Ceiling Cassette AWH Series	Ceiling Cassette CW Series	Ceiling Exposed CBW Series	Ceiling Convertible DW Series	Ceiling Convertible EW Series	Ceiling Concealed CW Series	Ceiling Concealed CW-C Series	Ducted Split BW Series
											
Model Range	AWM 07/10/15/20 G2W	AWM 301W	ACK 20/25/30/40/50 AW	ACK 20/25/30/40/50 AWH	ACK 10/15/20 CW	RCM 07/10/15 CBW	RCM 20/25/30/40/50 DW	ACM 15/20/25 EW	ACC 10/15/20/25/28 CW ACC 30/38/40/50/60 CW	ACW 200/300/400/600 C/H ACW 800/1000/1200 C/H	ADB 75/100/125/150 BW
Cooling Capacity (kW)	2.34 - 5.28	2.34 - 5.28	6.62 - 10.80	3.81 - 5.16	2.34 - 4.25	1.90 - 3.08	5.19 - 13.19	4.54-6.15	2.9 - 15.8	2.2 - 10.7	22.2 - 44
Heating Capacity (kW)	3.02 - 6.74	3.02 - 6.74	8.40 - 12.90	10.55 - 13.77	3.22 - 5.42	2.34 - 4.25	6.45 - 15.10	5.72 - 8.21	3.4 - 19.6	3.5 - 19.2	16.5 - 31.2
Electrical Supply	50Hz & 60Hz	50Hz	50Hz & 60Hz	50Hz	50Hz	50Hz & 60Hz	50Hz & 60Hz	50Hz	50Hz & 60Hz	50Hz	50Hz & 60Hz

HydroTech Chilled Water System

Acson International is committed to offer you with the better solution in your air conditioning needs. In the new HydroTech series of chilled water products, Acson International is not just offering you with wide range of chilled water air conditioning equipments, but a better solution from selecting the equipments, designing the water piping systems to providing easy control of the complete chilled water system. This is facilitated by the user friendly computer selection programs and remote monitoring of the operation of complete system through the smart HydroIntel controller.

The HydroTech series of chilled water product has incorporated the technology of advanced communicating controls, microprocessor controlled chillers with a wide range and variety of fan coil unit that offers total flexibility.



Year Round Comfort

Can be used in variety of climates with systems that are available in two versions, cooling only and heat pump.

Reliable And More Efficient

The refrigerant of the system is confined to within the chiller itself and therefore no refrigerant is circulating throughout the building. This will be no risk of refrigerant leakages in building or risk of poor oil return that will damage compressor caused by poor installation.

Multiple compressors in Hydrotech chiller series offers stages capacity control that will offer better efficiency.

Long Piping Applications

The HydroTech series avoids the limitation of piping lengths and bends that exist in Direct Expansion refrigerant system. The chiller can be installed far away from the fan coil units, thus offering flexibility and creativity in the installation site.

Multiple Temperature Zone Control

The operation of the fan coil units can be managed independently by zones according to similar air conditioning comfort needs.

Quality, Innovative and Compact Design

The HydroTech chiller is equipped with reliable and quality components.

Advantages

Air Cooled Mini Chiller System

Acson International offering you the range of air cooled chiller that is suitable for many applications from residential to commercial.

The HydroTech chiller is incorporated with the basic necessary components such as circulating water pump, expansion tank, compact brazed plate heat exchanger, differential pressure switch and the microprocessor controller and wired control panel.




In addition, the selection of the HydroTech chiller could not be more easy than the user friendly yet versatile HydroPro selection softwares for chiller as well as connecting piping.

In short, HydroTech Chilled Water Product Range offers you the better solution to your chilled water product needs.





Product Range





Model :
 AMAC 20/25/30 C/CR
 A4AC 25/30 C/CR
 A5AC 20/25 CR
 Capacity :
 Cooling : 4.6 kW to 8.8 kW
 Heating : 6.3 kW to 10.3 kW

Refrigerant : R-22, R-407C, R-410A



Model :
 AMAC 40/50/60 C/CR
 A4AC 40/50/60 C/CR
 Capacity :
 Cooling : 11.1 kW to 15.8 kW
 Heating : 12.6 kW to 16.1 kW

Refrigerant : R-22, R-407C


Model :
 AMAC 80/100/120/150 C/CR
 A4AC 80/100/120/150 C/CR
 Capacity :
 Cooling : 21.7 kW to 50.5 kW
 Heating : 26.4 kW to 42.2 kW

Refrigerant : R-22, R-407C

Model :
 A5AC 30/40/50/55 CR
 Capacity :
 Cooling : 7.3 kW to 13.2 kW
 Heating : 9.5 kW to 16.1 kW

Refrigerant : R-410A





Long Piping Application

Acson chilled water system has no limitation in piping length unlike Direct Expansion refrigerant system. As long as the water pump head pressure is sufficient to pump the water through the pipe network, the chiller can be installed far away from the fan coil units. Acson Mini Chiller had been designed to support maximum water operating pressure up to 1000kPA. With such pressure, Acson Mini Chiller is enough to support most HVAC application. In the case where the Mini Chiller's built in pump head is insufficient to support the overall friction loss, additional pump can be installed to cater for higher pump head requirement.

Easy Installation and Maintenance

Integrated Hydronic Components

Acson Mini Chiller is fully integrated and equipped with key hydronic components such as expansion tank, water tank, brazed plate heat exchanger and water circulating pump. As all hydronic components are assembled and tested in the factory, installation of additional component on site can be eliminated.

Factory Precharged Refrigerant

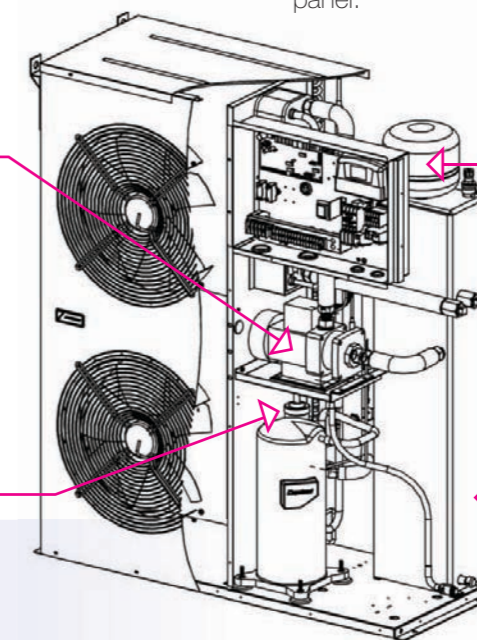
Each heat exchanger in the chiller is brazed and tested against leakages through dried air at 30 bars. After that, another process to vacuum the system before it is accurately charged with refrigerant to ensure optimum performance. Thus, it saves the hustles of field charging by installers.

Serviceability & Error Code For Ease Of Troubleshooting

By opening the front panel, one can access and service all the components in the chiller. The chiller is equipped with self diagnosis function which allow the chiller panel to display total of 19 type of faulty occurred in the system by showing different error code on the LCD screen of the panel.

Multistage End Suction Water Pump
Impeller and all movable parts in contact with the water are made of stainless steels.

Filter Drier
Remove dirt and moisture in the refrigerant circuit.



Diaphragm Expansion Tank
Prevent damage of hydraulic components and cracking of piping due to expansion of hot water in the pipes.

Water Storage Tank
Prevent the compressor from switching ON/OFF too frequently during low load conditions such as night time.

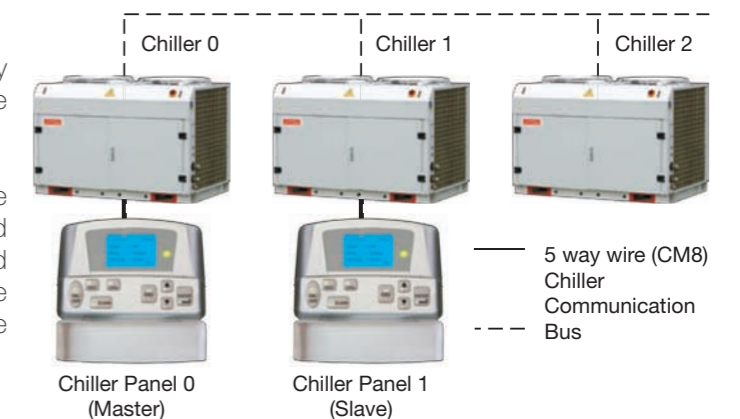
NOTE:
Model AM4AC/AMAC080 ~ 150C/CR water tank is offered as an optional device.

Modular Installation

Acson Mini Chiller provides flexibility in adding capacity for building extension. This can be done by installing the mini chiller in modular connection.

A network of up to 50 chillers is possible to be connected in a system. For ease of controlling and setting, Acson Mini Chiller panel implement Master and Slave function. This function allows user to do the setting at the Master unit only and all the slave unit in the group will follow the same setting.

Supported Up To 50 Units Of Chiller





State-Of-The-Art Components

Scroll Compressor

Scroll Compressors are used for the units to offer a quieter and more reliable performance over a wide operating temperature range. (Except AMAC/AM4AC 20 C/CR which uses rotary compressor).

For AMAC/AM4AC 30, 40, 50, 60, 80, 100, 120, 150 CR, phase protector is provided to prevent the compressor from rotating in the wrong directions.

Anti-freeze Protection

The chiller unit has several anti-freeze protection features:

1. Built-in heater in BPHE

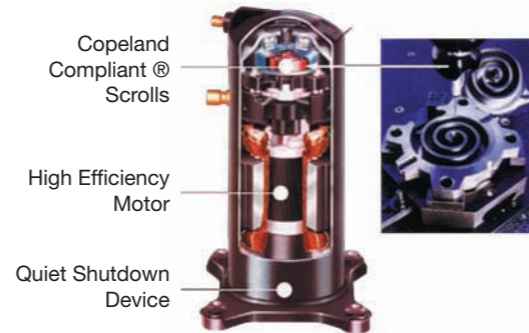
The BPHE has a strip heater around it to prevent water freezing inside.

2. Anti-Freeze sensor

BPHE can avoid the frosting as the anti-freeze sensor will send the signal to cut out the compressor if the water temperature becomes too cold.

3. Water pressure differential switch

This protection feature will ensure there is water flow in pipings when the chiller is in operation. Otherwise, the compressor will cut out immediately.



Superior Reliability

Microprocessor Control

Acson chillers are equipped with microprocessor controller that will control and regulate the operation of the unit. Besides, the controller that contains the well developed algorithm will provide protection to the chiller by accurately sensing the key temperatures in both the water and refrigerant circuit. Should there be any abnormal reading received by controller, an alarm signal will be sent to chiller panel, followed by protection action plans such as to stop the operation of compressor, condenser fan motor or circulating water pump.

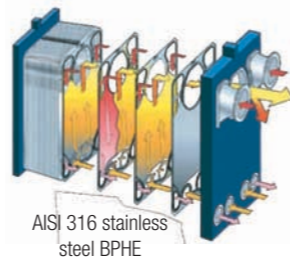
Safety Protection

The safety protections provided for the Acson chiller are:

- High & Low Pressure Switches
- Anti-Freeze Protection Sensor
- Discharge Temperature Sensor
- Over Pressure Relief Valve
- Water Pressure Differential Switch
- Anti-Freeze Heater on BPHE
- Compressor Water Pump & Fan Motor Overload Protector

Brazed Plate Heat Exchanger

The heat exchanger is made of AISI 316 stainless steel plates closely arranged and brazed together to maximize possible heat exchange efficiency.



Chiller Control Panel

The chiller panel controller is designed to control the chiller operation. This device allows the user to have customized control for each connected unit.

Each chiller will have a chiller control panel that comes as a standard accessory. At the same time, the chiller control panel is able to be installed remotely through the cable up to a distance of 100 meters. Example, the chiller panel can be installed in a centralized plant control room for the building.

The chiller control panel has been designed taking into consideration of the user friendly and yet versatile control features.

Features:

- Whole system configuration.
- Unique parameter settings.
- Operation status display.
- Tracing fault record (offer quick troubleshooting solutions).
- The display is shown in an 8-lines graphical LCD display. There are 8 dedicated keys available in the panel.
- Menu selection.
- Navigation on the screen.
- Modification of the selected value.

Anti Corrosion Gold Aluminum Fin

Gold Aluminum fin is offered as the standard material of the condenser heat exchanger of this series of chiller.



Sequencing Control

For AMAC/A4AC 80~150 C/CR, both compressors will cut in and cut out depending on their accumulative operating time. This sequencing control feature will ensure no single compressor is overload in operation as well as to ensure longer reliability of compressors.

Partial Loading

Models AMAC/A4AC 80~150 C/CR has been designed with two separate refrigerant circuits, i.e. it has two compressors. By doing so, the unit has part loading capabilities, i.e. 0-50-100% of rated capacity. This will improve the reliability and energy efficiency of the unit, especially during low loading operations.



Efficient And Performance

●●●●● **Tandem Compressors**



This new line of innovative air cooled chiller by Acson International was designed with one purpose in mind, which is to offer user with cost and energy saving for users.



Hydrotech Mini Chiller

Better Performance

- Usage of higher efficient R-410A rotary compressors in tandem configuration
- Tight tolerances between moving parts resulting in high compressor volumetric efficiency
- Minimize mechanical losses
- Minimize gas flow losses and turbulence
- Optimize compressor oil return

Capacity Step Control

3 steps compressor loading (0%-40%-60%-100%) for A5AC 40 CR & A5AC 50 CR

2 steps compressor loading (0%-50%-100%) for A5AC 30 CR & A5AC 55 CR

Sequential Control

Both compressors will cut in cut out depending on water temperature. This is possibly improving the compressor life cycle as well as the compressor reliability.

Elimination of Water Tank

Combining the Tandem Compressors technology with the algorithm of the microprocessor Acontrol, water tank can be eliminated in most instances.

Choices of Single Phase and 3 Phase Power Supply Connection

- Usage of single phase power supply compressors and circulating water pump.
- Offers flexibility to field installation.

Advantages

Modular Installation

A network up to 50 chillers in a system is possible. Control on the operation of the chillers will be done through the microprocessor controller. The external water piping connection can be made either from the left or right side of the unit.



Chiller Panel comes as the standard controller.

●●●●● **HydroTech**



To complement the new innovative HydroTech range of air cooled chillers, Acson International is offering an extensive range of chilled water fan coil units that will meet most of indoor application requirements covering residential, light commercial and commercial.

The aesthetically attractive decorative fan coil units such as Wall Mounted models, Ceiling Cassette and Ceiling Convertible is compact and ergonomic, the ranges can blend in easily to any interior designs whether it is residential houses, office, restaurant or shops.

In addition, the HydroTech chilled water fan coil units are designed with easy installation and easy servicing in mind. The fan coil units also include the microprocessor controller that has built in algorithm to control the operation of the fan coil unit as well as to provide protection to the unit.

Chilled Water Fan Coil Units

Wall Mounted



AWM 05/10/15/20/25 G2W



AWM 301 W

- Slim and compact
- Wide capacity range
- Wide air flow range
- Incorporated with NanoShield (except AWM301W)
- Able to communicate with the versatile HydroNIM for fan coil units networking
- Light weight
- Detachable and washable air intake grille
- Microprocessor control
- Self diagnosis features
- Automatic air swing
- Wireless Control as standard
- Mode selection, fan speed, 24 hours real timers
- Optional wired controller

STANDARD



GS02

OPTIONAL FIELD INSTALLED ACCESSORY



SLM 3
Wired Controller



SLM 9
Wired Controller

HydroTech Chilled Water Fan Coil Units Range

Ceiling Convertible*



RCM 07/10/15 CBW (Ceiling Exposed Only)



RCM 20/25/30/40/50 DW
(Ceiling Expose Only)



ACM 15/20/25 EW
(Ceiling Convertible)

- Ceiling Convertible feature offers flexibility on installation - Installation method of under ceiling or floor standing*
 - 2 way air discharge** ensure better air distribution
 - Horizontal air throw and bottom air throw
 - Automatic Air swing*
 - Aesthetically attractive with round profile outlook fits in to any indoor architectural
 - Strong air flow volume and strong air throw distance makes it a perfect choice for light commercial such as restaurant and shop
 - Microprocessor control
 - Able to communicate with the versatile HydroNIM for fan coil units networking
 - Self diagnosis feature
 - Wireless Control as standard
 - Mode selection, fan speed, 24 hours real timers
 - Optional wired controller
- * Applicable for ACM15/20/25EW only
** Applicable for RCM30-50DW models only

STANDARD



GS02

OPTIONAL FIELD INSTALLED ACCESSORY



SLM 3
Wired Controller



SLM 9
Wired Controller

Ceiling Cassette

STANDARD



GS02

OPTIONAL FIELD INSTALLED ACCESSORY



SLM 3
Wired Controller



SLM 9
Wired Controller



ACK 10/15/20 CW



2 Pipes System:
ACK 20/25/30/40/50 AW
4 Pipes System:
ACKK 20/25/30/40/50 AWH

- 3 range of ceiling cassette to be chosen from.
 - ACK-CW - 570mm (w) x 570mm (l)
 - ACK-AW - 820mm (w) x 820mm (l)
- Aesthetically attractive and slim front panel
- 4 way air discharge to provide better air distribution to room
- Automatic air swing
- 4 pipes system is available for model ACK20/25/30/40/50AWH
- Easy servicing and maintenance
- Built in high pressure head drain pump
 - Ability to pump up condensate water to 700mm high
- Built in water float switch to protect the unit from problems of condensate water overflow
- Microprocessor control
- Able to communicate with the versatile HydroNIM for fan coil units networking
- Self diagnosis feature
- Wireless Control as standard
 - Mode selection, fan speed, 24 hours real timers
- Optional wired controller

Ceiling Concealed

STANDARD



SLM 3
Wired Controller

OPTIONAL



SLM 9
Wired Controller



ACC 10/15/20/25/30/40/50/60 CW



ACC 28/38 CW

- Wide capacity range
- 4 speed fan motor offers flexibility for installation to suit application
- Each speed will offer different external static pressure and air flow
- High External Static Pressure is available up to 18mm
- Extra secondary drain pan to provide protection against condensate water leaking
- Availability of various optional duct accessories specially designed to fit to ACC-CW range
- Microprocessor control
- Able to communicate with the versatile HydroNIM for fan coil units networking
- Self diagnosis feature
- Wired Control as standard
- Mode selection, fan speed selection

Ceiling Concealed



2 Pipes System:
ACW 200/300/400/600/800/1000/1200 C
4 Pipes System:
ACW 200/300/400/600/800/1000/1200 CH

- Wide capacity range
- Multiple rooms can be cooled by just 1 unit of ACW
- Simple design with easy serviceability feature
- Extremely low height of unit – 251mm for complete range
- Water piping connection can be easily converted from one side to the other
- Fan motor assembly is not cased, allowing free return or back return or bottom return with optional return plenum
- Availability of optional extended drain to receive the condensate water dripping from the water piping connection
- Availability of 4 pipes ACW series
- Other optional accessory available:
 - Wired thermostat
 - Choice of external static pressure (ESP)
 - Four types of ESP are available: 0Pa, 30Pa, 60Pa, 80Pa.
 - PTC (Positive Temperature Coefficient) electric heater
 - 2 way & 3 way valves

HydroTech Chilled Water Fan Coil Units Range

Ducted Blower



ADB 75/100/125/150 BW

- These units are design with high air flow and high external static pressure, enables adequate distribution of air to the desired space
- Multiple rooms can be cooled by just 1 unit of ADB
- Simple design with easy serviceability feature
- The robust unit is designed with durability and reliability in mind
- ADB125/150BW is using the belt driven fan motor and blower fan thus it offers flexibility for upgrading should higher air flow is required
- ADB150BW is designed to cater for either horizontal air discharge or vertical air discharge

HydroTech Controller

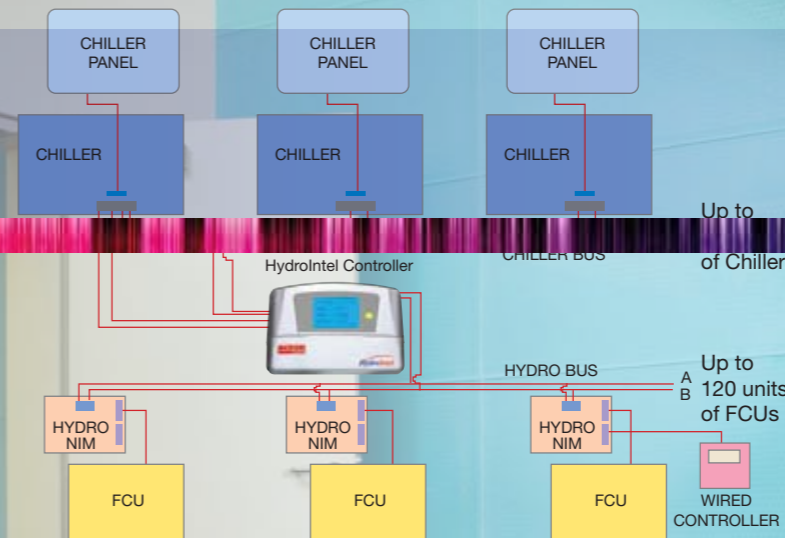
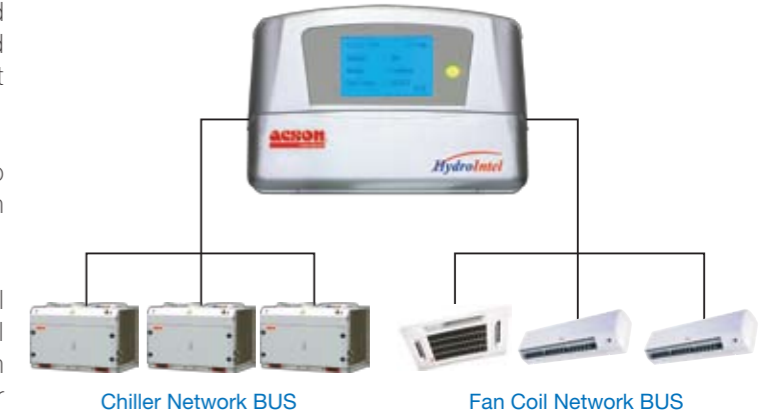
By adopting the HydroTech chilled water system, the comfort in residential and light commercial buildings such as offices, hospital, restaurant, hotel and shopping complex can be controlled and managed from just one point, that is through the smart "HydroIntel Controller".

The HydroIntel controller is acting as a center to manage the operation of both the chilled water fan coil units and the chillers.

Besides allowing the user to have customized control for each connected unit, the smart HydroIntel controller is also able to manage the overall system operating mode of all units based on the air conditioning system load demand of the building.

Supported up to 50 Chillers & 120 Fan coil units.

Through the versatile HydroIntel controller, the operation of each equipments in the HydroTech chilled water system connected through the chiller Bus and Acson own proprietary HydroNIM BUS can be managed and controlled.



Features

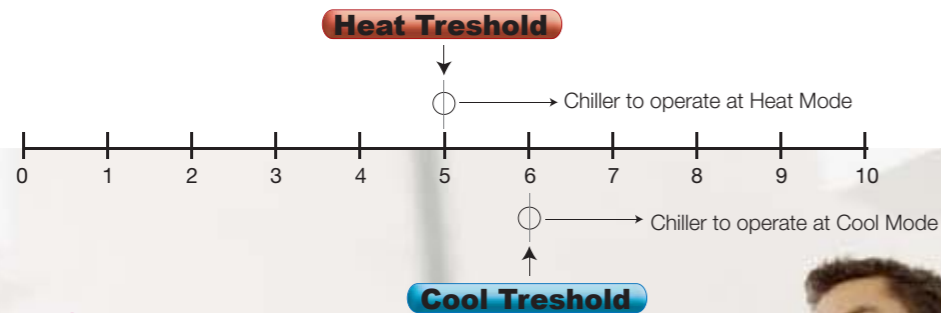
Display Up To 46 Types Of Chiller Fault/ Alarm And 6 Types Of FCU Fault/Alarm

Whenever a fault occurred in either the chiller or fan coil unit, a signal will be sent to HydroIntel controller and an alarm message will appear on the LCD, showing type of alarm, alarm occurred time, date and unit.

This will greatly ease the troubleshooting process and thus reduce the valuable time of service technicians.

As soon as the fault is being solved, the alarm will automatically dissolve from the LCD.





Threshold Value Setting

If the priority setting is being preset to fan coil unit, the operating mode of the complete HydroTech Chilled water system can be synchronized to operate under one same mode. This is achievable through the unique feature called "Threshold Value Setting"

HydroIntel Controller can command chiller operating mode to switch from current operating mode if the threshold value is meet.

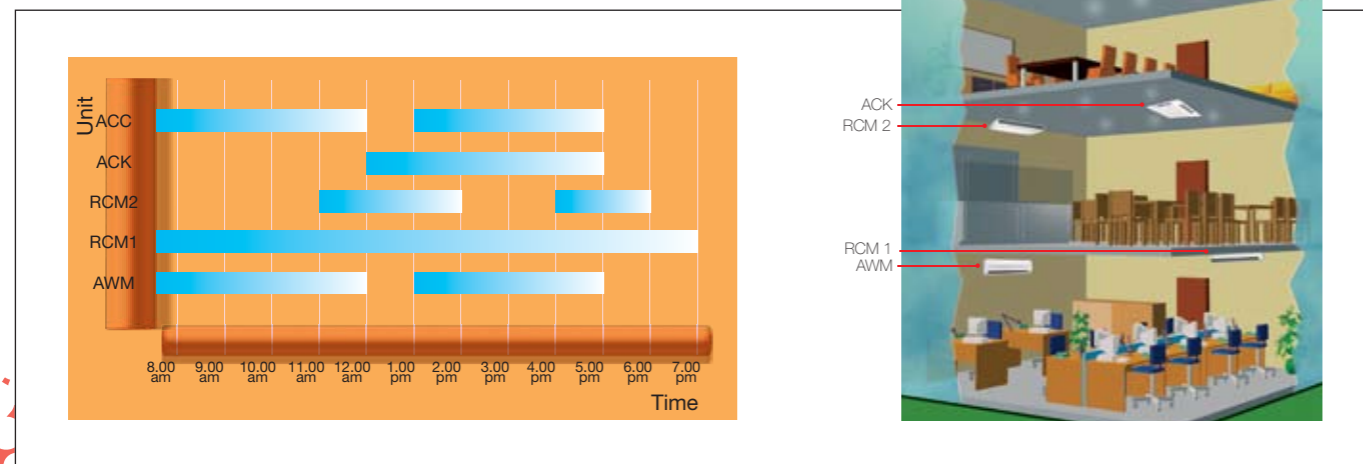
Example,
In a network of 10 fan coil units that is currently operating in COOL mode and a threshold of 60% was set for COOL mode and threshold of 50% was set for HEAT mode. Should 6 of the fan coil units are requesting for HEAT mode then the threshold for HEAT is crossed. Signal will be sent by HydroIntel to chiller BUS to switch the operating mode of all chillers to HEAT mode. Requirement of users will be met.

Features

Energy Saving Programmable Timer

The operation of the chiller and each fan coil unit can be preset to operate and to stop at different time schedule and at different day of a week. Taking consideration of the fact that certain rooms in a building will be empty at certain period of the day, setting timer to On and to Off the operation of units in those areas will greatly reduce the energy cost of the building.

At the same time, the HydroIntel controller allows setting up to five sets of 7 days programmable operating schedules (2 On/Off timer per day) for each fan coil unit.



Password Protection for advanced parameter settings (Chiller)

A HydroTech chilled water product system with key parameters that were set by personnel to optimize operating conditions will need to be protected against any unauthorized disturbance or changes. The built in "Password Settings" feature will prevent the losing of key parameter settings in the HydroIntel controller.

Low Power Mode (Chiller + FCU)

HydroIntel controller will turn into low power mode during electricity power breakdown. It will operate based on the built in backup battery and only one timer and interrupt is active. CPU operation is Off and no display on LCD as well for energy saving purpose.

Real Time Clock (RTC)

RTC will always appear at the summary pages and the user is able to set the time and date.

Priority Settings

Depending on the application requirement, the HydroIntel controller offers the flexibility to allow user to set the priority on the operation of fan coil unit and Chiller in a complete HydroTech chilled water product system.

If priority is set to fan coil unit, the chiller will be forced to OFF if all fan coil units are OFF. If Chiller Priority is being set, all fan coil units will be OFF if chillers are OFF.

Memory Backup (EEPROM), Alarm Memory for Chiller and FCU

When there is power failure occurs during operation, HydroIntel Controller will load the last state memory from EEPROM after power On reset.

Besides, extra memory space inside the HydroIntel controller will allow user to view the previous alarm records even though its have been dissolved. This useful information will benefit the service technician to view the history of maintenance record done to the unit.

HOLIDAY SETTINGS

Holiday 1	Set Holiday 1 Month : 1 Day : 1 Duration : Disable
Holiday 2	
Holiday 3	
Holiday 4	
Holiday 5	

Key Parameter Display

For easy serviceability and maintenance, HydroIntel Controller's is able to display the key parameter such as defrost and compressor discharge sensor temperature, water in/out temperature, status of compressor On/Off, Cool/Heat mode water in temperature, etc. Thus, it reduces the cumbersome of requiring the service technicians to physically go to site of chiller installation to do the troubleshooting process.

Accumulative compressor run time

User can also check the compressor run time of chiller in HydroIntel Controller. It will provide a guideline as well as posting a reminder for requirement of routine system service.

Mini Chiller Specifications

AMAC20C - AMAC60C (Cooling Only, R-22)

MODEL		AMAC20C	AMAC25C	AMAC30C	AMAC40C	AMAC50C	AMAC60C
NOMINAL COOLING CAPACITY	Btu/h	20000	24200	30000	39500	48500	54000
	W	5860	7090	8790	11580	14210	15830
NOMINAL TOTAL INPUT POWER	W	2660	2680	3520	4508	5150	5780
POWER SOURCE	V/Ph/Hz	220-240 / 1 / 50			380-415 / 3 / 50		
REFRIGERANT TYPE	R-22						
CONTROL	CAPILLARY TUBE						
UNIT DIMENSION	HEIGHT	800 / 31.5			1410 / 55.5		
	WIDTH	1160 / 45.7			1160 / 45.7		
	DEPTH	460 / 18.1			460 / 18.1		
UNIT WEIGHT	kg/lb	116 / 256	123 / 271	126 / 278	188 / 414	189 / 417	196 / 432
SOUND PRESSURE LEVEL	dBA	57	57	58	59	59	59
NOMINAL WATER FLOW	l/s / m ³ /hr	0.28 / 1.0	0.33 / 1.2	0.42 / 1.51	0.53 / 1.9	0.67 / 2.4	0.74 / 2.7
PIPING CONNECTION JOINT TYPE and SIZE	mm/in	BSPT 25.4 / 1					
TANK MATERIAL	CAST IRON / STAINLESS STEEL						
TANK CAPACITY/VOLUME	L / ft ³	22 / 0.78			40 / 1.41		

AMAC20CR - AMAC60CR (Heatpump, R-22)

MODEL		AMAC20CR	AMAC25CR	AMAC30CR	AMAC40CR	AMAC50CR	AMAC60CR	
NOMINAL COOLING CAPACITY	Btu/h	19000	23000	27500	38000	44000	50000	
	W	5570	6740	8060	11140	12900	14650	
NOMINAL HEATING CAPACITY	Btu/h	22000	27000	35000	43000	50000	55000	
	W	6450	7910	10260	12602	14650	16100	
NOMINAL TOTAL INPUT POWER	COOLING	2530	2670	3450	4300	5250	5600	
	HEATING	2600	2800	3430	4450	5150	5350	
POWER SOURCE	V/Ph/Hz	220-240 / 1 / 50			380-415 / 3 / 50			
REFRIGERANT TYPE	R-22							
CONTROL	CAPILLARY TUBE							
UNIT DIMENSION	HEIGHT	800 / 31.5			1410 / 55.5			
	WIDTH	1160 / 45.7			1160 / 45.7			
	DEPTH	460 / 18.1			460 / 18.1			
UNIT WEIGHT	kg/lb	116 / 256	123 / 271	128 / 282	195 / 430	197 / 433	203 / 448	
SOUND PRESSURE LEVEL	dBA	57	57	58	59	59	61	
NOMINAL WATER FLOW	COOLING	l/s / m ³ /hr	0.28 / 1.0	0.31 / 1.1	0.39 / 1.4	0.56 / 2.0	0.61 / 2.2	0.74 / 2.5
	HEATING	l/s / m ³ /hr	0.28 / 1.0	0.39 / 1.4	0.49 / 1.75	0.56 / 2.0	0.61 / 2.2	0.83 / 2.7
PIPING CONNECTION JOINT TYPE and SIZE	mm/in	BSPT 25.4 / 1						
TANK MATERIAL	CAST IRON / STAINLESS STEEL							
TANK CAPACITY/VOLUME	L / ft ³	22 / 0.78			40 / 1.41			

NOTES:

- 1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
- 2) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
 - a) COOLING - 12°C / 7°C ENTERING / LEAVING EVAPORATOR WATER TEMPERATURE, 35°C AIR AMBIENT TEMPERATURE.
 - b) HEATING - 40°C / 45°C ENTERING / LEAVING EVAPORATOR WATER TEMPERATURE, 7°C AIR AMBIENT TEMPERATURE.
- 3) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1M IN FRONT AND 1M BELOW THE UNIT.

AMAC80C - AMAC150C (Cooling Only, R-22)

MODEL		AMAC80C	AMAC100C	AMAC120C	AMAC150C	
NOMINAL COOLING CAPACITY	Btu/h	85000	95000	116000	138000	
	W	24910	27840	34000	40450	
NOMINAL TOTAL INPUT POWER	W	9050	10800	11350	14220	
POWER SOURCE	V/Ph/Hz	380-415 / 3 / 50				
REFRIGERANT TYPE	R-22					
CONTROL	TXV					
UNIT DIMENSION	HEIGHT	1245 / 49.0				
	WIDTH	1500 / 59.1		1800 / 70.9		
	DEPTH	900 / 35.4		1150 / 45.3		
UNIT WEIGHT	kg/lb	340 / 750	340 / 750	480 / 1058	560 / 1235	
SOUND PRESSURE LEVEL	dBA	63	63	67	67	
NOMINAL WATER FLOW	l/s / m ³ /hr	1.22 / 4.4	1.36 / 4.9	1.67 / 6.0	2.00 / 7.2	
PIPING CONNECTION JOINT TYPE and SIZE	mm/in	BSPT 31.75 / 1.25				
TANK MATERIAL	NA					
TANK CAPACITY/VOLUME	L / ft ³	NA				

AMAC80CR - AMAC150CR (Heatpump, R-22)

MODEL		AMAC80CR	AMAC100CR	AMAC120CR	AMAC150CR	
NOMINAL COOLING CAPACITY	Btu/h	80000	95000	113000	138000	
	W	23450	27840	33120	40450	
NOMINAL HEATING CAPACITY	Btu/h	95000	105000	120000	132000	
	W	27840	30770	35170	38690	
NOMINAL TOTAL INPUT POWER	COOLING	8650	11200	12060	14320	
	HEATING	8900	10500	12300	15010	
POWER SOURCE	V/Ph/Hz	380-415 / 3 / 50				
REFRIGERANT TYPE	R-22					
CONTROL	CAPILLARY TUBE					
UNIT DIMENSION	HEIGHT	1245 / 49.0				
	WIDTH	1500 / 59.1		1800 / 70.9		
	DEPTH	900 / 35.4		1150 / 45.3		
UNIT WEIGHT	kg/lb	340 / 750	340 / 750	480 / 1058	560 / 1235	
SOUND PRESSURE LEVEL	dBA	63	63	67	67	
NOMINAL WATER FLOW	COOLING	l/s / m ³ /hr	1.13 / 4.05	1.33 / 4.8	1.67 / 6.0	2.00 / 7.2
	HEATING	l/s / m ³ /hr	1.13 / 4.05	1.47 / 5.3	1.67 / 6.0	2.00 / 7.2
PIPING CONNECTION JOINT TYPE and SIZE	mm/in	BSPT 31.75 / 1.25				
TANK MATERIAL	NA					
TANK CAPACITY/VOLUME	L / ft ³	NA				

NOTE :

- 1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
- 2) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
 - a) COOLING - 12°C / 7°C ENTERING / LEAVING EVAPORATOR WATER TEMPERATURE, 35°C AIR AMBIENT TEMPERATURE.
 - b) HEATING - 40°C / 45°C ENTERING / LEAVING EVAPORATOR WATER TEMPERATURE, 7°C AIR AMBIENT TEMPERATURE.
- 3) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

Mini Chiller Specifications

A4AC20C - A4AC60C (Cooling Only, R-407C)

MODEL		A4AC25C	A4AC30C	A4AC40C	A4AC50C	A4AC60C
NOMINAL COOLING CAPACITY	Btu/h	23000	26900	38500	47500	50000
	W	6740	7880	11280	13920	14650
NOMINAL TOTAL INPUT POWER	W	2950	3770	4700	5450	6050
POWER SOURCE	V/Ph/Hz	220-240 / 1 / 50		380-415 / 3 / 50		
REFRIGERANT TYPE		R-407C				
CONTROL		CAPILLARY TUBE				
UNIT DIMENSION	HEIGHT	800 / 31.5		1410 / 55.5		
	WIDTH	1160 / 45.7			1160 / 45.7	
	DEPTH	460 / 18.1		460 / 18.1		
UNIT WEIGHT	kg/lb	123 / 271	188 / 414	188 / 414	189 / 417	196 / 432
SOUND PRESSURE LEVEL	dBA	57	58	59	59	60
NOMINAL WATER FLOW	l/s / m ³ /hr	0.31 / 1.1	0.39 / 1.4	0.53 / 1.9	0.64 / 2.3	0.7 / 2.5
PIPING CONNECTION JOINT TYPE and SIZE	mm/in	BSPT 25.4 / 1				
TANK MATERIAL		CAST IRON / STAINLESS STEEL				
TANK CAPACITY/VOLUME	L / ft ³	22 / 0.78		40 / 1.41		

A4AC60CR (Heatpump, R-407C)

MODEL		A4AC60CR				
NOMINAL COOLING CAPACITY	Btu/h	50000				
	W	14650				
NOMINAL HEATING CAPACITY	Btu/h	55000				
	W	16120				
NOMINAL TOTAL INPUT POWER	COOLING W	6300				
	HEATING W	5600				
POWER SOURCE	V/Ph/Hz	380-415 / 3 / 50				
REFRIGERANT TYPE		R-407C				
CONTROL		CAPILLARY TUBE				
UNIT DIMENSION	HEIGHT	1410 / 55.5				
	WIDTH	1160 / 45.7				
	DEPTH	460 / 18.1				
UNIT WEIGHT	kg/lb	203 / 448				
SOUND PRESSURE LEVEL	dBA	60				
NOMINAL WATER FLOW	COOLING l/s / m ³ /hr	0.64 / 2.3				
	HEATING l/s / m ³ /hr	0.78 / 2.8				
PIPING CONNECTION JOINT TYPE and SIZE	mm/in	25.4 / 1				
TANK MATERIAL		CAST IRON / STAINLESS STEEL				
TANK CAPACITY/VOLUME	L / ft ³	40 / 1.41				

Notes:

- 1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
- 2) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
 - a) COOLING - 12°C / 7°C ENTERING / LEAVING EVAPORATOR WATER TEMPERATURE, 35°C AIR AMBIENT TEMPERATURE.
 - b) HEATING - 40°C / 45°C ENTERING / LEAVING EVAPORATOR WATER TEMPERATURE, 7°C AIR AMBIENT TEMPERATURE.
- 3) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

A4AC80C - A4AC150C (Cooling Only, R-407C)

MODEL		A4AC80C	A4AC100C	A4AC120C	A4AC150C
NOMINAL COOLING CAPACITY	Btu/h	80000	90000	115000	137000
	W	23450	26380	33700	40150
NOMINAL TOTAL INPUT POWER	W	9600	11400	12150	14970
POWER SOURCE	V/Ph/Hz	380-415 / 3 / 50			
REFRIGERANT TYPE		R-407C			
CONTROL		TXV			
UNIT DIMENSION	HEIGHT	1245 / 49.0			
	WIDTH	1500 / 59.1		1800 / 70.9	
	DEPTH	900 / 35.4		1150 / 45.3	
UNIT WEIGHT	kg/lb	340 / 750	340 / 750	480 / 1058	560 / 1235
SOUND PRESSURE LEVEL	dBA	63	63	67	67
NOMINAL WATER FLOW	l/s / m ³ /hr	1.14 / 4.1	1.25 / 4.5	1.67 / 6.0	2.00 / 7.2
PIPING CONNECTION JOINT TYPE and SIZE	mm/in	BSPT 31.75 / 1.25			
TANK MATERIAL		NA			
TANK CAPACITY/VOLUME	L / ft ³	NA			

A4AC80CR - A4AC150CR (Heatpump, R-407C)

MODEL		A4AC80CR	A4AC100CR	A4AC120CR	A4AC150CR
NOMINAL COOLING CAPACITY	Btu/h	74000	87500	110000	130000
	W	21700	25640	32240	38100
NOMINAL HEATING CAPACITY	Btu/h	90000	96000	118000	144000
	W	26400	28140	34600	42200
NOMINAL TOTAL INPUT POWER	COOLING W	9200	11300	12620	15900
	HEATING W	9500	11300	12730	16100
POWER SOURCE	V/Ph/Hz	380-415 / 3 / 50			
REFRIGERANT TYPE		R-407C			
CONTROL		TXV			
UNIT DIMENSION	HEIGHT	1245 / 49.0			
	WIDTH	1500 / 59.1		1800 / 70.9	
	DEPTH	900 / 35.4		1150 / 45.3	
UNIT WEIGHT	kg/lb	340 / 750	340 / 750	480 / 1058	560 / 1234
SOUND PRESSURE LEVEL	dBA	63	63	67	67
NOMINAL WATER FLOW	COOLING l/s / m ³ /hr	1.03 / 3.7	1.25 / 4.5	1.67 / 6.0	1.89 / 6.8
	HEATING l/s / m ³ /hr	1.03 / 3.7	1.35 / 4.5	1.79 / 6.0	1.89 / 6.8
PIPING CONNECTION JOINT TYPE and SIZE	mm/in	BSPT 31.75 / 1.25			
TANK MATERIAL		NA			
TANK CAPACITY/VOLUME	L / ft ³	NA			

Notes:

- 1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
- 2) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
 - a) COOLING - 12°C / 7°C ENTERING / LEAVING EVAPORATOR WATER TEMPERATURE, 35°C AIR AMBIENT TEMPERATURE.
 - b) HEATING - 40°C / 45°C ENTERING / LEAVING EVAPORATOR WATER TEMPERATURE, 7°C AIR AMBIENT TEMPERATURE.
- 3) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

Mini Chiller Specifications

A5AC020CR - A5AC055CR (Heatpump, R-410A)

MODEL		A5AC020CR	A5AC025CR	A5AC030CR	A5AC040CR	A5AC050CR	A5AC055CR	
NOMINAL COOLING CAPACITY	Btu/h	15700	19400	24800	34100	41600	45000	
	W	4610	5690	7270	10000	12200	13200	
NOMINAL HEATING CAPACITY	Btu/h	21500	25000	32500	43000	48000	55000	
	W	6300	7300	9500	12600	14100	16100	
NOMINAL TOTAL INPUT POWER	COOLING	W	2620	2830	3830	5000	5490	
	HEATING	W	2590	2790	3630	4650	5440	
POWER SOURCE	V/Ph/Hz	220-240 / 1 / 50		380-415 / 3 / 50				
REFRIGERANT TYPE		R-410A						
CONTROL		CAPILLARY TUBE		CAPILLARY TUBE & TXV				
UNIT DIMENSION	HEIGHT	mm/in	791 / 31.1		790 / 31.1	1410 / 55.5	1410 / 55.5	
	WIDTH	mm/in	1160 / 45.7		1059 / 41.7	1059 / 41.7	1059 / 41.7	
	DEPTH	mm/in	460 / 18.1		460 / 18.1	460 / 18.1	460 / 18.1	
UNIT WEIGHT	kg/lb	128 / 282	128 / 282	128 / 282	195 / 430	195 / 430	195 / 430	
SOUND PRESSURE LEVEL	dBA	58	59	59	59	59	61	
NOMINAL WATER FLOW	COOLING	l/s / m ³ /hr	0.23 / 0.86	0.28 / 1.00	0.42 / 1.5	0.50 / 1.8	0.60 / 2.15	0.75 / 2.7
	HEATING	l/s / m ³ /hr	0.32 / 1.16	0.35 / 1.25	0.42 / 1.5	0.50 / 1.8	0.60 / 2.15	0.75 / 2.7
PIPING CONNECTION JOINT TYPE and SIZE	mm/in	BSPT 25.4 / 1						
TANK	MATERIAL	CAST IRON / STAINLESS STEEL			NA			
	CAPACITY/VOLUME	L / ft ³	22 / 0.78			NA		

Notes:

- 1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
- 2) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
 - a) COOLING - 12°C / 7°C ENTERING / LEAVING EVAPORATOR WATER TEMPERATURE, 35°C AIR AMBIENT TEMPERATURE.
 - b) HEATING - 40°C / 45°C ENTERING / LEAVING EVAPORATOR WATER TEMPERATURE, 7°C AIR AMBIENT TEMPERATURE.
- 3) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS B 8615 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 1m BELOW THE UNIT.

Chilled Water Fan Coil Specifications

ACK20AW - ACK50AW (Ceiling Cassette A Series)

MODEL		ACK20AW	ACK25AW	ACK30AW	ACK40AW	ACK50AW		
50HZ	NOMINAL TOTAL COOLING CAPACITY	Btu/h	22500	25500	30000	33500	36500	
		W	6620	7500	8800	9820	10700	
	NOMINAL SENSIBLE COOLING CAPACITY	Btu/h	16700	18400	21800	24200	26300	
		W	4900	5400	6400	7100	7700	
	NOMINAL TOTAL HEATING CAPACITY (ENTERING WATER TEMP. = 50°C)	Btu/h	28500	32000	37500	40500	44000	
		W	8400	9500	11000	11870	12900	
	NOMINAL AIR FLOW	HIGH	l/s / CFM	364 / 771	383 / 812	433 / 918	483 / 1024	511 / 1083
		MEDIUM	l/s / CFM	314 / 665	328 / 695	367 / 777	425 / 901	467 / 989
		LOW	l/s / CFM	297 / 630	297 / 630	336 / 712	372 / 789	428 / 906
	NOMINAL WATER FLOW RATE	USGPM	5.02	5.68	6.65	7.53	8.19	
LITRES/M		19.00	21.55	25.23	28.52	30.97		
POWER SOURCE	V/Ph/Hz	220-240/1/50						
TOTAL INPUT POWER	W	127	151	164	192	253		
60HZ	NOMINAL TOTAL COOLING CAPACITY	Btu/h	24000	26000	29500	35000	40000	
		W	7030	7620	8640	10250	11720	
	NOMINAL TOTAL HEATING CAPACITY (ENTERING WATER TEMP. = 50°C)	Btu/h	30000	32000	36000	39000	42000	
		W	8790	9380	10550	11430	12310	
	NOMINAL AIR FLOW	HIGH	l/s / CFM	350 / 740	369 / 779	416 / 879	468 / 989	492 / 1040
		USGPM	5.51	5.81	6.70	7.31	7.49	
NOMINAL WATER FLOW RATE	LITRES/M	20.83	22.00	25.33	27.67	28.33		
POWER SOURCE	V/Ph/Hz	208-230/1/60						
TOTAL INPUT POWER	W	132	155	198	306	312		
UNIT DIMENSION - () WITH PANEL	HEIGHT	mm/in	305 / 12.0 (355 / 13.9)					
	WIDTH	mm/in	824 / 32.4 (930 / 36.6)					
	DEPTH	mm/in	824 / 32.4 (930 / 36.6)					
UNIT WEIGHT (UNIT + PANEL)	kg/lb	(25+4) / (55.1+8.8)	(36+4) / (79.3+8.8)	(38+4) / (83.7+8.8)	(42+4) / (92.5+8.8)	(44+4) / (97.0+8.8)		
SOUND PRESSURE LEVEL (H/M/L)	dBA	42 / 39 / 37	45 / 42 / 40	49 / 45 / 43	51 / 48 / 46	53 / 52 / 50		
HEAD LOSS (COOLING)	kPa / psi	25 / 3.6	31 / 4.5	42 / 6	52 / 7.6	69 / 10		
HEAD LOSS (HEATING) : 50°C	kPa / psi	21 / 3.1	27 / 3.9	35 / 5.1	45 / 6.6	64 / 9.3		
CONNECTION		3/4" BSP FEMALE UNION						

Notes:

- 1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
- 2) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
 - a) COOLING - ENTERING AIR TEMP. : 27°C (80.6°F) DB / 19°C (66.2°F) WB, ENTERING WATER TEMP. : 7°C (44.6°F), LEAVING WATER TEMP. : 12°C (53.6°F)
 - b) HEATING - ENTERING AIR TEMP. : 20°C (68°F) DB, ENTERING WATER TEMP. : 50°C (122°F), LEAVING WATER TEMP. : 45°C (131°F), WATER FLOW RATE BASED ON COOLING CYCLE.
- 3) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS C 9612 STANDARD. MICROPHONE POSITION OF THE MEASUREMENT POINT IS 1.4m BELOW THE CENTRE OF THE UNIT.

ACK20AWH - ACK50AWH (4 Pipes Ceiling Cassette)

MODEL		ACK20AWH	ACK25AWH	ACK30AWH	ACK40AWH	ACK50AWH		
50HZ	NOMINAL TOTAL COOLING CAPACITY	Btu/h	13000	13500	15500	17100	17500	
		W	3810	3960	4540	4980	5130	
	NOMINAL SENSIBLE COOLING CAPACITY	Btu/h	11600	12000	13850	15000	15500	
		W	3400	3520	4060	4400	4540	
	NOMINAL TOTAL HEATING CAPACITY (ENTERING WATER TEMP. = 50°C)	Btu/h	36000	37500	42500	45500	46500	
		W	10550	10990	12460	13480	13630	
	NOMINAL AIR FLOW	HIGH	l/s / CFM	364 / 771	383 / 812	433 / 918	484 / 1024	511 / 1083
		MEDIUM	l/s / CFM	314 / 665	328 / 695	367 / 777	425 / 900	467 / 989
		LOW	l/s / CFM	297 / 630	297 / 630	336 / 712	372 / 789	428 / 906
	NOMINAL WATER FLOW RATE	Cooling	USGPM	2.90	3.00	3.52	3.80	3.92
			LITRES/M	10.92	11.35	13.27	14.37	14.80
		Add.Heat	USGPM	4.00	4.18	4.76	5.10	5.20
	Exch	LITRES/M	15.12	15.75	17.93	19.32	19.73	
	POWER SOURCE	V/Ph/Hz	220-240/1/50					
	TOTAL INPUT POWER	W	122	138	153	184	232	
	UNIT DIMENSION - () WITH PANEL	HEIGHT	mm/in	305 / 12.0 (355 / 13.9)				
		WIDTH	mm/in	824 / 32.4 (930 / 36.6)				
		DEPTH	mm/in	824 / 32.4 (930 / 36.6)				
UNIT WEIGHT (UNIT + PANEL)	kg/lb	(25+4) / (55.1+8.8)	(36+4) / (79.3+8.8)	(38+4) / (83.7+8.8)	(42+4) / (92.5+8.8)	(44+4) / (97+8.8)		
SOUND PRESSURE LEVEL (H/M/L)	dBA	42 / 39 / 37	45 / 42 / 40	49 / 45 / 43	51 / 48 / 46	53 / 52 / 50		
HEAD LOSS (COOLING)	kPa / psi	4 / 0.5	4 / 0.5	5 / 0.7	6 / 0.8	6 / 0.9		
HEAD LOSS (HEATING) : 70°C	kPa / psi	5 / 0.7	6 / 0.8	7 / 1	9 / 1.2	9 / 1.3		
CONNECTION		3/4" BSP FEMALE UNION						

Notes:

- 1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
- 2) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
 - a) COOLING - ENTERING AIR TEMP. : 27°C (80.6°F) DB / 19°C (66.2°F) WB, ENTERING WATER TEMP. : 7°C (44.6°F), LEAVING WATER TEMP. : 12°C (53.6°F)
 - b) HEATING - ENTERING AIR TEMP. : 20°C (68°F) DB, ENTERING WATER TEMP. : 50°C (158°F), LEAVING WATER TEMP. : 45°C (167°F), WATER FLOW RATE BASED ON COOLING CYCLE.
- 3) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS C 9612 STANDARD. MICROPHONE POSITION OF THE MEASUREMENT POINT IS 1.4m BELOW THE CENTRE OF THE UNIT.

Chilled Water Fan Coil Specifications

ACK10CW - ACK20CW (Ceiling Cassette C Series)

MODEL		ACK10CW	ACK15CW	ACK20CW		
50HZ	NOMINAL TOTAL COOLING CAPACITY	Btu/h	8500	14000	15500	
		W	2490	4100	4540	
	NOMINAL SENSIBLE COOLING CAPACITY	Btu/h	6500	10000	11500	
		W	1910	2930	3370	
	NOMINAL TOTAL HEATING CAPACITY (ENTERING WATER TEMP. = 50°C)	Btu/h	12000	16000	18000	
		W	3520	4690	5280	
	NOMINAL AIR FLOW	HIGH	l/s / CFM	179 / 380	189 / 400	208 / 440
		MEDIUM	l/s / CFM	137 / 290	146 / 310	156 / 330
		LOW	l/s / CFM	109 / 230	104 / 220	132 / 280
	NOMINAL WATER FLOW RATE	USGPM		2.03	3.43	3.57
		LITRES/M		7.67	13.00	13.50
	POWER SOURCE	V/Ph/Hz	220-240/1/50			
	TOTAL INPUT POWER	W	63	64	79	
	UNIT DIMENSION - () WITH PANEL	HEIGHT	mm/in	250 / 9.8 (295 / 11.6)		
		WIDTH	mm/in	570 / 22.4 (640 / 25.2)		
		DEPTH	mm/in	570 / 22.4 (640 / 25.2)		
	UNIT WEIGHT (UNIT + PANEL)	kg/lb	(15+3) / (33.1+6.6)	(17+3) / (37.5+6.6)		
	SOUND PRESSURE LEVEL (H/M/L)	dBA	42/35/29	45/38/30	48/40/36	
HEAD LOSS (COOLING)	kPa / psi	19 / 2.8	27 / 3.9	29 / 4.3		
HEAD LOSS (HEATING) : 50°C	kPa / psi	17 / 2.5	24 / 3.5	27 / 4.0		
CONNECTION		3/4" BSP FEMALE UNION				

Notes:

- 1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
- 2) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
 - a) COOLING - ENTERING AIR TEMP. : 27°C (80.6°F) DB / 19°C (66.2°F) WB, ENTERING WATER TEMP. : 7°C (44.6°F), LEAVING WATER TEMP. : 12°C (53.6°F)
 - b) HEATING - ENTERING AIR TEMP. : 20°C (68°F) DB, ENTERING WATER TEMP. : 50°C (122°F), LEAVING WATER TEMP. : 45°C (131°F), WATER FLOW RATE BASED ON COOLING CYCLE.
- 3) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS C 9612 STANDARD. MICROPHONE POSITION OF THE MEASUREMENT POINT IS 1.4m BELOW THE CENTRE OF THE UNIT.

RCM07CBW - RCM15CBW (Ceiling Exposed)

MODEL		RCM07CBW	RCM10CBW	RCM15CBW		
50 / 60HZ	NOMINAL TOTAL COOLING CAPACITY	Btu/h	6500	8500	10500	
		W	1910	2490	3080	
	NOMINAL SENSIBLE COOLING CAPACITY	Btu/h	5000	6700	8600	
		W	1460	1960	2520	
	NOMINAL TOTAL HEATING CAPACITY (ENTERING WATER TEMP. = 50°C)	Btu/h	7500	10500	14200	
		W	2280	3080	4160	
	NOMINAL AIR FLOW	HIGH	l/s / CFM	94 / 200	142 / 300	190 / 400
		MEDIUM	l/s / CFM	80 / 170	134 / 280	156 / 330
		LOW	l/s / CFM	71 / 150	119 / 250	139 / 292
	NOMINAL WATER FLOW RATE	USGPM	1.45	1.89	2.33	
		LITRES/M	5.49	7.15	8.82	
	POWER SOURCE	V/Ph/Hz	220-240/1/50 , 208-230/1/60			
	TOTAL INPUT POWER	w	49.00	50.00	81.00	
	UNIT DIMENSION	HEIGHT	mm/in	235 / 9.3		
		WIDTH	mm/in	666 / 26.2		
		DEPTH	mm/in	824 / 32.4	1174 / 46.2	
	UNIT WEIGHT	kg/lb	33 / 72.8		35 / 77.2	
	SOUND PRESSURE LEVEL (H/M/L)	dBA	45 / 42 / 37	46 / 43 / 38	47 / 44 / 39	
HEAD LOSS (COOLING)	kPa / psi	9 / 1.4	15 / 2.2	5 / 0.7		
HEAD LOSS (HEATING) : 50°C	kPa / psi	7.0 / 1.01	13 / 1.8	4 / 0.5		
CONNECTION		3/4" BSP FEMALE ADAPTOR				

Notes:

- 1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
- 2) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
 - a) COOLING - ENTERING AIR TEMP. : 27°C (80.6°F) DB / 19°C (66.2°F) WB, ENTERING WATER TEMP. : 7°C (44.6°F), LEAVING WATER TEMP. : 12°C (53.6°F)
 - b) HEATING - ENTERING AIR TEMP. : 20°C (68°F) DB, ENTERING WATER TEMP. : 50°C (122°F), LEAVING WATER TEMP. : 45°C (131°F), WATER FLOW RATE BASED ON COOLING CYCLE.
- 3) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS C 9612 STANDARD. MCM020/025DW : POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT MICROPHONE POSITION OF THE MEASUREMENT POINT IS 1.4m BELOW THE CENTRE OF THE UNIT.

Chilled Water Fan Coil Specifications

RCM20DW - RCM50DW (Ceiling Convertible)

MODEL		RCM20DW	RCM25DW	RCM30DW	RCM40DW	RCM50DW		
50HZ	NOMINAL TOTAL COOLING CAPACITY	Btu/h	17700	20800	24600	31200	45000	
		W	5190	6100	7210	9140	13190	
	NOMINAL SENSIBLE COOLING CAPACITY	Btu/h	13700	15000	17700	25600	31400	
		W	4000	4400	5190	7500	9200	
	NOMINAL TOTAL HEATING CAPACITY (ENTERING WATER TEMP. = 50°C)	Btu/h	22000	25900	28000	42300	51500	
		W	6450	7590	8210	12400	15090	
	NOMINAL AIR FLOW	HIGH	l/s / CFM	264 / 560	297 / 630	329 / 697	451 / 956	500 / 1059
		MEDIUM	l/s / CFM	238 / 505	293 / 620	324 / 687	428 / 908	483 / 1023
		LOW	l/s / CFM	189 / 400	262 / 555	307 / 650	419 / 889	451 / 956
	NOMINAL WATER FLOW RATE	USGPM	3.92	4.62	5.46	6.91	9.99	
		LITRES/M	14.84	17.49	20.67	26.16	37.82	
	POWER SOURCE	V/Ph/Hz	220-240/1/50					
	TOTAL INPUT POWER	W	96.00	130.00	132.00	240.00	240.00	
	60HZ	NOMINAL TOTAL COOLING CAPACITY	Btu/h	17700	20800	24600	31200	45000
			W	5190	6100	7210	9140	13190
		NOMINAL TOTAL HEATING CAPACITY (ENTERING WATER TEMP. = 50°C)	Btu/h	22000	25900	28000	42300	51500
			W	6450	7590	8210	12400	15090
		NOMINAL AIR FLOW	HIGH	l/s / CFM	264 / 560	297 / 630	329 / 697	451 / 956
MEDIUM			l/s / CFM	238 / 505	293 / 620	324 / 687	428 / 908	483 / 1023
LOW			l/s / CFM	189 / 400	262 / 555	307 / 650	419 / 889	451 / 956
NOMINAL WATER FLOW RATE		USGPM	3.92	4.62	5.46	6.91	9.99	
		LITRES/M	14.84	17.49	20.67	26.16	37.82	
POWER SOURCE		V/Ph/Hz	208-230/1/60					
TOTAL INPUT POWER		W	104.00	163.00	163.00	306.00	306.00	
UNIT DIMENSION - () WITH PANEL		HEIGHT	mm/in	214 / 8.4		249 / 9.8		
		WIDTH	mm/in	1214 / 47.8			1714 / 67.5	
		DEPTH	mm/in	670 / 26.4			70 / 154.3	
UNIT WEIGHT (UNIT + PANEL)		kg/lb	43 / 94.8		45 / 99.2		70 / 154.3	
SOUND PRESSURE LEVEL (H/M/L)		dBA	50 / 47 / 40	54 / 53 / 50	51 / 50 / 48	54 / 53 / 52	54 / 53 / 52	
HEAD LOSS (COOLING)		kPa / psi	46 / 6.6	56 / 8.1	49 / 7.2	24.0 / 3.5	38 / 5.5	
HEAD LOSS (HEATING) : 50°C		kPa / psi	39 / 5.7	48 / 7	43 / 6.2	22 / 3.1	32 / 4.6	
CONNECTION		3/4" BSP FEMALE ADAPTOR						

Notes:

- 1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
- 2) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
 - a) COOLING - ENTERING AIR TEMP. : 27°C (80.6°F) DB / 19°C (66.2°F) WB, ENTERING WATER TEMP. : 7°C (44.6°F), LEAVING WATER TEMP. : 12°C (53.6°F)
 - b) HEATING - ENTERING AIR TEMP. : 20°C (68°F) DB, ENTERING WATER TEMP. : 50°C (122°F), LEAVING WATER TEMP. : 45°C (131°F), WATER FLOW RATE BASED ON COOLING CYCLE.
- 3) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS C 9612 STANDARD. MICROPHONE POSITION OF THE MEASUREMENT POINT IS 1.4m BELOW THE CENTRE OF THE UNIT.

RCM15EW - RCM25EW (Ceiling Convertible)

MODEL		ACM15EW	ACM20EW	ACM25EW		
50HZ	NOMINAL TOTAL COOLING CAPACITY	Btu/h	15500	20300	21000	
		W	4540	5950	6150	
	NOMINAL SENSIBLE COOLING CAPACITY	Btu/h	12700	15400	16200	
		W	3720	4510	4750	
	NOMINAL TOTAL HEATING CAPACITY (ENTERING WATER TEMP. = 50°C)	Btu/h	19500	25000	28000	
		W	5720	7330	8210	
	NOMINAL AIR FLOW	HIGH	l/s / CFM	236 / 500	274 / 580	293 / 620
		MEDIUM	l/s / CFM	213 / 450	250 / 530	269 / 570
		LOW	l/s / CFM	189 / 400	231 / 490	245 / 520
	NOMINAL WATER FLOW RATE	USGPM	3.43	4.49	4.67	
		LITRES/M	12.98	17.00	17.68	
	POWER SOURCE	V/Ph/Hz	220-240/1/50			
	TOTAL INPUT POWER	W	101.00	109.00	113.00	
	UNIT DIMENSION - () WITH PANEL	HEIGHT	mm/in	212 / 8.3		
		WIDTH	mm/in	1090 / 42.9		
		DEPTH	mm/in	630 / 24.8		
	UNIT WEIGHT (UNIT + PANEL)	kg/lb	27 / 59.5			
	SOUND PRESSURE LEVEL (H/M/L)	dBA	50 / 43 / 41	53 / 51 / 49	56 / 51 / 44	
HEAD LOSS (COOLING)	kPa / psi	27 / 4.0	48 / 7.0	57 / 8.3		
HEAD LOSS (HEATING) : 50°C	kPa / psi	24 / 3.5	42 / 6.1	50 / 7.3		
CONNECTION		1/2" BSP FEMALE ADAPTOR				

Notes:

- 1) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
- 2) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
 - a) COOLING - ENTERING AIR TEMP. : 27°C (80.6°F) DB / 19°C (66.2°F) WB, ENTERING WATER TEMP. : 7°C (44.6°F), LEAVING WATER TEMP. : 12°C (53.6°F)
 - b) HEATING - ENTERING AIR TEMP. : 20°C (68°F) DB, ENTERING WATER TEMP. : 50°C (122°F), LEAVING WATER TEMP. : 45°C (131°F), WATER FLOW RATE BASED ON COOLING CYCLE.
- 3) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS C 9612 STANDARD. MICROPHONE POSITION OF THE MEASUREMENT POINT IS 1.4m BELOW THE CENTRE OF THE UNIT.

Chilled Water Fan Coil Specifications

ACC10CW - ACC28CW (Ceiling Concealed)

MODEL		ACC10CW	ACC15CW	ACC20CW	ACC25CW	ACC28CW		
50HZ	NOMINAL TOTAL COOLING CAPACITY	Btu/h	9900	11600	18000	22500	24600	
		W	2900	3400	5280	6590	7210	
	NOMINAL SENSIBLE COOLING CAPACITY	Btu/h	7000	8100	12600	15800	17090	
		W	2050	2370	3690	4620	5009	
	NOMINAL TOTAL HEATING CAPACITY (ENTERING WATER TEMP. = 50°C)	Btu/h	11500	15000	23000	29000	30900	
		W	3370	4400	6740	8500	9056	
	NOMINAL AIR FLOW	HIGH	l/s / CFM	142 / 300	241 / 510	330 / 700	344 / 730	382 / 810
		MEDIUM	l/s / CFM	123 / 260	208 / 440	321 / 680	340 / 720	363 / 770
		LOW	l/s / CFM	104 / 220	170 / 360	293 / 620	274 / 580	335 / 710
	NOMINAL WATER FLOW RATE	USGPM	2.20	2.55	4.00	4.98	5.73	
	LITRES/M	8.33	9.65	15.14	18.85	21.70		
POWER SOURCE	V/Ph/Hz	220-240/1/50						
TOTAL INPUT POWER	W	67.60	97.20	141.00	165.00	170.00		
60HZ	NOMINAL TOTAL COOLING CAPACITY	Btu/h	9900	11600	18000	22500	-NA-	
		W	2900	3400	5280	6590		
	NOMINAL TOTAL HEATING CAPACITY (ENTERING WATER TEMP. = 50°C)	Btu/h	11500	15000	23000	29000		
		W	3370	4400	6740	8500		
	NOMINAL AIR FLOW	HIGH	l/s / CFM	142 / 300	241 / 510	330 / 700	344 / 730	
			USGPM	2.20	2.55	4.00	4.98	
	NOMINAL WATER FLOW RATE	LITRES/M	8.33	9.65	15.14	18.85		
	POWER SOURCE	V/Ph/Hz	208-230/1/60					
	TOTAL INPUT POWER	W	78.00	114.00	165.00	219.00		
	EXTERNAL STATIC (H/M/L)	mmAq	5 / 4 / 3	5 / 4 / 2	7 / 6 / 3	6 / 4 / 3	8 / 7 / 6	
UNIT DIMENSION - () WITH PANEL	HEIGHT	mm/in	261 / 10.3	261 / 10.3	261 / 10.3	261 / 10.3	285 / 11.3	
	WIDTH	mm/in	765 / 30.1	905 / 35.6	1065 / 41.9	1200 / 47.2	992 / 39.0	
	DEPTH	mm/in	411 / 16.2	411 / 16.2	411 / 16.2	411 / 16.2	600 / 23.7	
UNIT WEIGHT (UNIT + PANEL)	kg/lb	18 / 39.7	24 / 52.9	27 / 59.5	28 / 61.7	39 / 86.0		
SOUND PRESSURE LEVEL (H/M/L)	dB	33 / 30 / 26	37 / 34 / 29	38 / 36 / 34	40 / 39 / 36	41 / 38 / 34		
HEAD LOSS (COOLING)	kPa / psi	11 / 1.5	24 / 3.5	20 / 2.9	32 / 4.7	24 / 3.5		
HEAD LOSS (HEATING) : 50°C	kPa / psi	9 / 1.3	20 / 2.9	17 / 2.5	28 / 4	22 / 3.2		
CONNECTION		3/4" BSP FEMALE ADAPTOR						

NOTES :

- 1) ALL SPECIFICATIONS ARE SUBJECT TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
- 2) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
 - a) COOLING - ENTERING AIR TEMP. : 27°C (80.6°F) DB / 19°C (66.2°F) WB, ENTERING WATER TEMP. : 7°C (44.6°F), LEAVING WATER TEMP. : 12°C (53.6°F)
 - b) HEATING - ENTERING AIR TEMP. : 20°C (68°F) DB, ENTERING WATER TEMP. : 50°C (122°F), LEAVING WATER TEMP. : 45°C (131°F), WATER FLOW RATE BASED ON COOLING CYCLE.
- 3) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS C 9612 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1.4m BELOW THE FACIA.

ACC30CW - ACC60CW (Ceiling Concealed)

MODEL		ACC30CW	ACC38CW	ACC40CW	ACC50CW	MCC060CW		
50HZ	NOMINAL TOTAL COOLING CAPACITY	Btu/h	26500	32200	30000	44560	51200	
		W	7770	9440	8790	13060	15010	
	NOMINAL SENSIBLE COOLING CAPACITY	Btu/h	18700	23900	21000	31250	35860	
		W	5480	7010	6160	9160	10510	
	NOMINAL TOTAL HEATING CAPACITY (ENTERING WATER TEMP. = 50°C)	Btu/h	33700	42600	42200	53700	62800	
		W	9880	12490	12370	15740	18410	
	NOMINAL AIR FLOW	HIGH	l/s / CFM	392 / 830	548 / 1160	458 / 970	652 / 1380	723 / 1530
		MEDIUM	l/s / CFM	359 / 760	487 / 1030	449 / 950	605 / 1280	675 / 1430
		LOW	l/s / CFM	335 / 710	435 / 920	406 / 860	572 / 1210	609 / 1290
	NOMINAL WATER FLOW RATE	USGPM	6.18	7.51	6.99	10.39	11.93	
	LITRES/M	23.38	28.41	26.47	39.32	45.17		
POWER SOURCE	V/Ph/Hz	220-240/1/50						
TOTAL INPUT POWER	W	333	406	389	428	562		
60HZ	NOMINAL TOTAL COOLING CAPACITY	Btu/h	26500		30000	44560	51200	
		W	7770		8790	13060	15010	
	NOMINAL TOTAL HEATING CAPACITY (ENTERING WATER TEMP. = 50°C)	Btu/h	33710		42200	53700	62800	
		W	9880		12370	15740	18410	
	NOMINAL AIR FLOW	HIGH	l/s / CFM	392 / 830	-NA-	458 / 970	652 / 1380	723 / 1530
			USGPM	6.18		6.99	10.39	11.93
	NOMINAL WATER FLOW RATE	LITRES/M	23.38		26.47	39.32	45.17	
	POWER SOURCE	V/Ph/Hz	208-230/1/60					
	TOTAL INPUT POWER	W	486		661	767	804	
	EXTERNAL STATIC (H/M/L)	mmAq	17 / 13 / 9	12 / 11 / 9	18 / 13 / 9	16 / 14 / 11	16 / 14 / 10	
UNIT DIMENSION - () WITH PANEL	HEIGHT	mm/in	378 / 14.8	315 / 12.5	378 / 14.9	378 / 14.9	378 / 14.9	
	WIDTH	mm/in	990 / 39.0	1297 / 51.1	1106 / 43.6	1358 / 53.5	1558 / 61.4	
	DEPTH	mm/in	541 / 21.3	638 / 25.2	541 / 21.3	541 / 21.3	541 / 21.3	
UNIT WEIGHT (UNIT + PANEL)	kg/lb	42 / 92.6	42 / 110.2	45 / 100	49 / 109	57 / 126		
SOUND PRESSURE LEVEL (H/M/L)	dB	46 / 42 / 38	51 / 48 / 45	49 / 45 / 41	52 / 50 / 47	53 / 50 / 47		
HEAD LOSS (COOLING)	kPa / psi	15 / 2.1	32.2/4.7	21 / 3	41 / 5.9	38.3/5.6		
HEAD LOSS (HEATING) : 50°C	kPa / psi	12 / 1.8	30/4.4	18 / 2.6	36 / 5.2	34.8/5.1		
CONNECTION		3/4" BSP FEMALE ADAPTOR						

NOTES :

- 1) ALL SPECIFICATIONS ARE SUBJECT TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
- 2) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
 - a) COOLING - ENTERING AIR TEMP. : 27°C (80.6°F) DB / 19°C (66.2°F) WB, ENTERING WATER TEMP. : 7°C (44.6°F), LEAVING WATER TEMP. : 12°C (53.6°F)
 - b) HEATING - ENTERING AIR TEMP. : 20°C (68°F) DB, ENTERING WATER TEMP. : 50°C (122°F), LEAVING WATER TEMP. : 45°C (131°F), WATER FLOW RATE BASED ON COOLING CYCLE.
- 3) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS C 9612 STANDARD. POSITION OF THE MEASUREMENT POINT IS 1.4m BELOW THE CENTRE OF THE UNIT. Tested with 2m length duct at the air discharge outlet and air return inlet

Chilled Water Fan Coil Specifications

ACW200C - ACW1200C (Ceiling Concealed)

MODEL		ACW200C	ACW300C	ACW400C	ACW600C	ACW800C	ACW1000C	ACW1200C	
NOMINAL TOTAL COOLING CAPACITY	Btu/h	7507	10919	14979	21019	26649	30129	36510	
	W	2200	3200	4390	6160	7810	8830	10700	
NOMINAL SENSIBLE COOLING CAPACITY	Btu/h	5930	8049	11062	15017	20609	21868	26488	
	W	1738	2359	3242	4401	6040	6409	7763	
NOMINAL TOTAL HEATING CAPACITY (ENTERING WATER TEMP. = 60°C)	Btu/h	11942	17402	24909	33985	44631	50431	65411	
	W	3500	5100	7300	9960	13081	14780	19171	
NOMINAL AIR FLOW	HIGH	l/s / CFM	109 / 230	148 / 312	212 / 447	290 / 612	395 / 835	451 / 953	568 / 1200
	MEDIUM	l/s / CFM	73 / 153	103 / 218	137 / 289	217 / 459	304 / 641	317 / 671	417 / 882
	LOW	l/s / CFM	53 / 112	67 / 142	95 / 200	139 / 294	206 / 436	231 / 489	284 / 600
For Conversion purpose	HIGH	l/s	109	148	212	290	395	451	568
	MEDIUM	l/s	73	103	137	217	304	317	417
	LOW	l/s	53	67	95	139	206	231	284
	HIGH	CFM	230	312	447	612	835	953	1200
	MEDIUM	CFM	153	218	289	459	641	671	882
	LOW	CFM	112	142	200	294	436	489	600
	HIGH	m3h	390	530	760	1040	1420	1620	2040
MEDIUM	m3h	260	370	490	780	1090	1140	1500	
LOW	m3h	190	240	340	500	740	830	1020	
EXTERNAL STATIC (H/M/L)	mmAq	8.16 / 6.12 / 3.06							
UNIT DIMENSION	HEIGHT	mm/in	251 / 9.88	251 / 9.88	251 / 9.88	251 / 9.88	251 / 9.88	251 / 9.88	251 / 9.88
	WIDTH	mm/in	714 / 28.11	884 / 34.8	1014 / 39.92	1214 / 47.8	1464 / 57.64	1564 / 61.57	1824 / 71.81
	DEPTH	mm/in	556 / 21.9	556 / 21.9	556 / 21.9	556 / 21.9	556 / 21.9	556 / 21.9	556 / 21.9
UNIT WEIGHT	kg/lb	19 / 41.9	20 / 44.1	26 / 57.3	30 / 66.1	41 / 90.4	44 / 97.0	46 / 101.4	
SOUND PRESSURE LEVEL (H/M/L) AT 60Pa	dB	37 / 34 / 31	38 / 35 / 31	41 / 36 / 33	47 / 44 / 38	47 / 44 / 39	49 / 46 / 40	49 / 45 / 42	
NOMINAL WATER FLOW RATE	USGPM	1.80	2.50	3.40	4.80	6.10	6.90	8.50	
	LITRES/M	6.80	9.45	12.85	18.14	23.06	26.08	32.13	
HEAD LOSS (COOLING)	kPa / psi	14.6 / 2.12	12 / 1.74	21.6 / 3.13	38.2 / 5.54	18.4 / 2.67	21 / 3.05	32.7 / 4.74	
HEAD LOSS (HEATING) : 60°C	kPa / psi	14.6 / 2.12	12 / 1.74	21.6 / 3.13	38.2 / 5.54	18.4 / 2.67	21 / 3.05	32.7 / 4.74	
CONNECTION		3/4" BSP FEMALE ADAPTOR							

ACW200H - ACW1200H (Ceiling Concealed)

MODEL		ACW200H	ACW300H	ACW400H	ACW600H	ACW800H	ACW1000H	ACW1200H	
NOMINAL TOTAL COOLING CAPACITY	Btu/h	7268	10578	14536	20405	25864	29242	35418	
	W	2130	3100	4260	5980	7580	8570	10380	
NOMINAL SENSIBLE COOLING CAPACITY	Btu/h	5742	7798	10735	14578	20002	21224	25696	
	W	1683	2285	3146	4273	5862	6220	7531	
NOMINAL TOTAL HEATING CAPACITY (ENTERING WATER TEMP. = 60°C) - 1 ROW	Btu/h	4606	7780	10953	14638	17470	23680	28969	
	W	1350	2280	3210	4290	5120	6940	8490	
NOMINAL AIR FLOW	HIGH	l/s / CFM	101 / 212	142 / 300	209 / 441	281 / 594	384 / 812	437 / 924	556 / 1176
	MEDIUM	l/s / CFM	70 / 147	98 / 206	131 / 277	215 / 453	298 / 630	309 / 653	409 / 865
	LOW	l/s / CFM	51 / 106	64 / 136	92 / 195	137 / 289	201 / 424	228 / 483	281 / 594
EXTERNAL STATIC (H/M/L)	mmAq	8.16 / 6.12 / 3.06							
UNIT DIMENSION	HEIGHT	mm/in	251 / 9.9	251 / 9.9	251 / 9.9	251 / 9.9	251 / 9.9	251 / 9.9	
	WIDTH	mm/in	714 / 28.1	884 / 34.8	1014 / 39.9	1214 / 47.8	1464 / 57.6	1564 / 61.6	1824 / 71.8
	DEPTH	mm/in	556 / 21.9	556 / 21.9	556 / 21.9	556 / 21.9	556 / 21.9	556 / 21.9	556 / 21.9
UNIT WEIGHT	kg/lb	20 / 44.1	24 / 52.9	28 / 61.7	32 / 70.5	44 / 97	47 / 103.6	49 / 108	
SOUND PRESSURE LEVEL (H/M/L) AT 60Pa	dB	37 / 34 / 31	38 / 35 / 31	41 / 36 / 33	47 / 44 / 38	47 / 44 / 39	49 / 46 / 40	49 / 45 / 42	
NOMINAL WATER FLOW RATE - 3 ROWS	USGPM	1.80	2.50	3.40	4.80	6.10	6.90	8.50	
	LITRES/M	6.80	9.45	12.85	18.14	23.06	26.08	32.13	
NOMINAL WATER FLOW RATE - 1 ROW	USGPM	1.10	1.10	1.10	1.10	1.10	2.20	2.20	
	LITRES/M	4.16	4.16	4.16	4.16	4.16	8.32	8.32	
HEAD LOSS (COOLING) - 3 ROWS	kPa / psi	12 / 1.74	21.6 / 3.13	38.2 / 5.54	18.4 / 2.67	21 / 3.05	32.7 / 4.47	12 / 1.74	
HEAD LOSS (HEATING) : 60°C - 3 ROWS	kPa / psi	12 / 1.74	21.6 / 3.13	38.2 / 5.54	18.4 / 2.67	21 / 3.05	32.7 / 4.47	12 / 1.74	
HEAD LOSS (COOLING) - 1 ROW	kPa / psi	12 / 1.74	13.5 / 1.96	14.8 / 2.15	20.7 / 3	4 / 0.58	12.8 / 1.86	14.6 / 2.12	
HEAD LOSS (HEATING) : 60°C - 1 ROW	kPa / psi	12 / 1.74	13.5 / 1.96	14.8 / 2.15	20.7 / 3	4 / 0.58	12.8 / 1.86	14.6 / 2.12	
CONNECTION									

Chilled Water Fan Coil

Specifications

AWM07G2W - AWM25G2W (Wall Mount)

MODEL			AWM07G2W	AWM10G2W	AWM15G2W	AWM20G2W	AWM25G2W	AWM301W	
50HZ	NOMINAL TOTAL COOLING CAPACITY	Btu/h	8000	9500	11000	15500	18000	22000	
		W	2340	2780	3220	4540	5280	6450	
	NOMINAL SENSIBLE COOLING CAPACITY	Btu/h	5900	6900	8000	12500	14800	16720	
		W	1730	2020	2350	3650	4330	4900	
	NOMINAL TOTAL HEATING CAPACITY (ENTERING WATER TEMP. = 50°C)	Btu/h	10300	12800	14000	20500	23000	23000	
		W	3020	3750	4100	6010	6740	6740	
	NOMINAL AIR FLOW	HIGH	l/s / CFM	130 / 275	142 / 300	163 / 345	297 / 630	312 / 660	316 / 670
		MEDIUM	l/s / CFM	106 / 225	118 / 250	130 / 275	231 / 490	274 / 580	297 / 630
		LOW	l/s / CFM	83 / 175	94 / 200	104 / 220	208 / 440	222 / 470	236 / 500
	NOMINAL WATER FLOW RATE	USGPM	1.76	2.11	2.42	3.43	4.00	4.90	
	LITRES/M	6.66	7.99	9.16	12.98	15.14	18.50		
POWER SOURCE	V/Ph/Hz	220-240/1/50							
TOTAL INPUT POWER	W	24.00	25.00	29.00	66.00	69.00	74.00		
60HZ	NOMINAL TOTAL COOLING CAPACITY	Btu/h	-NA-	9500	11000	15500	18000	-NA-	
		W	-NA-	2780	3220	4540	5280	-NA-	
	NOMINAL TOTAL HEATING CAPACITY (ENTERING WATER TEMP. = 50°C)	Btu/h	-NA-	12800	14000	20500	23000	-NA-	
		W	-NA-	3750	4100	6010	6740	-NA-	
	NOMINAL AIR FLOW	HIGH	l/s / CFM	-NA-	142 / 300	163 / 345	297 / 630	312 / 660	-NA-
		MEDIUM	l/s / CFM	-NA-	118 / 250	130 / 275	231 / 490	274 / 580	-NA-
		LOW	l/s / CFM	-NA-	94 / 200	104 / 220	208 / 440	222 / 470	-NA-
	NOMINAL WATER FLOW RATE	USGPM	-NA-	2.11	2.42	3.43	4.00	-NA-	
		LITRES/M	-NA-	7.99	9.16	12.98	15.14	-NA-	
	POWER SOURCE	V/Ph/Hz	208-230/1/60						
TOTAL INPUT POWER	W	-NA-	28.60	28.60	63.00	65.80	-NA-		
UNIT DIMENSION - () WITH PANEL	HEIGHT	mm/in	260 / 10.2	260 / 10.2	304 / 12.0	304 / 12.0	291 / 11.4		
	WIDTH	mm/in	799 / 31.5	899 / 35.4	1062 / 41.8	1062 / 41.8	815 / 32.1		
	DEPTH	mm/in	198 / 7.8	198 / 7.8	222 / 8.7	222 / 8.7	181 / 7.1		
UNIT WEIGHT (UNIT + PANEL)	kg/lb	8.5 / 18.8	9.4 / 20.8	15 / 33.1	15 / 33.1	17.6 / 38.8			
SOUND PRESSURE LEVEL (H/M/L)	dBA	38 / 33 / 28	39 / 34 / 28	42 / 36 / 29	49 / 44 / 42	50 / 48 / 45	49 / 47 / 45		
HEAD LOSS (COOLING)	kPa / psi	48 / 7	65 / 9.4	77 / 11.1	50 / 7.3	69 / 10	52 / 7.6		
HEAD LOSS (HEATING) : 50°C	kPa / psi	42 / 6.1	59 / 8.5	64 / 9.2	51 / 7.3	71 / 10.2	19 / 2.7		
CONNECTION		1/2" BSP FEMALE ADAPTOR							

Notes:

- 1) ALL SPECIFICATIONS ARE SUBJECT TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
- 2) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
 - a) COOLING - ENTERING AIR TEMP. : 27°C (80.6°F) DB / 19°C (66.2°F) WB, ENTERING WATER TEMP. : 7°C (44.6°F), LEAVING WATER TEMP. : 12°C (53.6°F)
 - b) HEATING - ENTERING AIR TEMP. : 20°C (68°F) DB, ENTERING WATER TEMP. : 50°C (122°F), LEAVING WATER TEMP. : 45°C (131°F), WATER FLOW RATE BASED ON COOLING CYCLE.
- 3) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS C 9612 STANDARD.
POSITION OF THE MEASUREMENT POINT IS 1m IN FRONT AND 0.8m BELOW THE VERTICAL CENTRE LINE OF THE UNIT.

ADB75BW - ADB150BW (Ducted Blower)

MODEL			ADB75BW	ADB100BW	ADB125BW	ADB150BW
50HZ	NOMINAL TOTAL COOLING CAPACITY	Btu/h	75600	95000	125000	150000
		W	22160	27840	36640	43960
	NOMINAL SENSIBLE COOLING CAPACITY	Btu/h	53700	69400	90000	106500
		W	15730	20330	26380	31210
	NOMINAL TOTAL HEATING CAPACITY (ENTERING WATER TEMP. = 50°C)	Btu/h	78000	97500	138000	170000
		W	22860	28580	40450	49820
	NOMINAL AIR FLOW	l/s / CFM	1180 / 2500	1510 / 3200	1982 / 4200	2171 / 4600
	NOMINAL WATER FLOW RATE	USGPM	16.78	21.09	27.74	33.29
		LITRES/M	63.52	79.83	105.01	126.02
	POWER SOURCE	V/Ph/Hz	220-240/1/50			
TOTAL INPUT POWER	W	810.00	1840.00	1550.00	1620.00	
60HZ	NOMINAL TOTAL COOLING CAPACITY	Btu/h	75600	95000	125000	150000
		W	22160	27840	36640	43960
	NOMINAL TOTAL HEATING CAPACITY (ENTERING WATER TEMP. = 50°C)	Btu/h	78000	97500	138000	170000
		W	22860	28580	40450	49820
	NOMINAL AIR FLOW	l/s / CFM	1180 / 2500	1510 / 3200	1982 / 4200	2171 / 4600
	NOMINAL WATER FLOW RATE	USGPM	16.78	21.09	27.74	33.29
		LITRES/M	63.52	79.83	105.01	126.02
	POWER SOURCE	V/Ph/Hz	208-230/1/60			
	TOTAL INPUT POWER	W	1098.00	1396.00	1063.00	1575.00
	EXTERNAL STATIC (H/M/L)	mmAq	10.2			
UNIT DIMENSION - () WITH PANEL	HEIGHT	mm/in	572 / 22.5	572 / 22.5	885 / 34.8	885 / 34.8
	WIDTH	mm/in	1502 / 59.1	1502 / 59.1	1640 / 64.6	1640 / 64.6
	DEPTH	mm/in	761 / 30.0	761 / 30.0	1040 / 40.9	1040 / 40.9
UNIT WEIGHT (UNIT + PANEL)	kg/lb	92 / 202.8	102 / 224.9	176 / 388.0	189 / 416.7	
SOUND PRESSURE LEVEL (H/M/L)	dBA	56	57	58	58	
HEAD LOSS (COOLING)	kPa / psi	35 / 5	42 / 6.1	49 / 7.1	53 / 7.7	
HEAD LOSS (HEATING) : 50°C	kPa / psi	33 / 4.8	27 / 4	32 / 4.6	63 / 9.1	
CONNECTION		1 1/8" BRAZING				

NOTES:

- 1) ALL SPECIFICATIONS ARE SUBJECT TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.
- 2) NOMINAL COOLING AND HEATING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
 - a) COOLING - ENTERING AIR TEMP. : 27°C (80.6°F) DB / 19°C (66.2°F) WB, ENTERING WATER TEMP. : 7°C (44.6°F), LEAVING WATER TEMP. : 12°C (53.6°F)
 - b) HEATING - ENTERING AIR TEMP. : 20°C (68°F) DB, ENTERING WATER TEMP. : 50°C (122°F), LEAVING WATER TEMP. : 45°C (131°F), WATER FLOW RATE BASED ON COOLING CYCLE.
- 3) SOUND PRESSURE LEVEL ARE ACCORDING TO JIS C 9612 STANDARD.
Microphone position: 1.4m below the centre of the unit
Tested with 2m length duct at the air discharge outlet and air return inlet

