



Chillers & Fan Coil Units

 **inventor**
Your-conditions

CATALOGUE 2012



YOUR CONDITIONS!

Since 1916, **Inventor** pioneers in the US market, by designing and manufacturing innovative air conditioning and heat pump units. The company's primary competitive advantage is the use of its know-how expertise gained in the past, to build air conditioning systems of the future.

The key to **Inventor** units' success is that they are specifically designed to enable the modern individual invent his own custom made living and working conditions. Regulating effectively the natural environment, **Inventor** units can create silently the perfect indoor conditions; your conditions!

All **Inventor** units carry a 2-year Warranty for the compressor and for all parts of the unit.

Inventor units can be found all across Europe in a continuously growing selected network of air conditioning professionals!

Their excellent quality and operational efficiency has been awarded by the European Union with the highest standard certificates.

Furthermore, the use of the environmental friendly refrigerants (freon) do not contribute to the increase of the global warming environment.







Your *natural* conditions







For Heat Pump Units Only

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CHILLERS

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MINI CHILLERS

R410A

Integral Type



21.5kW-42kW

Split Type



7.5kW



10kW-14.2kW

Integral type

- Flexible installation thanks to slope up discharge structure.
- Water pump.
- Expansion vessel.
- Water flow switch kit.
- LCD thermostat.
- Safety valve, auto water replenishing valve, auto air evacuation valve.
- IMCR355Na-M and IMCR455Na-M, also available without hydraulic kit, with modular structure (up to 16 units) achieving maximum capacity of 720kW.

Split type

- Detached cooler/heater design, which make installation more flexible.
- Compact design, the height of the cooler/heater is only 288mm.
- Wide operation range of heat mode in cold season, thanks for the cooler/heater can be installed in indoor ceiling void to avoid freezing problem.
- Water pump.
- Expansion vessel.
- Water flow switch kit.
- LCD thermostat.
- Safety valve, auto water replenishing valve, auto air evacuation valve



Memory function



Two circuits



Quiet design



For Heat Pump Units Only

ITEM	Water side side				Air side		
	Nominal Operating Condition		Operating Range		Nominal Operating Condition		Operating Range
	Inlet water temp. (°C)	Outlet water temp. (°C)	Outlet water temp. (°C)	Temp. Difference between inlet & outlet (°C)	Outdoor temp. (DB°C)	Outdoor temp. (WB°C)	Outdoor temp. (DB°C)
Cooling	12	7	7 -12	3 - 8	35	/	16 - 43
Heating	40	45	40 - 50	3 - 8	7	6	-15 - 28

MINI CHILLERS

R410A

Split Type						
MODEL	Heat pump		IMCR8WZNa-M	IMCR10WZNa-M	IMCR12.5WZNa-M	IMCR15WZNa-M
Capacity	Cooling (kW)		7.5	10.0	12.5	14.2
	Heating (kW)		9.0	12.0	13.0	16.5
EER (W/W)			2.1	2.2	2.2	2.5
COP (W/W)			2.7	2.7	2.7	3.1
Power supply (V/Ph/Hz)			380 - 415V/3Ph/50Hz			
Power input	Cooling (kW)		3.5	4.4	5.7	5.7
	Heating (kW)		3.3	4.4	4.8	5.3
Compressor quantity (Unit)			1	1	1	1
Refrigerant charge volume (kg)			3.1	3.55	4.5	5.5
Build-in chilled water pump	Water flow volume	m ³ /h	1.4	1.7	2.1	2.6
		l/s	0.38	0.48	0.59	0.72
	Head of delivery (m)		18	18	18	18
Power input (W)			550	550	550	550
Build-in expansion tank volume (L)			5	5	5	5
Chilled water outlet/inlet dimension (Inch)			1" Female BSP	1" Female BSP	1" Female BSP	1" Female BSP
Indoor unit	Outline dimension (WxDxH) (mm)		1.100x450x288	1.100x450x288	1.100x450x288	1.100x450x288
	Packaged dimension (WxDxH) (mm)		1.285x682x385	1.285x682x385	1.285x682x385	1.285x682x385
	Net weight (kg)		84	84	84	84
	Gross weight (kg)		96	96	96	96
	Sound pressure level (dB(A))		38	38	38	38
Outdoor unit	Outline dimension (WxDxH) (mm)		950x412x840	950x412x1.250	950x412x1.250	950x412x1.250
	Packaged dimension (WxDxH) (mm)		1.100x450x985	1.100x450x1.385	1.100x450x1.385	1.100x450x1.385
	Net weight (kg)		90	112	115	123
	Gross weight (kg)		100	123	126	134
	Sound pressure level (dB(A))		60	60	60	60
Connection pipe	Liquid (Inch)		1/2	1/2	1/2	1/2
	Gas (Inch)		3/4	3/4	3/4	3/4



Integral Type						
MODEL	Heat pump		IMCR22SNa-M	IMCR25SNa-M	IMCR35SNa-M	IMCR45SNa-M
Capacity	Cooling (kW)		21.5	22.8	31.0	42.0
	Heating (kW)		25.0	25.0	37.5	49.0
EER (W/W)			2.50	2.60	2.60	2.30
COP (W/W)			2.90	2.80	3.00	2.80
Power supply (V/Ph/Hz)			380 - 415V/3Ph/50Hz			
Power input	Cooling (kW)		8.6	8.8	11.9	18.3
	Heating (kW)		8.6	8.9	12.5	17.5
Compressor quantity unit			2	2	2	2
Refrigerant charge volume (kg)			3.6 x 2	4.8 x 2	6.5 x 2	7.3 x 2
Build-in chilled water pump	Water flow volume	m ³ /h	3.8	4.3	5.0	7.9
		l/s	1.05	1.2	1.4	2.2
	Head of delivery (m)		22	24	25	27
Power input (W)			750	750	1500	1500
Build-in expansion tank volume (L)			8	8	8	8
Chilled water outlet/inlet dimension (Inch)			1" Female BSP	1" Female BSP	1-1/2" Female BSP	1-1/2" Female BSP
Dimension	Outline dimension (WxDxH) (mm)		1.460x530x1.850	1.460x530x1.850	1.750x800x1.760	1.750x800x1.760
	Packaged dimension (WxDxH) (mm)		1.540x710x2.100	1.540x710x2.100	1.910x960x1.970	1.910x960x1.970
Net weight (kg)			370	390	680	755
Gross weight (kg)			380	400	690	765
Sound pressure level (dB(A))			66	66	68	68



MODULAR AIR COOLED SCROLL CHILLERS R410A



62.1, 71.5kW



125, 143kW

- Flexible main module patent, any unit can be set as main module just by connected with wired controller
- High efficient heat operation even in low temperature and high humidity thanks to real time intelligent defrost mode and gas discharging feed-through structure
- Low start-up current thanks to power delay control design
- Special top cover design: make a better cooling capacity of 5% improvement and higher efficiency of 3% improvement
- Modular operation optional, up to 16 units (65/80kW) 8 units (130/160kW) can be integrated
- Saving installation space by 35% compared to conventional design
- Multi compressor paralleling technology to guarantee longer usage life
- Completed safeties
- Quiet mode available
- Throttling controlled by electronic expansion valve, more accurate and rapid
- Wide ambient range ensures stable operation in extreme climate
- Golden fin condenser



Modular structure



Intelligent defrosting



Diagnosis displaying



Multi circuits



Wired controller



For Heat Pump Units Only

ITEM	Water side				Air side		
	Nominal Operating Condition		Operating Range		Nominal Operating Condition		Operating Range
	Inlet water temp. (°C)	Outlet water temp. (°C)	Outlet water temp. (°C)	Temp. Difference between inlet & outlet (°C)	Outdoor temp. (DB°C)	Outdoor temp. (WB°C)	Outdoor temp. (DB°C)
Cooling	12	7	5 -15	2.5 - 8	35	/	5 - 46
Heating	40	45	40 - 50	2.5 - 8	7	6	-15 - 24

MODULAR AIR COOLED SCROLL CHILLERS

R410A



62.5, 71.5kW



125, 143kW



Modular structure



Intelligent defrosting



Diagnosis displaying



Multi circuits



Wired controller



For Heat Pump Units Only



MODEL	Heat pumpVV	IWCQWRF65MG/NaC-M	IWCQWRF80MG/NaC-M	IWCQWRF130MG/NaC-M	IWCQWRF160MG/NaC-M	
Capacity	Cooling (kW)	62.5	71.5	125.0	143.0	
	Heating (kW)	70.0	80.0	140.0	160.0	
EER (W/W)		2.52	2.68	2.52	2.68	
COP (W/W)		2.90	3.0	2.91	3.0	
Power supply (V/Ph/Hz)		380 - 415V/3Ph/50Hz				
Power input	Cooling (kW)	24.8	26.7	49.6	53.4	
	Heating (kW)	24.1	26.7	48.1	53.3	
Water side heat exchanger	Type	Hi-efficient shell and tube evaporator				
	Water flow volume	m ³ /h	10.8	12.2	21.6	24.5
		l/s	3.0	3.4	6.0	6.8
	Pressure drop	kPa	30	35	30	35
ft.WG		9.8	11.5	9.8	11.5	
Air side heat exchanger	Connection pipe (mm)	DN50		DN50		
	Fan type/Number of fans	axial fan/3			axial fan/6	
	Total fan air flow	m ³ /h	3.0 x 10 ⁴	3.2 x 10 ⁴	6.0 x 10 ⁴	6.4 x 10 ⁴
CFM		1.8 x 10 ⁴	1.9 x 10 ⁴	3.5 x 10 ⁴	3.8 x 10 ⁴	
Total fan motor power (W)		700 x 3	700 x 3	700 x 6	700 x 6	
Sound pressure level (dB(A))		67	68	69	70	
Dimension	Outline (WxDxH) (mm)	1.100x2.265x2.214	1.100x2.265x2.214	2.200x2.265x2.214	2.200x2.265x2.214	
	Packaged (WxDxH) (mm)	1.130x2.295x2.214	1.130x2.295x2.214	2.230x2.295x2.214	2.230x2.295x2.214	
Net weight (kg)		950	1.050	1.880	2.080	

MODULAR AIR COOLED SCREW CHILLERS R134a



- Running condition real-time display
- Low start-up current thanks to power delay control design
- Multistep adjustment plus modular design makes a better unloading capacity that ensures the stability of water temperature. Double-flow design makes a higher heat exchange efficiency.
- Double spray cooling design to both compressor chamber and motor, ensure the reliable operation of motor and discharging bearing.
- Special oil return pipe at bottom of the shell and tube, to prevent the oil storage and compressor oil lack
- Well radiating and waterproof of electric control box thanks to special waterproof design
- Higher heat exchange efficiency thanks to Double-flow design.
- Main module patent! Any unit can be set as main module via wired controller.
- Modular design. Up to 8 units can be integrated freely achieving maximum capacity of 3.440kw
- Auto anti-freezing function under heating mode when the unit is switched off

ITEM	Water Side		Air Side	
	Water Flow (m ³ /(h.kw))	Outlet Water Temperature (°C)	DB Temperature (°C)	WB Temperature (°C)
Cooling	0.172	7	35	-

ITEM	Operating Range		
	Water Side		Air Side
Cooling	Outlet Water Temperature (°C)	Temperature Difference between Inlet&Outlet (°C)	DB Temperature (°C)
	5~15	2.5~8	18~52



Modular structure



Diagnosis displaying



Wired controller



For Heat Pump Units Only

MODEL		IWCBLGF230MT3/Nb-M	IWCBLGF350MT3/Nb-M	IWCBLGF430MT3/Nb-M	
Capacity	kW	230	350	430	
	TR	65	100	122	
Capacity Steps %		25-50-75-100			
EER (W/W)		2.88	2.8	2.83	
Power Supply (V/Ph/Hz)		380V/3Ph/50Hz			
Power Input (kW)		80	125	152	
Compressor	Type	Semi-hermetic screw			
	Quantity	1	1	1	
Water Side Heat Exchanger	Type	Shell and tube			
	Water Flow Volume (m ³ /h)	142.56	216.72	266.4	
	Pressure drop (kPa)	≤ 50	≤ 50	≤ 50	
	Connection pipe	DN100	DN100	DN125	
Air Side Heat Exchanger	Type	High-efficient fin tube			
	Fan type and quantity	axial x 4	axial x 6	axial x 8	
	Total fan air flow	m ³ /h	10x10 ⁴	15x10 ⁴	20x10 ⁴
		CFM	5.9x10 ⁴	8.8x10 ⁴	11.8x10 ⁴
Total fan motor power (kW)	2.0x4	2.0x6	2.0x8		
Sound pressure level (dB(A))		78	79	80	
Dimension (WxDxH)	Outline (mm)	3.150x2.100x2.300	4.330x2.100x2.300	5.250x2.100x2.300	
	Package (mm)	3.230x2.180x2.300	4.410x2.180x2.300	5.330x2.180x2.300	
Weight	net/gross/operating (kg)	3.110/3.130/3.421	4.600/4.620/5.060	5.330/5.350/5.863	

WATER COOLED SCREW CHILLERS R134a



- High coefficient of performance, nearly 1/3 more energy saving than ordinary chiller unit. For wide working range, the machine may run within 25%-100% energy range.
- Water flow switch kit.
- Reserved interface for water pump and cooling tower.
- Flooded type evaporator.
- Multi compressor paralleling technology for high capacity units.
- Orifice throttle disc integrated with electronic expansion valve technology.
- Automatic stepless or stepped capacity adjustment.
- Compact design.
- Reliable oil return system.
- High efficient oil separator system thanks to mechanical and adsorptive fractionation devices.
- Accurate high-pressure liquid injection oil return technology.
- Low oil level protection technology.
- Completed safeties
- LCD control panel (optional to upgrade to colorful touch screen control panel).
- Long distance monitoring and centralized control (optional).
- New model up to 1395.0 kW/396.6 RT cooling capacity



Completed protection



Compact design

Operating Condition of Nominal Cooling				Operating Range			
Chilled Water		Cooling Water		Chilled Water		Cooling Water	
Outlet water Temp. (°C)	Water flow volume m³/(h.kw)	Inter water Temp. (°C)	Water flow volume m³/(h.kw)	Outlet water Temp. (°C)	Temp. difference between inlet & outlet (°C)	Inter water Temp. (°C)	Temp. difference between inlet & outlet (°C)
7	0.172	30	0.215	5~15	2.5~8	18~35	3.5~8

MODEL	IWCBLG180H/Nb-M	IWCBLG210H/Nb-M	IWCBLG240H/Nb-M	IWCBLG300H/Nb-M	
Cooling capacity (kW/RT)	175 / 49.8	202/57.4	231/65.7	292/83	
Cooling control	Continuous adjustment				
IPLV (W/W)	5.58	5.63	5.72	5.81	
EER (W/W)	5	5.05	5.13	5.21	
Power input (kW)	35	40	45	56	
Power supply (V/Ph/Hz)	380V/3Ph/50Hz				
Compressor	Type	semi-hermetic twin screw compressor			
	Starting mode	Y - Δ or Part Winding			
	Quantity	1	1	1	
Refrigerant	Charge volume (Kg)				
Refrigerant oil	Category	BSE170			
	Charge volume (L)	15	15	22	
Evaporator	Type	flooded shell and tube			
	Water flow volume	m³/h	30.24	34.22	39.6
		l/s	8.4	9.7	11.0
	Pressure drop	kPa	40	45	50
		ft.WG	13.4	15.1	16.7
Connection pipe (mm)	DN100	DN100	DN100	DN125	
Condenser	Type	shell and tube			
	Water flow volume	m³/h	37.8	43.56	49.68
		l/s	10.5	12.1	13.8
	Pressure drop	kPa	56	57	65
		ft.WG	18.7	19.1	21.8
Connection pipe (mm)	DN100	DN100	DN100	DN125	
Sound pressure level (dB(A))	76.2	76.6	77.4	80.1	
Outline dimension	Width (mm)	3.160	3.160	3.160	
	Depth (mm)	1.150	1.150	1.150	
	Height (mm)	1.587	1.587	1.587	
Net weight (Kg)	1.800	1.900	2.100	2.800	

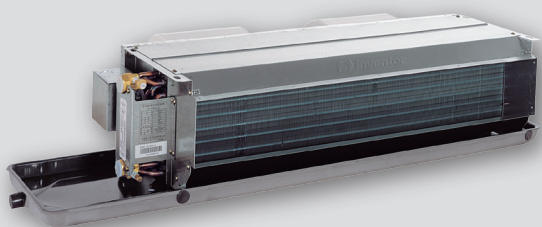


MODEL	IWCBLG340H/Nb-M	IWCBLG380H/Nb-M	IWCBLG450H/Nb-M	IWCBLG500H/Nb-M	IWCBLG580H/Nb-M	IWCBLG640H/Nb-M		
Cooling capacity (kW/RT)	331/94.1	376/106.9	442/125.7	495/140.7	572/162.6	636/180.8		
Cooling control	Continuous adjustment							
IPLV (W/W)	5.86	5.90	5.94	5.93	5.96	5.91		
EER (W/W)	5.25	5.30	5.33	5.32	5.35	5.30		
Power input (kW)	63	71	83	93	107	120		
Power supply (V-Ph-Hz)	380V-3N-50Hz							
Compressor	Type	semi-hermetic twin screw compressor						
	Starting mode	Y - Δ or Part Winding						
	Quantity	1	1	1	1	1		
Refrigerant	Charge volume (Kg)	120	130	210	210	210	200	
oil	Category	BSE170						
	Charge volume (L)	19	19	35	35	35	35	
Evaporator	Type	flooded shell and tube						
	Water flow volume	m ³ /h	56.9	64.8	76.0	85.3	98.3	109.4
		l/s	15.8	18	21.1	23.7	27.3	30.4
	Pressure drop	kPa	60	62	64	66	68	74
		ft.WG	20.1	20.7	21.4	22.1	22.8	24.8
Connection pipe (mm)	DN125	DN125	DN150	DN150	DN150	DN150		
Condenser	Type	shell and tube						
	Water flow volume	m ³ /h	71.3	81	95.0	106.6	123.1	136.8
		l/s	19.8	22.5	26.4	29.6	34.2	38
	Pressure drop	kPa	66	67	69	71	72	73
		ft.WG	22.1	22.4	23.1	23.8	24.1	24.4
Connection pipe (mm)	DN125	DN125	DN150	DN150	DN150	DN150		
Sound pressure level (dB(A))	81.2	83.3	83.9	84.1	84.3	85.4		
Outline dimension	Width (mm)	3.160	3.160	3.160	3.160	3.160	3.160	
	Depth (mm)	1.400	1.400	1.520	1.520	1.520	1.520	
	Height (mm)	1.680	1.720	2.130	2.130	2.130	2.130	
Net weight (Kg)	2.900	3.100	3.850	4.100	4.400	4.600		

MODEL	IWCBLG680H/Nb-M	IWCBLG760H/Nb-M	IWCBLG880H/Nb-M	IWCBLG1000H/Nb-M	IWCBLG1160H/Nb-M	IWCBLG1280H/Nb-M		
Cooling capacity (kW/RT)	676/192.2	752/213.8	871/247.7	990/281.5	1044/325.3	1275/362.5		
Cooling control	Continuous adjustment							
IPLV (W/W)	5.98	5.90	5.96	5.93	5.96	6.26		
EER (W/W)	5.37	5.30	5.34	5.32	5.35	5.62		
Power input (kW)	126	142	163	186	214	227		
Power supply (V-Ph-Hz)	380V-3N-50Hz							
Compressor	Type	semi-hermetic twin screw compressor						
	Starting mode	Y - Δ or Part Winding						
	Quantity	2	2	2	2	2	2	
Refrigerant	Charge volume (Kg)	350	350	350	350	350	380	
oil	Category	BSE170						
	Charge volume (L)	19*2	19*2	35*2	35*2	35*2	35*2	
Evaporator	Type	flooded shell and tube						
	Water flow volume	m ³ /h	116.3	129.2	149.8	170.3	196.9	219.2
		l/s	32.3	35.9	41.6	47.3	54.7	60.9
	Pressure drop	kPa	76	76	76	77	78	78
		ft.WG	25.4	25.4	25.4	25.8	26.1	26.1
Connection pipe (mm)	DN200	DN200	DN200	DN200	DN200	DN200		
Condenser	Type	shell and tube						
	Water flow volume	m ³ /h	145.4	161.6	187.2	212.8	245.9	274.0
		l/s	40.4	44.9	52.0	59.1	68.3	76.1
	Pressure drop	kPa	76	77	82	83	84	85
		ft.WG	25.4	25.8	27.4	27.8	28.1	28.4
Connection pipe (mm)	DN200	DN200	DN250	DN250	DN250	DN250		
Sound pressure level (dB(A))	82.5	84.6	85.2	85.4	85.6	86.8		
Outline dimension	Width (mm)	3.400	3.400	3.900	3.900	3.900	3.900	
	Depth (mm)	1.700	1.700	1.900	1.900	1.900	1.900	
	Height (mm)	2.030	2.030	2.230	2.230	2.230	2.230	
Net weight (Kg)	5.100	5.500	6.200	6.500	6.800	7.000		

FAN COIL UNITS

CONCEALED CEILING TYPE



FLOOR CEILING TYPE



WALL MOUNTED TYPE



CASSETE TYPE



- Light weight and high air volume thanks to plastic fan structure
- 3-speed motor



Compact design



Quiet design



Long life and washable filter

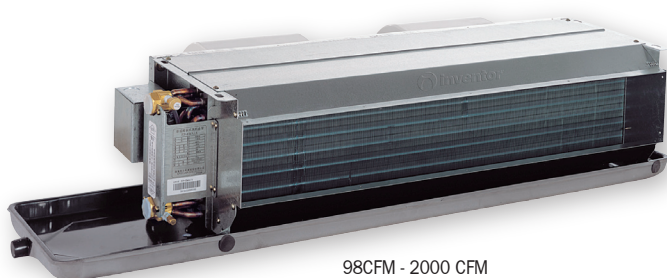


Light weight



ITEM	Nominal Test Condition			
	DB Temperature (°C)	WB Temperature (°C)	Inlet Temperature (°C)	Temperature Difference (°C)
Cooling	27 °C	19 °C	7 °C	12 °C
Heating	21 °C	-	60 °C	-

CONCEALED CEILING TYPE



98CFM - 2000 CFM



Wireless



FCU Wired remote controller WK-010PA-K



High, mid and low joints of switch Z54352A1



Digital fan coil thermostat WK-110PA0

- Excellent outside condensate-water proof performance thanks to compression-moulding chassis with integrated heat-insulating material.
- Slim design
- Low noise
- Inner groove copper
- Hot galvanized steel case
- Various type of controller available (optional)
- Different kind of wired remote control available (optional)
- 3way valve(optional)
- Long life and washable filter with air return box(optional)
- Also available with 2, 4, 3 + 1 rows

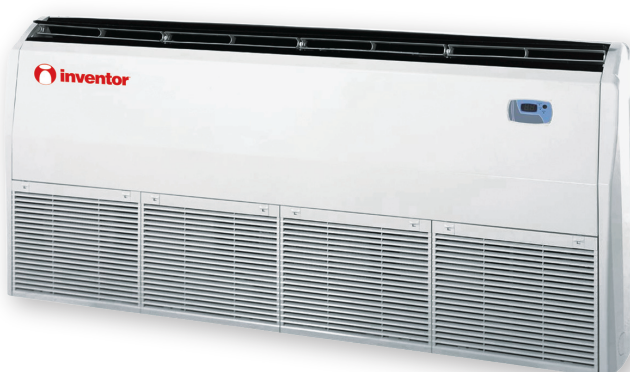
MODEL		IFC-34WAS-R	IFC-51WAS-R	IFC-68WAS-R	IFC-85WAS-R
Air flow volume	High (CFM)	200	300	400	500
	Medium (CFM)	146	232	291	375
	Low (CFM)	125	155	194	250
External statics pressure (Pa)		30			
Capacity	Cooling (kW)	2.19	3.37	4.28	5.04
	Heating (kW)	3.29	5.06	6.42	7.56
Power system	Type (V/Ph/Hz)	220V-240-1Ph-50Hz			
	Input (W)	44	59	72	87
Water system	Water flow volume (m ³ /h)	0.396	0.61	0.792	0.90
	Pressure drop (kPa)	10	15	25	30
Sound pressure level (dB(A))		38	40	42	44
Connection pipe size	Water inlet outlet pipe (Inch)	3/4»(inner groove)			
	Condensing water drain pipe (Inch)	3/4»(outer groove)			
Outline Dimension (WXDXH) (mm)		881x510x245	1.011x510x245	1.131x510x245	1.211x510x245
Package Dimension (WXDXH) (mm)		900x560x275	1.030x560x275	1.150x560x275	1.230x560x275
Net weight (Kg)		15	16	18	19.5
Gross weight (Kg)		19	20.5	23	24.5
Optional Parts	Wireless remote controller	NA			
	Wired remote controller	Luxury wired controller:WK-010PA-K;LCD Controller WK-110PA			
	Air return box (without filter)	HF41	HF42	HF43	HF44
	Air return box (with filter)	HF31	HF32	HF33	HF34

CONCEALED CEILING TYPE

MODEL		IFC-102WAS-R	IFC-136WAS-R	IFC-170WAS-R	IFC-204WAS-R
Air flow volume	High (CFM)	600	800	1.000	1.200
	Medium (CFM)	464	644	750	926
	Low (CFM)	309	429	500	618
External statics pressure (Pa)		30			
Capacity	Cooling (kW)	6.46	8.17	11.4	12.16
	Heating (kW)	9.70	10.9	18.2	18.6
Power system	Type (V/Ph/Hz)	220-240V/1Ph/50Hz			
	Input (W)	108	156	174	212
Water system	Water flow volume (m ³ /h)	1.15	1.33	1.98	2.05
	Pressure drop (kPa)	40	20	38	45
Sound pressure level (dB(A))		46	47	49	52
Connection pipe size	Water inlet outlet pipe (Inch)	3/4"(inner groove)			
	Condensing water drain pipe (Inch)	3/4"(outer groove)			
Outline Dimension (WxDxH) (mm)		1.371x510x245	1.761x510x245	1.921x510x245	1.921x510x245
Package Dimension (WxDxH) (mm)		1.390x560x275	1.780x560x275	1.940x560x275	1.940x560x275
Net weight (Kg)		21	30	33	34
Gross weight (Kg)		26	35	38.5	39.5
Optional Parts	Wireless remote controller	NA			
	Wired remote controller	Luxury wired controller:WK-010PA-K;LCD Controller WK-110PA			
	Air return box (without filter)	HF45	HF46	HF47	HF47
	Air return box (with filter)	HF35	HF36	HF37	HF37

MODEL		IFC-238WAS-R	IFC-272WAS-R	IFC-306WAS-R	IFC-340WAS-R
Air flow volume	High (CFM)	1.400	1.600	1.800	2.000
	Medium (CFM)	971	1.235	1.006	1.400
	Low (CFM)	729	868	674	812
External statics pressure (Pa)		30			
Capacity	Cooling (kW)	12.4	13.5	16.0	17.0
	Heating (kW)	19.5	21.3	24.8	26.1
Power system	Type (V/Ph/Hz)	220-240V/1Ph/50Hz			
	Input (W)	380	475	535	640
Water system	Water flow volume (m ³ /h)	2.05	2.30	2.66	2.84
	Pressure drop (kPa)	21.9	27.9	37.5	41.2
Sound pressure level (dB(A))		56	59	62	63
Connection pipe size	Water inlet outlet pipe (Inch)	3/4"(inner groove)			
	Condensing water drain pipe (Inch)	3/4"(outer groove)			
Outline Dimension (WxDxH) (mm)		1.671x595x354	1.671x595x354	1.921x595x354	1.921x595x354
Package Dimension (WxDxH) (mm)		1.750x650x380	1.750x650x380	1.950x650x380	1.950x650x380
Net weight (Kg)		48	48	52	52
Gross weight (Kg)		55	55	60	60
Optional Parts	Wireless remote controller	NA			
	Wired remote controller	Luxury wired controller:WK-010PA-K;LCD Controller WK-110PA			
	Air return box (without filter)	NA	NA	NA	NA
	Air return box (with filter)	HF28	HF28	HF29	HF29

FLOOR CEILING TYPE



310 CFM - 1200 CFM



Wireless
(Standard)

- Slim design
- Low noise
- Plastic case
- Wireless remote control fitted as standard
- Long life and washable filter
- Inner groove copper
- Auto clean
- Anti - cold function
- Wireless remote control fitted as standard
- Self diagnosis

MODEL		IFC-34WM-K	IFC-51WM-K	IFC-68WM-K	IFC-85WM-K	IFC-102WM-K	IFC-136WM-K	IFC-170WM-K	IFC-204WM-K
Air flow volume	High (CFM)	200	300	400	500	600	800	1000	1200
	Medium (CFM)	146	232	291	375	464	644	750	926
	Low (CFM)	125	155	194	250	309	429	500	618
Capacity	Cooling (kW)	1.8	2.8	3.6	4.5	5.4	7.2	9.0	10.8
	Heating (kW)	2.8	4.2	5.4	6.8	8.1	10.8	13.5	16.2
Power system	Type (V/Ph/Hz)	220-240V/1Ph/50Hz							
	Input (W)	40	40	62	77	99	162	240	275
Water system	Water flow volume (m ³ /h)	0.36	0.5	0.65	0.790	0.94	1.30	1.51	1.94
	Pressure drop (Kpa)	9.8	9.8	36.5	36.5	30.8	34.8	38.4	42.8
Sound pressure level (dB(A))		48	48	49	49	49	51	52	55
Connection pipe size	Water inlet & outlet (Inch)	3/4, (outer groove)							
	Condensing water drain (Inch)	3/4, (outer groove)							
Outline dimension (WxDxH) (mm)		834x238x694	834x238x694	1.300x188x600	1.300x188x600	1.300x188x600	1.590x238x695	1.590x238x695	1.590x238x695
Package dimension (WxDxH) (mm)		960x330x830	960x330x830	1.414x248x724	1.414x248x724	1.414x248x724	1.714x330x830	1.714x330x830	1.714x330x830
Net weight (kg)		26	26	34	34	34	48.5	48.5	48.5
Gross weight (kg)		35	35	38	38	38	57	57	57
Standard controller		Wireless remote controller - Y512							

CASSETTE TYPE



303 CFM - 1176 CFM



Wireless



FCU Wired remote controller Z4E351B

- Compact and light weight
- Low noise
- Different kind of wired control available (optional)
- Wireless remote control fitted as standard
- Long life and washable filter
- Water pump fitted as standard
- Inner groove copper
- Anti - cold function
- Self diagnosis



MODEL		IFC-85XD/B-T	IFC-102XD/B-T	IFC-125XD/B-T	IFC-140XD/B-T	IFC-160XD/B-T	IFC-180XD/B-T	IFC-200XD/B-T
Air flow volume	High (CFM)	500	600	735	841	965	1060	1176
	Medium (CFM)	375	464	606	802	853	1035	994
	Low (CFM)	303	362	538	705	781	932	860
Capacity	Cooling (kW)	4.64	5.4	6.7	7.74	8.7	9.6	13
	Heating (kW)	7.5	9.1	10.5	11.2	12.9	14.6	19
Power system	Type (V/Ph/Hz)	220-240V/1Ph/50Hz						
	Input (W)	100	100	150	140	150	180	200
Water system	Water flow volume (m ³ /h)	0.828	0.936	1.188	1.368	1.548	1.692	2.304
	Pressure drop (Kpa)	15	19	21	21	31	36	37
Sound pressure level (dB(A))		46	46	47	48	53	54	58
Connection pipe size	Water inlet & outlet (Inch)	3/4						
	Condensing water drain (mm)	33						
Outline dimension (WxHxD) (mm)	Body	840x840x240			840x840x320			
	Panel	950x950x85			950x950x85			
Package dimension (WxHxD) (mm)	Body	960x960x310			960x960x394			
	Panel	1030x1035x118			1030x1035x118			
Net weight (kg)	Body	27			33			
	Panel	7			7			
Gross weight (kg)	Body	35			42			
	Panel	11			11			
Standard controller		Wireless remote controller - YB1FA(X-FAN)						
Optionals		Luxury wired remote controller : Z4E3518						

CASSETTE TYPE



210 CFM - 1090 CFM



Wireless



FCU Wired remote controller Z4E351B

- Compact and light weight
- Low noise
- Different kind of wired control available (optional)
- Wireless remote control fitted as standard
- Long life and washable filter
- Water pump fitted as standard
- Inner groove copper
- Anti - cold function
- Self diagnosis

MODEL		IFC-51XD-E	IFC-68XD-E	IFC-8XD-E	IFC-10XD-E
Air flow volume	High (CFM)	300	371	500	600
	Medium (CFM)	247	318	375	464
	Low (CFM)	205	265	303	363
Capacity	Cooling (kW)	3.0	3.5	4.64	5.4
	Heating (kW)	4.0	5.0	7.50	9.1
Power system	Type (V/Ph/Hz)	220-240V/1Ph/50Hz			
	Input (W)	49.0	56	100	100
Water system	Water flow volume (m ³ /h)	0.5	0.61	0.83	0.94
	Pressure drop (Kpa)	5	9	15	25
Sound pressure level (dB(A))		43	48	46	46
Connection pipe size	Water inlet & outlet (Inch)	3/4, (outer groove)			
	Condensing water drain (mm)	25			
Outline dimension (WxHxD) (mm)	Body	600x230x600	600x230x600	840x320x840	840x320x840
	Panel	650x50x650	650x50x650	960x60x960	960x60x960
Package dimension (WxHxD) (mm)	Body	848x310x678	848x310x678	960x394x960	960x394x960
	Panel	730x102x670	730x102x670	1.025x115x1.040	1.025x115x1.040
Net weight (kg)	Body	19.3	19.3	30	30
	Panel	5	5	6.5	6.5
Gross weight (kg)	Body	27	27	38	38
	Panel	6	6	10	10
Standard controller		Wireless remote controller - Y512			
Optionals		Luxury wired remote controller : Z4E351B			

CASSETTE TYPE



210 CFM - 1090 CFM



Wireless



FCU Wired remote controller Z4E351B



MODEL		IFC-12.5XD-E	IFC-14XD-E	IFC-16XD-E	IFC-18XD-E
Air flow volume	High (CFM)	735	840	965	1059
	Medium (CFM)	606	802	853	1035
	Low (CFM)	538	705	781	932
Capacity	Cooling (kW)	6.7	7.74	8.7	9.6
	Heating (kW)	10.5	11.2	12.9	14.6
Power system	Type (V/Ph/Hz)	220-240V/1Ph/50Hz			
	Input (W)	150	140	160	155
Water system	Water flow volume (m ³ /h)	1.19	1.37	1.55	1.69
	Pressure drop (Kpa)	25	25	27	29
Sound pressure level (dB(A))		47	52	53	54
Connection pipe size	Water inlet & outlet (Inch)	3/4, (outer groove)			
	Condensing water drain (mm)	25			
Outline dimension (WxHxD) (mm)	Body	840x320x840	840x320x840	840x320x840	840x320x840
	Panel	960x60x960	960x60x960	960x60x960	960x60x960
Package dimension (WxHxD) (mm)	Body	960x394x960	960x394x960	960x394x960	960x394x960
	Panel	1.025x115x1040	1.025x115x1040	1.025x115x1040	1.025x115x1.040
Net weight (kg)	Body	30	38	38	38
	Panel	6.5	6.5	6.5	6.5
Gross weight (kg)	Body	38	46	46	46
	Panel	10	10	10	10
Standard controller		Wireless remote controller - Y512			
Optionals		Luxury wired remote controller : Z4E351B			

WALL MOUNTED TYPE



193CFM - 330 CFM



Wireless



FCU Wired remote controller Z4E351B

- Compact and light weight
- Low noise
- Condensed water free
Water pan is produced by mounting with heat preservation material wholly pressed, there is no bothering for condensed water.
- Different kind of wired remote control available (optional)
- Wireless remote control fitted as standard
- Long life and washable filter
- Inner groove copper
- Anti - cold function
- Self diagnosis

MODEL	Standard Type				With 3-way valve		
	IFC-34BA2/A-K	IFC-51BA2/A-K	IFC-68BA2/A-K	IFC-85BA2/A-K	IFC-51BWA2/A-K	IFC-85BWA2/A-K	
Air flow volume	High (CFM)	212	324	400	500	265	588
	Medium (CFM)	189	242	347	416	225	493
	Low (CFM)	166	215	312	362	190	423
Capacity	Cooling (kW)	2.1	2.7	3.6	4.2	1.5	5.4
	Heating (kW)	3.15	4.05	5.4	6.3	2.25	8.5
Power system	Type (V/Ph/Hz)	220-240V/1Ph/50Hz					
	Input (W)	50	50	60	60	50	70
Water system	Water flow volume (m ³ /h)	0.40	0.47	0.61	0.68	0.29	0.86
	Pressure drop (Kpa)	13	24	44	45	37	63
Sound pressure level (dB(A))		35	40	43	48	42	49
Connection pipe size	Water inlet & outlet (Inch)	1/2					
	Condensing water drain (mm)	15.6					
Outline dimension (WxHxD) (mm)	845x275x180	845x275x180	940x298x200	940x298x200	845x275x180	940x298x200	
Package dimension (WxHxD) (mm)	915x355x255	915x355x255	1.010x380x285	1.010x380x285	915x355x255	1.010x380x285	
Net weight (kg)	11	11	13	13	11	13	
Gross weight (kg)	14	14	17	17	14	17	
Standard controller	YB1FA						

notes



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