

YORK AIR-CONDITIONING PRODUCTS

Residential & Light Commercial 2010





YORK AIR-CONDITIONING PRODUCTS

A more comfortable,
safe and sustainable world





Our Vision

A more comfortable, safe and sustainable world

Our Values

Integrity
Customer Satisfaction
Employee Engagement
Innovation
Sustainability



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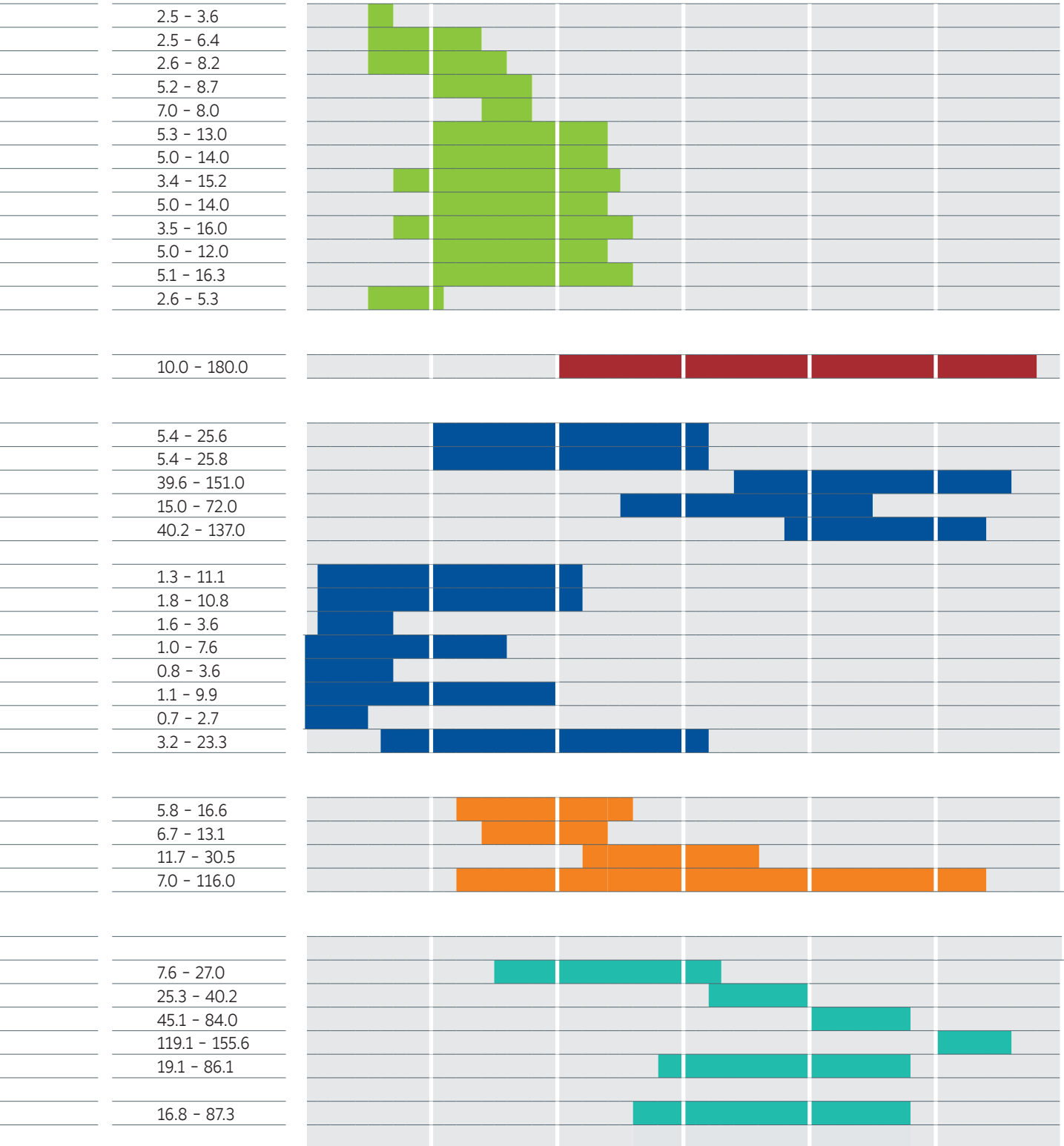
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Cooling capacity kW

1.0 | 5.0 | 10.0 | 20.0 | 50.0 | 100.0 | 200.0





Minisplit Systems

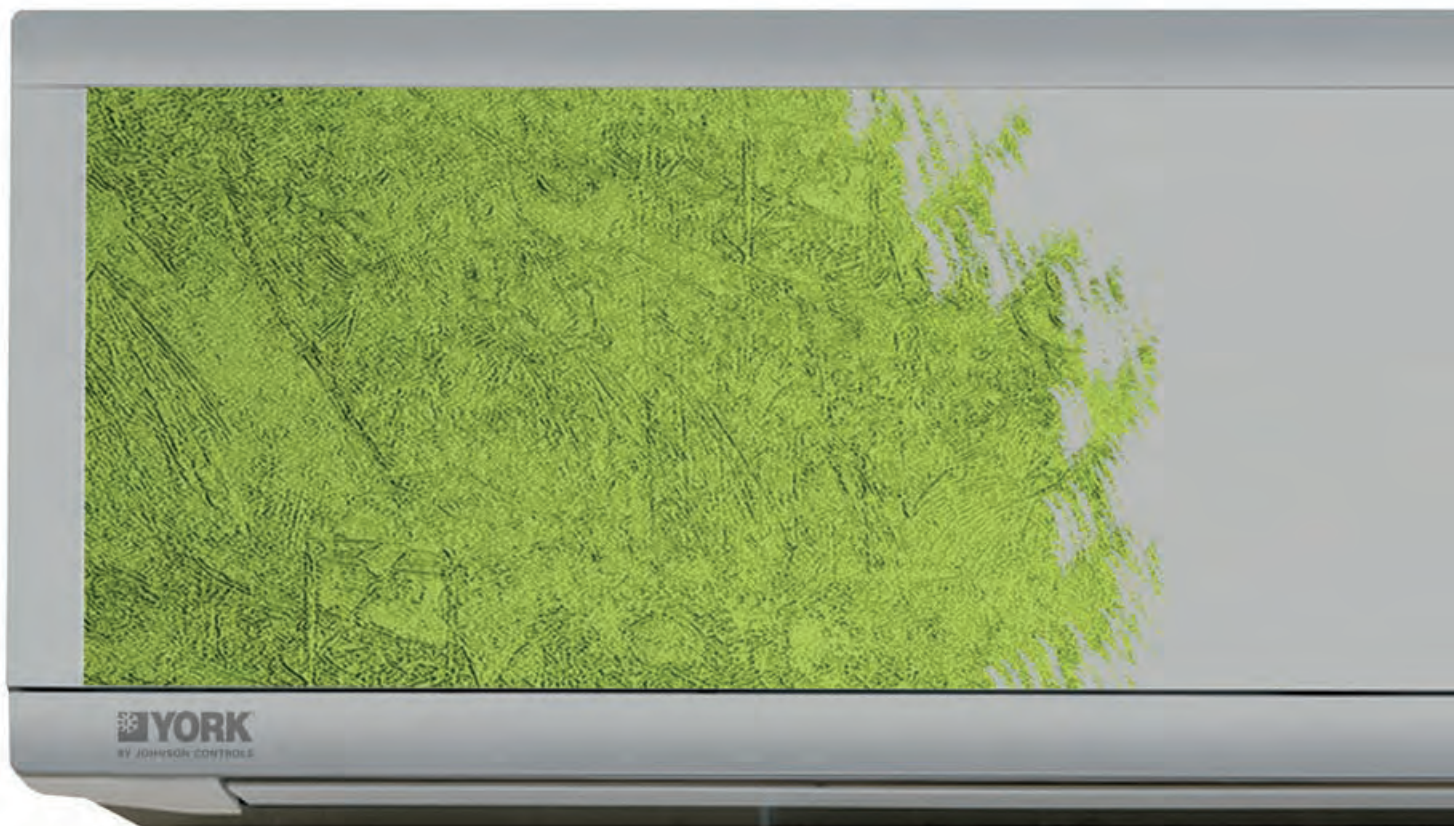
HIGH WALL UNITS

MULTISPLITS FREE COMBINATION

CASSETTE, FLOOR/CEILING & BLOWER UNITS

WINDOW UNITS





enjoy the art



MIMETECH RANGE

The main characteristic of these units is the possibility to be painted with the same color as the wall, this chameleonic ability and the latest inverter technology confers this High Wall a combination of mimesis and power; Mimetech offers a great performance as well as art in every environment.

Thin design (15 cm depth) and silver champagne color makes the unit look more than air conditioning equipment but a neat and modern design part of the home.

Another feature that has been taken into account when designing these units is the low noise levels, featuring very silent motor's fan and specially designed cross-flow indoor fan that provides same air-flow lowering the speed.







advanced technology

HIGH WALL INVERTER RANGE

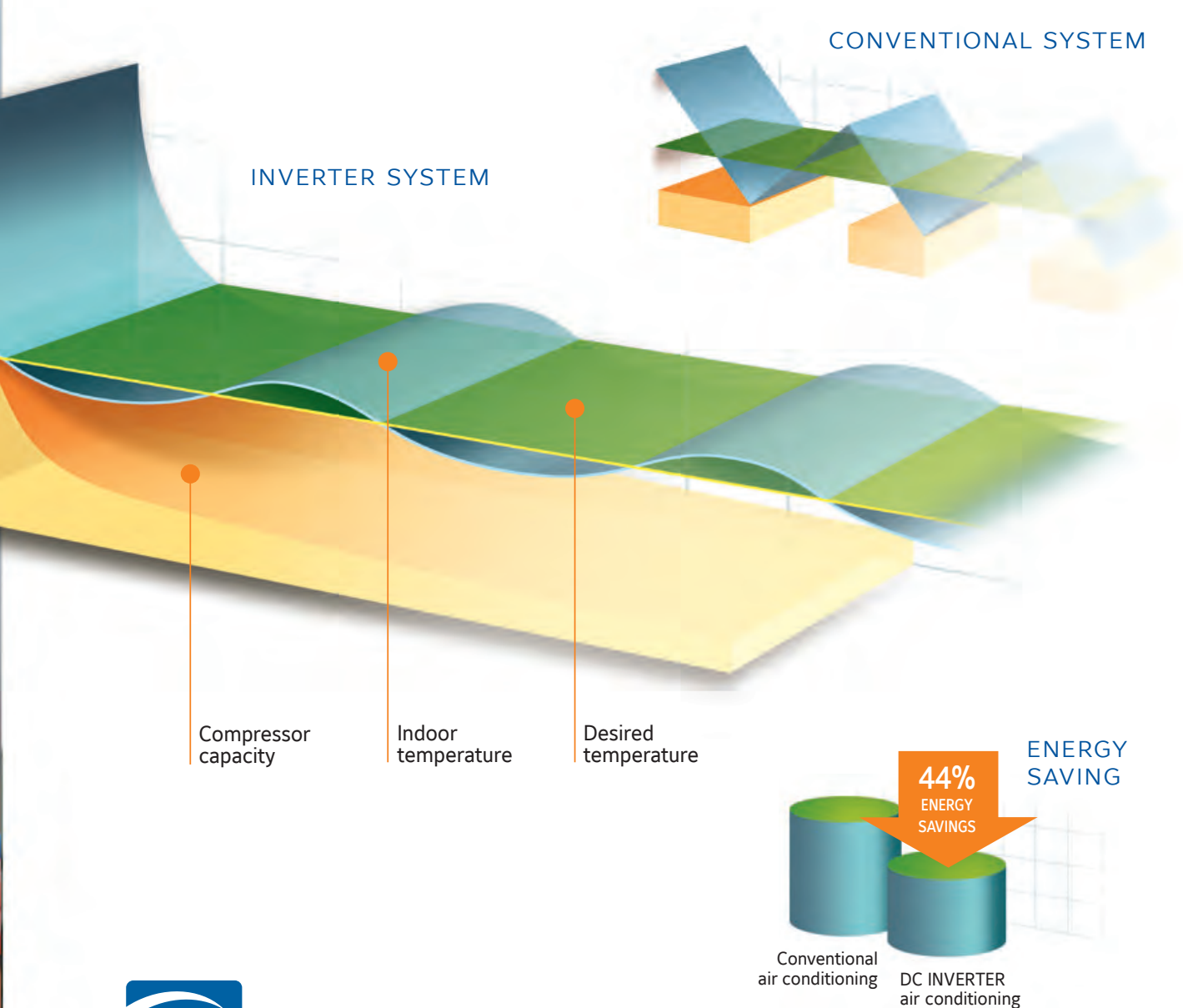
The High Wall inverter air conditioners have been designed thinking about comfort and sustainability. Comfort as the ultimate technology of DC Inverter compressor installed in these units is able to achieve performances of 3.69 COP in heating mode and 3.40 EER in cooling mode, the temperature variations in the room are minimized and the noise level is lower. The active carbon electrostatic filter improves the air quality and thanks to the motorized louver system, the air is distributed equally in the room.

Sustainable because the high efficiency of the unit results in a very low energy consumption, one of the most efficient in the market, the materials used are recyclable and free of hazardous substances, all together makes this unit the appropriate choice for conditioning your home.





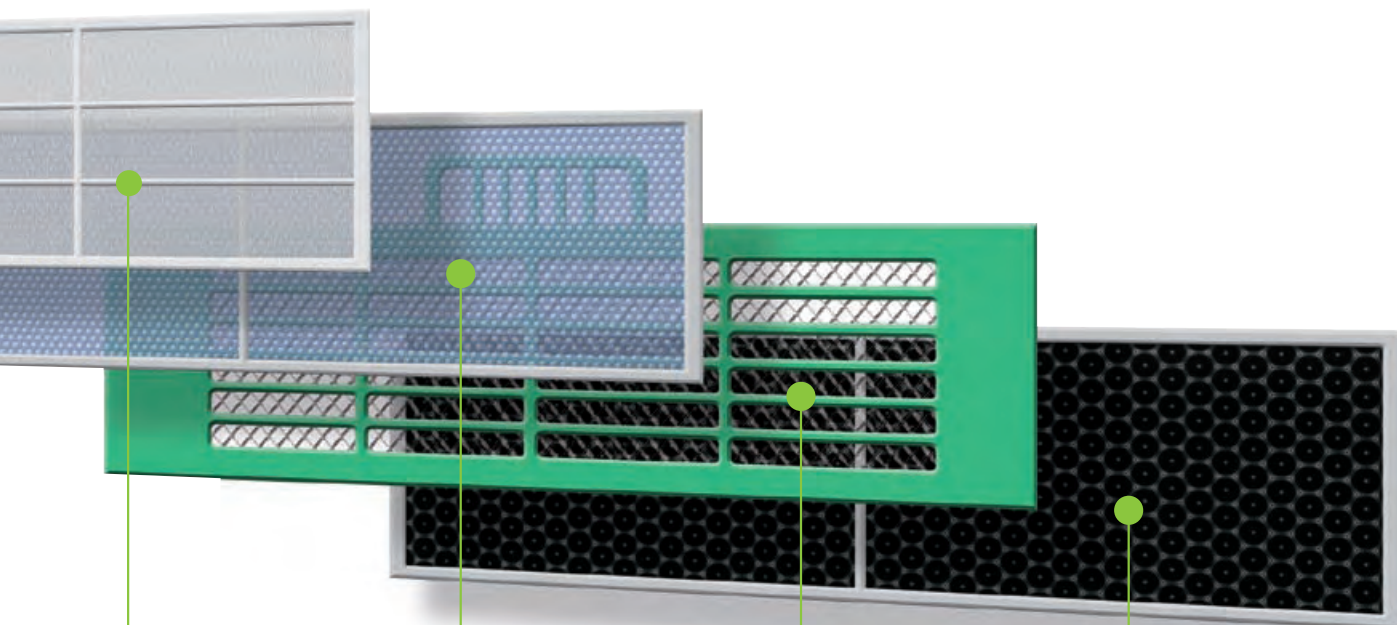
INVERTER SYSTEM HIGHER EFFICIENCY AND COMFORT



- DC Inverter technology regulates the frequency of the compressor which results in many advantages:
- Energy saving by avoiding consumption peaks of the compressor compared to an on-off system. Inverter compressors reduce the frequency and therefore increase the efficiency.
 - The variations of the temperature in the room are reduced improving the comfort.
 - The setting temperature is achieved faster thanks to the flexibility of the system which allows reaching even 30% more of the nominal capacity.
 - The overall performance is more uniform and silent.



FILTER OPTIONS FOR A CLEAN AND HEALTHY AIR



STANDARD FILTER

These filters prevent the bigger dust particles to enter the room by creating a barrier against dirtiness and insects.

BIO-FILTER

Bio Filter consists of a specialized biological enzyme and Eco Filter. The Eco Filter catches very small airborne dust particles and neutralizes bacteria, fungi and microbes.

PLASMA FILTER

The Plasma Dust Collector can generate an ionization zone. The air is converted to plasma as it passes the high voltage ion generator. 95% of the dust, smoke and pollen particles are attracted to the electrostatic filter.

CARBON ELECTROSTATIC FILTER

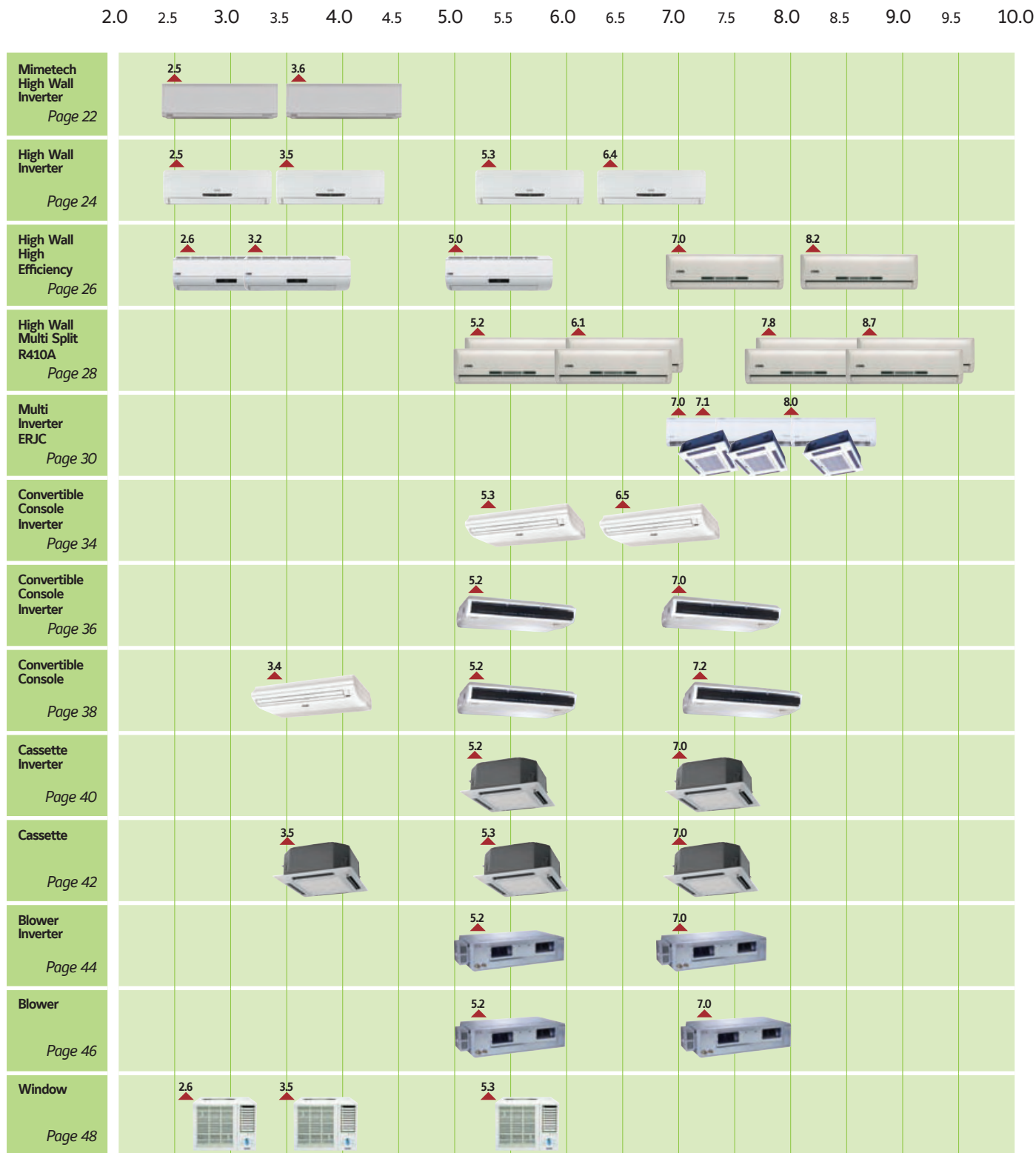
Active Carbon Filter eliminates certain kinds of odors such as ammonia (NH_3) and deactivates harmful chemical gas such as formaldehyde (HCHO).



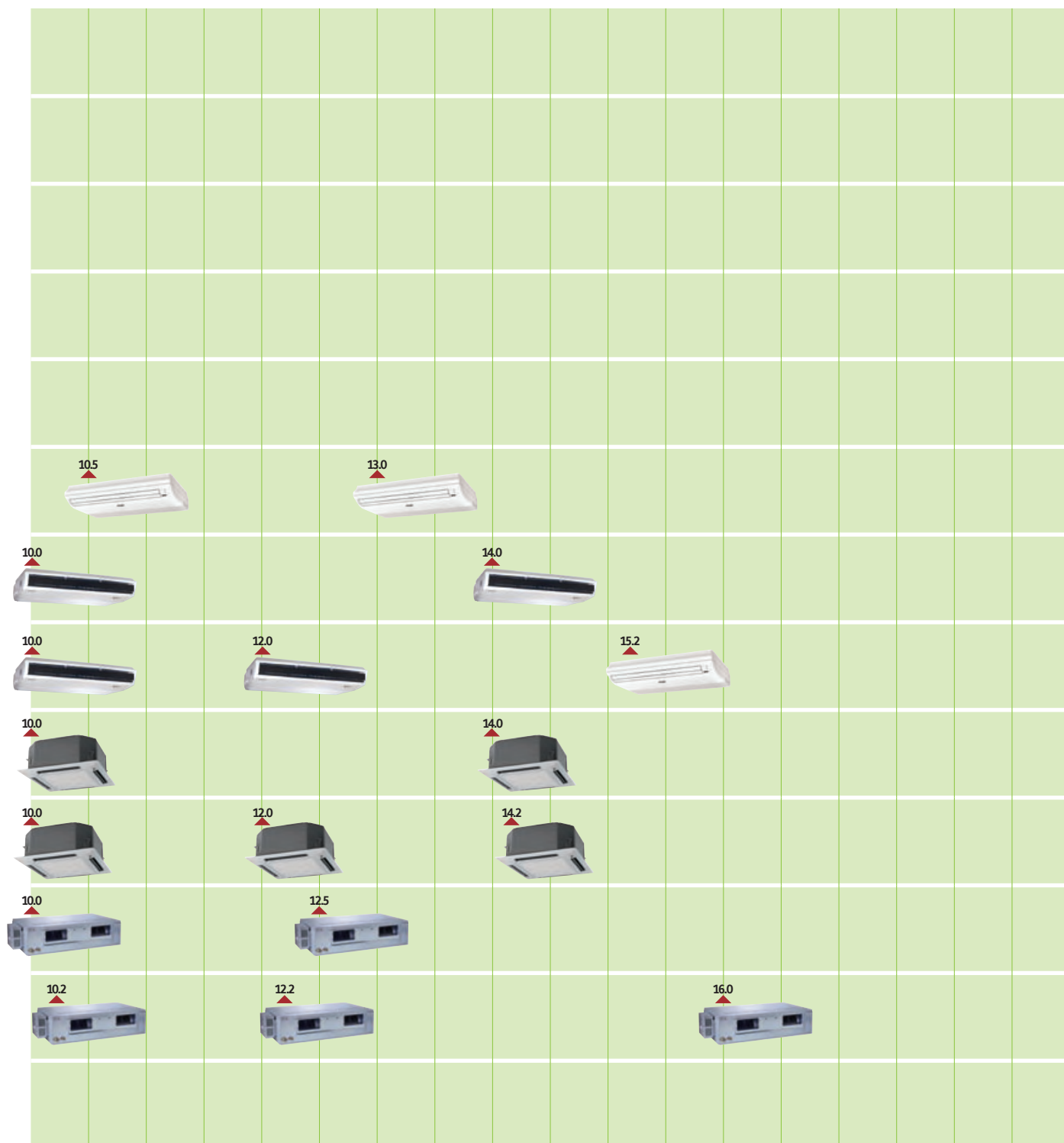
DRY MOULD PROOF

Turn off the unit that contains this function when it is cooling or drying, indoor fan would still operate in low speed to dry the inner components and parts. This action can remain unit inside clean and dry, prevent mould growing and odor.

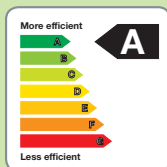
Range Capacities



10.0 10.5 11.0 11.5 12.0 12.5 13.0 13.5 14.0 14.5 15.0 15.5 16.0 16.5 17.0 17.5 18.0 18.5 **kW**

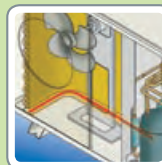


Main Features



EU Energy Label A Class

With the powerful compressor and optimized refrigerant, the EER can reach EU Energy Label A Class (over 3.2 w/w) or B Class (over 3.0 w/w), greatly reducing the power consumption.



Heater Cable

Heater cable prevents ice forming on the outdoor unit. Specially indicated in heat pump mode and low ambient temperature conditions. A thermostat regulates the activation of the heater.



Auto-Restart Function

When the power supply is interrupted and then restored, the air conditioners automatically restore the previous function setting.



Turbo Mode

Press the Turbo button and the A/C will reach the preset temperature in the shortest time.



Two-direction Air Vane Tech

With special structural design and microcomputer control, York air conditioners employ a unique bi-directional rotary air vane technology.



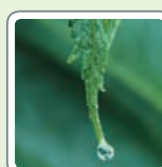
Condensate pump

Made up of a pump and a remote detection unit. The pump absorbs the condensates from the indoor unit and sends it to the draining pipes.



Low Ambient Kit

The air conditioning unit can operate in cooling mode at low ambient temperature conditions. The kit is suitable for special applications such as computer and power station control rooms where cooling is required even in the winter months.



Dehumidification

Independent dehumidification function is usually used in rainy days in springtime or damp areas. The unit will alternately operate in cooling mode or fan only mode, which assures strong dehumidification while not lowering room temperature.



Golden Coating Condenser

The Golden hydrophilic condenser can improve the heating efficiency by accelerating the defrosting process. The unique coating on the condenser can withstand the salty air, rain and other corrosive environment thus guaranteeing a much longer life span.



Sleep Mode

With Sleep Mode, the air conditioner's set temperature will automatically increase (cooling) or decrease (heating) 1°C per hour for the first two hours then hold steady for the next 5 hours after which the air conditioner will stop operation. With the sleep mode function can maintain the most comfortable temperature and save energy.

Main Features



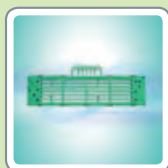
Bio Filter

Bio Filter consists of a specialized biological enzyme and Eco Filter. The Eco Filter catches very small airborne dust particles and neutralizes bacteria, fungi and microbes. Biological enzyme eliminates bacteria by dissolving their cell wall thus eliminating the problem of re-pollution seen in traditional air conditioners.



Active Carbon Electrostatic Filter

Active Carbon Filter eliminates certain kinds of odors such as ammonia (NH₃) and deactivates harmful chemical gas such as formaldehyde (HCHO). By forming positive positions on the filter surface, Electrostatic Fiber Filter traps small dust particles, smoke and pet fur to prevent allergic reactions.



Plasma Filter

The Plasma Dust Collector can generate an ionization zone. The air is converted to plasma as it passes the high voltage ion generator. 95% of the dust, smoke and pollen particles are attracted to the electrostatic filter.



Ionizer

Ionizer brings refreshing air into the home. Anions can stimulate the blood circulation system, improve lung function and effectively prevent respiratory passage illnesses (such as asthma and pneumonia).



Anti-Rust Cabinet

Made from electrolytic zinc steel sheet and anti-rust coated components. York's outdoor units are rust free even in coastal regions.



Valve Protection Cover

It protects the service valves and prevents water from dripping.

Iconography



Infrared control



Wired control



Infrared or Wired control



Dry mode



Sleep mode



Timer



Auto Sweep



Auto Restart



Turbo mode



Thin profile



Quiet



4 Way Air Flow



Floor/Ceiling



Ducted Installation



Air Filter

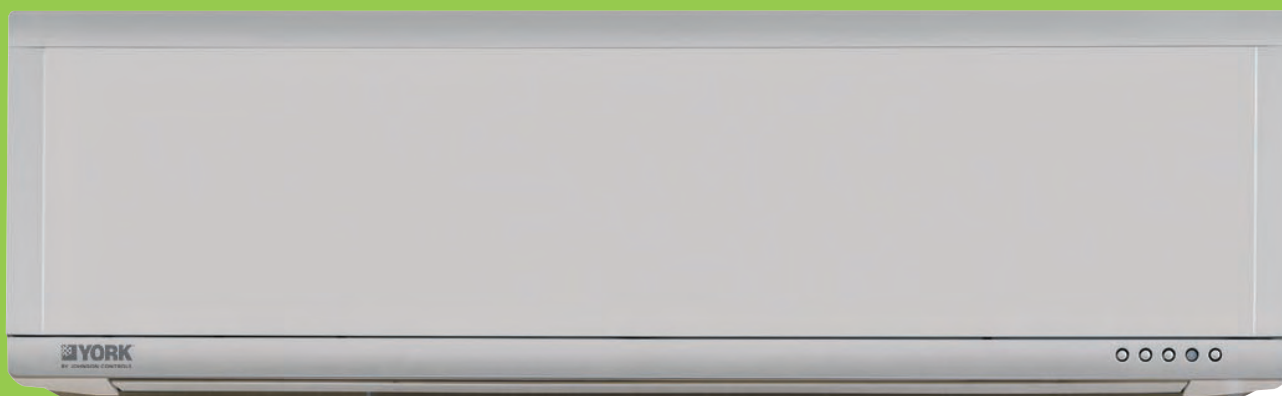


Low Ambient Kit

Mimeteck High Wall Inverter

YVHC 09 to 12

A complete range from 2.5 kW to 3.6 kW



PAINT THE FRONT WITH
THE COLOR YOU WANT

Features

- Flat stylish indoor unit
- Low noise levels
- Active carbon electrostatic filter
- Automatic restart
- ON/OFF timer
- Automatic air sweep
- Service valve protection cover
- Rustproof casing
- Dry mould proof



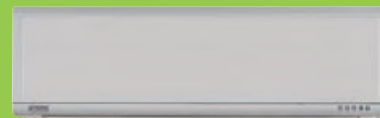
Remote controller

- Wireless
- 5 operation modes (Cool/Heat/Auto/Dry/Fan)
- Sleep mode
- Room temperature setting
- Fan speed selection
- Timer
- Air flow direction setting
- LCD display



Mimetech High Wall Inverter

YVHC 09 to 12



Technical features

Set reference			YVHC	
Indoor unit	Sizes		YVHC 09 DS	YVHC 12 DS
Outdoor unit	Sizes		YVJC 09 DS	YVJC 12 DS
Cooling capacity	kW		2.5 (1.0 - 3.2)	3.6 (1.4 - 4.6)
Heating capacity	kW		2.7 (1.1 - 3.5)	3.8 (1.5 - 4.9)
Compressor	Type		Rotary	
Refrigerant			R410A	
Power supply	V/Ph/Hz		230 / 1 / 50 + E	
Power input	cooling	kW	0.7	1.1
	heating	kW	0.8	1.2
EER			3.3	3.2
COP			3.5	3.4
Energy Class	cooling		A	A
	heating		B	B
Fuse rating	A		15	15
Indoor airflow	m³/h		450	500
Sound pressure at 1 m	Indoor (L/M/H)	dB(A)	32 / 35 / 38	33 / 36 / 40
	Outdoor	dB(A)	50	50
Dimensions	Indoor	H (mm)	290	290
		W (mm)	1 005	1 005
		D (mm)	150	150
	Outdoor	H (mm)	540	540
		W (mm)	848	848
		D (mm)	320	320
Net weight	Indoor unit	kg	11	11
	Outdoor unit	kg	40	40
Piping	Type of connection		Flare	
	Diameter	Gas	3/8"	1/2"
		Liquid	1/4"	1/4"
Refrigerant charge	g		780	1 230
Pipe run	Length	m	15	15
	Height	m	7	7
Operating limits - cooling mode		min./max.	+18°C / +50°C	
Operating limits - heating mode		min./max.	-15°C / +24°C	

Nominal cooling capacity based on : - Indoor Air Temp. 27°C DB / 19°C WB - Outdoor Air Temp. 35°C DB
 Nominal heating capacity based on : - Indoor Air Temp. 21°C DB - Outdoor Air Temp. 7°C DB/6°C WB
 Piping length : 5 m with initial charge

Codes / Options / Accessories

Sizes		09	12
Set code		S693892481	S693893481
Indoor unit code		S683862481	S683863481
Outdoor unit code		S683802481	S683803481
Condensate pump	A	AMP01C	
Wall mounting kit	A	AMW42A	
Floor mounting kit	A	AMF44B	
Heater cable	O/A	Contact Johnson Controls	

O= option (factory fitted) A= accessory (supplied loose)



High Wall Inverter

EVHC-D 09 to 24

A complete range from 2.5 kW to 6.4 kW



Features

- DC Inverter compressor
- Low noise levels
- Active carbon electrostatic filter
- Dry mould proof
- Automatic restart
- ON/OFF timer
- Automatic air sweep
- Service valve protection cover
- Rustproof casing



Remote controller

- Wireless
- 5 operation modes (Cool/Heat/Auto/Dry/Fan)
- Sleep mode
- Room temperature setting
- Fan speed selection
- Timer setting function
- Air flow direction setting
- LCD display
- Turbo mode
- Lock button function



High Wall Inverter

EVHC-D 09 to 24



Technical features

Set reference		EVHC			
Indoor unit	Sizes	EVKC-09DS	EVKC-12DS	EVKC-18DS	EVKC-24DS
Outdoor unit	Sizes	EVJC-09DS	EVJC-12DS	EVJC-18DS	EVJC-24DS
Cooling capacity	kW	2.5 (1.2 - 3.1)	3.5 (1.2 - 3.8)	5.3 (1.3 - 6.2)	6.4 (1.4 - 6.8)
Heating capacity	kW	2.8 (1.2 - 3.8)	4.0 (1.3 - 4.7)	5.8 (1.3 - 6.3)	7.0 (1.3 - 8.0)
Compressor	Type	Rotary			
Refrigerant		R410A			
Power supply	V/Ph/Hz	230 / 1 / 50 + E			
Power input	cooling	kW	0.74	1.06	1.60
	heating	kW	0.75	1.10	1.62
EER			3.40	3.30	3.29
COP			3.69	3.64	3.61
Energy Class	cooling		A	A	A
	heating		A	A	A
Indoor airflow (high speed)	m³/h	500	560	850	900
Sound pressure at 1 m	Indoor (L/M/H)	dB(A)	23 / 31 / 37	24 / 33 / 37	38 / 42 / 45
	Outdoor	dB(A)	51	52	53
Dimensions	Indoor	H (mm)	265	275	298
		W (mm)	790	845	940
		D (mm)	170	180	200
	Outdoor	H (mm)	540	540	700
		W (mm)	848	848	890
		D (mm)	260	260	340
Net weight	Indoor unit	kg	9	11	13
	Outdoor unit	kg	35	36	47
Piping	Type of connection		Flare		
	Diameter	Gas	3/8"	1/2"	1/2"
		Liquid	1/4"	1/4"	1/4"
Refrigerant charge	g	800	1 150	1 100	1 400
Pipe run	Length	m	15	20	25
	Height	m	5	10	10
Operating limit - cooling mode		min./max.	+18°C / +50°C		
Operating limit - heating mode		min./max.	-15°C / +24°C		

Nominal cooling capacity based on : - Indoor Air Temp. 27°C DB / 19°C WB - Outdoor Air Temp. 35°C DB

Nominal heating capacity based on : - Indoor Air Temp. 21°C DB - Outdoor Air Temp. 7°C DB/6°C WB

Piping length : 5 m with initial charge

Codes / Options / Accessories

Sizes		09	12	18	24
Set code		S693892881	S693893881	S693895141	S693895141
Indoor unit code		S683862881	S683863881	S683865141	S683866051
Outdoor unit code		S683802881	S683803881	S683805141	S683806051
Condensate pump	A	AMP01C			
Wall mounting kit	A	AMW42A		AMW50A	
Floor mounting kit	A	AMF44B			
Heater cable	A	Contact Johnson Controls			

O - option (factory fitted) A - accessory (supplied loose)

High Wall High Efficiency

TAHC 09 to 12 / TLHC 18 / RAHC 24 to 28

A complete range from 2.6 kW to 8.2 kW



TAHC 09 to 12 / TLHC 18



RAHC 24 to 28

Features

- High efficiency Class A (sizes 09 & 12)
- Automatic restart
- Active carbon electrostatic filter
- ON/OFF timer
- Automatic air sweep
- 2 speed outdoor fan for sizes 24 & 28
- Service valve protection cover
- Rustproof casing



Remote controller

- Wireless
- 5 operation modes (Cool/Heat/Auto/Dry/Fan)
- Sleep mode
- Room temperature setting
- Fan speed selection
- Timer
- Air flow direction setting
- LCD display
- Turbo mode (models RAHC)



High Wall High Efficiency

TAHC 09 to 12 / TLHC 18 / RAHC 24 to 28



Technical features

Set reference			TAHC		TLHC	RAHC	
Indoor unit	Sizes		TAKC 09	TAKC 12	TLKC 18	RAKC 24	RAKC 28
Outdoor unit	Sizes		TAJC 09	TAJC 12	TLJC 18	RAJC 24	RAJC 28
Cooling capacity	kW		2.6	3.2	5.0	7.0	8.2
Heating capacity	kW		2.8	3.7	5.3	7.9	8.5
Compressor	Type		Rotary				
Refrigerant			R410A				
Power supply	V/Ph/Hz		230 / 1 / 50 + E				
Power input	cooling	kW	0.8	1.0	1.7	2.5	2.6
	heating	kW	0.8	1.0	1.6	2.5	2.7
EER			3.3	3.2	3.1	2.9	2.8
COP			3.6	3.7	3.5	3.2	3.2
Energy Class	cooling		A	A	B	C	C
	heating		A	A	B	C	C
Fuse rating	A		10	16	25	32	32
Indoor airflow (High speed)	m³/h		400	580	800	1 080	1 150
Sound pressure at 1 m	Indoor	dB(A)	39 / 36 / 32	43 / 41 / 39	44 / 41 / 34	39 / 42 / 45	41 / 44 / 47
	Outdoor	dB(A)	52	54	58	55	57
Dimensions	Indoor	H (mm)	190	190	198	330	330
		W (mm)	790	790	940	1 080	1 080
		D (mm)	275	275	275	225	225
	Outdoor	H (mm)	535	535	590	695	695
		W (mm)	700	700	760	845	845
		D (mm)	235	235	285	335	335
Net weight	Indoor unit	kg	8	8.5	10	17	17
	Outdoor unit	kg	28	35	41	55	61
Piping	Type of connection		Flare				
	Diameter	Gas	3/8"	1/2"	1/2"	5/8"	5/8"
		Liquid	1/4"	1/4"	1/4"	3/8"	3/8"
Refrigerant charge	g		730	840	1 770	1 950	2 000
Pipe run	Length	m	20	20	20	20	20
	Height	m	8	8	10	10	10
Operating limits - cooling mode		min/max	+18°C / +43°C				
Operating limits - heating mode		min/max	-7°C / +24°C				

Nominal cooling capacity based on : - Indoor Air Temp. 27°C DB / 19°C WB - Outdoor Air Temp. 35°C DB

Nominal heating capacity based on : - Indoor Air Temp. 21°C DB - Outdoor Air Temp. 7°C DB/6°C WB

Piping length : 7.5 m with initial charge

Codes / Options / Accessories

Sizes		09	12	18	24	28
Set code		S693892901	S693893901	S693896071	S693897161	S693968161
Indoor unit code		S683862901	S683863901	S683866071	S683867161	S683868161
Outdoor unit code		S683802901	S683803901	S683806031	S683807161	S683808161
Bio Filter	O/A	-			ABF02M	
Condensate pump	A				AMP01C	
Wall mounting kit	A	AMW42A			AMW50A	
Floor mounting kit	A				AMF44B	
Heater cable	A				AHC01A	

O= option (factory fitted) A= accessory (supplied loose)



E-COM-M1003 Manufacturer reserves the rights to change specifications without prior notice.



High Wall Multi Split

RMHC 18-21 (2x1) / RMHC 27-30 (3x1)

A complete range from 5.2 kW to 8.7 kW



Features

Condensing units

- 2 circuits / 2 compressors running in same mode
- Low ground space requirements
- Rustproof casing

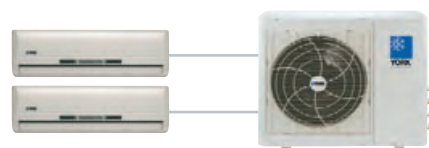
Indoor units

- Automatic restart
- Active carbon Electrostatic filter
- ON/OFF timer
- Automatic air sweep

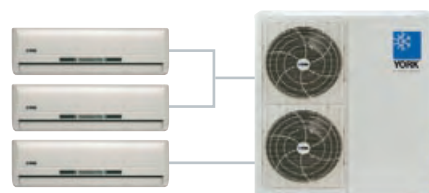


Remote controller

- Wireless
- 5 operation modes (Cool/Heat/Auto/Dry/Fan)
- Sleep mode
- Room temperature setting
- Fan speed selection
- Timer
- Air flow direction setting
- LCD display



RMHC 18-21 (2x1)



RMHC 27-30 (3x1)

High Wall Multi Split

RMHC 18-21 (2x1) / RMHC 27-30 (3x1)



Technical features

Set reference		RMHC			
Models	Sizes	18	21	27	30
Cooling capacity	kW	2 x 2.6	2.6 + 3.5	3 x 2.6	2 x 2.6 + 3.5
Heating capacity	kW	2 x 2.9	2.9 + 3.8	3 x 2.9	2 x 2.9 + 3.8
Compressor	Type (Nb)	Rotary (2)			
Refrigerant		R410A			
Location of expansion device		Outdoor unit			
Power supply	V/Ph/Hz	230 / 1 / 50 + E			
Power input (Cooling)	kW	2 x 0.9	1.0 + 1.2	3 x 1.0	2 x 1.0 + 1.2
Power input (Heating)	kW	2 x 1.0	1.0 + 1.3	3 x 1.0	2 x 0.9 + 1.2
EER / COP		2.9 / 3.0	2.9 / 3.1	2.8 / 3.1	3.0 / 3.3
Energy Class (cooling/heating)		C / D	C / D	C / D	C / C
Fuse rating	A	16	16	20	25
Indoor airflow (high speed)	m³/h	2 x 550	550 + 650	3 x 550	2 x 550 + 650
Sound press. at 1 m (indoor) L/M/H	dB(A)	31 / 34 / 37	31 / 34 / 37	31 / 34 / 37	31 / 34 / 37
Sound pressure at 1 m (outdoor)	dB(A)	56	56	58	58
Dimensions	Indoor unit size 9	HxWxD(mm)	250 x 710 x 195	250 x 710 x 195	250 x 710 x 195
	Indoor unit size 12	HxWxD(mm)	-	265 x 790 x 193	265 x 790 x 193
	Outdoor unit	HxWxD(mm)	655 x 895 x 345	830 x 860 x 330	830 x 860 x 330
Net Weight (Indoor / Outdoor)	kg	8.5 x 2 / 75	8.5 + 10.5 / 76	8.5 x 3 / 81	8.5 x 2 + 10.5 / 81
Type of connection		Flared			
Piping	Diameter	Gas	2 x 3/8"	3/8" + 1/2"	3 x 3/8"
		Liquid	2 x 1/4"	1/4" + 1/4"	3 x 1/4"
Refrigerant charge	g	2 x 980	900 + 1 100	1 550 + 1 150	1 550 + 1 150
Max pipe run (each indoor unit)	m	10	10	10	10
Operating limits - cooling mode	min/max	+18°C / +43°C			
Operating limits - heating mode	min/max	-15°C / +24°C			

Nominal cooling capacity based on : - Indoor Air Temp. 27°C DB / 19°C WB - Outdoor Air Temp. 35°C DB

Nominal heating capacity based on : - Indoor Air Temp. 21°C DB - Outdoor Air Temp. 7°C DB/6°C WB

Piping length : 7.5 m with initial charge

Codes / Options / Accessories

Sizes (Outdoor units)		18	21	27	30
Wall mounting kit	A	AMW50A			
Floor mounting kit	A	AMF44B			
Sizes (Indoor units)		09		12	
Bio Filter *	O/A	ABF01M			
Plasma filter	O	APF01M			
Ionizer	O	AIN01M			
Condensate pump	A	AMP01C			

* Per indoor unit O= option (factory fitted) A= accessory (supplied loose)

Table of compatibility with indoor units

Sizes	Indoor unit size 9	Indoor unit size 12
RMHC 18	2	-
RMHC 21	1	1
RMHC 27	3	-
RMHC 30	2	1

Multi Inverter Free Indoor Units

ERJC 22 (2x1) / ERJC 24 (3x1) / ERJC 28 (4x1)

A complete range of indoor units



ERJC 22 (2x1)



ERJC 24 (3x1)



ERJC 28 (4x1)



Features

- Free match indoor/outdoor
- Automatic restart
- ON/OFF timer
- Automatic air sweep
- Rustproof casing



Remote controller

- Wireless
- 5 operation modes (Cool/Heat/Auto/Dry/Fan)
- Sleep mode
- Room temperature setting
- Fan speed selection
- Timer
- Air flow direction setting
- LCD display

Indoor units



Multi Inverter Free Indoor Units

ERJC 22 (2x1) / ERJC 24 (3x1) / ERJC 28 (4x1)



Technical features Outdoor units

Model		ERJC		
Outdoor units	Sizes	22	24	28
Indoor units	number	2 indoor units	3 indoor units	4 indoor units
Cooling capacity	kW	7.0 (2.6 - 9.1)	7.1 (2.7 - 10.0)	8.0 (2.7 - 10.0)
Heating capacity	kW	8.7 (2.9 - 11.3)	8.7 (2.8 - 11.0)	9.3 (2.8 - 11.0)
Compressor	Type (Nb)	Rotary Inverter (1)		
Refrigerant		R410A		
Location of expansion device		Outdoor unit		
Power supply	V/Ph/Hz	230 / 1 / 50 + E		
Power input	cooling	kW	2.2	2.5
	heating	kW	2.6	2.6
EER		3.2	3.2	3.2
COP		3.4	3.4	3.5
Energy Class	cooling	A	A	A
	heating	B	B	B
Sound pressure level	dB(A)	59	59	59
Dimensions outdoor unit	H / W / D	mm	840 / 950 / 420	840 / 950 / 420
Net weight outdoor unit	kg	68	75	75
Refrigerant charge	gr	2 500	3 300	3 300
Type of connection		Flare		
Piping	Gas	2 x 1/2"	3 x 3/8"	4 x 3/8"
	Liquid	2 x 1/4"	3 x 1/4"	4 x 1/4"
Max pipe run	Length	m	15	15
	Height	m	7 *	10 *
Operating limits - cooling mode	min/max	+18°C / +46°C		
Operating limits - heating mode	min/max	-15°C / +24°C		

* Each indoor unit

Nominal cooling capacity based on : - Indoor Air Temp. 27°C DB / 19°C WB - Outdoor Air Temp. 35°C DB

Nominal heating capacity based on : - Indoor Air Temp. 21°C DB - Outdoor Air Temp. 7°C DB/6°C WB

Piping length : 5 m with initial charge

Codes / Options / Accessories

Sizes (Outdoor units)	22	24	28
Outdoor unit code	S683872601	S683879001	S683871011
Wall mounting kit	A	AMW50A	
Floor mounting kit	A	AMF44B	

O= option (factory fitted) A= accessory (supplied loose)

Sizes (Indoor units)	09	12	18
ERKC High wall unit code	S683872641	S683873641	S683875641
EOKC Floor/Ceiling unit code	-	S683873841	S683875841
EKKC Cassette unit code	-	S683873741	S683875741
Panel code	-	S613990123	S613990123
EUKC Ducted unit code	-	S683873941	S683875941

Indoor units technical features



- Active carbon electrostatic filter
- Automatic air sweep

		ERKC		
Indoor units	Sizes	09	12	18
Cooling capacity	kW	2.6	3.5	5.3
Heating capacity	kW	2.8	3.8	5.8
Power supply	V/Ph/Hz	230 / 1 / 50 + E		
Indoor airflow	H / M / L m ³ /h	400 / 360 / 280	490 / 420 / 320	730 / 680 / 600
Sound pressure level	H / M / L dB(A)	34 / 31 / 28	34 / 32 / 30	43 / 40 / 36
Dimensions	H / W / D mm	250 / 770 / 190	285 / 830 / 200	310 / 1 020 / 228
Net Weight	kg	8.5	11	13
Piping	Type of connection	Flare		
	Diameter	Gas 3/8"	1/2"	1/2"
	Liquid	1/4"	1/4"	1/4"



- Convertible floor/ceiling
- Automatic air sweep

		EOKC	
Indoor units	Sizes	12	18
Cooling capacity	kW	3.5	5.3
Heating capacity	kW	3.8	5.8
Power supply	V/Ph/Hz	230 / 1 / 50 + E	
Indoor airflow	H / M / L m ³ /h	490 / 420 / 320	730 / 680 / 600
Sound pressure level	H / M / L dB(A)	46 / 43 / 36	54 / 50 / 47
Dimensions	H / W / D mm	695 / 836 / 238	695 / 836 / 238
Net Weight	kg	27	27
Piping	Type of connection	Flare	
	Diameter	Gas 1/2"	1/2"
	Liquid	1/4"	1/4"



- Condensate pump included
- 600 x 600 standard size

		EKKC	
Indoor units	Sizes	12	18
Cooling capacity	kW	3.5	5.3
Heating capacity	kW	3.8	5.8
Power supply	V/Ph/Hz	230 / 1 / 50 + E	
Indoor airflow	m ³ /h	600 / 580 / 500	860 / 760 / 650
Sound pressure level	H / M / L dB(A)	44 / 40 / 36	47 / 44 / 39
Dimensions unit	H / W / D mm	230 / 600 / 600	230 / 600 / 600
Dimensions panel	H / W / D mm	50 / 650 / 650	50 / 650 / 650
Net Weight	kg	20	20
Piping	Type of connection	Flare	
	Diameter	Gas 1/2"	1/2"
	Liquid	1/4"	1/4"



- Slim size
- Air filter included
- Wired control included

		EUKC	
Indoor units	Sizes	12	18
Cooling capacity	kW	3.5	5.3
Heating capacity	kW	3.8	5.8
Power supply	V/Ph/Hz	230 / 1 / 50 + E	
Indoor airflow	m ³ /h	520	840
Sound pressure level	H / M / L dB(A)	40 / 40 / 33	42 / 42 / 33
Dimensions	H / W / D mm	220 / 913 / 680	266 / 1 012 / 736
Net Weight	kg	27	36
Piping	Type of connection	Flare	
	Diameter	Gas 1/2"	1/2"
	Liquid	1/4"	1/4"

Indoor unit combinations

ERJC 22 (2x1) Cooling performances

Nbr. connecting units	Room A	Room B	Room C	Room D	Capacity rating (Min.~ Max.)	Power rating (Min.~ Max.)
9+9	2500	2500	-	-	5000 (3300-6700)	1400 (1000-2600)
9+12	2500	3500	-	-	6000 (3300-7800)	1800 (1000-3300)
12+12	3500	3500	-	-	7000 (3300-8200)	2300 (1000-3800)
9+18	2600	4500	-	-	7100 (3300-9500)	2200 (1000-4600)
12+18	3500	3600	-	-	7100 (3300-9500)	2200 (1000-4600)
18+18	3550	3550	-	-	7100 (3300-9500)	2200 (1000-4600)

ERJC 22 (2x1) Heating performances

Nbr. connecting units	Room A	Room B	Room C	Room D	Capacity rating (Min.~ Max.)	Power rating (Min.~ Max.)
9+9	3200	3200	-	-	6400 (2550-8600)	2050 (900-2950)
9+12	3200	4000	-	-	7200 (2550-9000)	2300 (900-3300)
12+12	3900	3900	-	-	7800 (3000-9600)	2400 (900-3500)
9+18	2900	5000	-	-	7900 (3000-9300)	2400 (900-3500)
12+18	3600	4500	-	-	8100 (3100-9900)	2400 (850-3900)
18+18	4350	4350	-	-	8700 (3100-11300)	2600 (850-3900)

ERJC 24 (3x1) Cooling performances

Nbr. connecting units	Room A	Room B	Room C	Room D	Capacity rating (Min.~ Max.)	Power rating (Min.~ Max.)
9+9	2500	2500	-	-	5000 (3300-6700)	1400 (1000-2600)
9+12	2500	3500	-	-	6000 (3300-7800)	1800 (1000-3300)
12+12	3500	3500	-	-	7000 (3300-8200)	2300 (1000-3800)
9+18	2600	4500	-	-	7100 (3300-9500)	2200 (1000-4600)
12+18	3500	3600	-	-	7100 (3300-9500)	2200 (1000-4600)
9+9+9	2350	2350	2350	-	7100 (3300-9500)	2200 (1000-4600)
9+9+12	2100	2100	2900	-	7100 (3300-9500)	2200 (1000-4600)
9+12+12	1900	2600	2600	-	7100 (3300-9600)	2200 (1000-4650)
12+12+12	2400	2400	2400	-	7100 (3300-9600)	2200 (1000-4650)
9+9+18	2200	2200	2700	-	7100 (3300-9600)	2200 (1000-4650)
9+12+18	2100	2300	2700	-	7100 (3300-9600)	2200 (1000-4650)
12+12+18	2300	2300	2500	-	7100 (3300-9600)	2200 (1000-4650)
9+18+18	2100	2500	2500	-	7100 (3300-9600)	2200 (1000-4650)

ERJC 24 (3x1) Heating performances

Nbr. connecting units	Room A	Room B	Room C	Room D	Capacity rating (Min.~ Max.)	Power rating (Min.~ Max.)
9+9	3200	3200	-	-	6400 (2550-8600)	2050 (900-2950)
9+12	3200	4000	-	-	7200 (2550-9000)	2300 (900-3300)
12+12	3900	3900	-	-	7800 (3000-9600)	2400 (900-3500)
9+18	2900	5000	-	-	7900 (3000-9300)	2400 (900-3500)
12+18	3600	4500	-	-	8100 (3100-9900)	2400 (850-3900)
9+9+9	2850	2850	2850	-	8500 (3100-11000)	2350 (850-4000)
9+9+12	2650	2650	3200	-	8500 (3100-11000)	2350 (850-4000)
9+12+12	2500	3100	3100	-	8700 (3100-11000)	2400 (850-4000)
9+9+18	2500	2500	3700	-	8700 (3100-11000)	2400 (850-4000)
12+12+12	2900	2900	2900	-	8700 (3100-11000)	2400 (850-4000)
9+12+18	2300	2700	3700	-	8700 (3100-11000)	2400 (850-4000)
12+12+18	2700	2700	3300	-	8700 (3100-11000)	2400 (850-4000)
9+18+18	2100	3300	3300	-	8700 (3100-11000)	2400 (850-4000)

ERJC 28 (4x1) Cooling performances

Nbr. connecting units	Room A	Room B	Room C	Room D	Capacity rating (Min.~ Max.)	Power rating (Min.~ Max.)
9+9	2600	2600	-	-	5200 (3300-6700)	1400 (1000-2600)
9+12	2600	3500	-	-	6100 (3300-7800)	1800 (1000-3300)
12+12	3500	3500	-	-	7000 (3300-8200)	2300 (1000-3800)
9+18	2600	5300	-	-	7900 (3300-9500)	2400 (900-3500)
12+18	3500	4500	-	-	8000 (3300-9500)	2400 (900-3500)
18+18	4000	4000	-	-	8000 (3300-9500)	2400 (900-3500)
9+9+9	2600	2600	2600	-	7800 (3300-9500)	2200 (1000-4600)
9+9+12	2400	2400	3200	-	8000 (3300-9500)	2200 (1000-4600)
9+12+12	2000	3000	3000	-	8000 (3300-9600)	2200 (1000-4650)
12+12+12	2650	2650	2650	-	8000 (3300-9600)	2200 (1000-4650)
9+9+18	2300	2300	3400	-	8000 (3300-9600)	2200 (1000-4650)
9+12+18	2200	2600	3200	-	8000 (3300-9600)	2200 (1000-4650)
12+12+18	2500	2500	3000	-	8000 (3300-9600)	2200 (1000-4650)
9+18+18	2000	3000	3000	-	8000 (3300-9600)	2200 (1000-4650)
9+9+9+9	2000	2000	2000	2000	8000 (3300-9600)	2480 (1000-4650)
9+9+9+12	1750	1750	1750	2750	8000 (3300-9600)	2480 (1000-4650)
9+9+9+18	1700	1700	1700	2900	8000 (3300-9600)	2480 (1000-4650)
9+9+12+12	1500	1500	2500	2500	8000 (3300-10000)	2480 (1000-4700)
9+9+12+18	1400	1400	2400	2800	8000 (3300-10000)	2480 (1000-4700)
9+12+12+12	1700	2100	2100	2100	8000 (3300-10000)	2480 (1000-4700)
9+12+12+18	1400	2100	2100	2500	8000 (3300-10000)	2480 (1000-4700)
9+9+18+18	1400	1400	2600	2600	8000 (3300-10000)	2480 (1000-4700)
12+12+12+12	2000	2000	2000	2000	8000 (3300-10000)	2480 (1000-4700)

ERJC 28 (4x1) Heating performances

Nbr. connecting units	Room A	Room B	Room C	Room D	Capacity rating (Min.~ Max.)	Power rating (Min.~ Max.)
9+9	2800	2800	-	-	5600 (2550-8200)	2050 (900-2950)
9+12	2800	3800	-	-	6600 (2550-8500)	2300 (900-3300)
12+12	3800	3800	-	-	7600 (3000-9300)	2400 (900-3500)
9+18	2800	5800	-	-	8600 (3000-9300)	2400 (900-3500)
12+18	3700	5600	-	-	9300 (3100-9900)	2600 (900-3900)
18+18	4650	4650	-	-	9300 (3100-9900)	2600 (900-3900)
9+9+9	2800	2800	2800	-	8400 (3100-9900)	2400 (850-4000)
9+9+12	2800	2800	3700	-	9300 (3100-9900)	2600 (900-4000)
9+12+12	2500	3400	3400	-	9300 (3100-9900)	2600 (900-4000)
9+9+18	2400	2400	4500	-	9300 (3100-9900)	2600 (900-4000)
12+12+12	3100	3100	3100	-	9300 (3100-9900)	2600 (900-4000)
9+12+18	2300	2800	4200	-	9300 (3100-9900)	2600 (900-4000)
12+12+18	2600	2600	4100	-	9300 (3100-9900)	2600 (900-4000)
9+18+18	2200	3550	3550	-	9300 (3100-9900)	2600 (900-4000)
9+9+9+9	2320	2320	2320	2320	9300 (3300-11000)	2600 (900-4000)
9+9+9+12	2100	2100	2100	3000	9300 (3300-11000)	2600 (900-4000)
9+9+9+18	1900	1900	1900	3600	9300 (3300-11000)	2600 (900-4000)
9+9+12+12	2000	2000	2650	2650	9300 (3300-11000)	2600 (900-4000)
9+9+12+18	1900	1900	2500	3000	9300 (3300-11000)	2600 (900-4000)
9+12+12+12	1900	2450	2450	2450	9300 (3300-11000)	2600 (900-4000)
9+12+12+18	1900	2300	2300	2800	9300 (3300-11000)	2600 (900-4000)
9+9+18+18	1900	1900	2750	2750	9300 (3300-11000)	2600 (900-4000)
12+12+12+12	2320	2320	2320	2320	9300 (3300-11000)	2600 (900-4000)

Convertible Console Inverter

YOHC-D 18 to 48

A complete range from 5.3 kW to 13.0 kW



Features

- Low ambient kit
- Convertible – floor or ceiling
- Horizontal and vertical air sweep function
- Wide angle air distribution
- Slim profile – flush mounting
- Service valve protection cover
- Rustproof casing



Remote controller

- Wireless
- 5 operation modes (Cool/Heat/Auto/Dry/Fan)
- Sleep mode
- Room temperature setting
- Fan speed selection
- Timer
- Air flow direction setting
- LCD display

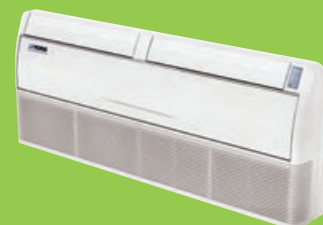


Low
Ambient
Kit



Convertible Console Inverter

YOHC-D 18 to 48



Technical features

Set reference			YOHC-D			
Indoor unit		Sizes	YOKC-D 18*	YOKC-D 24*	YOKC-D 36*	YOKC-D 48*
Outdoor unit		Sizes	YOJC-D 18*	YOJC-D 24*	YOJC-D 36*	YOJC-D 48*
Cooling capacity		kW	5.3 (2.1 - 6.4)	6.5 (2.6 - 7.8)	10.5 (4.2 - 12.6)	13.0 (5.2 - 15.6)
Heating capacity		kW	5.8 (2.3 - 7.0)	7.2 (2.9 - 8.6)	12.6 (5.0 - 15.1)	14.1 (5.6 - 16.9)
Compressor		Type	Rotary		Scroll	
Refrigerant			R410A			
Power supply		V/Ph/Hz	230 / 1 / 50 + E		400 / 3 / 50 + E + N	
Power input	cooling	kW	1.7	2.1	3.4	4.4
	heating	kW	1.7	2.2	3.5	4.3
EER			3.0	3.0	3.1	3.0
COP			3.4	3.2	3.4	3.3
Energy Class	cooling		B	B	B	B
	heating		B	C	C	C
Fuse rating		A	25	25	16	16
Indoor airflow (high / low speed)		m³/h	800 / 650	1 050 / 850	1 400 / 1 200	1 800 / 1 600
Sound pressure at 1 m	Indoor (L/M/H)	dB(A)	37 / 39 / 41	39 / 41 / 43	41 / 44 / 45	49 / 50 / 52
	Outdoor	dB(A)	48	52	57	58
Dimensions	Indoor	H (mm)	660	660	660	680
		W (mm)	995	995	1 285	1 670
		D (mm)	198	198	198	240
	Outdoor	H (mm)	710	860	960	1 245
		W (mm)	880	930	990	940
		D (mm)	340	330	360	340
Net weight	Indoor unit	kg	28	30	35	50
	Outdoor unit	kg	52	75	101	110
Type of connection			Flare			
Piping	Diameter	Gas	1/2"	5/8"	5/8"	5/8"
		Liquid	1/4"	3/8"	3/8"	3/8"
Refrigerant charge		g	2 050	2 600	3 100	4 000
Pipe run	Length	m	20	20	25	25
	Height	m	10	10	15	15
Operating limits - cooling mode		min/max	-10°C / +43°C			
Operating limits - heating mode		min/max	-15°C / +24°C			

Nominal cooling capacity based on : - Indoor Air Temp. 27°C DB / 19°C WB - Outdoor Air Temp. 35°C DB

Nominal heating capacity based on : - Indoor Air Temp. 21°C DB - Outdoor Air Temp. 7°C DB/6°C WB

Piping length : 7.5 m with initial charge

* Until the end of stock, will be replaced by EOHC-D

Codes / Options / Accessories

Sizes		18	24	36	48
Wired control	O			AMR01Y	
Weekly timer control	O			AMR02M	
Centralised control	O	-		AMR03M	
Condensate pump	A		AMP01C		AMP02B
Wall mounting kit	A			AMW50A	
Floor mounting kit	A			AMF44B	

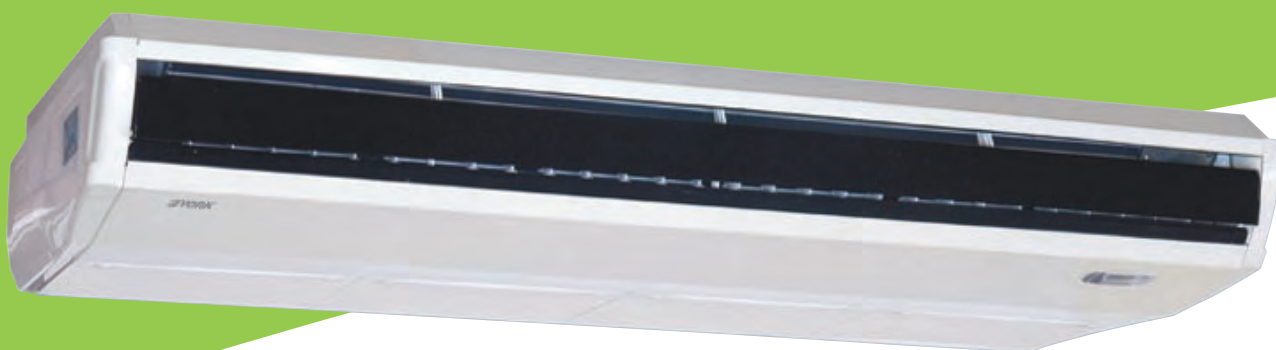
O= option (factory fitted) A= accessory (supplied loose)



Convertible Console Inverter

EOHC-D 18 to 48

A complete range from 5.2 kW to 14.0 kW



Features

- Inverter DC compressor
- Air filter included
- Convertible – floor or ceiling
- Horizontal and vertical air sweep function
- Wide angle air distribution
- Slim profile – flush mounting
- Rustproof casing



Remote controller

- Wireless
- 5 operation modes (Cool/Heat/Auto/Dry/Fan)
- Sleep mode
- Room temperature setting
- Fan speed selection
- Timer
- LCD display



Convertible Console Inverter

EOHC-D 18 to 48



Technical features

Set reference		EOHC-D			
Indoor unit	Sizes	EOKC 18 DS	EOKC 24 DS	EOKC 36 DS*	EOKC 48 DS
Outdoor unit	Sizes	ENJC 18 DT	ENJC 24 DT	ENJC 36 DT*	ENJC 48 DT
Cooling capacity	kW	5.2 (1.1 - 6.3)	7.0 (1.5 - 8.5)	10.0 (2.1 - 12.1)	14.0 (2.9 - 16.9)
Heating capacity	kW	5.8 (1.2 - 7.0)	7.6 (1.6 - 9.2)	11.5 (2.4 - 13.9)	15.5 (3.3 - 18.8)
Compressor	Type	Scroll			
Refrigerant		R410A			
Power supply	V/Ph/Hz	230 / 1 / 50		230 / 1 / 50 or 400 / 3 / 50	
Power input	cooling	kW	1.72	2.30	3.30
	heating	kW	1.80	2.20	3.70
EER			3.02	3.04	3.03
COP			3.22	3.45	3.11
Energy Class	cooling		B	B	D
	heating		C	D	D
Indoor airflow	m³/h	700	1 170	1 800	2 100
Sound pressure at 1 m	Indoor (H/M/L)	dB(A)	54 / 50 / 46	52 / 50 / 48	54 / 51 / 48
	Outdoor	dB(A)	56	59	63
Dimensions	Indoor	H (mm)	238	188	238
		W (mm)	836	1 300	1 590
		D (mm)	695	600	695
	Outdoor	H (mm)	540	680	1 250
		W (mm)	848	913	1 032
		D (mm)	320	378	412
Net weight	Indoor unit	kg	27	32	42
	Outdoor unit	kg	36	51	128
Piping	Type of connection		Flare		
	Diameter	Gas	1/2"	5/8"	3/4"
		Liquid	1/4"	3/8"	1/2"
Refrigerant charge	g	1 500	1 800	4 000	4 000
Pipe run	Length	m	20	30	50
	Height	m	15	15	30
Operating limits - cooling mode		min/max	+18°C / +50°C		
Operating limits - heating mode		min/max	-15°C / +24°C		

Nominal cooling capacity based on : - Indoor Air Temp. 27°C DB / 19°C WB - Outdoor Air Temp. 35°C DB

Nominal heating capacity based on : - Indoor Air Temp. 21°C DB - Outdoor Air Temp. 7°C DB/6°C WB

Piping length : 5 m with initial charge

* Values for single phase models

Available in May 2010

Codes / Options / Accessories

Sizes		18	24	36	48
Set code		S693725011	S693797071	S693793563	S693794023
Indoor unit code		S683715011	S683787031	S683783611	S683784081
Outdoor unit code		S683767051	S683767071	S683767101	S683767143
Wall mounting kit	A	AMW50A			
Floor mounting kit	A	AMF44B			

A= accessory (supplied loose)



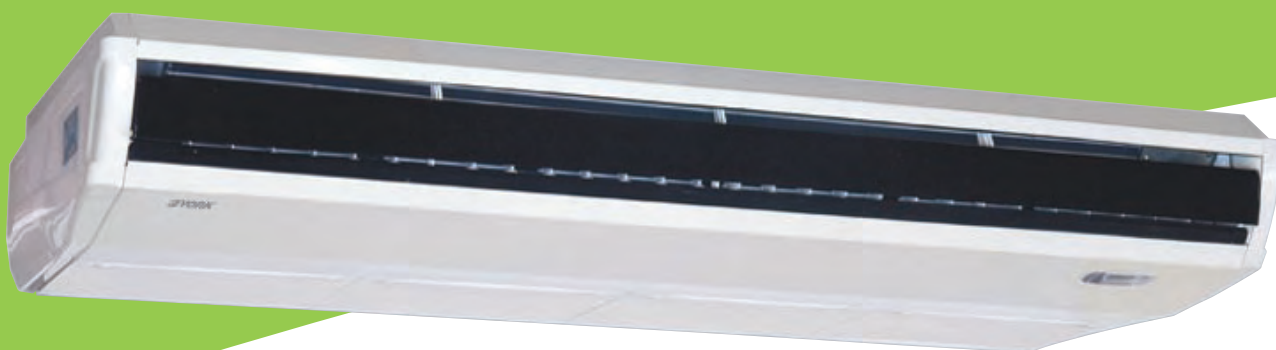
Convertible Console

YOHC 12 & 60 / EOHC 18 to 42

A complete range from 3.4 kW to 15.2 kW



NEW



Features

- Low ambient kit (sizes 12 & 60)
- Convertible – floor or ceiling
- Horizontal and vertical air sweep function
- Wide angle air distribution
- Slim profile – flush mounting
- Service valve protection cover
- Rustproof casing



Remote controller

- Wireless
- 5 operation modes (Cool/Heat/Auto/Dry/Fan)
- Sleep mode
- Room temperature setting
- Fan speed selection
- Timer
- Air flow direction setting
- LCD display



Convertible Console

YOHC 12 & 60 / EOHC 18 to 42



Technical features

Set reference			YOHC	EOHC			YOHC	
Indoor unit		Sizes	YOKC 12	EOKC 18 FS	EOKC 24 FS	EOKC 36 FS	EOKC 42 FS	YOKC 60
Outdoor unit		Sizes	YOJC 12	ENJC 18 FS	ENJC 24 FS	ENJC 36 FS	ENJC 42 FS	YOJC 60
Cooling capacity		kW	3.4	5.2	7.2	10.0	12.0	15.2
Heating capacity		kW	3.8	5.7	8.0	11.0	14.0	17.1
Compressor		Type	Rotary			Scroll		
Refrigerant			R410A					
Power supply		V/Ph/Hz	230 / 1 / 50 + E				400 / 3 / 50 + E + N	
Power input	cooling	kW	1.20	1.80	2.50	3.50	4.50	5.40
	heating	kW	1.20	2.00	2.59	3.30	4.70	5.40
EER			2.90	2.89	2.88	2.86	2.67	2.80
COP			3.20	2.85	3.09	3.33	2.98	3.20
Energy Class	cooling		C	C	C	C	D	C
	heating		C	D	D	C	D	C
Fuse rating		A	25	25	25	16	16	16
Indoor airflow (high speed)		m³/h	600	700	1 170	1 800	1 800	2 000
Sound pressure at 1 m	Indoor (H/M/L)	dB(A)	43 / 41 / 38	54 / 50 / 46	50 / 48 / 46	54 / 51 / 48	54 / 51 / 48	47 / 46 / 44
	Outdoor	dB(A)	43	56	59	58	60	59
Dimensions	Indoor	H (mm)	660	695	600	695	695	680
		W (mm)	995	836	1 300	1 590	1 590	1 670
		D (mm)	198	238	188	238	238	240
	Outdoor	H (mm)	590	540	700	840	1 250	1 245
		W (mm)	760	848	1 018	1 018	950	940
		D (mm)	285	320	412	412	412	360
Net weight	Indoor unit	kg	30	27	32	42	42	42
	Outdoor unit	kg	44	40	59	90	112	112
Piping	Type of connection		Flare					
	Diameter	Gas	1/2"	1/2"	5/8"	3/4"	3/4"	3/4"
		Liquid	1/4"	1/4"	3/8"	1/2"	1/2"	1/2"
Refrigerant charge		g	1 120	1 500	2 200	3 200	3 550	4 200
Pipe run	Length	m	20	20	30	50	50	30
	Height	m	10	15	15	30	30	20
Operating limits - cooling mode		min/max	+18°C / +43°C					
Operating limits - heating mode		min/max	-15°C / +24°C					

Nominal cooling capacity based on : - Indoor Air Temp. 27°C DB / 19°C WB - Outdoor Air Temp. 35°C DB

Nominal heating capacity based on : - Indoor Air Temp. 21°C DB - Outdoor Air Temp. 7°C DB/6°C WB

Piping length : 7.5 m with initial charge (mod. YOHC) / 5 m with initial charge (mod. EOHC)

Codes / Options / Accessories

Sizes		12	18	24	36	42	60
Set code		-	S693890501	S693890701	S693891001	S693891203	-
Indoor unit code		-	S683835011	S683897031	S683893711	S683894581	-
Outdoor unit code		-	S683810501	S683810701	S683811011	S683811203	-
Wired control	0	AMR01Y					
Weekly timer control	0	AMR02M					
Centralised control	0	-		AMR03M			
Condensate pump	A	AMP01C			AMP02B		
Low ambient kit	A	Standard	-				Standard
Wall mounting kit	A	AMW42A	AMW50A				
Floor mounting kit	A	AMF44B					

O= option (factory fitted) A= accessory (supplied loose)

Cassette Inverter

EKHC-D 18 to 48

A complete range from 5.2 kW to 14.0 kW



Features

- Inverter DC compressor
- Air filter included
- Condensate pump standard
- Fresh air intake for sizes 24 to 48
- Auto restart
- Rustproof casing



Remote controller

- Wireless
- 5 operation modes (Cool/Heat/Auto/Dry/Fan)
- Sleep mode
- Room temperature setting
- Fan speed selection
- Timer
- LCD display



Cassette Inverter

EKHC-D 18 to 48



Technical features

Set reference		EKHC-D			
Indoor unit	Sizes	EKKC 18 DS	EKKC 24 DS	EKKC 36 DS*	EKKC 48 DS
Outdoor unit	Sizes	ENJC 18 DT	ENJC 24 DT	ENJC 36 DT*	ENJC 48 DT
Cooling capacity	kW	5.2 (1.1 - 6.3)	7.0 (1.5 - 8.5)	10.0 (2.1 - 12.1)	14.0 (2.9 - 16.9)
Heating capacity	kW	5.8 (1.2 - 7.0)	7.6 (1.6 - 9.2)	12.0 (2.5 - 14.5)	15.5 (3.3 - 18.8)
Compressor	Type	Scroll			
Refrigerant		R410A			
Power supply	V/Ph/Hz	230 / 1 / 50		230 / 1 / 50 or 400 / 3 / 50	
Power input	Cooling	kW	1.70	2.30	3.30
	Heating	kW	1.80	2.20	3.70
EER			3.06	3.04	3.03
COP			3.22	3.45	3.24
Energy Class	Cooling		B	B	D
	Heating		C	C	D
Indoor airflow (high / low speed)	m³/h	680	1 180	1 600	1 700
Sound pressure at 1 m	Indoor (H/M/L)	dB(A)	47 / 45 / 42	53 / 51 / 48	53 / 51 / 48
	Outdoor	dB(A)	56	59	62
Dimensions	Indoor	H (mm)	230	260	320
		W (mm)	600	840	840
		D (mm)	600	840	840
	Outdoor	H (mm)	540	680	1 250
		W (mm)	848	913	1 032
		D (mm)	320	378	412
	Panel H / W / D	mm	50 / 650 / 650	60 / 950 / 950	60 / 950 / 950
Net weight	Indoor unit	kg	20	30	38
	Outdoor unit	kg	36	51	128
Piping	Type of connection		Flare		
	Diameter	Gas	1/2"	5/8"	3/4"
		Liquid	1/4"	3/8"	1/2"
Refrigerant charge	g	1 500	1 800	4 000	4 000
Pipe run	Length	m	20	30	50
	Height	m	15	15	30
Operating limits - cooling mode		min/max	+18°C / +50°C		
Operating limits - heating mode		min/max	-15°C / +24°C		

Nominal cooling capacity based on : - Indoor Air Temp. 27°C DB / 19°C WB - Outdoor Air Temp. 35°C DB

Nominal heating capacity based on : - Indoor Air Temp. 21°C DB - Outdoor Air Temp. 7°C DB/6°C WB

Piping length : 5 m with initial charge

* Values for single phase models

Available in May 2010

Codes / Options / Accessories

Sizes		18	24	36	48
Set code		S693795001	S693797521	S693793553	S693795571
Indoor unit code		S683785001	S683782551	S683783581	S683785571
Panel code		S613990531	S613990122	S613990122	S613990122
Outdoor unit code		S683767051	S683767071	S683767101	S683767143
Wall mounting kit	A	AMW50A			
Floor mounting kit	A	AMF44B			

A= accessory (supplied loose)

Cassette

EKHC 12 to 48 FS

A complete range from 3.5 kW to 14.2 kW



NEW



Features

- Condensate pump
- Fresh air intake for sizes 24 to 42
- 3 fan speeds
- 600 x 600 mm (size 12 & 18)
- Auto restart
- Low noise operation
- Rustproof casing



Remote controller

- Wireless
- 5 operation modes (Cool/Heat/Auto/Dry/Fan)
- Sleep mode
- Room temperature setting
- Fan speed selection
- Timer
- LCD display



Cassette

EKHC 12 to 48 FS



Technical features

Set reference			EKHC						
Indoor unit		Sizes	EKKC 12 FS	EKKC 18 FS	EKKC 24 FS	EKKC 36 FS	EKKC 42 FS	EKKC 48 FS	
Outdoor unit		Sizes	ENJC 12 FS	ENJC 18 FS	ENJC 24 FS	ENJC 36 FS	ENJC 42 FS	ENJC 48 FS	
Cooling capacity		kW	3.5	5.3	7.0	10.0	12.0	14.2	
Heating capacity		kW	3.6	5.7	7.5	11.0	14.0	15.5	
Compressor		Type	Rotary			Scroll			
Refrigerant			R410A						
Power supply		V/Ph/Hz	230 / 1 / 50 + E			400 / 3 / 50 + E			
Power input	Cooling	kW	1.15	1.85	2.50	3.50	4.60	5.40	
	Heating	kW	1.10	1.75	2.50	3.40	4.80	5.80	
Indoor airflow		m³/h	550	550	1 180	1 660	1 660	1 660	
EER			3,04	2,86	2,80	2,86	2,61	2,63	
COP			3,27	3,26	3,00	3,24	2,92	2,67	
Energy Class	Cooling		B	C	C	C	D	D	
	Heating		C	C	D	C	D	E	
Sound pressure at 1 m	Indoor (H/M/L)	dB(A)	47 / 45 / 43	47 / 45 / 43	47 / 45 / 43	53 / 51 / 48	53 / 51 / 48	53 / 51 / 48	
	Outdoor	dB(A)	56	56	59	60	60	63	
Dimensions	Indoor	H (mm)	230	230	260	320	320	320	
		W (mm)	600	600	840	840	840	840	
		D (mm)	600	600	840	840	840	840	
		H (mm)	540	540	700	840	1 250	1 250	
	Outdoor	W (mm)	848	848	1 018	1 018	950	950	
		D (mm)	320	320	412	412	412	412	
		Panel H/W/D	mm	50 / 650 / 650	50 / 650 / 650	60 / 950 / 950	60 / 950 / 950	60 / 950 / 950	60 / 950 / 950
Net weight	Indoor unit	kg	20	20	30	38	38	38	
	Outdoor unit	kg	32	40	59	90	112	112	
Piping	Type of connection		Flare						
	Diameter	Gas	1/2"	1/2"	5/8"	3/4"	3/4"	3/4"	
		Liquid	1/4"	1/4"	3/8"	1/2"	1/2"	1/2"	
Refrigerant charge		g	1 000	1 500	2 200	3 200	3 550	3 800	
Max pipe run	Length	m	20	20	30	50	50	50	
	Height	m	15	15	15	30	30	30	
Operating limits - cooling mode		min/max	+18°C / +43°C						
Operating limits - heating mode		min/max	-15°C / +24°C						

Nominal cooling capacity based on : - Indoor Air Temp. 27°C DB / 19°C WB - Outdoor Air Temp. 35°C DB
 Nominal heating capacity based on : - Indoor Air Temp. 21°C DB - Outdoor Air Temp. 7°C DB/6°C WB
 Piping length : 5 m with initial charge

Available in May 2010

Codes / Options / Accessories

Sizes	12	18	24	36	42	48
Set code	S693890401	S693890511	S693890711	S693891011	S693891213	S693891413
Indoor unit code	S683893501	S683895001	S683892551	S683893581	S683894571	S683894871
Panel code	S613990531	S613990531	S613990122	S613990122	S613990122	S613990122
Outdoor unit code	S683810401	S683810501	S683810701	S683811001	S683811203	S683811403
Wall mounting kitA	AMW42A	AMW50A				
Floor mounting kitA	AMF44B					

A= accessory (supplied loose)

Blower Inverter

EUHC-D 18 to 42

A complete range from 5.2 kW to 12.5 kW



Features

- Inverter DC compressor
- Air filter included
- Condensate pump standard (for sizes 24 to 60)
- Fresh air intake
- Indoor unit with centrifugal fan
- Large distances between indoor and outdoor units
- Indoor units with high pressure
- Quiet operation
- Wired control with weekly timer
- Infrared remote control



Wired control

- Weekly timer
- 5 operation modes (Cool/Heat/Auto/Dry/Fan)
- Sleep mode
- Room temperature setting
- Fan speed selection
- Timer
- LCD display



Remote controller

- Wireless
- 5 operation modes (Cool/Heat/Auto/Dry/Fan)
- Sleep mode
- Room temperature setting
- Fan speed selection
- Timer
- Air flow direction setting
- LCD display



Blower Inverter

EUHC-D 18 to 42



Technical features

Set reference			EUHC-D			
Indoor unit		Sizes	EUKC 18 DT	EUKC 24 DT	EUKC 36 DT *	EUKC 42 DT *
Outdoor unit		Sizes	ENJC 18 DT	ENJC 24 DT	ENJC 36 DT *	ENJC 42 DT *
Cooling capacity		kW	5.2 (1.1 - 6.3)	7.0 (1.5 - 8.5)	10.0 (2.1 - 12.1)	12.5 (2.6 - 15.1)
Heating capacity		kW	5.8 (1.2 - 7.0)	7.5 (1.6 - 9.1)	12.0 (2.5 - 14.5)	14.0 (2.9 - 16.9)
Compressor		Type	Inverter Scroll			
Power supply		V/Ph/Hz	230.1.50		230.1.50 or 400.3.50	
Power input	cooling	kW	1.70	2.30	3.50	4.40
	heating	kW	1.80	2.30	3.70	4.50
EER			3.06	3.04	2.86	2.84
COP			3.22	3.26	3.24	3.11
Energy Class	cooling		B	B	C	C
	heating		C	C	C	D
Indoor airflow		m³/h	840	1 400	2 000	2 000
External static pressure		Pa	60	80	150	150
Sound pressure at 1 m	Indoor H / M / L	dB(A)	42 / 40 / 38	44 / 42 / 40	50 / 48 / 46	50 / 48 / 46
	Outdoor	dB(A)	56	59	62	63
Dimensions	Indoor	H (mm)	266	268	290	290
		W (mm)	1 012	1 270	1 251	1 251
		D (mm)	736	504	744	744
	Outdoor	H (mm)	540	680	1 250	1 250
		W (mm)	848	913	1 032	1 032
		D (mm)	320	378	412	412
Net weight	Indoor unit	kg	36	37	57	57
	Outdoor unit	kg	36	51	128	128
Type of connection			Flare			
Piping	Diameter	Gas	1/2"	5/8"	3/4"	3/4"
		Liquid	1/4"	3/8"	1/2"	1/2"
Refrigerant charge		g	1 500	1 800	4 000	4 000
Pipe run	Length	m	20	30	50	50
	Height	m	15	15	30	30
Operating limits - cooling mode		min/max	+18°C / +50°C			
Operating limits - heating mode		min/max	-15°C / +24°C			

Nominal cooling capacity based on : - Indoor Air Temp. 27°C DB / 19°C WB - Outdoor Air Temp. 35°C DB

Nominal heating capacity based on : - Indoor Air Temp. 21°C DB - Outdoor Air Temp. 7°C DB/6°C WB

Piping length : 5 m with initial charge

* Values for single phase models

Options / Accessories

Sizes	18	24	36	42
Indoor unit code	S683607051	S683607071	S683607101	S683607121
Outdoor unit code	S683767051	S683767071	S683767101	S683767121
Wall mounting kit	A	AMW50A		
Floor mounting kit	A	AMF44B		

A= accessory (supplied loose)



Blower

EUHC 18 to 60

A complete range from 5.2 kW to 16.0 kW



Features

- Air filter included
- Condensate pump standard (for sizes 24 to 60)
- Fresh air intake
- Indoor unit with centrifugal fan
- Large distances between indoor and outdoor units
- Indoor units with high pressure
- Quiet operation
- Wired control with weekly timer
- Infrared remote control



Wired control

- Weekly timer
- 5 operation modes (Cool/Heat/Auto/Dry/Fan)
- Sleep mode
- Room temperature setting
- Fan speed selection
- Timer
- LCD display



Remote controller

- Wireless
- 5 operation modes (Cool/Heat/Auto/Dry/Fan)
- Sleep mode
- Room temperature setting
- Fan speed selection
- Timer
- Air flow direction setting
- LCD display



Blower

EUHC 18 to 60



Technical features

Set reference			EUHC				
Indoor unit	Sizes		EUKC 18 FT	EUKC 24 FT	EUKC 36 FT	EUKC 42 FT	EUKC 60 FT
Outdoor unit	Sizes		ENJC 18 FS	ENJC 24 FS	ENJC 36 FS	ENJC 42 FS	ENJC 60 FS
Cooling capacity	kW		5.2	7.0	10.2	12.2	16.0
Heating capacity	kW		5.7	8.0	11.2	14.0	18.5
Compressor	Type		Rotary	Rotary	Scroll	Scroll	Scroll
Power supply	V/Ph/Hz		230.1.50	230.1.50	400.3.50	400.3.50	400.3.50
Power input	cooling	kW	1.85	2.60	3.70	4.80	6.30
	heating	kW	1.75	2.50	3.50	4.90	6.00
EER			2.81	2.69	2.76	2.54	2.54
COP			3.26	3.20	3.20	2.86	3.08
Energy Class	cooling		C	D	D	E	E
	heating		C	C	C	D	D
Indoor airflow	m³/h		840	1 400	2 000	2 000	2 500
External static pressure	Pa		40	80	150	150	150
Sound pressure at 1 m	Indoor	dB(A)	42 / 40 / 38	44 / 42 / 40	50 / 48 / 46	50 / 48 / 46	53 / 50 / 48
	Outdoor	dB(A)	56	59	60	60	64
Dimensions	Indoor	H (mm)	266	268	290	290	330
		W (mm)	1 012	1 270	1 251	1 251	1 251
		D (mm)	736	504	744	744	788
	Outdoor	H (mm)	540	700	840	1 250	1 250
		W (mm)	848	1 018	1 018	950	950
		D (mm)	320	412	412	412	412
Net weight	Indoor unit	kg	36	37	57	57	66
	Outdoor unit	kg	40	59	90	112	123
Piping	Type of connection		Flare				
	Diameter	Gas	1/2"	5/8"	3/4"	3/4"	3/4"
		Liquid	1/4"	3/8"	1/2"	1/2"	1/2"
Refrigerant charge	g		1 500	2 200	3 200	3 550	5 000
Pipe run	Length	m	20	30	50	50	50
	Height	m	15	15	30	30	30
Operating limits - cooling mode		min/max	+18°C / +43°C				
Operating limits - heating mode		min/max	-15°C / +24°C				

Nominal cooling capacity based on : - Indoor Air Temp. 27°C DB / 19°C WB - Outdoor Air Temp. 35°C DB

Nominal heating capacity based on : - Indoor Air Temp. 21°C DB - Outdoor Air Temp. 7°C DB/6°C WB

Piping length : 5 m with initial charge

Options / Accessories

Sizes		18	24	36	42	60
Indoor unit code		S683606151	S683606171	S683616101	S683616121	S683616161
Outdoor unit code		S683810501	S683810701	S683811001	S683811203	S683811603
Wall mounting kit	A	AMW50A				
Floor mounting kit	A	AMF44B				

A= accessory (supplied loose)



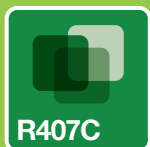
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Window

Y9USE 09 / 12 / 18 B5R

A complete range from 2.6 kW to 5.3 kW



CONTROL PANEL



Features

- Super compact design
- Quiet design
- Easy removed panel
- Fresh air switch
- Sliding chassis
- Two drainage methods
- Slinger-up system



Remote controller

- Wireless
- 3 operation modes
Cool/Heat/Fan)
- Room temperature setting
- Fan speed selection
- Timer

Window

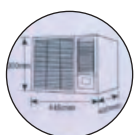
Y9USE 09 / 12 / 18 B5R



Technical features

Models	Sizes	Y9USE 09 B5R	Y9USE 12 B5R	Y9USE 18 B5R
Cooling capacity	kW	2.6	3.5	5.3
Heating capacity	kW	2.6	3.5	5.3
Power supply	V/Ph/Hz	230 / 1 / 50 + E		
Refrigerant	Type	R407C		
Power input (cooling / heating)	kW	1.0 / 0.9	1.3 / 1.2	2.1 / 1.9
Operating current (cooling / heating)	A	4.6 / 4.3	6.1 / 5.7	9.6 / 8.9
EER / COP	W / W	2.6 / 2.8	2.6 / 2.8	2.5 / 2.7
Indoor airflow	m³/h	360	530	750
Refrigerant charge	g	550	940	1 150
Sound pressure at 1 m (H / L)	dB(A)	47 / 43	46 / 42	52 / 47
Net dimensions W / H / D	mm	450 / 346 / 535	600 / 380 / 560	660 / 435 / 650
Packing dimensions W / H / D	mm	495 / 435 / 580	685 / 430 / 620	740 / 520 / 750
Net weight	kg	37	54	59
Gross weight	kg	41	59	64
Applicable area	m²	14-20	18-26	30-40
Stuffing quantity 20' / 40' HQ	Set	220 / 574	133 / 340	94 / 240

Nominal cooling capacity based on : - Indoor Air Temp. 27°C DB / 19°C WB - Outdoor Air Temp. 35°C DB
 Nominal heating capacity based on : - Indoor Air Temp. 21°C DB - Outdoor Air Temp. 7°C DB/6°C WB



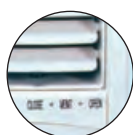
Super compact design



Quiet design



Easy removed panel



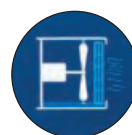
Fresh air switch



Sliding chassis



Two drainage methods



Slinger-up system

Information for minisplit installation

Model	Size	Power supply	Power supply cable size (mm²)	Interconnection cables (number of cables and sizes) (mm²)	Maximum pipe run (m)	Maximum height (m)	Piping diameter Liquid - gas	Outdoor unit charged for a piping length of (m)	Extra refrigerant charge for every meter (gr)
YVHC									
Mimetech High wall Inverter YVHC R410A	09	Indoor	3 x 2.5	4 x 2.5	15	7	1/4 - 3/8"	5	30
	12						1/4 - 1/2"		
EVHC-D									
High wall Inverter EVHC-D R410A	09	Indoor	3 x 2.5	4 x 2.5	15	5	1/4 - 3/8"	5	30
	12				20	10	1/4 - 1/2"		50
	18	Outdoor			25				
	24								
TAHC-TLHC-RAHC									
High wall High Efficiency TAHC-TLHC-RAHC R410A	09	Indoor	3 x 2.5	5 x 2.5	20	8	1/4 - 3/8"	7.5	30
	12			4 x 1.5		10	1/4 - 1/2"		
	18								
	24	Outdoor			5/8 - 3/8"	65			
	28								
RMHC									
High wall Multisplit RMHC R410A	18	Outdoor & Indoor	3 x 2.5	5 x 1.5	10 *	5	1/4 -3/8"	7.5 *	30
	21						1/4-3/8" + 1/4+1/2"		
	27						1/4 -3/8"		
	30						1/4-3/8" + 1/4+1/2"		
ERJC									
Multisplit Inverter ERJC	22	Outdoor	3 x 4	4 x 1.5	15 *	5 *	1/4-3/8" (07 & 09) or 1/4-1/2" (12 & 18) **	5	40
	24								
	28								
YOHC-D									
Convertible Console Inverter YOHC-D R410A	18	Outdoor	3 x 2.5	3 x 2.5 + 2 (BUS communication)	25	15	1/4 - 1/2"	7.5	30
	24		5 x 2.5		30		3/8 - 5/8"		65
	36					20			90
	48								
EOHC-D / EKHC-D									
Console Inverter EOHC-D Cassette Inverter EKHC-D R410A	18	Outdoor & Indoor	Ind: 3 x 1.5 Out: 3 x 2.5	2 x 0.25	20	15	1/4 - 1/2"	5	30
	24		Ind: 3 x 1.5 Out: 3 x 6		30		3/8 - 5/8"		60
	36				50	30	1/2 - 3/4"		120
	48								
EUHC-D									
Blower Inverter EUHC-D R410A	18	Outdoor & Indoor	Ind: 3 x 1.5 Out: 3 x 2.5	2 x 0.25	20	15	1/4 - 1/2"	5	30
	24		30		3/8 - 5/8"		60		
	36		Ind: 3 x 1.5 Out: 3 x 6		50	30	1/2 - 3/4"		120
	42						120		
YOHC - EOHC									
Convertible Console YOHC - EOHC R410A	12	Indoor	3 x 2.5	5 x 2.5 + 5 x 1.5	20	10	1/4 - 1/2"	7.5	30
	18	Outdoor & Indoor	Ind: 3 x 1.5 Out: 3 x 2.5	2 x 0.25	30	15	3/8 - 5/8"	5	60
	24		Ind: 3 x 1.5 Out: 3 x 4		50		30		1/2 - 3/4"
	36		Ind: 3 x 1.5 Out: 3 x 6						
	42		Ind: 3 x 1.5 Out: 5 x 2.5						
	60	Indoor	5 x 2.5	5 x 2.5 + 5 x 1.5	30	20		7.5	90
EKHC									
Cassette EKHC R410A	12	Outdoor & Indoor	Ind: 3 x 1.5 Out: 3 x 2.5	2 x 0.25	20	15	1/4 - 1/2"	5	30
	18		Ind: 3 x 1.5 Out: 3 x 4		30		3/8 - 5/8"		60
	24								
	36		Ind: 3 x 1.5 Out: 3 x 6		50	30	1/2 - 3/4"		120
Blower EUHC R410A	18	Outdoor & Indoor	Ind: 3 x 1.5 Out: 3 x 2.5	2 x 0.25	20	15	1/4 - 1/2"	5	30
	24		Ind: 3 x 1.5 Out: 3 x 4		30		3/8 - 5/8"		60
	36		Ind: 3 x 1.5 Out: 3 x 6		50	30	1/2 - 3/4"		120
	42		Ind: 3 x 1.5 Out: 5 x 2.5						120
	60								120

* Each indoor unit ** next indoor unit

Load calculation

Customer		Date		Project	vv
Telephone		Type of installation			
Address					

Termical loads		PARAMETERS		FACTOR		CAPACITY
WINDOWS	not exposed to sunlight	m ²	x	50	=	
	exposed to sunlight	m ²	x	180	=	
	exposed to sunlight with curtains	m ²	x	135	=	
	exposed to sunlight with awnings	m ²	x	90	=	
OUTDOOR WALLS	exposed to sunlight and insulated	m ²	x	9	=	
	exposed to sunlight non insulated	m ²	x	23	=	
	not exposed to sunlight and insulated	m ²	x	7	=	
	not exposed to sunlight non insulated	m ²	x	12	=	
INDOOR WALLS *		m ²	x	10	=	
CEILING OR ROOF *	insulated	m ²	x	5	=	
	not insulated	m ²	x	12	=	
	insulation under the roof	m ²	x	10	=	
	not insulation under roof	m ²	x	24	=	
FLOOR *	insulated	m ²	x	7	=	
	not insulated	m ²	x	10	=	
FRESH AIR		m ³ /h	x	4,5	=	
PERSONS INSIDE THE ROOM		pers.	x	144	=	
WORKING ELECTRICAL EQUIPMENT		W	x	1	=	
NEEDED COOLING CAPACITY						W

* To not consider if they are next to climatized area.



Important: This is a simplified method to obtain an approximate value of cooling capacity, as long as the climatic conditions are not extreme.
Only for cooling calculation.



VRF Systems

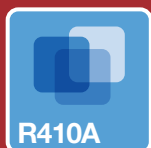
YDS-C • R410A

NEW INDOOR UNIT TYPES

YDS Variable refrigerant flow system

YDMH 100, 140, 252, 280, 335, 400, 450 C

Cooling capacities 10.0 kW to 180.0 kW



YDS System

- Capacities from 10 to 180 kW
- Operating range of nominal power (10% - 100 %)
- Digital Scroll Technology
- Low noise levels
- High performance
- Flexible and quickly installation

Comfort – Quality

- Cooling and heating
- Connection up to 64 indoor units per refrigeration circuit (4 outdoor units)
- Complete range in R410A
- Reduced space of ground
- Is appropriate particularly for existing buildings
- Cooling to -10°C to +48°C (outdoor temperature)
- Heating to -15°C to +30°C (outdoor temperature)



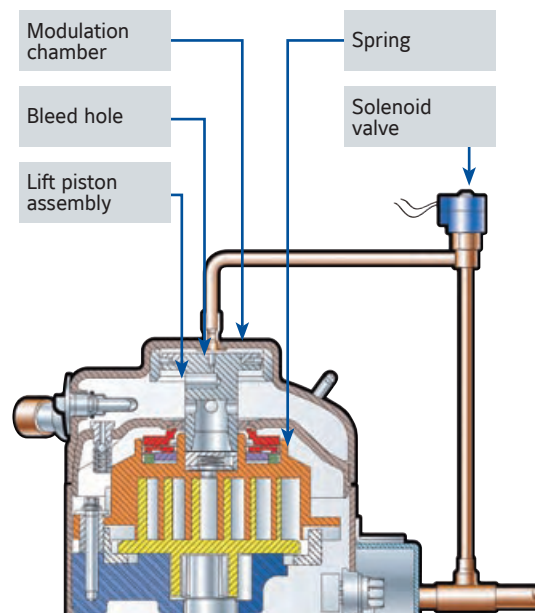
YDS Variable refrigerant flow system

YDMH 100, 140, 252, 280, 335, 400, 450 C



Technology of future: Digital Scroll Compressor operation

The Digital Scroll Compressor uses a simple and effective method to modulate the capacity of an AC, giving unparalleled performance in the modulation field. To modulate the capacity the Digital Scroll operates in two stages, the "loaded state" in which the compressor works as a normal Scroll compressor at full capacity and mass flow, and the "unloaded state", where there is not capacity and mass flow. During the "unloaded state" there is a separation between the scrolls. Once the scrolls separate, any gas passing through is no longer compressed. Changing the cycle time ("Loaded state" time and "Unloaded state" time) determines the capacity modulation of the compressor.



With the introduction of the third generation of the YDS systems, we offer one of the biggest capacity capabilities in the VRF market. Cooling capacity from 10 kW to 180 kW is now available. This capacity is now possible to achieve through connecting from 4 outdoor units together.

The range is based on 2 outdoor units of 10 kW and 14 kW capacity (Digital scroll compressor) and 4 basic modules of different capacities from 25.2 kW to 45 kW, each basic module including a Digital Scroll compressor and a conventional compressor.

You can connect up to 64 indoor units in one

refrigerant circuit. More than 30 models are available, high walls, cassettes, duct and floor/ceiling types. The individual setting is done by infra red or wired remote control. Additionally it is possible to use a central controller.

10.0 - 14.0 kW



25.2 - 45.0 kW



53.2 - 90.0 kW

96.0 - 135.0 kW

140.0 - 180.0 kW





YDS Variable refrigerant flow system

YDMH 100 to 900

YDS Technical features – Single module outdoor unit

Model		YDMH 100C	YDMH 140C	YDMH 252C	YDMH 280C	YDMH 335C	YDMH 400C	YDMH 450C
Cooling capacity	kW	10.00	14.00	25.20	28.00	33.50	40.00	45.00
Heating capacity	kW	12.00	16.00	27.00	31.50	35.00	43.00	47.00
Air flow	m³/h	6 000	6 000	10 000	10 000	10 000	14 000	14 000
Noise level at 1 m	dB(A)	55	55	58	58	58	60	60
Electrical features								
Power supply		3/N/ 400V 50Hz						
Power input "cooling"	kW	3.50	4.50	7.31	8.05	9.68	11.53	12.86
Running current "cooling"	A	8.50	8.50	12.5	14.60	17.30	20.20	23.00
Power input "heating"	kW	3.41	4.40	7.01	8.14	9.12	11.17	12.08
Running current "heating"	A	7.60	7.60	12.00	14.50	16.40	19.50	21.40
Compressor	Type	Digital Scroll			Digital Scroll and Fix Scroll			
Dimensions and Weight								
Height x Width x Length	mm	1245 x 940 x 340	1245 x 940 x 340	1630 x 980 x 800			1630 x 1380 x 830	
Weight	kg	117	117	245			382	
Piping connections								
Gas		18mm / 3/4"		28mm / 1 1/8"			35mm / 1 3/8"	
Liquid		10mm / 3/8"		12mm / 1/2"			16mm / 5/8"	
Refrigerant charge	Type	R410A						
	kg	4.10	4.10	11.0	11.00	11.00	16.00	16.00
Piping length / Height difference								
Max. piping length	m	70	70	175	175	175	175	175
Max. height difference	m	8	8	70	70	70	70	70
Max. number of indoor units		6	8	13	16	20	20	20

YDS Technical features – Outdoor units with two module combinations

Model		YDMH 532C	YDMH 560C	YDMH 615C	YDMH 680C	YDMH 730C	YDMH 785C	YDMH 850C	YDMH 900C
Module combinations		1x YDMH252 1x YDMH280	2x YDMH280	1x YDMH280 1x YDMH335	1x YDMH280 1x YDMH400	1x YDMH280 1x YDMH450	1x YDMH335 1x YDMH450	1x YDMH400 1x YDMH450	2x YDMH450
Cooling capacity	kW	53.2	56.00	61.50	68.00	73.00	78.50	85.00	90.00
Heating capacity	kW	58.5	63.00	66.50	74.50	78.50	82.00	90.00	94.00
Noise level at 1 m	dB(A)	62	62	62	62	62	63	63	63
Electrical features									
Power supply			3/N/ 400V 50Hz						
Power input “cooling”	kW	15.36	16.10	17.73	19.58	20.91	22.54	24.39	25.72
Power input “heating”	kW	15.15	16.28	17.26	19.31	20.22	21.20	23.25	24.16
Dimensions and Weight									
Height x Width x Length	mm	1630 x 1960 x 800			1630 x 2360 x 830			1630 x 2760 x 830	
Weight	kg	490			627			764	
Piping size between the outdoor unit and the first branch									
Gas		35mm / 1 3/8"						42mm / 1 5/8"	
Liquid		18mm / 3/4"						22mm / 7/8"	
Refrigerant piping									
Piping 1		16mm / 5/8"							
Piping 2		18mm / 3/4"							
Connection between modules (out. groups)		YDSA / RD102					YDSA / RD103		
Max. number of indoor units		20	20	20	20	20	20	32	32

YDS Variable refrigerant flow system

YDMH 960 to 1800



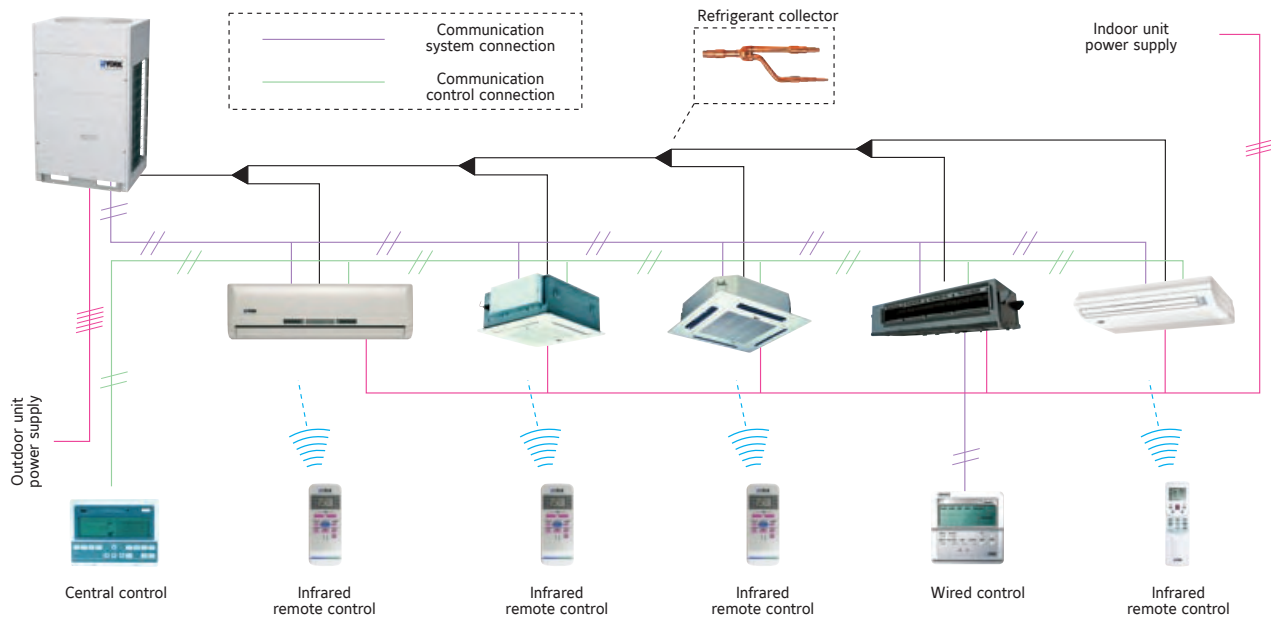
YDS Technical features - Outdoor units with three module combinations

Model		YDMH 960C	YDMH 1010C	YDMH 1065C	YDMH 1130C	YDMH 1180C	YDMH 1235C	YDMH 1300C	YDMH 1350C
Module combinations		2x YDMH280 1x YDMH400	2x YDMH280 1x YDMH450	1x YDMH280 1x YDMH335 1x YDMH450	1x YDMH280 1x YDMH400 1x YDMH450	1x YDMH280 2x YDMH450	1x YDMH335 2x YDMH450	1x YDMH400 2x YDMH450	3x YDMH450
Cooling capacity	kW	96.00	101.00	106.50	113.00	118.00	122.50	130.00	135.00
Heating capacity	kW	106.00	110.00	113.50	121.50	125.50	129.00	137.00	141.00
Noise level at 1 m	dB(A)	64	64	64	64	64	64	64	64
Electrical features									
Power supply		3/N/ 400V 50Hz							
Power input "cooling"	kW	27.63	28.96	30.59	32.44	33.77	35.40	37.25	38.58
Power input "heating"	kW	27.45	28.36	29.34	31.39	32.30	33.28	35.33	36.24
Dimensions and Weight									
Height x Width x Length	mm	1630 x 3340 x 830			1630 x 3740 x 830			1630 x 4140 x 830	
Weight	kg	872			1.009			1.146	
Piping size between the outdoor unit and the first branch									
Gas		42mm / 1 5/8"							
Liquid		22mm / 7/8"							
Refrigerant piping									
Piping 1		16mm / 5/8"							
Piping 2		18mm / 3/4"							
Connection between modules (out. groups)		1x YDSA / RD102 + 1x YDSA / RD01					1x YDSA / RD103 + 1x YDSA / RD01		
Max. number of indoor units		32	32	32	40	40	40	40	40

YDS Technical features - Outdoor units with four module combinations

Model		YDMH 1405C	YDMH 1455C	YDMH 1520C	YDMH 1570C	YDMH 1630C	YDMH 1685C	YDMH 1750C	YDMH 1800C
Module combinations		3x YDMH335 1x YDMH400	3x YDMH335 1x YDMH450	2x YDMH335 1x YDMH400 1x YDMH450	2x YDMH335 2x YDMH450	1x YDMH280 3x YDMH450	1x YDMH335 3x YDMH450	1x YDMH400 3x YDMH450	4x YDMH450
Cooling capacity	kW	140.50	145.50	152.00	156.00	163.00	168.50	175.00	180.00
Heating capacity	kW	148.00	152.00	160.00	164.00	172.50	176.00	184.00	188.00
Noise level at 1 m	dB(A)	65	65	65	65	65	65	65	65
Electrical features									
Power supply		3/N/ 400V 50Hz							
Power input "cooling"	kW	40.57	41.90	43.75	45.08	46.63	48.26	50.11	51.44
Power input "heating"	kW	38.53	39.44	41.49	42.40	44.38	45.36	47.41	48.32
Dimensions and Weight									
Height x Width x Length	mm	1.630 x 4.320 x 830		1.630 x 4.720 x 830		1.630 x 5.120 x 830		1.630 x 5.520 x 830	
Weight	kg	1.117		1.254		1.391		1.528	
Piping size between the outdoor unit and the first branch									
Gas		54mm / 2 1/8"							
Liquid		28mm / 1 1/8"							
Refrigerant piping									
Piping 1		16mm / 5/8"							
Piping 2		18mm / 3/4"							
Connection between modules (out. groups)		1x YDSA / RD102 + 2x YDSA / RD01					1x YDSA / RD103 + 2x YDSA / RD01		
Max. number of indoor units		50	50	50	50	50	64	64	64

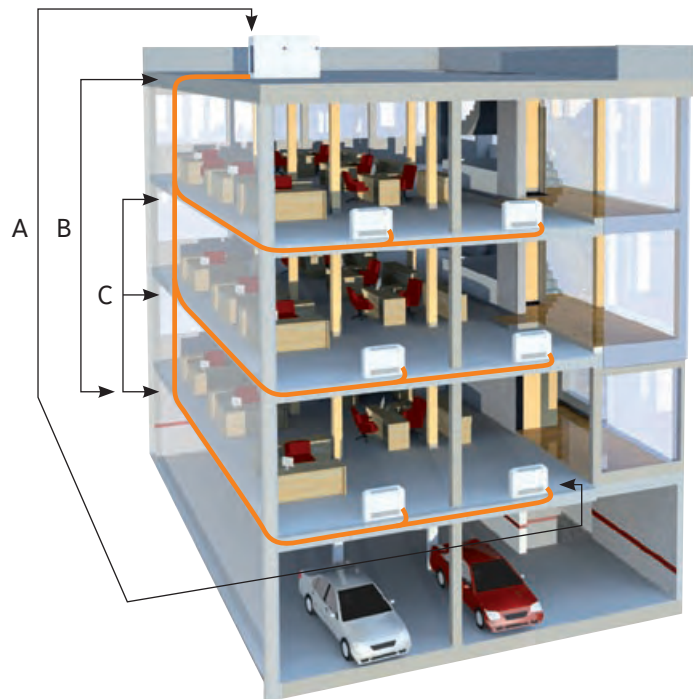
YDS System – System Diagram



YORK System YDS

The YORK system with Digital Scroll is working like the VRF principle and offers you economical air-conditioning system for projects, which are requiring more capacity than the normal split and multi split solutions.

The lengths for the connecting tubes between the indoor and outdoor have been prolonged, which brings you more flexible solutions for complex air-conditioning projects.

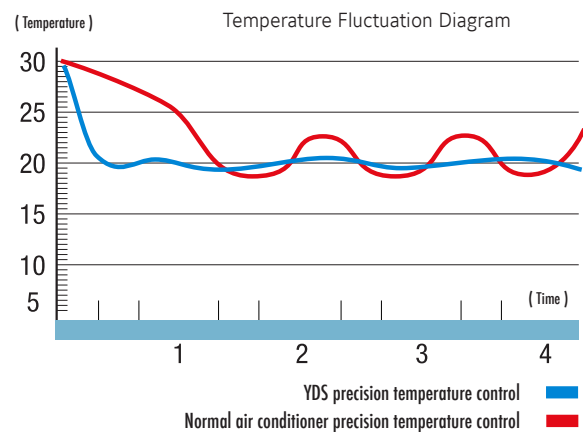


- A – Real length of refrigerant piping : 150 m.
- B – Maximum difference in height : 70 m.
- C – Maximum difference in height between 2 indoor units : 15 m.

Intelligent technology

Comfortable and pleasant intelligent temperature control. The advanced temperature control system maintains the indoor ambient temperature at a precision of $\pm 0.5^{\circ}\text{C}$. This precise temperature control improves the feeling of comfort.

The different indoor units have diverse charges that are measured by the control system, and refrigerant quality distributed to each one of the indoor units is calculated and controlled by the microprocessor, so that each indoor unit may satisfy all individual needs.



Management System YDS

It is possible to control the YDS system through the computer with the software or to connect to an overall BMS with LONWORKS® or BacNet® protocols.



YDS Technical features indoor units

High wall



Model			YDHW022C	YDHW028C	YDHW036C	YDHW045C	YDHW056C
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6
	Heating	kW	2.6	3.2	4.0	5.0	6.3
	Air flow	m³/h	580 / 430 / 410			1 150 / 800 / 650	
Noise level at 1 m	H / M / L	dB(A)	42 / 39 / 36			46 / 43 / 39	
Electrical features	Power supply	V/Ph/Hz	230 / 1 / 50 + N + E				
	Starting current	A	2.2			3.2	
Dimensions and Weight	H x W x D	mm	265 x 790 x 195			292 x 920 x 225	
	Weight	kg	14			15	
Piping	Gas		12mm / 1/2"				
	Liquid		6mm / 1/4"				

High wall (EXV integrated)



Model			YDHC022C	YDHC028C	YDHC036C	YDHC045C	YDHC056C
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6
	Heating	kW	2.6	3.2	4.0	5.0	6.3
	Air flow	m³/h	580 / 500 / 420			900 / 760 / 650	
Noise level at 1 m	H / M / L	dB(A)	35 / 32 / 29			40 / 38 / 34	
Electrical features	Power supply	V/Ph/Hz	230 / 1 / 50 + N + E				
	Starting current	A	2.5			3.3	
Dimensions and Weight	H x W x D	mm	290 x 915 x 210			315 x 1070 x 210	
	Weight	kg	12			15	
Piping	Gas		12mm / 1/2"				
	Liquid		6mm / 1/4"				

Cassette



Model			YDCS022C	YDCS028C	YDCS036C	YDCS045C	YDCS056C
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6
	Heating	kW	2.6	3.2	4.0	5.0	6.3
	Air flow	m³/h	570 / 400				
Noise level at 1 m	H / L	dB(A)	38 / 35			39 / 36	
Electrical features	Power supply	V/Ph/Hz	230 / 1 / 50 + N + E				
	Starting current	A	3.6				
Dimensions and Weight	H x W x D	mm	254 x 580 x 580				
	Weight	kg	18	18	18	24	24
Panel	H x W x D	mm	30 x 650 x 650				
	Weight	kg	3				
Piping	Gas		12mm / 1/2"				16mm / 5/8"
	Liquid		6mm / 1/4"				10mm / 3/8"

Cassette



Model			YDCL056C	YDCL071C	YDCL080C	YDCL090C	YDCL112C	YDCL140C
Capacity	Cooling	kW	5.6	7.1	8.0	9.0	11.2	14.0
	Heating	kW	6.3	8.0	9.0	10.0	12.5	15.0
	Air flow	m³/h	950 / 800 / 650	1 220 / 1 010 / 820		1 540 / 1 300 / 1 120		1 802 / 1 483 / 1 284
Noise level at 1 m	H / M / L	dB(A)	42 / 38 / 35	48 / 45 / 42		53 / 48 / 45		48 / 45 / 43
Electrical features	Power supply	V/Ph/Hz	230 / 1 / 50 + N + E					
	Starting current	A	3.6	4.2		6.0		
Dimensions and Weight	H x W x D	mm	230 x 840 x 840			300 x 840 x 840		
	Weight	kg	27	30		36		
Panel	H x W x D	mm	46 x 950 x 950					
	Weight	kg	6					
Piping	Gas		16mm / 5/8"					
	Liquid		10mm / 3/8"					



Convertible console floor/ceiling

Model			YDFC036C	YDFC045C	YDFC056C	YDFC071C	YDFC080C	YDFC090C	YDFC112C	YDFC140C
Capacity	Cooling	kW	3.5	4.7	5.3	7.0	7.9	8.8	11.7	14.1
	Heating	kW	4.0	5.1	6.2	8.2	9.4	10.6	13.2	15.5
	Air flow	m³/h	650 / 570 / 500	800 / 600 / 500			1 400 / 1 200 / 1 000		2 000 / 1 800 / 1 600	
Noise level at 1 m	H / M / L	dB(A)	43 / 41 / 38				45 / 43 / 40		47 / 45 / 42	
Electrical features	Power supply	V/Ph/Hz	230 / 1 / 50 + N + E							
	Starting current	A	4.7	5.4			6.2		7.7	
Dimensions and Weight	H x W x D	mm	660 x 995 x 198				660 x 1 285 x 198		680 x 1 670 x 240	
	Weight	kg	29				37		54	
Piping	Gas		12mm / 1/2"				16mm / 5/8"			
	Liquid		6mm / 1/4"				10mm / 3/8"			



Floor standing

Model			YDFSE022C	YDFSE028C	YDFSE036C	YDFSE045C	YDFSE056C	YDFSE071C	YDFSE080C	
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1	8.0	
	Heating	kW	2.6	3.2	4.0	5.0	6.3	8.0	9.0	
	Air flow	m³/h	530 / 456 / 400	569 / 485 / 421	624 / 522 / 375	660 / 542 / 440	1 150 / 970 / 830	1 380 / 1 100 / 870	1 332 / 1 212 / 1 023	
Noise level at 1 m	H / M / L	dB(A)	37 / 35 / 33		39 / 37 / 35		41 / 39 / 37		43 / 41 / 38	
Electrical features	Power supply	V/Ph/Hz	230 / 1 / 50 + N + E							
Dimensions and Weight	H x W x D	mm	625 / 1 000 / 220			625 / 1 200 / 220		625 / 1 500 / 220		
	Weight	kg	30			37		44		
Piping	Gas		12mm / 1/2"				16mm / 5/8"			
	Liquid		6mm / 1/4"				10mm / 3/8"			



Floor standing concealed

Model			YDFSC022C	YDFSC028C	YDFSC036C	YDFSC045C	YDFSC056C	YDFSC071C	YDFSC080C
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1	8.0
	Heating	kW	2.6	3.2	4.0	5.0	6.3	8.0	9.0
	Air flow	m³/h	530 / 456 / 400	569 / 485 / 421	624 / 522 / 375	660 / 542 / 440	1 150 / 970 / 830	1 380 / 1 100 / 870	1 332 / 1 212 / 1 023
Noise level at 1 m	H / M / L	dB(A)	37 / 35 / 33		39 / 37 / 35		41 / 39 / 37		
Electrical features	Power supply	V/Ph/Hz	230 / 1 / 50 + N + E						
Dimensions and Weight	H x W x D	mm	544 / 840 / 212			544 / 1 036 / 212		544 / 1 336 / 212	545 / 1 336 / 212
	Weight	kg	26			29.5		36	
Piping	Gas		12mm / 1/2"					16mm / 5/8"	
	Liquid		6mm / 1/4"					10mm / 3/8"	



Blower

Model			YDDN022C	YDDN028C	YDDN036C	YDDN045C	YDDN056C	YDDN071C	YDDN080C	YDDN090C	YDDN112C	YDDN140C	
Capacity	Cooling	kW	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	14.0	
	Heating	kW	2.6	3.2	4.0	5.0	6.3	8.0	8.4	10.0	12.5	15.0	
	Air flow	m³/h	570 / 400 / 320			1 160 / 1 100 / 950		1 400 / 1 100 / 900		1 800 / 1 500 / 1 200			
Noise level at 1 m	H / M / L	dB(A)	34 / 32 / 30	35 / 33 / 31		45 / 41 / 38		46 / 44 / 42		47 / 45 / 43		48 / 46 / 44	
Electrical features	Power supply	V/Ph/Hz	230 / 1 / 50 + N + E										
	Static pressure	Pa	10			40				70			
Dimensions and Weight	H x W x D	mm	210 x 955 x 385			298 x 1 000 x 800				298 x 1 350 x 800			
	Weight	kg	15			37.2				51.4			
Piping	Gas		12mm / 1/2"			16mm / 5/8"							
	Liquid		6mm / 1/4"			10mm / 3/8"							



High Static Pressure Blower

Model			YDDH200C	YDDH250C	YDDH280C
Capacity	Cooling	kW	20.0	25.0	28.0
	Heating	kW	22.6	27.5	31.1
	Air flow	m³/h	4 180 / 3 820 / 3 200		4 400 / 3 940 / 3 300
Noise level at 1 m	H / M / L	dB(A)	61 / 58 / 55		
Electrical features	Power supply	V/Ph/Hz	230 / 1 / 50 + N + E		
	Static pressure	Pa	196		
Dimensions and Weight	H x W x D	mm	500 x 1 425 x 928		
	Weight	kg	122		
Piping	Gas		16mm / 5/8"		
	Liquid		10mm / 3/8"		

Controllers

Remote Controllers

R05 Remote Controller

Light background, LCD display screen, clock function, ON / OFF / Temperature setting / Mode setting / Fan speed setting / Horizontal swing setting functions. Using for the Floor/Ceiling units.



R51 Remote Controller

LCD display, clock function, ON / OFF / Temperature setting / Mode setting / Fan speed / Swing etc. Using for all the indoor units except Floor/Ceiling units.



Central Control Monitor

AMR02Y Outdoor CCM

Max. 32 outdoor units control.



AMR03Y Indoor CCM

Max. 64 indoor units control; New mode lock function.



AMR09Y Indoor CCM

Max. 64 indoor units control. New weekly timer function.



Wired Controller

AMR01Y

ON / OFF / Mode setting / Temp. setting / Fan speed / Time setting / Swing, etc.
Temp sensor built-in.

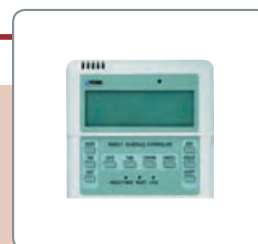


Weekly Timer

AMR02M Weekly schedule timer

Control one indoor unit.

Note: Weekly schedule timer and indoor CCM cannot be used simultaneously



BMS Accessories

AMR07Y LonWorks gateway

Matched with network CCM system (V3.0), connect to LonWorks.



Software 3.0

3rd network central control system kit.



AMR08Y Bacnet gateway

BACNET connection, max. connection 4 air-conditioning groups
(each group can connect max. 64 indoor units or 32 outdoor units).





Water Systems

CHILLER AND HEAT PUMP
INDOOR WATER TERMINALS

ECOFRIO v2

Air cooled chiller

YLCA 5 to 27

A complete range from 5.4 kW up to 25.6 kW



Features

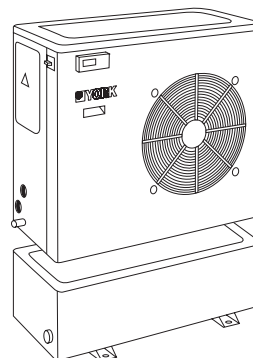
- Scroll compressor units
- Very compact units
- High efficiency units
- Leaving and return water temperature control
- Hydro pack standard
- Buffer tank supresion function
- Dynamic set point function
- Fan speed control as standard
- Coated condenser fins as standard (blue fin)
- Condenser protection grill
- Flow switch and water filter included

Options / Accessories

- Condenser copper fins
- BMS Communication
- Remote control / Remote terminal
- High pressure fans
- External buffer tank



Indoor water terminals: see page 86



External Buffer tank in accessories for sizes 5 to 27

ECOFRIO v2

YLCA 5 to 27



Technical features

M Single phase **T** Three phases supply **C** Hydro Pack

Model			YLCA G1								
			5 MC	7 MC	7 TC	9 MC	9 TC	12 TC	15 TC	20 TC	27 TC
Performance	Cooling capacity (1)	kW	5.4	7.1	7.1	8.6	8.6	12.4	14.5	19.5	25.6
	Total Input Power (1)	kW	1.9	2.6	2.6	3.3	3.3	4.2	5.4	6.9	9.2
	EER		2.87	2.76	2.41	2.76	2.59	2.97	2.52	2.81	2.81
	ESEER		2.88	2.88	2.88	2.93	2.93	3.20	2.91	3.24	3.17
	Capacity steps	%	0 / 100								
	Sound power level	dB(A)	70	70	70	71	71	73	73	74	78
	Sound pressure level at 10 m	dB(A)	40	40	40	41	41	43	43	44	48
Compressor	Type		Scroll								
	Quantity		1								
Air side heat exchanger	Fans quantity		1					2			
	Working ambient temperature	°C	(4) (-18°C) -10°C ~ 46°C							-18°C ~ 46°C	
Water side heat exchanger	Type		Plate Heat Exchanger								
	Unit water volume	Litres	1	1.1	1.1	1.2	1.2	1.5	2	2.8	3.2
	Pump Type		Circulator (3 speeds)					Multi stage			
	Nominal water flow	l/h	925	1 225	1 430	1 225	1 475	2 065	2 530	3 360	4 405
	Available pressure (1) (2)	kPa	49	75.5	75.5	71	67.5	113	149	129.5	182
	Working water leaving temp. (3)	°C	-5°C to 15°C								
	Water connections	inch	1"							1 1/4"	
Dimensions & Weight	Height / Width / Depth	mm	762/905/460	965 / 905 / 460				1 270 / 905 / 460		1270/1430/502	1270/1876/502
	Weight	kg	75	99		100		146	160	220	290
Electrical features	Voltage / Phases / Frequency	V/ph/hz	230-1-50		400-3-50	230-1-50	400-3-50+N+E				
	Running current (max) (2)	A	11.8	17.1	7.6	23	8.3	11.6	15.8	18.1	23

(1) net values at Eurovent nom. conditions (2) with filter (3) below 6°C with glycol (4) -18°C with LAK option
Nominal conditions: Cooling capacities in kW given for 7°C water leaving temperature Δt 5°C and 35°C ambient temperature

Compatibility table / Codes

Model	5 MC	7 MC	7 TC	9 MC	9 TC	12 TC	15 TC	20 TC	27 TC
YLCA Cooling only units (Pack included)	S668550582	S668550782	S668550784	S668550982	S668550984	S668551282	S668551582	S668552082	S668552782

Use this unit code when a factory fitted option is NOT required

Accessories (Supplied loose)

Water tank	S613990200 (20 litres)	S613990200 or S613990300	S613990300 (30 litres)	S613991150 (115 litres)
Remote control	S613802011			
Remote terminal	S613802231			
Anti vibration mounting	S613029001			S613029002
BMS Communication	S613802041			
Compressor heater	S613760322			STANDARD

Model	5 MC	7 MC	7 TC	9 MC	9 TC	12 TC	15 TC	20 TC	27 TC
YLCA Cooling only units (Pack included)	S668000000	S668000002	S668000004	S668000006	S668000008	S668000010	S668000012	S668000014	S668000016

Use this unit code when a factory fitted option is required

Options (Factory fitted)

High pressure fans	S611991082	S611991083	S611991085
Copper/copper condenser	Contact JCI sales office		
LAK -18°C	S613112083		STANDARD

ECOFRIO v2 Plus

Air to water heat pump

YLHA 5 to 27 Plus

A complete range from 5.4 kW up to 25.8 kW



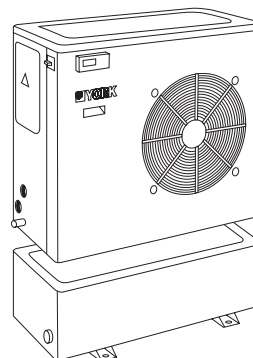
Indoor water terminals: see page 86

Features

- Scroll compressor units
- Very compact units
- High efficiency units
- Leaving and return water temperature control
- Hydro pack standard
- Buffer tank supresion function
- Dynamic set point function
- Fan speed control as standard
- Coated condenser fins as standard (blue fin)
- Condenser protection grill
- Flow switch and water filter included

Options / Accessories

- Condenser copper fins
- BMS Communication
- Remote control / Remote terminal
- High pressure fans
- Auxiliary electric heater
- External buffer tank
- Tray cable heater



External Buffer tank in accessories for sizes 5 to 27

ECOFRIO v2 Plus

YLHA 5 to 27 Plus



Technical features

M Single phase **T** Three phases supply **C** Hydro Pack

Model			YLHA PLUS G1								
			5 MC	7 MC	9 MC	9 TC	12 MC	12 TC	15 TC	20 TC	27 TC
Performance	Cooling capacity (1)	kW	5.4	7.1	8.7	8.7	11.8	11.5	14.5	19.4	25.8
	Total Input Power (1)	kW	1.9	2.6	3.5	3.5	4.2	4.2	5.5	7	8.9
	EER (1)		2.8	2.8	2.5	2.5	2.8	2.9	2.5	2.8	2.9
	ESEER		2.86	2.85	3.00	3.00	3.08	3.08	2.91	3.17	3.25
	Heating capacity (1)	kW	6.2	7.2	9.8	9.5	12.3	12	16.5	20.9	27.5
	Total Input Power (1)	kW	1.9	2.5	3.1	3.1	3.9	4.2	5.2	6.6	8.6
	COP (1)		3.3	2.9	3.0	3.0	3.1	3.0	3.1	3.3	3.3
	Heating capacity (2)	kW	6.4	7.2	9.7	9.7	12.4	12.6	16.4	20.5	26.8
	COP (2)		3.8	3.5	3.9	3.9	4.0	3.9	4.0	4.0	4.0
	Capacity steps	%	0 / 100								
	Sound power level	dB(A)	70	70	71	71	73	73	73	74	78
	Sound pressure level at 10 m	dB(A)	40	40	41	41	43	43	43	44	48
Compressor	Type		Scroll								
	Quantity		1								
Air side heat exchanger	Fans quantity		1				2				
	Working ambient temp. cool / heat mode		-18°C ~ 46°C / -15°C ~ 20°C								
Water side heat exchanger	Type		Plate Heat Exchanger								
	Unit water volume	Litres	1	1.1	1.2	1.2	1.5	1.5	2	2.8	3.2
	Pump Type		Circulator (3 speeds)				Multi stage				
	Nominal water flow in cooling	l/h	930	1 220	1 495	1 495	2 020	1 980	2 375	3 335	4 440
	Available pressure (1) (3)	kPa	49	76	67.5	67.5	100	116	157.5	124	182
	Working water leaving temp. cooling/heating mode (4)	°C	-5°C to 15°C / 30°C to 50°C								
	Water connections	inch	1"							1 1/4"	
	Dimensions & Weight	Height / Width / Depth	mm	762/905/460	965 / 905 / 460				1 270 / 905 / 460		1270/1430/502
Weight		kg	77	102	103		154		164	235	330
Electrical features	Voltage / Phases / Frequency	V/ph/hz	230-1-50			400-3-50		230-1-50		400-3-50+N+E	
	Running current (max) (3)	A	11.8	16.4	23	5.5	25.7	11.6	12.4	15.5	21

(1) net values at Eurovent nom. conditions (2) net values at floor heating conditions (3) with filter (4) below 6°C with glycol

Nominal conditions: Cooling capacities for 7°C water leaving temperature Δt 5°C and 35°C ambient temperature

Heating capacities for 45°C water leaving temperature Δt 5°C and 7°C ambient temperature

Floor heating conditions: Heating capacities for 35°C water leaving temperature Δt 5°C and 7°C ambient temperature

Compatibility table / Codes

YLHA Plus Model	5 MC	7 MC	9 MC	9 TC	12 MC	12 TC	15 TC	20 TC	27 TC
Heat pump units (Pack included)	S668650585	S668650785	S668650985	S668650986	S668651297	S668651285	S668651585	S668652085	S668652785
YLHA Plus Model	5 MCS	7 MCS	9 MCS	-	12 MCS	-	-	-	-
Heat pump units (Pack included) with soft start	S668650583	S668650786	S668650987	-	S668651287	-	-	-	-

Use this unit code when a factory fitted option is NOT required

Accessories (Supplied loose)

Water tank	S613990200 (20 litres)	S613990200 or S613990300	S613990300 (30 litres)	S613991150 (115 litres)
20 L + 2 kW (1~)	S613990205	-	-	-
20 L + 3 kW (1~)	-	S613990206	-	-
20 L + 3 kW (3~)	-	-	S613990207	-
Water tank + heater	30 L + 3.5 kW (1~)	-	S613990307	-
30 L + 4.5 kW (3~)	-	-	S613990305	-
30 L + 6 kW (3~)	-	-	S613990306	-
115 L + 10.5 kW (3~)	-	-	-	S613991151
Remote control	S613802011			
Remote terminal	S613802231			
Anti vibration mounting	S613029001			S613029002
BMS Communication	S613802041			
Compressor heater	S613760322			STANDARD
Tray cable heater	S611080788			

YLHA Plus Model	5 MC	7 MC	9 MC	9 TC	12 MC	12 TC	15 TC	20 TC	27 TC
Heat pump units (Pack included)	S6686000233	S6686000234	S6686000236	S6686000237	S6686000241	S6686000239	S6686000242	S6686000243	S6686000244
YLHA Plus Model	5 MCS	7 MCS	9 MCS	-	12 MCS	-	-	-	-
Heat pump units (Pack included) with soft start	S6686000232	S6686000235	S6686000238	-	S6686000240	-	-	-	-

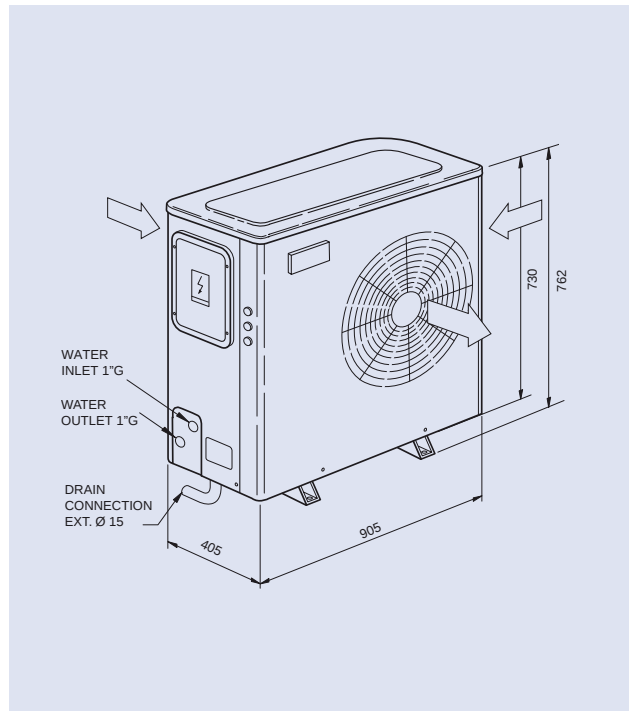
Use this unit code when a factory fitted option is required

Options (Factory fitted)

High pressure fans	S611991082	S611991083	S611991085
Copper/copper condenser	Contact JCI sales office		

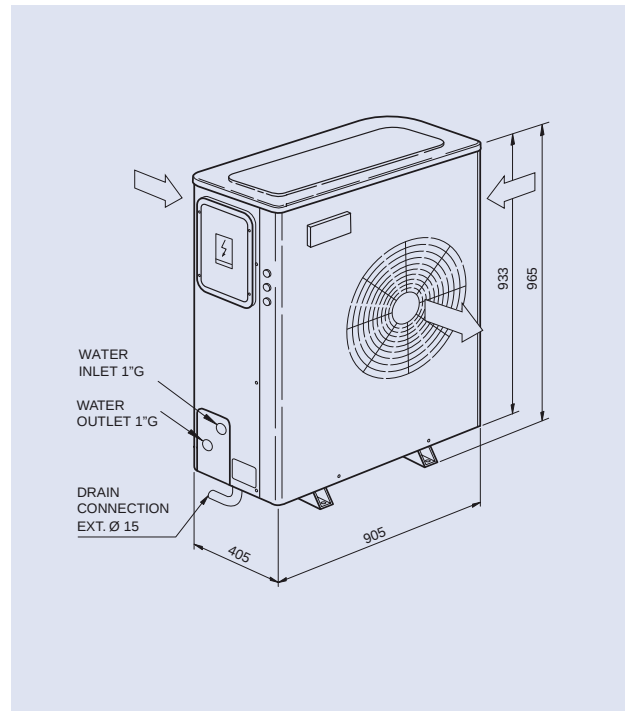
Dimensions, hydraulic connections and space requirements

YLCA-YLHA PLUS 5 MC



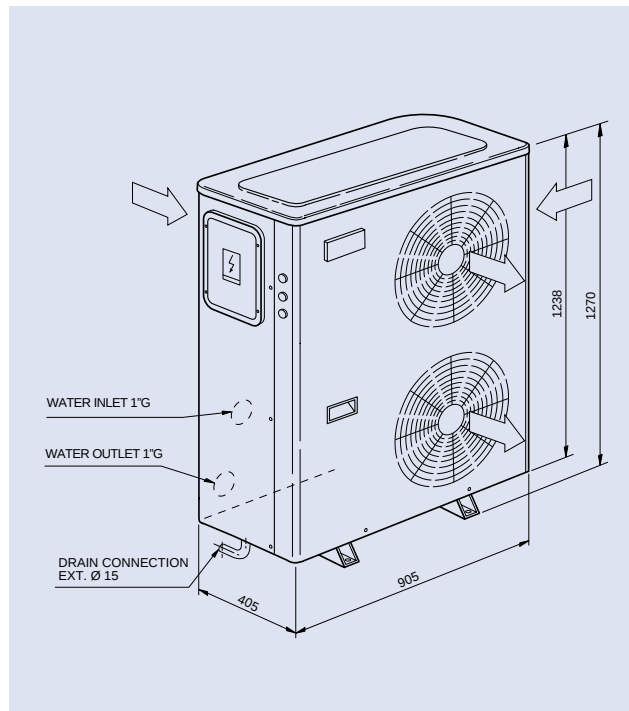
All dimensions in mm. Drawings not a scale.

YLCA-YLHA PLUS 7/9 MC/TC



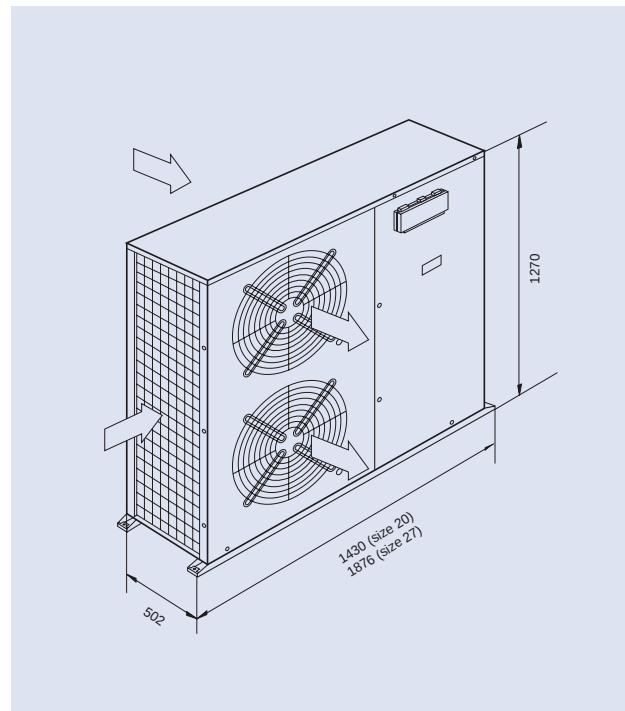
All dimensions in mm. Drawings not a scale.

YLCA-YLHA PLUS 12/15 MC/TC



All dimensions in mm. Drawings not a scale.

YLCA-YLHA PLUS 20/27 TC

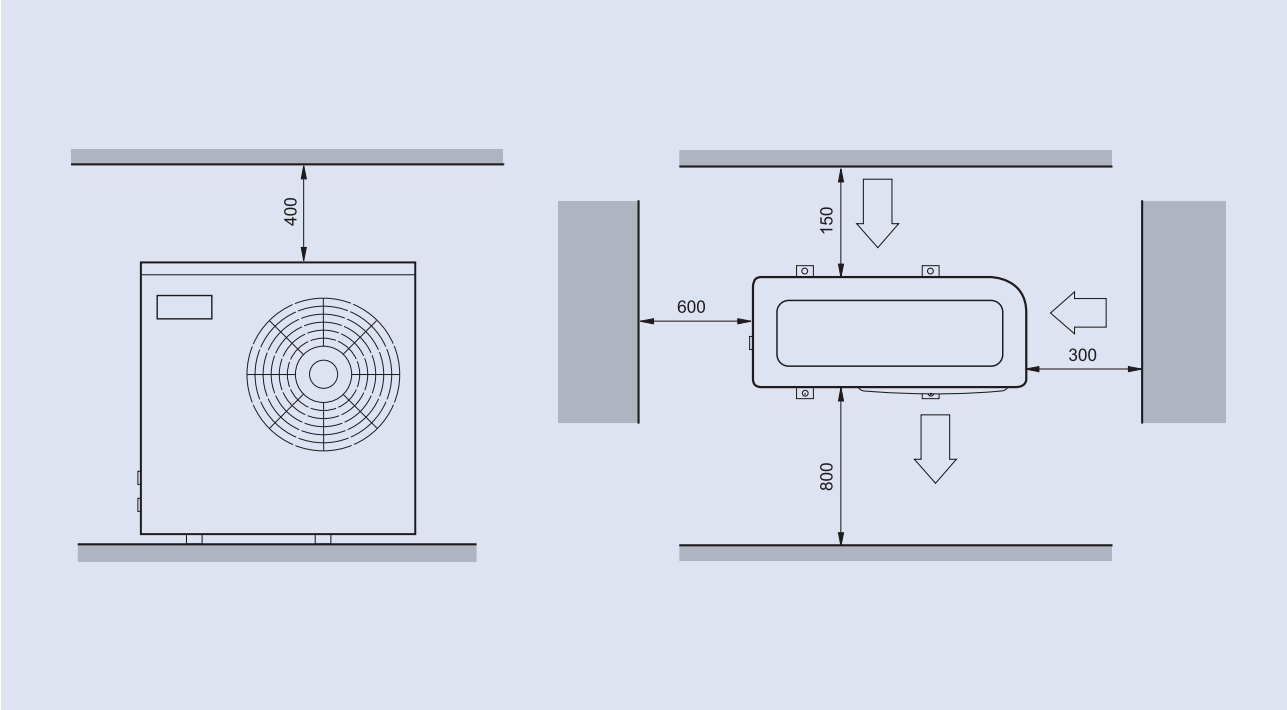


All dimensions in mm. Drawings not a scale.

YLCA-YLHA PLUS 5 to 27

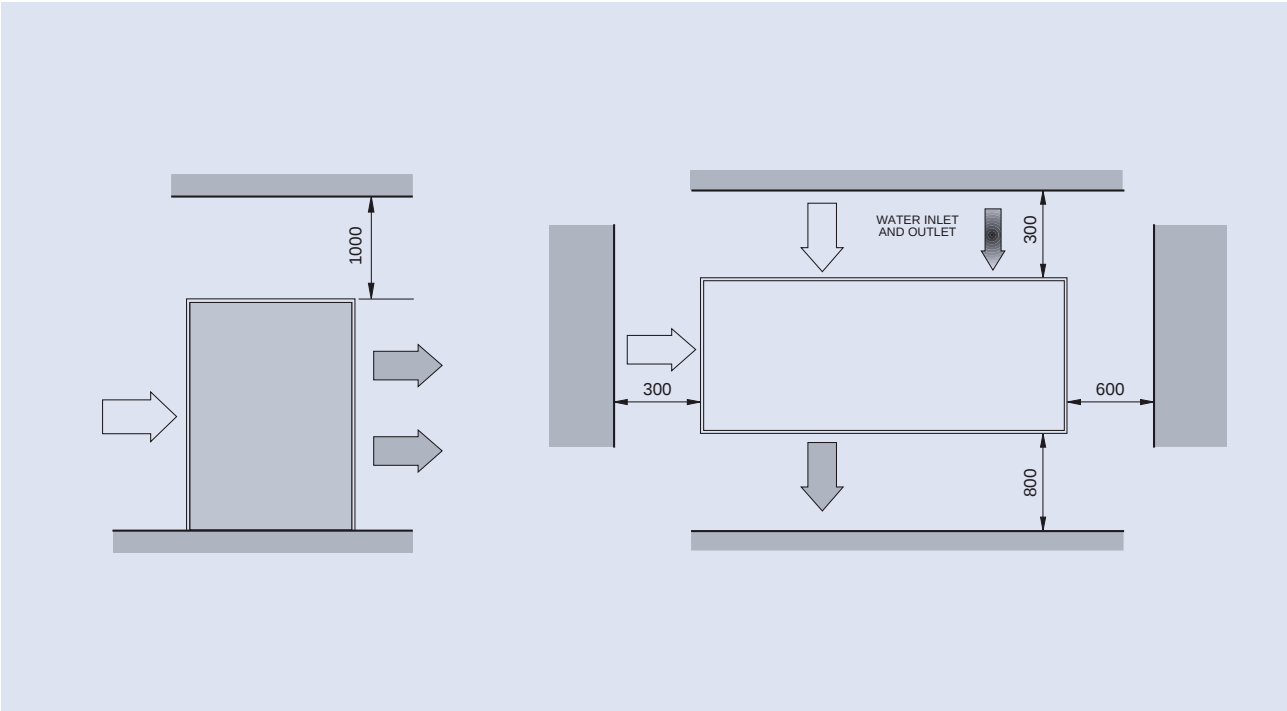


Models YLCA-YLHA PLUS 5/7/9/12/15



All dimensions in mm. Drawings not a scale.

Models YLCA-YLHA PLUS 20/27



All dimensions in mm. Drawings not a scale.

ECOFRIO v2

Air cooled chiller / heat pump

YLCA / YLHA 40 to 150

A complete range from 39.6 kW up to 151 kW



Indoor water terminals: see page 86

Features

YLCA/YLHA 40 to 80

- 2 capacity steps (1 for size 40)
- LWT & RWT Control
- Hydro Pack standard
- Buffer tank integrated
- Plate heat exchanger
- Condenser fins (blue fin)
- Pressostatic LAK (-18°C)

YLCA/YLHA 100 to 150

- Same features as YLCA/YLHA 40 to 80
- 4 capacity steps
- High efficiency at full and partial load
- Reduced noise levels
- 1/4 turn lock for easy access

Options / Accessories

- Unit without pack
- BMS Communication
- Remote control
- Remote terminal
- Water filter (unit without Hydro Pack)
- Flow switch (unit without Hydro Pack)
- Low noise version
- Dual pump version
- Antivibration mountings
- Condenser protection grille

ECOFRIO v2

YLCA / YLHA 40 to 150



Technical features

T Three phases supply P Hydro Pack H Heat pump

Model			YLCA / YLHA									
			40 T-TP	50 T-TP	60 T-TP	80 T-TP	100 T-TP	120 T-TP	150 T-TP			
Performance	Cooling capacity c/o units (1)	kW	39.6	52.1	60.5	77.6	98	119	151			
	Total Input Power (1) (3)	kW	17.2	18.2	19.5	26.6	33.8	40.1	53.5			
	EER (1)		3.0	2.9	3.1	2.9	2.9	2.9	2.8			
	ESEER (1)		3.31	3.24	3.44	3.26	3.56	3.80	3.60			
	Cooling capacity h/p units (1)	kW	37.8	50.1	60.5	72.2	96	114	145			
	Heating capacity h/p units (1)	kW	38.6	51.6	59.6	74.7	104	119.6	150			
	Total Input Power cool/heat mode (1) kW		13.3 / 12.6	18.1 / 18.2	19.6 / 19.7	26 / 26.3	35.6 / 37	43.3 / 39.6	51.3 / 53.5			
	EER / COP (1)		2.8 / 3.0	2.7 / 2.8	3.1 / 3.0	2.7 / 2.8	2.7 / 2.8	2.7 / 3.0	2.8 / 2.8			
	ESEER (1)		3.30	3.14	3.51	3.09	3.42	3.71	4.18			
	Capacity steps	%	0 / 100	0-50-100			0-25-50-75-100					
Sound power level STD / LN	dB(A)	82 / -	84 / 78	84 / 78	86 / 82	86 / 82	86 / 82	88 / 84				
Sound press. level 10 m STD / LN	dB(A)	54 / -	56 / 50	56 / 50	58 / 54	58 / 54	58 / 54	60 / 56				
Compressor	Type		Scroll									
	Quantity		1	2			4					
Air side heat exchanger	Fans quantity		2		3		4					
	Working ambient temp. cool. / heat. mode (4)		-18°C ~ 46°C / -10°C ~ 20°C									
Water side heat exchanger	Type		Single Plate Heat Exchanger				Dual Plate Heat Exchanger					
	Unit water volume (2)	Litres	131	188	194	285	168	170	179			
	Pump Type		Multistage horizontal pumps									
	Nominal water flow	l/h	6 820	8 960	10 400	13 350	16 860	20 470	25 970			
	Available pressure (1) (2)	kPa	105	108	158	123	190	202	186			
	Pressure drop (1) (3)	kPa	75	40	51	61	60	32	27 5			
	Working range water leaving temperature cooling / heating (5)		-5°C ~ 15°C / 30°C ~ 50°C									
	Water connections (2)	inch	1 1/4"	2"			2 1/2"					
Dimensions & Weight	Height / Width / Depth	mm	1573/1500/822		1600 / 1011 / 2104		1600/1118/2944		2190 / 1101 / 3416	2263/1101/3770		
	Weight without pack / pack c/o	kg	340 / 380		524 / 580		555 / 611		715 / 785	1 124 / 1 220	1 190 / 1 286	1 585 / 1 673
	Weight without pack / pack h/p	kg	337 / 397		537 / 593		568 / 624		735 / 805	1 154 / 1 250	1 220 / 1 316	1 615 / 1 703
Electrical features	Voltage / Phases / Frequency	V/ph/hz	400 / 3 / 50+N+E									
	Running current (max) (2)	A	33	46.2	49.2	70.5	80	108	120			

YLCA: Cooling only units models. YLHA: Air to water heat pump models.

(1) net values at Eurovent nominal conditions (2) version P with hydro kit with filter (3) version without hydro kit (4) -18°C with LAK option (5) below 6°C with glycol

Nominal conditions: Cooling capacities in kW given for 7°C water leaving temperature Δt 5°C and 35°C ambient temperature

Heating capacities in kW given for 45°C water leaving temperature and 7°C ambient temperature

Compatibility table / Codes

Model	40 TP	50 TP	60 TP	80 TP	100 TP	120 TP	150 TP
Cooling only unit (Pack included)	S668554084	S668525182	S668526182	S668528182	S668521182	S668551156	S668551507
Heat pump unit (Pack included)	S668654084	S668625182	S668626182	S668628182	S668621182	S668651156	S668651506

Model	40 T	50 T	60 T	80 T	100 T	120 T	150 T
Cooling only unit (without Pack)	S668554080	S668525180	S668526180	S668528180	S668521180	S668551154	S668551503
Heat pump unit (without Pack)	S668654080	S668625180	S668626180	S668628180	S668621180	S668651154	S668651504

Use this unit code when a factory fitted option is NOT required

Accessories (Supplied loose)

AVM mounting	S613029002	S613026080	S613028180	S613021580
Mechanical flow switch			S611992021	
Water Filter *	S611300150	S611300170		S611300190
Remote control			S613802011	
Remote terminal		S613802231		-
Cable for remote connection of the terminal		-		S613802241
B.M.S. Communication		S613802041		S613802051

Model	40 TP	50 TP	60 TP	80 TP	100 TP	120 TP	150 TP
Cooling only unit (Pack included)	S668000226	S668000247	S668000251	S668000255	S668000259	S668000107	S668000111
Heat pump unit (Pack included)	S668000228	S668000248	S668000252	S668000256	S668000260	S668000131	S668000135

Model	40 T	50 T	60 T	80 T	100 T	120 T	150 T
Cooling only unit (without Pack)	S668000038	S668000245	S668000249	S668000253	S668000257	S668000105	S668000109
Heat pump unit (without Pack)	S668000039	S668000246	S668000250	S668000254	S668000258	S668000129	S668000133

Use this unit code when a factory fitted option is required

Options (Factory fitted)

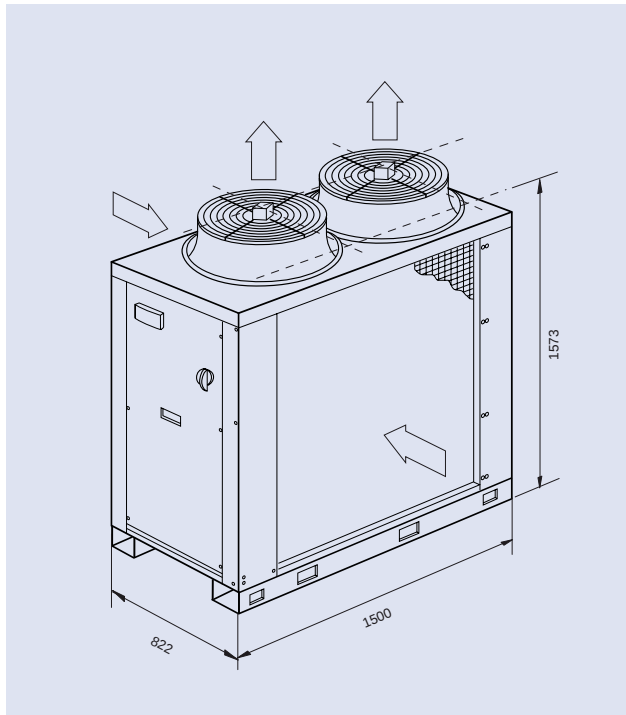
Copper/copper condenser	Contact JCI sales office					
Low Noise version	NA	S613990650	S613990850	S613991050	S613991285	S613991584
Softstart	S606744692	S606744693			S606744694	
Dual pumps	NA	S613990540	S613990640	S613990840	S613991040	S613991286
Condenser protection grille	S613995090	S613995091	S613995092	S613995093		S613995094

* included with unit version "P" only for unit without pack. Filter size: 2" for YLCA 40-50-60-80 and 2 1/2" for YLHA 100-120-150.

NA= Not available

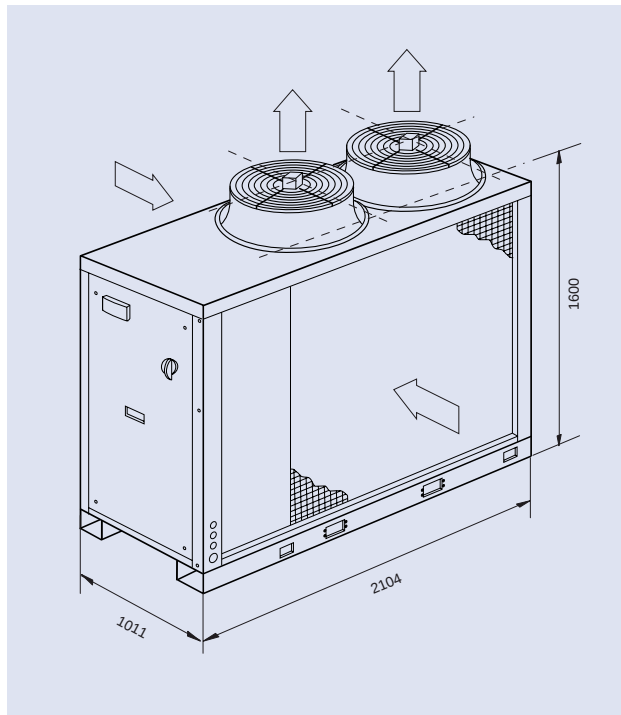
Dimensions, hydraulic connections and space requirements

YLCA-YLHA 40 T-TP



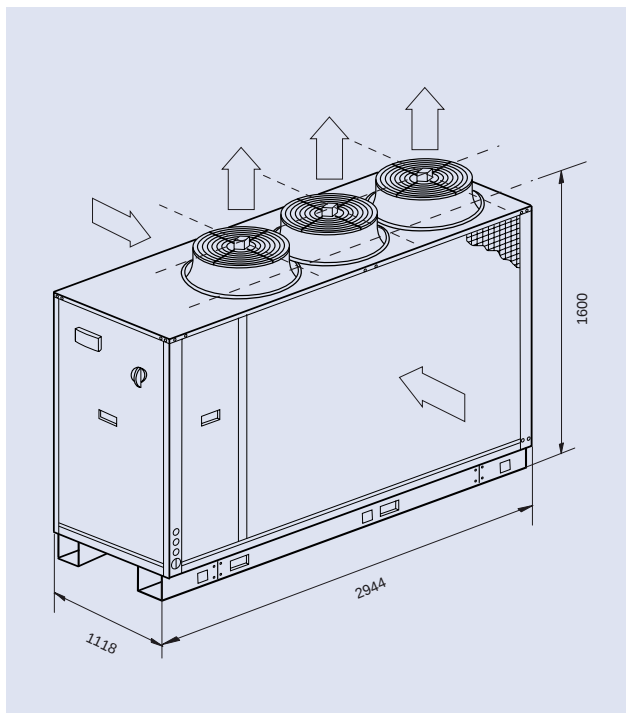
All dimensions in mm. Drawings not a scale.

YLCA-YLHA 50 and 60 T-TP



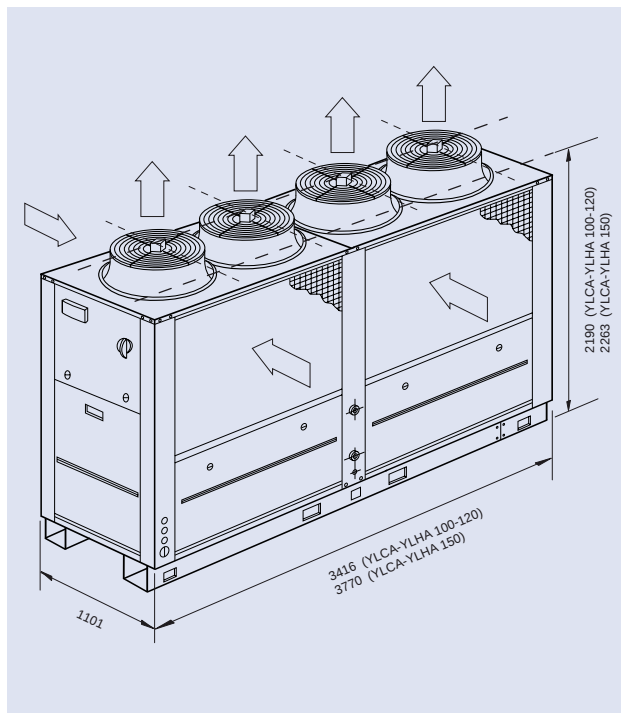
All dimensions in mm. Drawings not a scale.

YLCA-YLHA 80 T-TP



All dimensions in mm. Drawings not a scale.

YLCA-YLHA 100, 120 and 150 T-TP

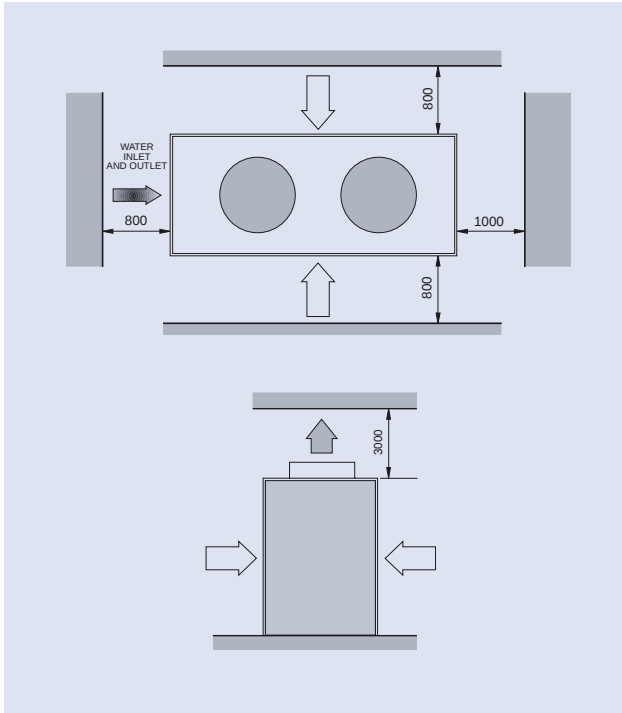


All dimensions in mm. Drawings not a scale.

YLCA / YLHA 40 to 150

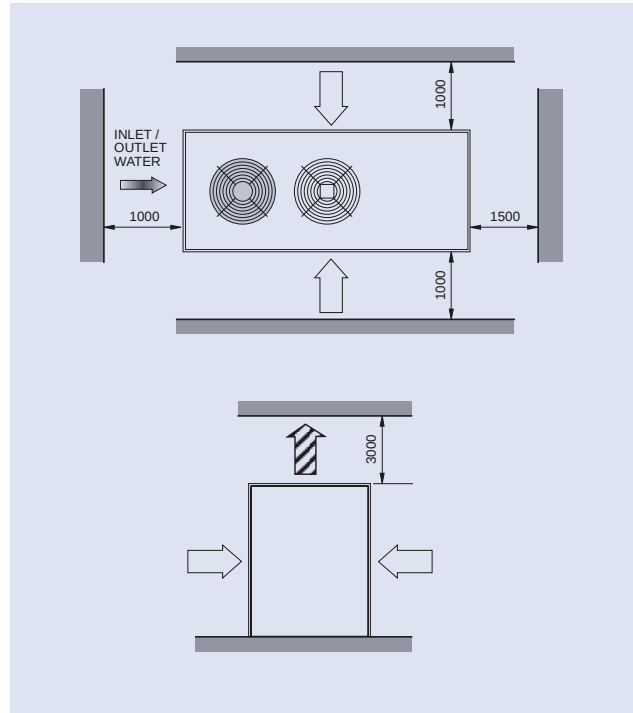


YLCA-YLHA 40 T-TP



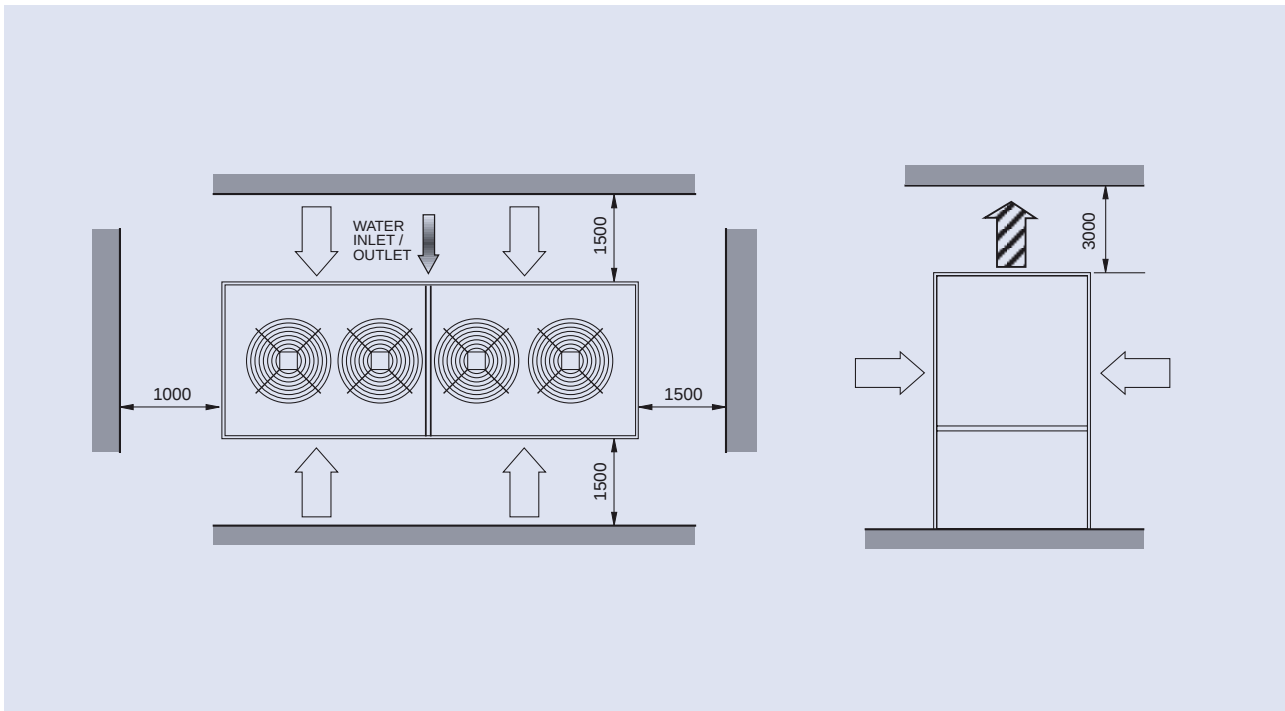
All dimensions in mm. Drawings not a scale.

YLCA-YLHA 50, 60 and 80 T-TP



All dimensions in mm. Drawings not a scale.

YLCA-YLHA 100, 120 and 150 T-TP

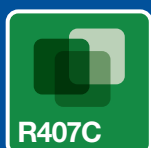


All dimensions in mm. Drawings not a scale.

HVS, Hydro Variable System Air cooled chiller

YDCC522H (-C) / YDCC972H (-C) / YOCC762H (-C) / YOCC1522H (-C)

A complete range from 15 kW up to 72 kW



Features

- Variable capacity compressor (10% to 100%)
- Constant water temperature
- Energy savings up to 35%
- BMS communication
- Easy selection software
- Low ambient operation standard
- Plate heat exchanger, no buffer tank needed
- Flexible in use
- No glycol required (split version)
- Integrated hydro kit (compact version)
- Water filter standard

Options / Accessories

- Condenser protection grilles
- High static pressure fans
- Anticorrosion epoxy coils
- Sound attenuation
- Softstarter kit
- DX unit (split version)
- Antifreeze heater for heat exchanger
- Interface card for LON Bus
- Anti vibration mounting
- Outdoor temperature sensor
- Valve kits
- Relay box for several FCU applications
- Fan coil load identification



Indoor water terminals: see page 86



Remote Central Controller

HVS Split & Compact version

YDCC522H (-C) / YDCC972H (-C) / YOCC762H (-C) / YOCC1522H (-C)



Technical features Compact version

Models			YDCC 522H-C	YDCC 972H-C	YDCC 1732 H-C	YDCC 2502 H-C
Performance	Cooling capacity c/o units	kW	15.0	28.0	50.0	72.0
	Total Input Power	kW	5	9	9.7 + 6.1	9.7 + 12.3
	Capacity steps	%	10 - 100	6 - 100	4 - 100	3 - 100
	Sound pressure level at 1 m	dB(A)	64	66	64	67
Compressor	Type		Digital Scroll	Digital Scroll & Scroll	Digital Scroll & 2 x Scroll	Digital Scroll & 3 x Scroll
	Quantity		1	2	3	4
Air side heat exchanger	Fans quantity		1	2	2 x 2	2 + 3
	Working ambient temperature		-20°C~45°C			
Water side heat exchanger	Type		Plate Heat Exchanger			
	Pump type		Circulators (3 speeds)			
	Water flow nominal	l/h	2 150	4 100	7 200	10 350
	Available pressure nominal (1)	kPa	81	67	67	64
	Water connections	inch	1 1/2"	2"	2" + 2"	2 1/2" + 2 1/2"
	Water connections type		Threated male			
Dimensions & Weight	Height	mm	1 350	1 350	2 x 1 350	1 350 + 1 350
	Width	mm	780	780	2 x 780	2 x 780
	Length	mm	1 330	1 500	1 500 + 1 330	1 500 + 1 980
	Weight cooling only	kg	310	400	435 + 285	400 + 700
Electrical supply	Voltage / Phases / Frequency	V/ph/hz	400 / 3 / 50+N			
Combinations			YDCC 522H-C	YDCC 972H-C	YDCC 972H-C + YOCC 762H-C	YDCC 972H-C + YOCC 1522H-C

Technical features Split version

Models			YDCC 522H	YDCC 972H	YDCC 1732 H	YDCC 2502 H
Performance	Cooling capacity c/o units	kW	15.0	28.0	50.0	72.0
	Total Input Power	kW	5	9	9.7 + 6.1	9.7 + 12.3
	Capacity steps	%	10 - 100	6 - 100	4 - 100	3 - 100
	Sound pressure level at 1 m	dB(A)	58	59	62	63
Compressor	Type		Digital Scroll	Digital Scroll & Scroll	Digital Scroll & 2 x Scroll	Digital Scroll & 3 x Scroll
	Quantity		1	2	3	5
Air side heat exchanger	Fans quantity		1	2	2 x 2	2 + 3
	Working ambient temperature		-20°C~45°C			
Refrigerant side	Refrigerant connections	mm	12 / 22	16 / 28	2 x 16 / 28	16 / 28 + 22 / 42
	Max refrigerant piping length	m	20			
	Max height difference	m	5			
Water side (Transformer Box)	Pump type		Circulators (3 speeds)			
	Available pressure nominal (1)	kPa	81	67	67	64
	Water connections (Threated male)	inch	1 1/2"	2"	2" + 2"	2 1/2" + 2 x 2"
Dimensions & Weight	H / W / L	mm	1350 x 780 x 1330	1350 x 780 x 1500	1350 x 780 x 2850	1350 x 780 x 3500
	Weight cooling only	kg	250	325	325 + 280	325 + 550
Electrical supply	Voltage / Phases / Frequency	V/ph/hz	400 / 3 / 50+N			
Combinations			YDCC 522 H	YDCC 972 H	YDCC 972 H + YOCC 762 H	YDCC 972 H + YOCC 1522 H

Nominal cooling capacity based on: leaving water temperature: +7°C - Ambient air temperature: 35°C DB

(1) At nominal water flow

Technical features Transformer boxes

Models			YTBC			
			522	972	1732	2502
Cooling capacities	Total capacity	kW	15.0	28.0	50.0	72.0
	Water flow	l/h	2150	4100	7200	10350
Sound pressure level at 3 m free field		dB(A)	35	35	40	40
Electrical characteristics	Power supply	V/Ph/Hz	220 - 240 / 1 / 50		400 / 3 / 50	
	Power input - nominal	W	270	350	1100	1100
	Running current - nominal	A	1.8	2.0	3.1	3.1
Dimensions	Height	mm	1000	1000	1200	1200
	Width	mm	800	800	1000	1000
	Depth	mm	300	300	300	300
Net weight		kg	80	95	150	170
Refrigerant piping connections	Diameter (nominal)	mm	12 / 22	16 / 28	2 x 16 / 28	3 x 16 / 28

Nominal cooling capacity based on: Leaving water temperature: +6° C

Horizontal Transformer Boxes available upon request, for more information contact to Johnson Controls.



Compatibility table / Codes

System		15 kW	28 kW	50 kW	72 kW
Cooling only models		YDCC 522 H (-C)	YDCC 972 H (-C)	YDCC 1732 H (-C)	YDCC 2502 H (-C)
Transformer boxes (only for split version)					
Cooling only models		YTBC 522 H-V	YTBC 97 2H-V	YTBC 1732 H-V	YTBC 2502 H-V
Options (factory fitted) Quantity depends on combination selected. See previous table in "Combinations".					
Models		YDCC 522 H (-C)	YDCC 972 H (-C)	YOCC 762 H (-C)	YOCC 1522 H (-C)
DX Cooling only units (only split model)	DX-KIT-CO	DX-KIT-CO-S	DX-KIT-CO-L		
Condenser grid	CG	CGS-1	CGL-1	CGS-1	Contact YORK
High static pressure fans	HPF	HPF-522	HPF-972	HPF-762	HPF-1522
Anticorrosion Epoxy coils	ACF-1	•	•	•	•
Sound attenuation	CSI	CSI-522	CSI-972	CSI-762	CSI-1522
Softstarter kit	SSK	SSK-522	SSK-972	SSK-762	SSK-1522
Water filter	WF-1	Standard (in the transformer box for split model, in the unit for compact model)			
Antifreeze heater for heat exchanger and internal piping	AFH-1	•	•	•	•
Fan coil load identification *	LI-1	•	•	With YDC_unit	With YDC_unit

* The compressor is inactive when all fan coils are switched off. Operation starts again when at least one fan coil is switched on.

ATTENTION! Not applicable for fan coil units with a coil sensor !

Accessories (supplied loose)

Remote central controller (mandatory) *		•		With YDC_unit	With YDC_unit
Interface card for LON Bus	LP-NET-102-000	•		With YDC_unit	With YDC_unit
Anti vibration mounting	AVM-1	•	•	•	•
Outdoor temperature sensor	OTS-1	•	•	With YDC_unit	With YDC_unit

* It is mandatory to have one central controller for HVS unit ** For automatic mode change heat pump only

Accessories for Fan coil units (supplied loose) compatible with HVS only - Valve kits not available any more

Valve kit diameter 3/8"	VK10-1	•
Valve kit diameter 1/2"	VK15-1	•
Valve kit diameter 3/4"	VK20-1	•
Valve kit diameter 1"	VK25-1	•
Valve kit diameter 1 1/2"	VK40-1	•

* Valve kit is assembled and composed of an on/off thermal actuator, 3-way valve, shut off and balancing valve

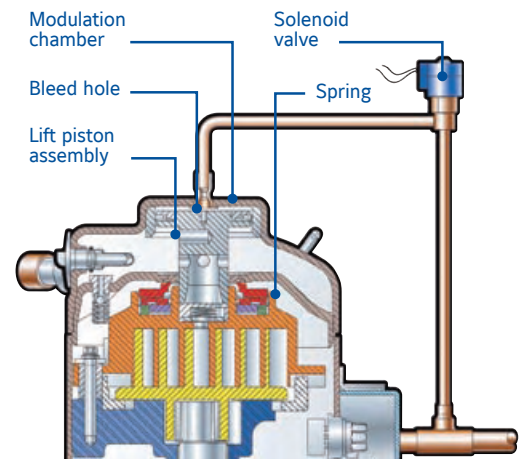
Relay box for up to 4 FCU	RB4-1	•
Relay box for up to 8 FCU	RB8-1	•

Recommended combinations

Cooling capacity	YDCC522	YDCC972	YOCC762	YOCC1522	Transformer Box
15	1				1 x YTB 522
28		1			1 x YTB 972
50		1	1		1 x YTB 1732
72		1	2		1 x YTB 2502
72		1		1	1 x YTB 2502
87	1	1	2		1 x YTB 522 + 1 x YTB 2502
87	1	1		1	1 x YTB 522 + 1 x YTB 2502
100		2	2		2 x YTB 1732
122		2	3		1 x YTB 1732 + 1 x YTB 2502
122		2	1	1	1 x YTB 1732 + 1 x YTB 2502
144		2	4		2 x YTB 2502
144		2		2	2 x YTB 2502
159	1	2	4		1 x YTB 522 + 2 x YTB 2502
159	1	2		2	1 x YTB 522 + 2 x YTB 2502
172		3	4		1 x YTB 972 + 2 x YTB 2502
172		3		2	1 x YTB 972 + 2 x YTB 2502
194		3	5		1 x YTB 1732 + 2 x YTB 2502
194		3	1	2	1 x YTB 1732 + 2 x YTB 2502
216		3	6		3 x YTB 2502
216		3		3	3 x YTB 2502

Digital Scroll Compressor

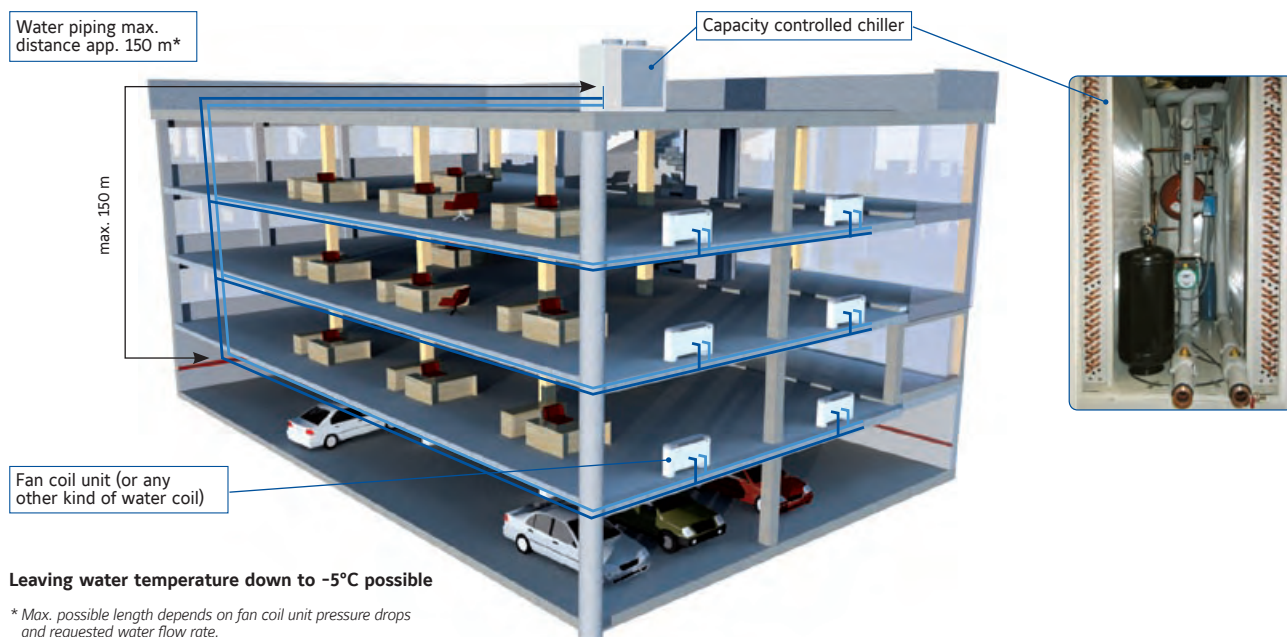
The Digital Scroll Compressor uses a simple and effective method to modulate the capacity of an AC, giving unparalleled performance in the modulation field. To modulate the capacity the Digital Scroll operates in two stages, the "loaded state" in which the compressor works as a normal Scroll compressor at full capacity and mass flow, and the "unloaded state", where there is not capacity and mass flow. During the "unloaded state" there is a separation between the scrolls. Once the scrolls separate, any gas passing through is no longer compressed. Changing the cycle time ("Loaded state" time and "Unloaded state" time) determines the capacity modulation of the compressor.



System Diagram Compact version

The HVS-system is available as a COMPACT version. This version is particularly designed for process cooling applications for very low brine-temperatures (down to -5°C) but is also applicable for standard AC applications. The HVS-COMPACT series contains all hydronic components which normally are located in the transformer box.

The hydronic components are installed between the two coils (see picture) therefore the COMPACT version provides the same dimensions as the condensing unit of the SPLIT version does. Water connections on the rear side of the unit (see picture).

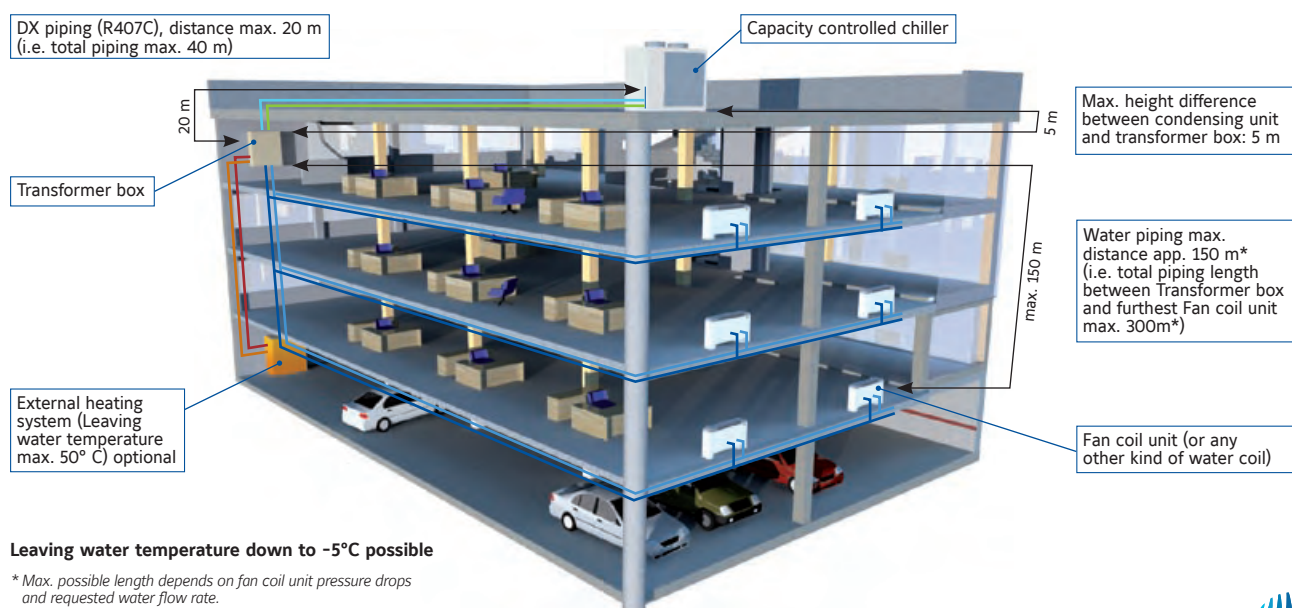


System Diagram Split version

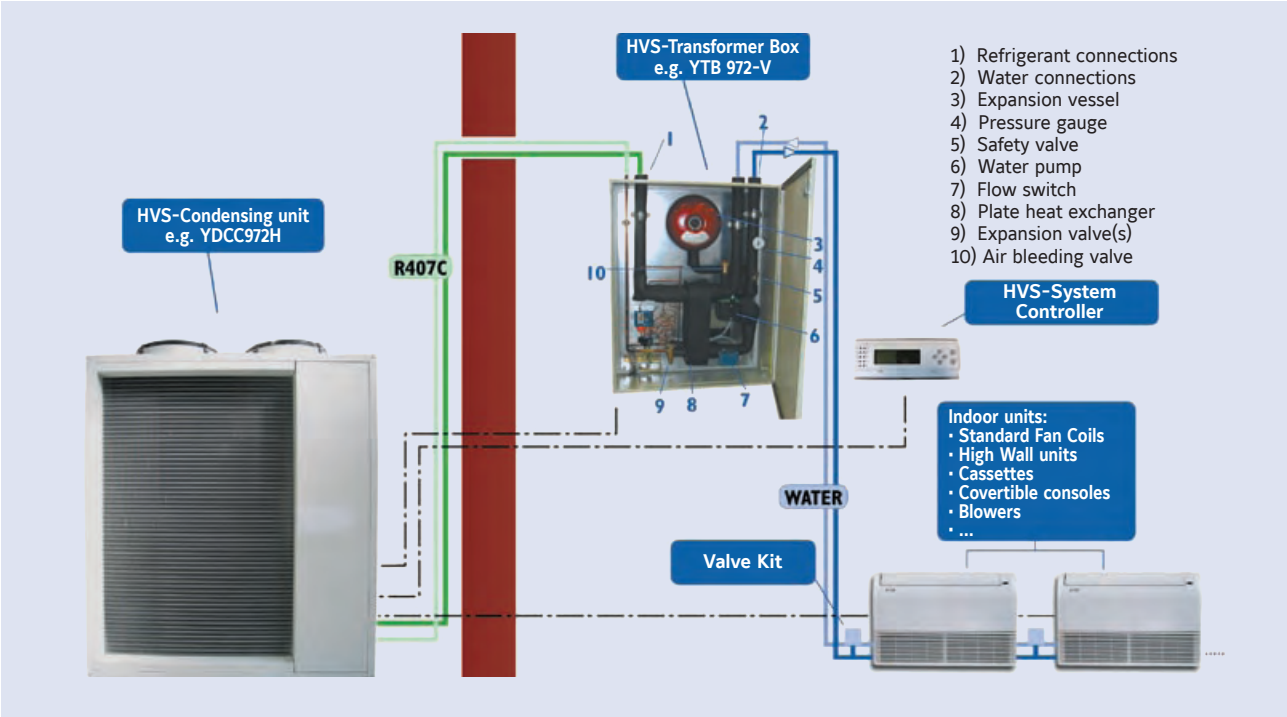
HVS Digital is the latest generation of YORK's Air Conditioners for cooling and heating. These units use the Digital Scroll compressor technology that allows to adequate the capacity to the cooling or heating load. Thanks to this innovative technology our products reach many advantages for our customers.

- Energy saving up to 35% compared with conventional chillers.
- High comfort because of the unit is capable to adjust the water outlet temperature in a $\pm 0,5^{\circ}\text{C}$, thereby it is possible for the users enjoy always a comfortable ambient temperature.

- Absence of Electromagnetic Interference, compared with a variable speed compressor, making the system easy and less sensitive.
 - High reliability, as there is not necessary to use complicates electronic devices to get the right capacity.
 - Not necessary to use buffer tank, thanks to the modulation control
 - Not necessary to use glycol, as it is possible to use an intermediate transformer box as a remote evaporator.
- And many other advantages that you can discover by yourself using HVS units.

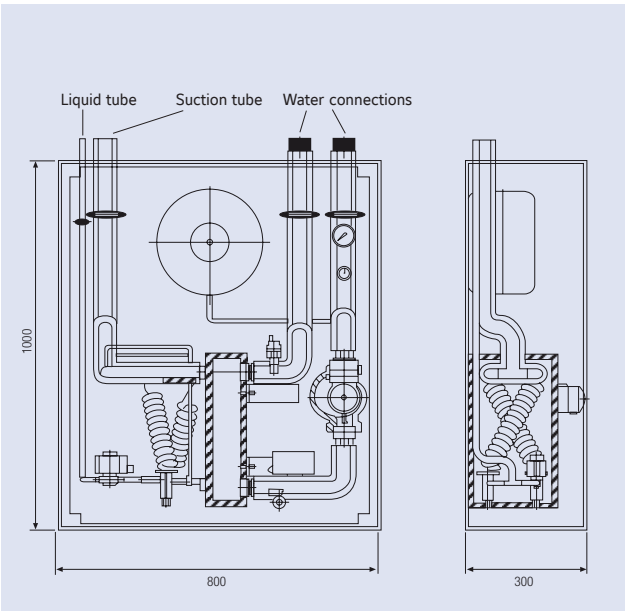


Split system overview



Transformer box dimensions

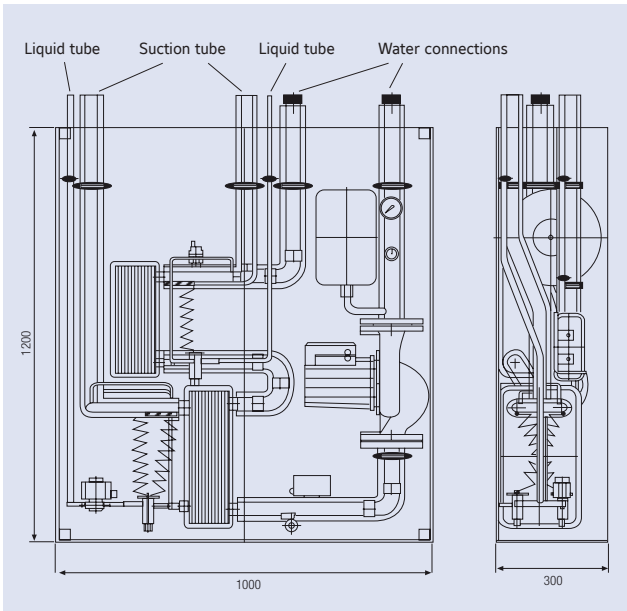
Transformer box YTB_522-V / YTB_972-V



All dimensions in mm. Drawings not a scale.

Unit	Water pipe connection	Refrigerant tubing diameter	Weight kg
YTB-522-V	1 1/2" threaded male	12 / 22	80
YTB-972-V	2" threaded male	16 / 28	95

Transformer box YTB_1732-V / YTB_2502-V

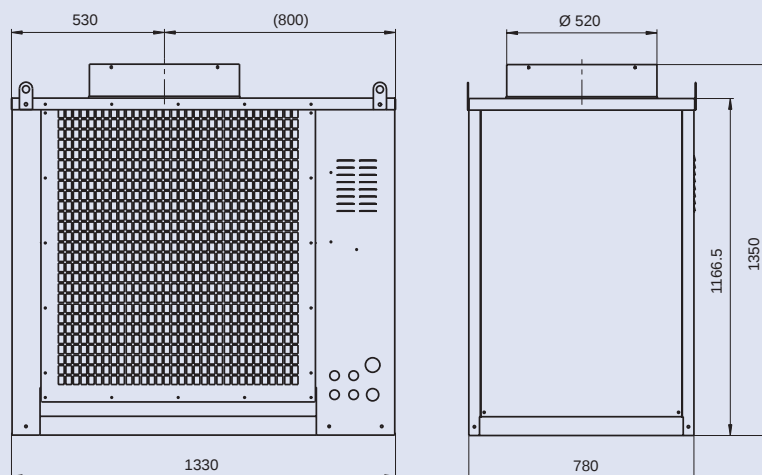


All dimensions in mm. Drawings not a scale.

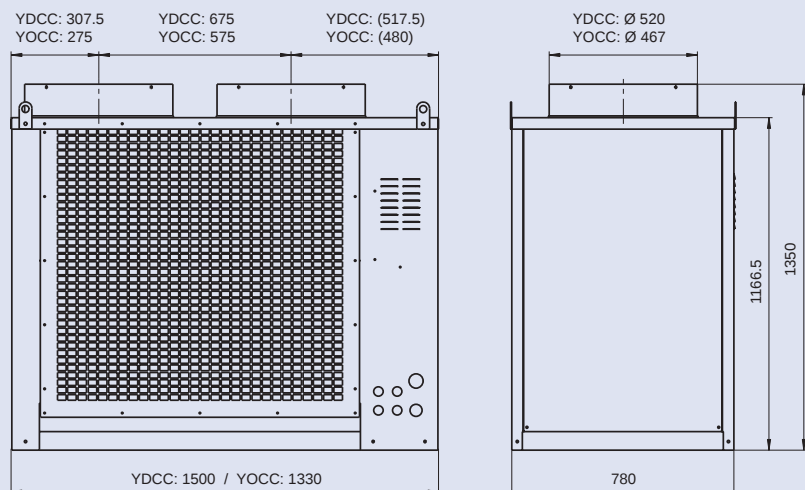
Unit	Water pipe connection	Refrigerant tubing diameter	Weight kg
YTB-1732-V	2" threaded male	2 x 16 / 28	150
YTB-2502-V	2 1/2" threaded male	3 x 16 / 28	170

Condensing unit dimensions

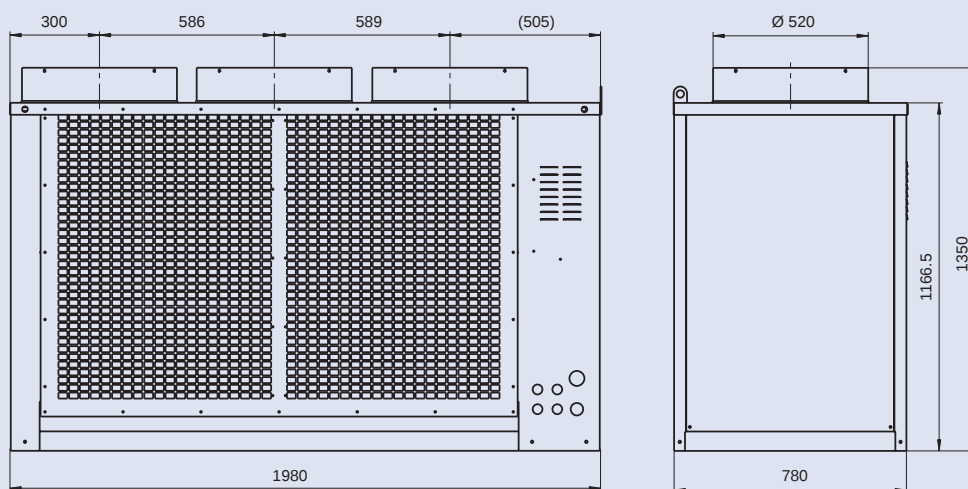
YDCC 522 (-C)



YDCC 972 (-C) / YOCC 762 (-C)



YOCC 1522 (-C)



All dimensions in mm. Drawings not a scale.

Air cooled chiller centrifugal fan

YLCC 42 to 152

A complete range from 40 kW up to 137 kW



Features

- Centrifugal fan
- Scroll compressor
- Vertical or horizontal discharge
- Coaxial heat exchanger
- Ductable (inlet/outlet)
- Hydro kit (option)
- Electronic control

Options / Accessories

- LAK (-18°C)
- Shut off valve HP/LP
- Coated condenser fins (blue fin)
- Antivibration mounting
- Flow switch
- Remote control
- BMS communication
- Hydro kit GH



Indoor water terminals: see page 86

Features GH

- Pump
- Expansion tank
- Buffer tank
- Differential flow switch
- Air bleeding valve
- Service valve
- Automatic filling valve
- Draining valve
- Direct connection to the chiller



Hydro kit
GH 200-260 & 600

Air cooled chiller with centrifugal fan

YLCC 42 to 152



Technical features Condensing unit YLCC

Models			YLCC					
			42	62	82	102	122	152
Performance	Cooling capacity cooling only units	kW	40.2	64	71	96.1	116	137
	Capacity steps	%	0-50-100%				0-25-50-75-100%	
	Sound power level	dB(A)	79	81	82	84	86	90
	Sound pressure level at 10 m	dB(A)	51	53	54	56	58	62
Compressor	Type		Hermetic Scroll					
	Quantity		2				4	
Air side heat exchanger	Fans quantity		2					
	Air flow (50 Pa)	m³/h	13 268	20 122	23 304	28 834	33 247	38 312
	Working ambient temperature		(-18°C *) -10°C ~ 46°C					
Water side heat exchanger	Type		Coaxial heat exchanger					
	Unit water volume	Litres	25	28	38.2	38.2	78.5	73.5
	Pressure drop cooling only	kPa	16	43	57	94	20	46
	Working range water leaving temperature		-5°C ~ 15°C					
	Water connections	inch	2"		2 1/2"		3"	
Dimensions & Weight	Height	mm	1 770		1 994			
	Width	mm	2 340		2 991		3 300	
	Depth	mm	885	1 029	1 150		1 400	
	Weight	kg	695	816	962	1 133	1 389	1 522
El. supply	Voltage / Phases / Frequency	V/ph/hz	400 / 3 / 50 + N + E					

Nominal cooling capacity based on: leaving water temperature: +7°C - Ambient air temperature: 35°C DB

* -18°C with Low ambient kit (optional)

Technical features Hydro Kit GH

Models			GH 200	GH 260	GH 600 S	GH 600 P
Corresponding unit			YLCC 42	YLCC 62-82	YLCC 102-122	YLCC 152
Buffer tank	Capacity	Litres	201	258	605	605
	Max pressure	bar	6			
Expansion vessel	Capacity	Litres	12	18	35	35
	Power supply	V/Ph/Hz	400/3/50			
Pump	Motor	kW	1.05	1.46	1.9	3
	Consumption	A	1.9	2.8	4.5	6.6
Safety valve rating		bar	6			
Dimensions	H / W / D	mm	1 184 / 883 / 883	1 440 / 928 / 883	1 980 / 1 383 / 1 038	
Weight		kg	129	164	340	380

Compatibility table / Codes

Models	42	62	82	102	122	152
Cooling only horizontal discharge unit YLCC	S668544280	S668546280	S668548280	S668541080	S668541280	S668541580
Cooling only vertical discharge unit YLCC_V	S668544281	S668546281	S668548281	S668541081	S668541281	S668541581

Use this unit code when a factory fitted option is NOT required

Accessories (Supplied loose)

AVM mounting		S613026080		S613028180	
Flow switch		S611992021			
Remote control		S613802011			
Remote terminal		S613802231			
B.M.S. Communication		S613802041			
Hydro kit models	Sizes	GH 200	GH 260	GH 600 S	GH 600 P
	Codes	S613992001	S613992601	S613996001	S613996011

Models	42	62	82	102	122	152
Cooling only horizontal discharge unit YLCC	S668000062	S668000063	S668000064	S668000065	S668000066	S668000067
Cooling only vertical discharge unit YLCC_V	S668000068	S668000069	S668000070	S668000071	S668000072	S668000073

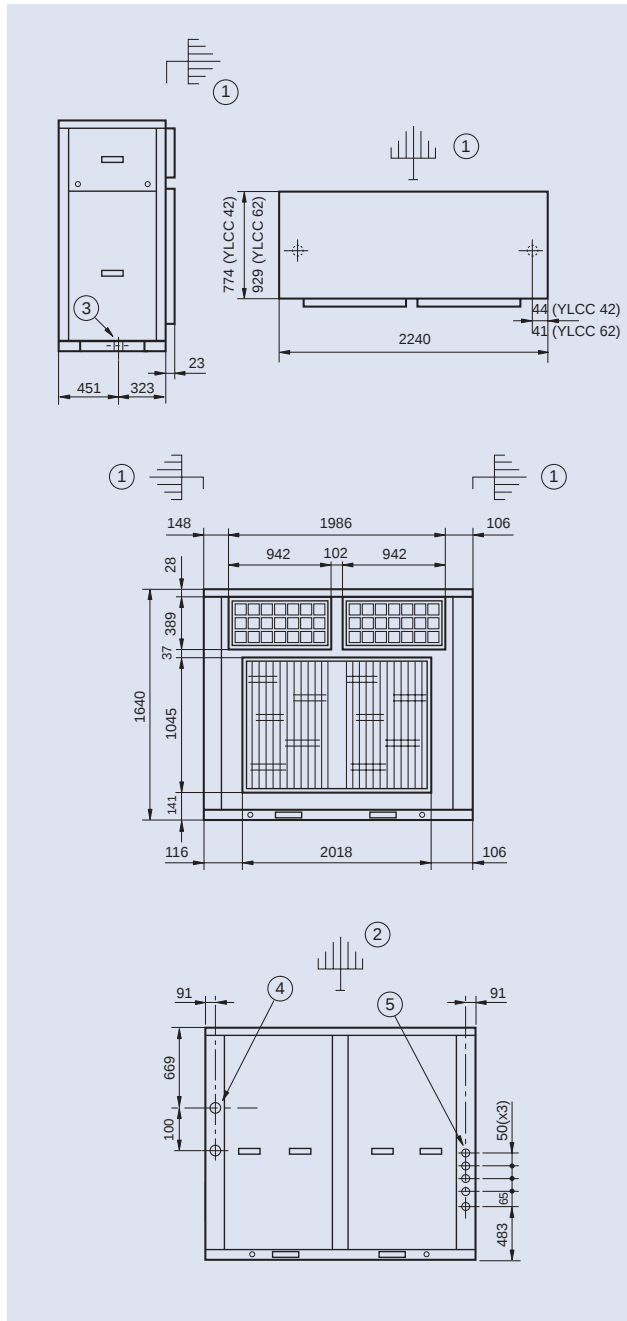
Use this unit code when a factory fitted option is required

Options (Factory fitted)

LAK (-18°C)		S613111082		S613111082		S613111282
Shut off valve HP a"nd LP		S613074081	S613076081	S613078081	S613071081	S613071282
Coated condenser fins (blue fin)		Contact JCI sales office				
Copper/copper condenser		Contact JCI sales office				

Dimensions, hydraulic connections and space requirements

YLCC 42 / YLCC 62

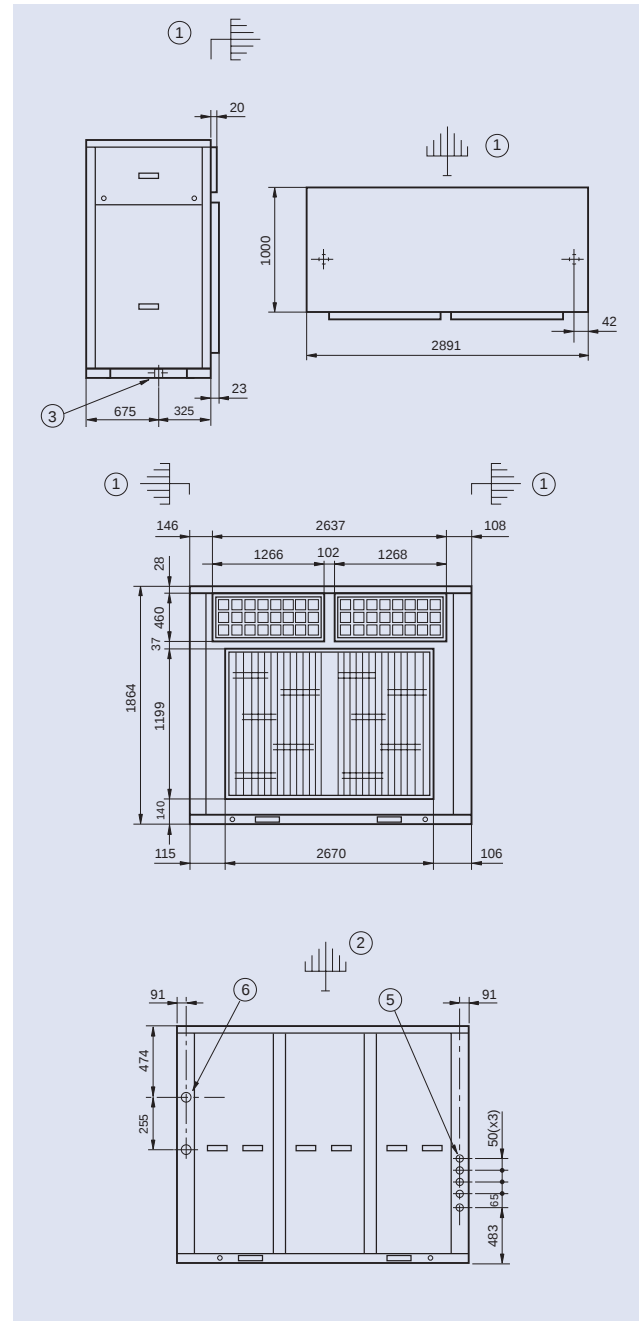


All dimensions in mm. Drawings not a scale.

- 1- Minimum free space (1000 mm)
- 2- Minimum free space (500 mm)
- 3- Draining 28 external, length 30 mm (on both side)
- 4- Water connection F 2" Gas
- 5- Electrical connection 22 (3) 28,6 (1) 38 (1)

For vertical discharge contact Johnson Controls office

YLCC 82



All dimensions in mm. Drawings not a scale.

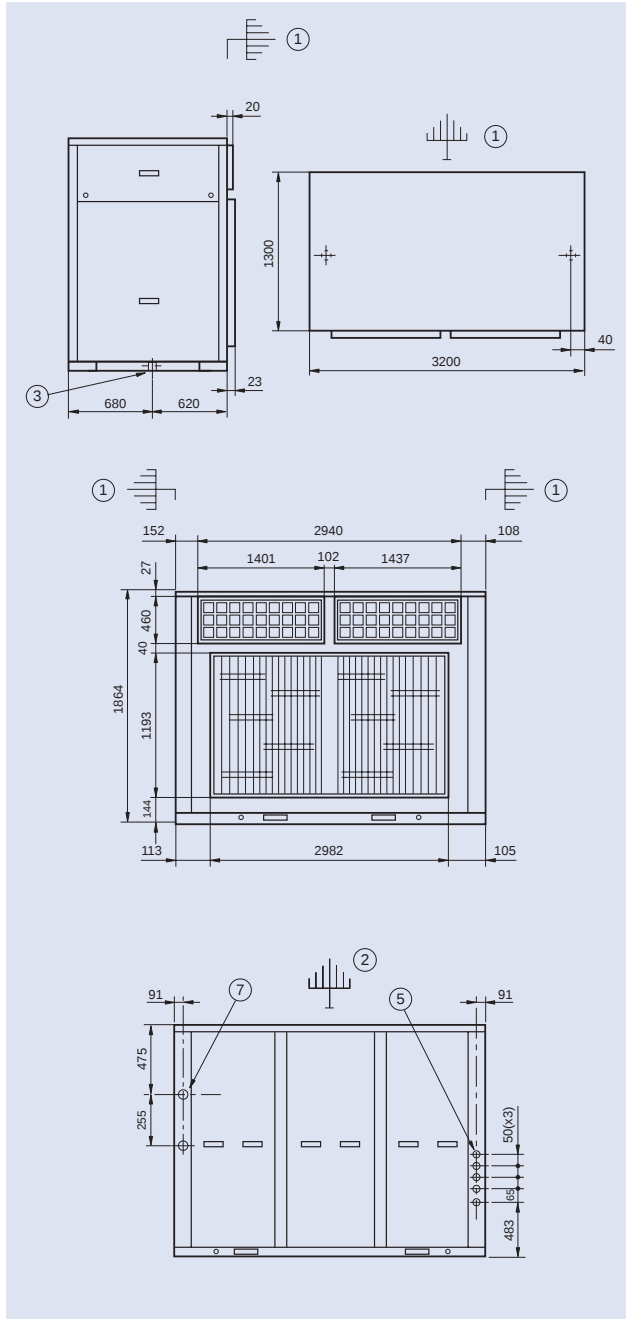
- 1- Minimum free space (1000 mm)
- 2- Minimum free space (500 mm)
- 3- Draining 28 external, length 30 mm (on both side)
- 4- Electrical connection 22 (3) 28,6 (1) 38 (1)
- 5- Water connection F 2 1/2" Gas
- 6- Water connection F 3" Gas

For vertical discharge contact Johnson Controls office

YLCC 42 to 152 & Hydro Kit GH



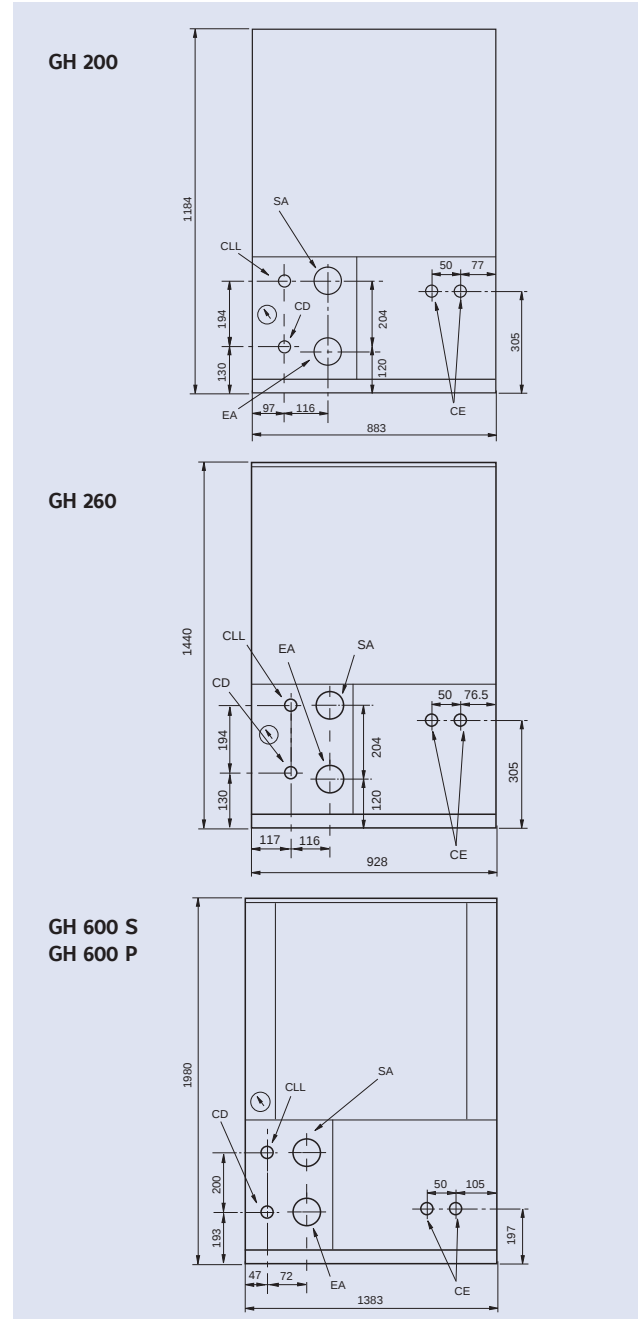
YLCC 122 / YLCC 152



All dimensions in mm. Drawings not a scale.

- 1- Minimum free space (1000 mm)
 - 2- Minimum free space (500 mm)
 - 3- Draining 28 external, length 30 mm (on both side)
 - 4- Electrical connection 22 (3) 28,6 (1) 38 (1)
 - 5- Water connection F 2 1/2" Gas
 - 6- Water connection F 3" Gas
- For vertical discharge contact Johnson Controls office**

HYDRO KIT GH



All dimensions in mm. Drawings not a scale.

- EA: Water intake, 2" G (GH200) / 2 1/2" G (GH260) / 3" G (GH600)
- SA: Water outlet, 2" G (GH200) / 2 1/2" G (GH260) / 3" G (GH600)
- CLL: Charge connection, 1/2" G
- CD: Drain connection, 1/2" G
- CE: Electrical connection (2), dia. 19,7

YHK Hydro Cassette

2 & 4 pipe system

A complete range from 1.3 kW to 11.1 kW



Coloured versions
available as a option

Wired controls



BR
Remote three speeds controller

TR
BR + Electronic thermostat
and Summer/Winter switch

ATR
Automatic TR



DTR
Digital Automatic
Remote controller

TMO 503 SV2
Digital Automatic
Remote controller
to be mounted in the standard
light wall box

DRC - DI
Centralized controller
up to 60 terminals



Infrared control



Features

- Cooling duty from 1.3 to 11.1 kW
- 2 & 4 pipes systems in all range
- 2 sizes: 600 x 600 & 800 x 800
- Possible to choice between 6 fan speeds
- Condensate pump integrated in all range
- 2/3 way valves fitted or supplied loose in all range
- Coloured versions, posible to change the colour of the grill and the frame
- Possible to select a complete range of controls
- Electric heater fitted as an option for all range (2 pipe only)
- All metal parts insulated to avoid condensations



**FX03 Terminal unit
controller**
BacNET and N2 Metasys
network compatible
(see page 99 for details)

YHK Hydro Cassette

1.3 to 11.1 kW



Technical features 2 pipe system

Model		YHK 20-2	YHK 25-2	YHK 40-2	YHK 50-2	YHK 65-2	YHK 95-2	YHK 110-2
Cooling capacity	kW	1.3 / 1.6 / 2.0	1.8 / 2.3 / 2.7	2.3 / 3.3 / 4.3	2.9 / 3.9 / 5.0	4.2 / 4.9 / 6.2	5.3 / 6.8 / 9.5	5.3 / 8.5 / 11.1
Sensible cooling capacity	kW	1.0 / 1.3 / 1.6	1.4 / 1.8 / 2.0	1.6 / 2.4 / 3.2	2.1 / 2.8 / 3.7	3.0 / 3.6 / 4.6	3.5 / 4.5 / 6.5	3.7 / 6.1 / 8.3
Heating capacity	kW	1.6 / 2.1 / 2.6	2.2 / 2.9 / 3.4	2.6 / 3.9 / 5.2	3.4 / 4.6 / 6.2	5.1 / 6.0 / 7.8	5.6 / 7.3 / 10.7	6.1 / 10.3 / 14.0
Power supply	V/Ph/Hz	230 / 1 / 50 + E						
Airflow	m ³ /h	310 / 420 / 610	310 / 420 / 520	320 / 500 / 710	430 / 610 / 880	630 / 820 / 1140	710 / 970 / 1500	710 / 1280 / 1820
Fan	W	25 / 32 / 57	25 / 32 / 44	25 / 44 / 68	32 / 57 / 90	33 / 48 / 77	42 / 63 / 120	42 / 95 / 170
	A	0.11 / 0.15 / 0.27	0.11 / 0.15 / 0.20	0.11 / 0.20 / 0.32	0.15 / 0.27 / 0.45	0.15 / 0.23 / 0.36	0.18 / 0.28 / 0.53	0.18 / 0.42 / 0.74
Water flow	l/h	219 / 280 / 340	316 / 402 / 461	387 / 574 / 745	506 / 667 / 863	724 / 845 / 1060	913 / 1166 / 1636	913 / 1453 / 1909
Water content	l	0.8	1.4	2.1	2.1	3.0	4.0	4.0
Pressure drop in cooling	kPa	4.5 / 7.0 / 10.0	4.9 / 7.6 / 9.7	4.6 / 9.4 / 15.1	7.5 / 12.4 / 19.7	10.9 / 14.3 / 21.6	9.4 / 14.7 / 26.9	9.4 / 21.8 / 35.6
Pressure drop in heating	kPa	4.0 / 6.0 / 9.0	4.1 / 6.3 / 8.2	3.5 / 7.3 / 11.4	6.7 / 11.2 / 17.7	6.7 / 9.9 / 15.1	7.9 / 12.4 / 23.0	7.9 / 18.6 / 30.6
Sound power level	dB(A)	33 / 40 / 49	33 / 40 / 45	33 / 45 / 53	41 / 49 / 59	33 / 40 / 48	34 / 40 / 53	34 / 48 / 58
Sound pressure level *	dB(A)	24 / 31 / 40	24 / 31 / 36	24 / 36 / 44	32 / 40 / 50	24 / 31 / 39	25 / 31 / 44	25 / 39 / 49
Dimensions (H x W x D)	mm	275 x 575 x 575					303 x 820 x 820	
Panel (W x D)	mm	670 x 670					965 x 965	
Net weight	kg	28	28	30	30	44	47	47

* The sound pressure levels apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.

Cooling capacities based on 7/12°C EWT - Indoor temperature 27°C DB / 19°C WB

Heating capacities based on 50°C EWT at nominal flow rate Indoor temperature 20°C

Water flow rate as for the cooling conditions.

All data are in Low / Medium / High speed.

Technical features 4 pipe system

Model		YHK 20-4	YHK 25-4	YHK 40-4	YHK 50-4	YHK 65-4	YHK 95-4	YHK 110-4
Cooling capacity	kW	1.5 / 2.0 / 2.3	1.9 / 2.4 / 2.7	1.9 / 2.7 / 3.3	2.4 / 3.0 / 3.8	4.1 / 5.0 / 6.3	4.5 / 5.7 / 7.7	4.5 / 6.9 / 8.9
Sensible cooling capacity	kW	1.2 / 1.6 / 1.9	1.4 / 1.7 / 2.0	1.3 / 2.0 / 2.6	1.8 / 2.3 / 3.0	3.0 / 3.7 / 4.7	3.3 / 4.2 / 5.8	3.3 / 5.2 / 6.8
Heating capacity	kW	2.0 / 2.5 / 3.0	2.4 / 3.0 / 3.5	2.4 / 3.5 / 4.4	3.1 / 4.0 / 5.0	5.9 / 7.2 / 9.1	6.5 / 8.1 / 11.0	6.5 / 10.0 / 12.7
Power supply	V/Ph/Hz	230 / 1 / 50 + E						
Airflow	m ³ /h	310 / 420 / 610	310 / 420 / 520	320 / 500 / 710	430 / 610 / 880	630 / 820 / 1140	710 / 970 / 1500	710 / 1280 / 1820
Fan	W	25 / 32 / 57	25 / 32 / 44	25 / 44 / 68	32 / 57 / 90	33 / 48 / 77	42 / 63 / 120	42 / 95 / 170
	A	0.11 / 0.15 / 0.27	0.11 / 0.15 / 0.20	0.11 / 0.20 / 0.32	0.15 / 0.27 / 0.45	0.15 / 0.23 / 0.36	0.18 / 0.28 / 0.53	0.18 / 0.42 / 0.74
Water flow in cooling	l/h	260 / 337 / 401	318 / 406 / 464	318 / 456 / 574	406 / 519 / 655	712 / 865 / 1090	777 / 974 / 1326	777 / 1192 / 1529
Water flow in heating	l/h	169 / 219 / 261	209 / 260 / 298	209 / 298 / 378	267 / 341 / 426	508 / 618 / 783	555 / 697 / 946	555 / 858 / 1092
Water content Cooling / Heating	l	1 / 0.6	1.4 / 0.7	1.4 / 0.7	1.4 / 0.7	3.0 / 1.4	3.0 / 1.4	3.0 / 1.4
Pressure drop in cooling	kPa	6.0 / 10.0 / 13.5	4.6 / 6.9 / 8.8	4.6 / 8.8 / 13.4	7.2 / 11.2 / 17.0	8.8 / 12.5 / 18.9	10.3 / 15.4 / 26.9	10.3 / 22.1 / 34.7
Pressure drop in heating	kPa	6.5 / 10.5 / 14.5	5.7 / 8.5 / 10.8	5.7 / 10.8 / 16.6	8.8 / 13.8 / 20.5	9.8 / 14.0 / 21.4	11.5 / 17.4 / 29.9	11.5 / 25.3 / 38.8
Sound power level	dB(A)	33 / 40 / 50	33 / 40 / 45	33 / 45 / 53	41 / 49 / 59	33 / 40 / 48	34 / 40 / 53	34 / 48 / 58
Sound pressure level *	dB(A)	24 / 31 / 41	24 / 31 / 36	24 / 36 / 44	32 / 40 / 50	24 / 31 / 39	25 / 31 / 44	25 / 39 / 49
Dimensions (H x W x D)	mm	275 x 575 x 575					303 x 820 x 820	
Panel (W x D)	mm	670 x 670					965 x 965	
Net weight	kg	30	30	30	30	47	47	47

* The sound pressure levels apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.

Cooling capacities based on 7/12°C EWT - Indoor temperature 27°C DB / 19°C WB

Heating capacities based on 70/60°C EWT - Indoor temperature 20°C

All data are in Low / Medium / High speed.



Condensate pump integrated in all sizes



Metal parts insulated to avoid condensation



2 or 3 way valves fitted or supplied loose in all sizes



Outer casing as an option to integrate the water cassette into any environment

YHK ECM Inverter Hydro Cassette

2 & 4 pipe system

A complete range from 1.8 kW to 10.8 kW



Coloured versions available as a option

Wired control



ETN-ECM

Wall-mounted controller that can be connected that allows the inverter control with a 0-10V signal. The same controller can be connected to one or several cassettes (master-slave function).



Infrared control



Features

- Cooling duty from 1.8 to 10.8 kW
- 2 & 4 pipes systems in all range
- 2 sizes: 600 x 600 & 800 x 800
- Condensate pump integrated in all range
- 2/3 way valves fitted or supplied loose in all range
- Coloured versions, posible to change the colour of the grill and the frame
- All metal parts insulated to avoid condensations
- Inverter fan motor for a very quiet operation
- Electrical consumption reduced by up to 75%
- Specific range of controllers with master-slave function



FX03 Terminal unit controller

BacNET and N2 Metasys network compatible (see page 99 for details)

YHK ECM Inverter Hydro Cassette

1.8 to 10.8 kW



Technical features 2 pipe system

Model		YHK-ECM 25-2	YHK-ECM 40-2	YHK-ECM 50-2	YHK-ECM 65-2	YHK-ECM 95-2
Cooling capacity	kW	1.8 / 2.2 / 2.8	2.2 / 3.1 / 4.3	2.6 / 3.9 / 5.0	4.2 / 5.2 / 6.3	5.3 / 7.7 / 10.8
Sensible cooling capacity	kW	1.4 / 1.6 / 2.1	1.6 / 2.2 / 3.2	1.8 / 2.8 / 3.7	3.0 / 3.8 / 4.7	3.7 / 5.5 / 7.9
Heating capacity	kW	2.2 / 2.7 / 3.4	2.6 / 3.6 / 5.2	3.0 / 4.6 / 6.2	5.1 / 6.4 / 8.0	5.9 / 8.8 / 12.7
Power supply	V/Ph/Hz	230 / 1 / 50 + E				
Airflow	m³/h	310 / 380 / 535	310 / 445 / 710	360 / 610 / 880	630 / 870 / 1165	710 / 1130 / 1770
Fan	W	5 / 8 / 16	5 / 11 / 31	7 / 21 / 62	10 / 17 / 33	10 / 32 / 108
Water flow	l/h	317 / 373 / 473	385 / 524 / 744	441 / 666 / 864	723 / 885 / 1089	909 / 1328 / 1848
Water content	l	1.4	2.1	2.1	3.0	4.0
Pressure drop in cooling	kPa	4.9 / 6.6 / 10.1	4.6 / 9.4 / 15.1	5.9 / 12.4 / 19.7	10.9 / 15.6 / 22.7	9.4 / 18.5 / 33.6
Pressure drop in heating	kPa	4.0 / 5.5 / 8.7	3.6 / 6.6 / 13.1	4.7 / 10.5 / 17.7	8.7 / 12.8 / 19.5	7.2 / 14.9 / 28.8
Sound power level	dB(A)	33 / 39 / 47	33 / 43 / 54	37 / 50 / 60	33 / 39 / 48	34 / 47 / 57
Sound pressure level *	dB(A)	24 / 30 / 38	24 / 34 / 45	28 / 41 / 51	24 / 30 / 39	25 / 38 / 48
Dimensions (H x W x D)	mm	275 x 575 x 575			303 x 820 x 820	
Panel (W x D)	mm	670 x 670			965 x 965	
Net weight	kg	28	30	30	44	47

* The sound pressure levels apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.

Cooling capacities based on 7/12°C EWT - Indoor temperature 27°C DB / 19°C WB

Heating capacities based on 50°C EWT at nominal flow rate Indoor temperature 20°C

Water flow rate as for the cooling conditions.

All data are in Low / Medium / High speed.

Technical features 4 pipe system

Model		YHK-ECM 25-4	YHK-ECM 40-6	YHK-ECM 50-6	YHK-ECM 65-4	YHK-ECM 95-6
Cooling capacity	kW	1.9 / 2.2 / 2.8	2.1 / 2.8 / 3.9	2.4 / 3.5 / 4.5	4.3 / 5.3 / 6.5	5.0 / 7.2 / 9.9
Sensible cooling capacity	kW	1.3 / 1.6 / 2.1	1.5 / 2.0 / 3.0	1.7 / 2.6 / 3.5	3.1 / 3.8 / 4.8	3.5 / 5.2 / 7.4
Heating capacity	kW	2.4 / 2.9 / 3.6	2.0 / 2.5 / 3.4	2.2 / 3.1 / 3.8	6.1 / 7.5 / 9.4	5.2 / 7.2 / 9.5
Power supply	V/Ph/Hz	230 / 1 / 50 + E				
Airflow	m³/h	310 / 380 / 535	310 / 445 / 710	360 / 610 / 880	630 / 870 / 1165	710 / 1130 / 1770
Fan	W	5 / 8 / 16	5 / 11 / 31	7 / 21 / 62	10 / 17 / 33	10 / 32 / 108
Water flow in cooling	l/h	318 / 375 / 476	359 / 483 / 676	409 / 608 / 779	740 / 908 / 1120	856 / 1233 / 1697
Water flow in heating	l/h	209 / 245 / 311	170 / 217 / 288	189 / 263 / 326	528 / 649 / 805	449 / 616 / 818
Water content Cooling / Heating	l	1.4 / 0.7	1.7 / 0.5	1.7 / 0.5	3.0 / 1.4	3.6 / 1.1
Pressure drop in cooling	kPa	4.6 / 6.2 / 9.5	3.5 / 5.7 / 10.5	4.1 / 8.4 / 13.1	9.4 / 13.6 / 19.8	8.8 / 17.0 / 30.1
Pressure drop in heating	kPa	5.7 / 7.6 / 11.7	3.5 / 5.5 / 9.0	4.5 / 7.5 / 11.0	10.5 / 15.5 / 22.5	6.5 / 11.0 / 18.0
Sound power level	dB(A)	33 / 39 / 47	33 / 43 / 54	37 / 50 / 60	33 / 39 / 48	34 / 47 / 57
Sound pressure level *	dB(A)	24 / 30 / 38	24 / 34 / 45	28 / 41 / 51	24 / 30 / 39	25 / 38 / 48
Dimensions (H x W x D)	mm	275 x 575 x 575			303 x 820 x 820	
Panel (W x D)	mm	670 x 670			965 x 965	
Net weight	kg	30	30	30	47	47

* The sound pressure levels apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.

Cooling capacities based on 7/12°C EWT - Indoor temperature 27°C DB / 19°C WB

Heating capacities based on 70/60°C EWT - Indoor temperature 20°C

All data are in Low / Medium / High speed.



Condensate pump integrated in all sizes



Metal parts insulated to avoid condensation



2 or 3 way valves fitted or supplied loose in all sizes



Outer casing as an option to integrate the water cassette into any environment

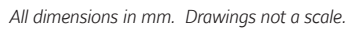
YHK Hydro Cassette

Compatibility table / Codes

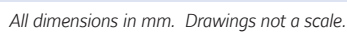
Model		YHK 20	YHK 25	YHK 40	YHK 50	YHK 65	YHK 95	YHK 110
Cassette YHKY - basic model without air diffuser	2 pipe system	•	•	•	•	•	•	•
	4 pipe system	•	•	•	•	•	•	•
Cassette YHKH - with infrared remote control included without air diffuser	2 pipe system	•	•	•	•	•	•	•
	4 pipe system	•	•	•	•	•	•	•
Cassette YHK-ECM - basic model without air diffuser	2 pipe system	•	•	•	•	•	•	•
	4 pipe system	•	•	•	•	•	•	•
Cassette YHKY-E - with electric resistance without air diffuser								
Version without infrared remote control YHKY-E	2 pipe system	•	•	•	•	•	•	•
Version with infrared remote control included YHKH-E	2 pipe system	•	•	•	•	•	•	•
Cassette YHKY-REB - with remote electric board without air diffuser								
Cassette YHKY-REB	2 pipe system	•	•	•	•	•	•	•
	4 pipe system	•	•	•	•	•	•	•
Options (Factory fitted)								
Valves								
3 way valve + mounting kit for 2 pipe models (factory fitted)	9079510		•				-	
	9079511		-				•	
3 way valve + mounting kit for 4 pipe models (factory fitted)	9079512		•				-	
	9079513		-				•	
Accessories (supplied loose)								
Air diffusers								
Air diffuser - intake grid, frame and louvres in RAL 9003 white colour	AKPA 600		•				-	
	AKPA 800		-				•	
Air diffuser - intake grid, frame and louvres in a colour of choice (*)	AKPB 600		•				-	
	AKPB 800		-				•	
Air diffuser - intake grid, frame and louvres in a colour of choice, frame in RAL 9003 white colour (*)	AKPC 600		•				-	
	AKPC 800		-				•	
Air diffuser - intake grid and frame in RAL 9003 white colour, louvres in a colour of choice (*)	AKPD 600		•				-	
	AKPD 800		-				•	
Valves								
3 way valve + mounting kit for 2 pipe models (not fitted)	9079500		•				-	
	9079501		-				•	
3 way valve + mounting kit for 4 pipe models (not fitted)	9079502		•				-	
	9079503		-				•	
2 way valve + mounting kit for 2 pipe models (not fitted)	9079505		•				-	
	9079506		-				•	
2 way valve + mounting kit for 4 pipe models (not fitted)	9079507		•				-	
	9079508		-				•	
3 way valve + mounting kit for units with outer casing OCA (not fitted)	9079519	-		•			-	
3 way valve + mounting kit for units with outer casing OCA (not fitted)	9079509		-				•	
Outer casing	OCA 600		•				-	
	OCA 800		-				•	
Fresh air duct	FAD				•			
Fresh air kit 1 way for units with outer casing OCA	FAK 600	-		•			-	
Fresh air kit 1 way for units with outer casing OCA	FAK 800		-				•	
CONTROLS for version without infrared remote control								
Remote three speed control BR	9060540				•			
Remote three speed control + electronic thermostat and S/W switch TR	9060541				•			
Automatic speed control with electronic thermostat and S/W - ATR	9060542				•			
Automatic speed control with electronic thermostat to be mounted in the light wall box TMO-503-SV2	9060172				•			
Receiver REC-S	9079110				•			
Automatic remote control with electronic thermostat, S/W switch and liquid crystal display DTR	9060521				•			
Receiver (slave) for control DTR RECD	9060139				•			
Change over CH 15-25	9053049				•			
Low temperature cut out thermostat TME	3021091				•			
CONTROLS for version with infrared remote control								
Digital remote control up to 60 multifunction units DRC-DI	9079102				•			
Change over for infrared remote control CH T2/ETN	9079103				•			
CONTROLS only for YHK-ECM version								
ETM-ECM control	3021232				•			
RT03/ECM infrared remote control	9079220				•			
Maxinet management system for a network of cassette fan coil								
Maxinet	9079104				•			
Board 8 relais for Maxinet	9079105				•			

(*) Minimum order quantity : 20 units

YHK-ECM 25/40/50-2 / YHK-ECM 25-4 / 40/50-6. (Version 600x600)



YHK-ECM 65/95-2 / YHK-ECM 65-4 / 95-6. (Version 800x800)



YFM Hydro High Wall

2 pipe system

A range from 1.6 to 3.6 kW



TR. Wired Control

Remote three speeds controller, electronic thermostat and Summer/Winter switch

ATR. Wired Control

Automatic TR



Electronic Infrared Control



FX03 Terminal unit controller

BacNET and N2 Metasys network compatible
(see page 99 for details)

Features

- Wired control or infrared control
- Automatic air sweep
- 3 way valves fitted (YFMH 20V and 30V models) or 2 way valves supplied loose in all range
- Condensate collection tray
- Air filter included
- Heat exchange coil



2 Way Valve ON/OFF
with thermoelectric actuator.
Suitable for the connection
with Ø 12 mm pipes



Rear Frame
for installation of valves (accessorie)

Wired control

- 4 operation modes (Cool/Heat/Auto/Fan)
- Room temperature and setting
- Fan speed selector (Auto, low, medium and high)

Infrared control

- Wireless
- 5 operation modes (Cool/Heat/Auto/Dry/Fan)
- Sleep Mode
- Room Temperature setting
- Fan speed selection
- Timer
- Air flow direction setting
- Turbo mode
- LCD display

YFM Hydro High Wall

1.6 to 3.6 kW



Technical features

Model		YFMY(H) 20	YFMY(H) 30	YFMY(H) 40
Cooling capacity	kW	1.9 / 1.7 / 1.6	2.6 / 2.3 / 2.0	3.6 / 3.4 / 3.0
Sensible capacity	kW	1.7 / 1.4 / 1.3	2.3 / 1.9 / 1.5	2.8 / 2.7 / 2.4
Heating capacity	kW	3.1 / 2.2 / 2.1	4.2 / 3.0 / 2.5	5.3 / 4.5 / 4.1
Air flow	m³/h	436 / 376 / 334	632 / 522 / 403	780 / 691 / 570
Electrical data				
Power supply	V/Ph/Hz	230 / 1 / 50 + E		
Power input	W	26 / 24 / 22	42 / 38 / 36	47 / 38 / 36
Noise level				
Sound pressure level at 1 m	dB(A)	35 / 30 / 27	37 / 33 / 30	44 / 41 / 39
Dimensions and weight				
Height	mm	285	285	290
Width	mm	830	830	907
Depth	mm	189	189	195
Weight	kg	11	11	14

Technical features with valve fitted

Model		YFMH 20 V	YFMH 30 V
Cooling capacity	kW	2.0 / 1.8 / 1.6	2.5 / 2.4 / 2.2
Sensible capacity	kW	1.8 / 1.6 / 1.5	2.1 / 1.9 / 1.8
Heating capacity	kW	3.5 / 3.2 / 3.0	4.5 / 4.2 / 3.9
Air flow	m³/h	540 / 478 / 439	600 / 527 / 507
Electrical data			
Power supply	V/Ph/Hz	230 / 1 / 50 + E	
Power input	W	46 / 42 / 40	60 / 50 / 48
Noise level			
Sound pressure level at 1 m	dB(A)	44 / 42 / 38	49 / 47 / 45
Dimensions and weight			
Height	mm	285	290
Width	mm	830	907
Depth	mm	189	195
Weight	kg	11	14

All data are in high/medium/low speed

Cooling capacities based on 7°C EWT Δt 5°C Indoor temperature 27°C DB / 19°C WB

Heating capacities based on 50°C EWT at nominal flow rate Indoor temperature 20°C

Options / Accessories

Description	Codes	YFMY(H) 20	YFMY(H) 30	YFMY(H) 40
Wired ON/OFF 3 Speeds Cool/Heat	TR	•	•	•
TR + Auto	ATR	•	•	•
2 Way valve	9079147	•	•	•
Rear frame	RF	•	•	•
Rear frame with 3 way valve	RFV	•	•	•
Change over	TMM	•	•	•
Low temperature cut out	TME	•	•	•

YFCN Fan Coil Unit centrifugal fan YFTM Fan Coil Unit tangential fan

2 & 4 pipe system

YFCN- A complete range from 1.0 kW to 7.6 kW / YFTM- A complete range from 1.4 kW to 5.3 kW



NEW

Wired controls



BR
Remote three speeds controller

TR
BR + Electronic thermostat
and Summer/Winter switch

ATR
Automatic TR



DTR
Digital Automatic
Remote controller

TMO 503 SV2
Digital Automatic
Remote controller
to be mounted in the standard
light wall box

DRC - DI
Centralized controller
up to 60 terminals



Infrared control

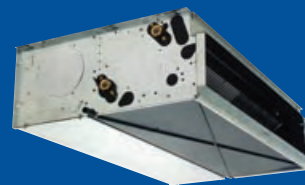
Features

- New Casing, improved aesthetics and suitable for any modern indoor ambient
- Full range for all your needs: 9 sizes (YFCN) and 5 sizes (YFTM), suitable for horizontal/vertical mounting
- Models with or without casing
- Low noise operation, with tangential fan in case of YFTM
- YFTM 6 fan speeds (3 pre-wired) - YFCN 3 fan speeds
- Single piece discharge grille
- Several coil choices: Single: 3 or 4 rows, Dual: 3 or 4 rows (cooling) & 1 row (heating) (3 rows cooling & 2 rows heating for YFCN)
- Electrical heater optional
- Suction and discharge plenum optional
- Factory fitted valves and controller packages
- Painted back panel option
- 3 available versions in all range:
VC = Vertical Discharge with Casing
HC = Horizontal Discharge with Casing
CD = Concealed unit without Casing



**FX03 Terminal unit
controller**
BacNET and N2 Metasys
network compatible
(see page 99 for details)

YFCN Fan Coil Unit centrifugal fan YFTM Fan Coil Unit tangential fan



YFCN – Technical features 2 pipes

YFCN model	Air flow m³/h	Total capacity		Pressure drop		Power input W	Pressure level dBA	Dimensions		
		Cooling	Heating	Cooling	Heating			Height	Width	Depth
		kW	kW	kPa	kPa			mm	mm	mm
130	220	1.0	1.4	2.3	2.0	33	36	530	670	225
230	295	1.6	2.0	6.5	5.5	32	38	530	770	225
330	385	2.4	2.9	19.7	16.7	41	40	530	985	225
430	485	2.9	3.6	27.2	23.1	44	38	530	985	225
530	545	3.2	3.9	12.7	10.8	46	34	530	1 200	225
630	760	4.1	5.1	19.8	16.8	78	43	530	1 200	225
730	925	5.1	6.3	34.2	29.1	103	47	530	1 415	225
830	1 200	5.8	7.7	19.0	16.2	130	51	530	1 415	255
930	1 500	6.7	9.1	24.6	20.9	176	55	530	1 415	255
140	220	1.2	1.6	5.6	4.7	33	36	530	670	225
240	295	1.8	2.2	13.9	11.6	32	38	530	770	225
340	385	2.6	3.1	11.5	9.2	41	40	530	985	225
440	485	3.1	3.8	15.5	12.2	44	38	530	985	225
540	545	3.5	4.2	24.2	19.9	46	34	530	1 200	225
640	760	4.8	5.9	36.2	29.3	78	43	530	1 200	225
740	925	5.6	6.7	27.7	23.7	103	47	530	1 415	225
840	1 200	6.5	8.4	17.5	14.5	130	51	530	1 415	255
940	1 500	7.6	10.1	23.2	19.3	176	55	530	1 415	255

YFCN – Technical features 4 pipes

YFCN model	Air flow m³/h	Total capacity		Pressure drop		Power input W	Pressure level dBA	Dimensions		
		Cooling	Heating	Cooling	Heating			Height	Width	Depth
		kW	kW	kPa	kPa			mm	mm	mm
130-1	220	1.0	1.0	2.3	1.7	33	36	530	670	225
230-1	295	1.6	1.5	6.5	4.0	32	38	530	770	225
330-1	385	2.4	2.3	19.7	9.7	41	40	530	985	225
430-1	485	2.9	2.7	27.2	12.8	44	38	530	985	225
530-1	545	3.2	3.0	12.7	3.2	46	34	530	1 200	225
630-1	760	4.1	3.8	19.8	6.7	78	43	530	1 200	225
730-1	925	5.1	4.8	34.2	8.3	103	47	530	1 415	225
830-1	1 200	5.8	5.4	19.0	10.3	130	51	530	1 415	225
930-1	1 500	6.7	6.2	24.6	13.2	176	55	530	1 415	225

YFTM – Technical features 2 pipes

YFTM model	Air flow m³/h	Total capacity		Pressure drop		Power input W	Pressure level dBA	Dimensions		
		Cooling	Heating	Cooling	Heating			Height	Width	Depth
		kW	kW	kPa	kPa			mm	mm	mm
130	300	1.4	2.1	4.6	3.7	40	39	530	770	225
230	450	2.4	3.1	12.0	9.8	50	38	530	985	225
330	600	3.4	4.3	13.2	11.0	65	39	530	1 200	225
430	750	4.1	5.0	19.7	16.4	80	43	530	1 200	225
530	1 000	4.6	6.3	27.4	26.1	85	46	530	1 415	225
140	300	1.7	2.3	8.0	7.2	40	39	530	770	225
240	450	2.6	3.3	9.2	7.6	50	39	530	985	225
340	600	3.7	4.7	20.1	20.8	65	38	530	1 200	225
440	750	4.5	5.6	36.6	33.4	80	43	530	1 200	225
540	1 000	5.3	6.9	20.6	17.4	85	47	530	1 415	225

YFTM – Technical features 4 pipes

YFTM model	Air flow m³/h	Total capacity		Pressure drop		Power input W	Pressure level dBA	Dimensions		
		Cooling	Heating	Cooling	Heating			Height	Width	Depth
		kW	kW	kPa	kPa			mm	mm	mm
130-1	300	1.4	1.4	5.7	2.4	40	39	530	770	225
230-1	450	2.4	2.6	14.5	8.9	50	38	530	985	225
330-1	600	3.4	3.5	13.9	3.7	65	39	530	1 200	225
430-1	750	4.1	4.0	19.7	4.4	80	45	530	1 200	225
530-1	1 000	4.2	4.4	20.6	5.4	85	45	530	1 415	225

With fan running at max. speed. Data for the casing models. The capacities are accordingly to the EUROVENT standards and UNI ENV 1397.

COOLING: Room temperature 27°C d.b., 19°C w.b. - Water temperature 7/12 °C

HEATING: Room temperature 20°C - Water inlet temperature: 50°C and water flow rate is for a cooling conditions (for 2 pipes) / Room temperature 20°C - Water inlet temperature: 70/60°C (for 4 pipes)

Sound pressure level in a 100 m² room and riverberating time of 0,5 s.



Options / Accessories

Compatibility table / Codes

Model	YFCN - YFTM		
Versions	VC mod. - Vertical with casing	HC mod. - Horizontal with casing	CD mod. - Without casing
Controls for style VC (supplied with separate packaging)			
Three speed control BL *	9060130	-	-
Three speed control + electronic thermostat and S/W switch TMV-S	9060140	-	-
Three speed control + electronic thermostat and centralized S/W - TLC **	9060133	-	-
Automatic speed control with electronic thermostat and S/W switch ATL **	9060134	-	-
Infra-red remote control with fitted electronic board for versions VC and HC only IRC-M **	9060175	-	-
IRC-M control (fitted on the unit) with ETN +/- 3%	9060166	-	-
Controls for style HC/CD (supplied with separate packaging)			
Remote three speed control BR *	-	9060540	9060540
Remote three speed control + electronic thermostat and S/W switch TR ***	-	9060541	9060541
Automatic speed control with electronic thermostat and centralized S/W - ATR ***	-	9060542	9060542
Automatic remote control with electronic thermostat, S/W switch and liquid crystal display DTR **	-	9060521	9060521
Automatic speed control with electronic thermostat to be mounted in the light wall box TMO-503-S ****	-	9060170	9060170
Automatic speed control with electronic thermostat to be mounted in the light wall box TMO-503-SV ****	-	9060172	9060172
Infra-red remote control with NOT fitted electronic board for version CD only IRC-S **	-	9060176	9060176
Digital remote control up to 60 multifunction units	-	9079102	9079102
IRC-S control (not fitted on the unit) with ETN +/- 3%	-	9060167	9060167
Controls for all versions (supplied with separate packaging)			
Low temperature cut out TME for controls TL, TLC, ATL, ATLC, TR, DTR	3021091	3021091	3021091
Low temperature cut out TMM for controls BL, BR	9053048	9053048	9053048
Change over 15-25 CH 15-25	9053049	9053049	9053049
Receiving speed selector for centralized control (slave) style VC RECV	9060136	9060136	9060136
Receiving speed selector for centralized control (slave) style HC/CD RECH	9060137	9060137	9060137
Receiver (slave) for control DTR RECD	9060139	9060139	9060139
Controls for style VC + additional electric resistance (supplied with separate packaging)			
Three speed control BL-E *	9063000	-	-
Three speed control + electronic thermostat and S/W switch BTL-E *	9063001	-	-
Three speed control + electronic thermostat and S/W switch TL-E **	9063002	-	-
Three speed control + electronic thermostat and centralized S/W - TLC-E **	9063003	-	-
Automatic speed control with electronic thermostat and S/W switch ATL-E **	9063004	-	-
Automatic speed control with electronic thermostat and centralized S/W - ATLC-E **	9063005	-	-
Controls for style HC/CD + additional electric resistance (supplied with separate packaging)			
Remote three speed control BR-E *	-	9063050	9063050
Remote three speed control + electronic thermostat and S/W switch TR-E ***	-	9063051	9063051
Automatic speed control with electronic thermostat and centralized S/W - ATR-E ***	-	9063024	9063024
Automatic remote control with electronic thermostat, S/W switch and liquid crystal display DTR **	-	9060521	9060521

* not to be used with valves and/or low temperature cut-out

** it can be used with valves and/or low temperature cut-out

*** to be used with valves and/or low temperature cut-out. The Winter/Summer switch is manual/centralized in accordance to the position of the J1 Jumper

**** low temperature cut-out included

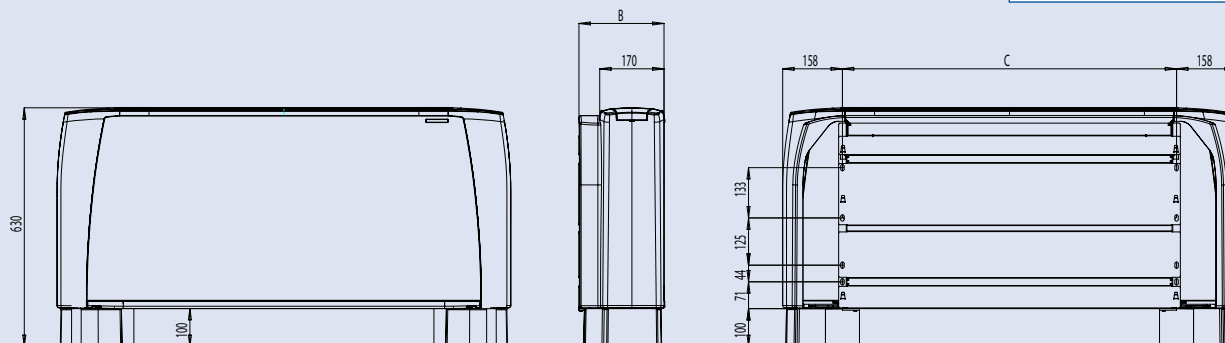
Options / Accessories

Compatibility table / Codes

Model	Sizes	YFCN									YFTM					
		130/140	230/240	330/340	430/440	530/540	630/640	730/740	830/840	930/940	130/140	230/240	330/340	430/440	530/540	
Valves																
Kit 3 way valve mounted	9066561				9060471				9060470							
Kit 3 way valve additional battery mounted	9060472															
Kit 3 way valve not mounted	9066560				9060474				9060473				9060474			
Kit 3 way valve additional battery not mounted	9060475															
Kit 2 way valve primary + additional battery mounted	9060476				-				9060476				-			
Kit 2 way valve primary battery mounted	-				9060477				-				9060477			
Kit 2 way valve primary+additional battery not mounted	9060478				-				9060478							
Kit 2 way valve primary battery not mounted	-				9060479				-				9060479			
Semplified valve kit for CD version fitted	9066571				9060484				9060483				9060484			
Semplified valve kit for CD version not fitted	9066570				9060481				9060480				9060481			
Accessories for all versions																
Pair feet	9060150							9060151		9060150						
Vertical auxiliary condensate tray	6060400															
Horizontal auxiliary condensate tray (left connections)	6060402															
Horizontal auxiliary condensate tray (right connections)	6060403															
Condensate drain pipe	6060420															
El. resistance and relays fitted on the unit (700 W) VC/HC	9066491	-														
El. resistance and relays fitted on the unit (400 W) VC/HC	-	9066472	-				9060630				-					
El. resistance and relays fitted on the unit (600 W) VC/HC	-	9066482	9066473		-				9060625		9060621	-				
El. resistance and relays fitted on the unit (750 W) VC/HC	-				9066475		-				9060622			-		
El. resistance and relays fitted on the unit (900 W) VC/HC	-		9066483		-						9060626		-			
El. resistance and relays fitted on the unit (1000 W) VC/HC	-	9066492	-				9066477		9060630		-			9060623		
El. resistance and relays fitted on the unit (1250 W) VC/HC	-								9060627				-			
El. resistance and relays fitted on the unit (1500 W) VC/HC	-		9066493		9066485		9066487		-	9060631	-			9060628		
El. resistance and relays fitted on the unit (2000 W) VC/HC	-				9066495		-				9060632			-		
El. resistance and relays fitted on the unit (2500 W) VC/HC	-				9066497				-				9060633			
El. resistance and relays fitted on the unit (700 W) CD	9066611	-														
El. resistance and relays fitted on the unit (400 W) CD	-	9066592	-				9060640				-					
El. resistance and relays fitted on the unit (600 W) CD	-	9066602	9066593		-				9060645		9060641	-				
El. resistance and relays fitted on the unit (750 W) CD	-				9066695		-				9060642			-		
El. resistance and relays fitted on the unit (900 W) CD	-		9066603		-						9060646		-			
El. resistance and relays fitted on the unit (1000 W) CD	-	9066612	-				9066597		9060650		-			9060643		
El. resistance and relays fitted on the unit (1250 W) CD	-				9066605		-				9060647			-		
El. resistance and relays fitted on the unit (1500 W) CD	-		9066613		-				9066607		-	9060651	-			
El. resistance and relays fitted on the unit (2000 W) CD	-				9066615		-				9060652			-		
El. resistance and relays fitted on the unit (2500 W) CD	-				9066617				-				9060653			
Damper	9066531	9066532	9066533		9066535		9066537	9066538		6060410		6060411		6060412		
Rear closing panel VC	-	9060180	9060181		9060182		9060183				9060180		9060181		9060182	
Rear closing panel HC	-	9060190	9060191		9060192		9060193	9060194		9060190		9060191		9060192		
Frontal air intake CD mounted	-	9060220	9060221		9060222		9060223	9060224		9060220		9060221		9060222		
Intake grid for VC	-	9060230	9060231		9060232		9060233				9060230		9060231		9060232	
Adaptor for terminal board VC for remote control	9060103															
Accessories only for concealed version CD																
Outlet flange 90°	9066381	9066382	9066383		9066385		9066387	9066388		9060700	9060701	9060702		9060703		
Inlet flange 90°	9066441	9060710	9060711		9060712		9060713	9060714		9060710	9060711	9060712		9060713		
Straight inlet flange	9066451	9060720	9060721		9060722		9060723	9060724		9060720	9060721	9060722		9060723		
Straight outlet flange	9066371	9066372	9066373		9066375		9066377	9066378		9060730	9060731	9060732		9060733		
Outlet spigot diffuser	9066361	9066362	9066363		9066365		9066367	9066368		9060740	9060741	9060742		9060743		
Air outlet grid	9066411	9060750	9060751		9060752		9060753				9060750	9060751	9060752		9060753	
Air inlet grid 400x150	9066421	9060760	9060761		9060762		9060763				9060760	9060761	9060762		9060763	
Air inlet spigot plenum	9066461	9060780	9060781		9060782		9060783	9060784		9060780	9060781	9060782		9060783		
Intake grid with filter (to be used in combination with inlet flange 90°)	9066391	9060770	9060771		9060772		9060773				9060770	9060771	9060772		9060773	
Intake grid with filter (to be used in combination with straight inlet flange)	9066401	9060774	9060775		9060776		9060777				9060774	9060775	9060776		9060777	

Dimensions

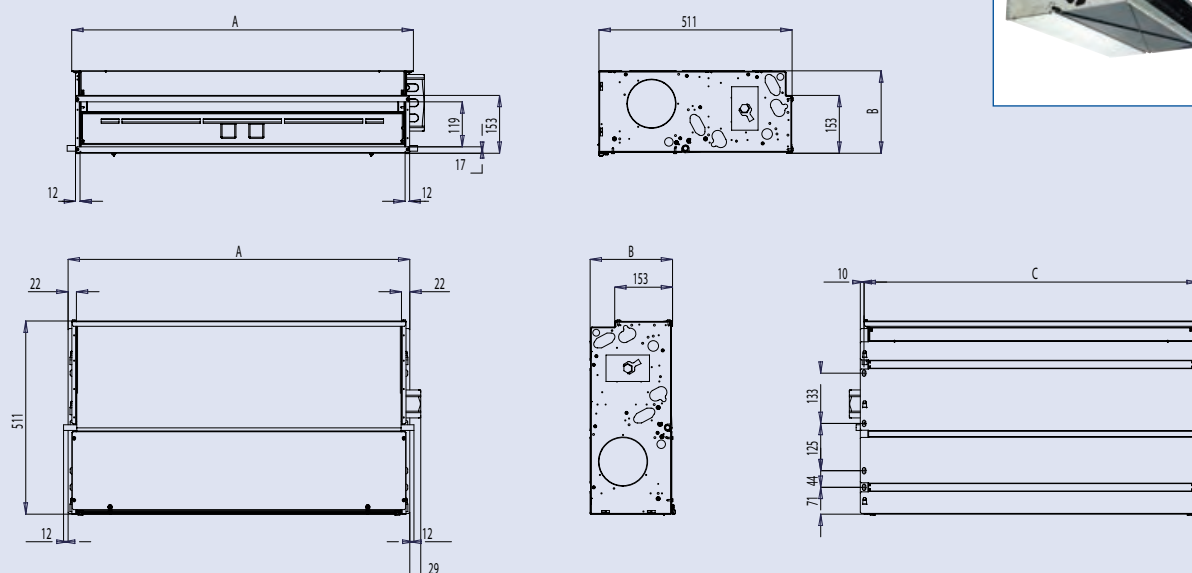
YFCN 130 to 940 / YFTM 130 to 540 (with casing)



All dimensions in mm. Drawings not a scale.

Model	130 / 140	230 / 240	330 / 340	430 / 440	530 / 540	630 / 640	730 / 740	830 / 840	930 / 940
A	670	770	985	985	1 200	1 200	1 415	1 415	1 415
B	225	225	225	225	225	225	225	255	255
C	354	454	669	669	884	884	1 099	1 099	1 099

YFCN 130 to 940 / YFTM 130 to 540 (without casing)



All dimensions in mm. Drawings not a scale.

Model	130 / 140	230 / 240	330 / 340	430 / 440	530 / 540	630 / 640	730 / 740	830 / 840	930 / 940
A	374	474	689	689	904	904	1 119	1 119	1 119
B	218	218	218	218	218	218	218	248	248
C	354	454	669	669	884	884	1 099	1 099	1 099

Smart Pac

Johnson Controls Intelligent Network Controllers



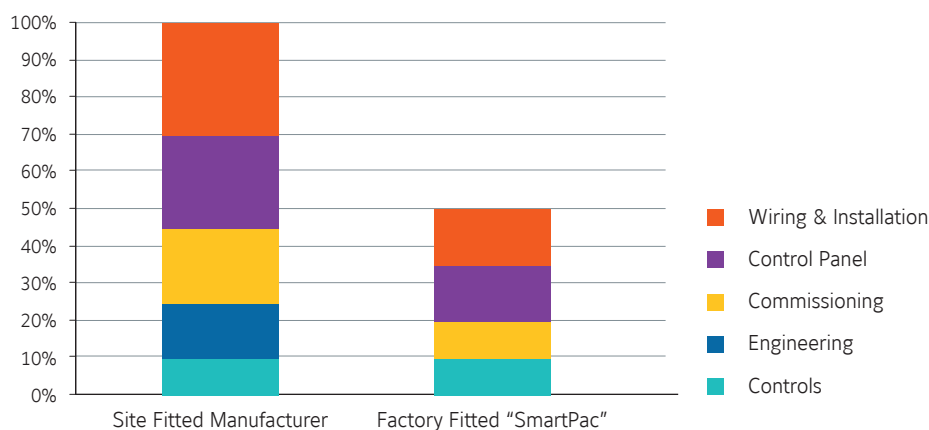
FX03 Controller

The controller is designed specifically to provide direct digital control of terminal unit applications with heating and/or cooling coils, an electric heater and a three-speed or variable speed fan. The device can be configured by the installer without the need of a PC and software tool, using a set of on-board dip-switches. The controller is designed for mounting by York OEM equipment FCU manufacturers on DIN-rail or directly on to the FCU surface.

Communication & Valves

The total assembly is completed in the factory; options for controllers include EUBAC approved systems or low cost configurable controllers. Further communication options enhance flexibility with BACNet and LON made available at no extra cost. Valves and Valve kits are also flexible, with modulating and on/off actuators, plus isolation valves if required fitted to the valve kits. Installations are tested and delivered to site with software ready loaded.

Fancoil Factory Package over Typical Site Installed Controls



Save Time...

Site Time is always precious, the more off site to benefit the flow of the contract, the deliver the desired result.

SmartPac Engineering is the control panels are standard and the savings are greater...

Source: Johnson Controls

SAPHIR Fan Coil Unit

2 & 4 pipe system

A complete range from 0.8 kW up to 3.6 kW



CSR00 (Wall mounted)
Fan speed selector



CER00 (Wall mounted)
Thermostat with manual fan speed and automatic change over



CMR00 (Wall mounted)
Thermostat with manual fan speed and S/W change over

CER20 (Wall mounted)
Thermostat with auto. fan speed and automatic change over

CER30 (Wall mounted)
Thermostat with auto. fan speed and automatic change over for modulating valve



FX03 Terminal unit controller
BacNET and N2 Metasys network compatible (see page 99 for details)

Features

- Inner frame, made of galvanized steel and lined with self-extinguishing thermal insulation material.
- Coil for 2 pipe systems, independent of the inner frame and provided with antitorsion structure. Standard water connections are on the right side of the unit, facing the air outlet; however they can be supplied left hand side on request; all water connections are 1/2" G female.
- Centrifugal fan deck independent of the inner frame with two aluminium impellers and galvanized steel scrolls, dynamically balanced; it includes the insulated condensate tray.
- 3 speed single phase motor, with permanently connected capacitor and thermal protection for the windings.
- Terminal board for the electric connections, fitted into a plastic box (ABS), mounted on the left side of the inner structure and easily removable.
- Outer casing, made of white (RAL 9001) ABS plastic (YSF and YSW models).
- Panel frontage made of sheet steel and painted with epoxy powders, of the same colour of the casing (YSF and YSW models).
- Air intake group (YSF and YSW models) and air delivery grilles (model YSW), both made of heat-resistant ABS plastic.
- Protection grill on the air delivery, made of heat-resistant ABS plastic (YSF and YSW models).
- Feet set (only YSF model), made of the same material and colour of the casing.
- Foldaway filter, easily removable, consisting of either an ABS plastic structure (YSW model) or a metallic structure (all other models), with a filter element made of polypropylene.

SAPHIR Fan Coil Unit

0.8 to 3.6 kW



Technical features

Model		10	20	30	40
Total cooling capacity [kW]	(1) max	1.56	2.09	2.92	3.62
	med	1.23	1.68	2.36	3.14
	min	0.84	1.22	1.83	2.35
Sensible cooling capacity [kW]	(1) max	1.16	1.58	2.16	2.70
	med	0.86	1.19	1.78	2.27
	min	0.62	0.85	1.37	1.70
Water flow in cooling [l/h]	(1) max	268	360	502	622
	med	211	289	407	540
	min	144	210	315	405
Pressure drop in cooling [kPa]	(1) max	1.9	3.1	7.3	10.6
	med	1.2	2.1	5.0	8.3
	min	0.6	1.2	3.2	5.0
Heating capacity 2 pipes [kW]	(2) max	2.05	2.81	3.61	4.57
	med	1.57	2.20	2.86	3.90
	min	1.04	1.55	2.17	2.84
Water flow in heating 2 pipes [l/h] *	(2) max	268	360	502	622
	med	211	289	407	540
	min	144	210	315	405
Pressure drop in heating 2 pipes [kPa]	(2) max	1.5	2.5	5.9	8.6
	med	1.0	1.7	4.1	6.7
	min	0.5	1.0	2.6	4.0
Heating capacity 2 pipes [kW]	(3) max	3.51	4.85	6.08	7.74
	med	2.68	3.76	4.80	6.58
	min	1.75	2.63	3.63	4.76
Water flow in heating 2 pipes [l/h]	(3) max	307	424	531	676
	med	234	329	420	575
	min	153	230	318	416
Pressure drop in heating 2 pipes [kPa]	(3) max	1.8	3.1	6.1	9.3
	med	1.1	2.0	4.0	7.0
	min	0.5	1.1	2.5	3.9
Heating capacity 4 pipes [kW]	(3) max	1.91	2.37	3.08	3.60
	med	1.58	1.98	2.65	3.23
	min	1.13	1.53	2.17	2.63
Water flow in heating 4 pipes [l/h]	(3) max	167	207	269	315
	med	138	173	232	283
	min	99	134	189	230
Pressure drop in heating 4 pipes [kPa]	(3) max	3.3	4.8	10.2	13.5
	med	2.3	3.5	7.9	11.2
	min	1.3	2.2	5.5	7.8
Air flow [m ³ /h]	max	275	390	425	550
	med	201	288	330	460
	min	125	190	246	325
Sound power level [dB(A)]	max	43	52	47	54
	med	35	44	42	49
	min	27	34	34	40
Sound pressure level [dB(A)]	(4) max	34	43	37	44
	med	25	35	32	39
	min	18	24	24	31
Power supply [V-ph-Hz]		230 - 1 - 50			
Power input [W]	max	31	42	63	65
Absorbed current [W]	max	0.13	0.20	0.30	0.29
Water content (2 pipes) [l]		1.00	1.00	1.40	1.40

(1) Room temperature 27°C d.b., 19°C w.b. - Water temperature 7/12 °C (2) Room temperature 20°C - Water temperature: 50°C

(3) Room temperature 20°C - Water temperature: 70/60°C (4) Sound pressure level in a 100 m³ room, at 1,5 m distance and reverberating time of 0,3 s.

* Water flow values as Cooling, accordingly to the EUROVENT standards and UNI ENV 1397



E-COM-H1005 Manufacturer reserves the rights to change specifications without prior notice.



Features & Accessories

Protection grill:

Delivered in standard (YSF, YSW).

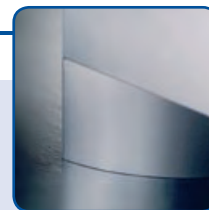


Feet set:

Delivered in standard (only YSF).

LUX:

Metallic aluminium grey cabinet (YSF, YSW).



Folaway filter:

Delivered in standard. (ABS plastic structure for YSW model, metallic structure for all other models).



CDI:

Built-in digital regulator (YSF, YSW).



PPV:

Back panel painted in RAL 9001 (YSF).

PPV LUX:

Back panel painted in metallic aluminium gray colour (YSF).



DTH2902:

Insulated ON/OFF valves, for 2 and 4 pipes.



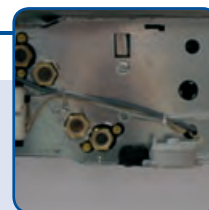
KREL:

Electric heater kit.



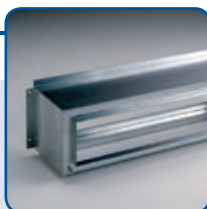
PC:

Condensing pump.



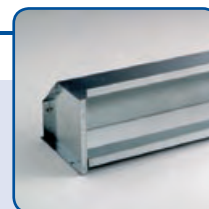
KPA:

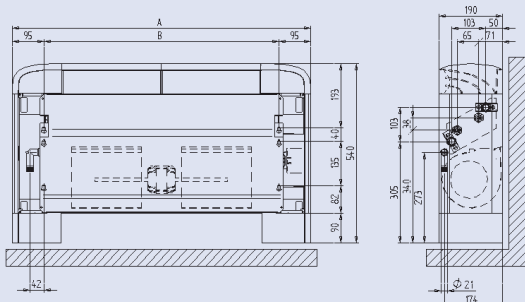
Air suction plenum (YSIV, YSIH).



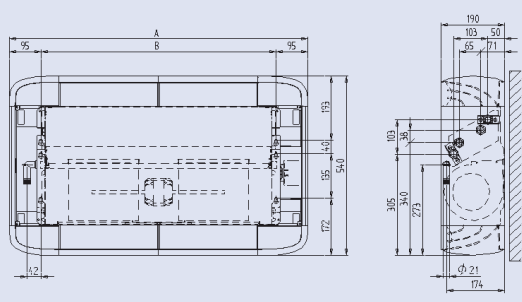
KPM:

Air delivery plenum (YSIV, YSIH).

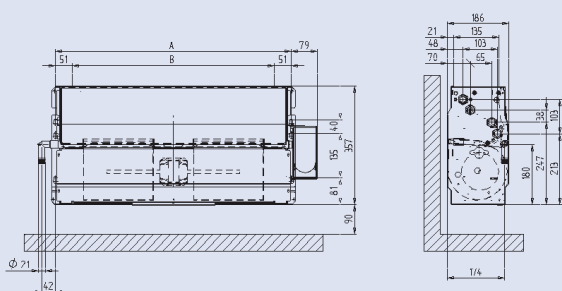




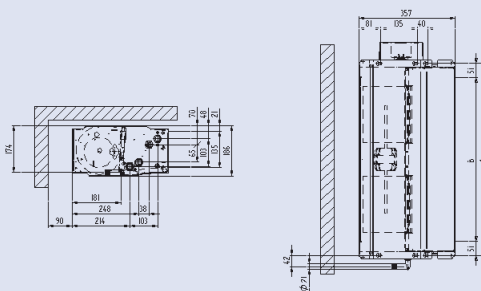
Mod.	10	20	30	40
A	900	900	1 200	1 200
B	710	710	1 010	1 010
kg	19	19	27	27



Mod.	10	20	30	40
A	900	900	1 200	1 200
B	710	710	1 010	1 010
kg	20	20	29	29



Mod.	10	20	30	40
A	710	710	1 010	1 010
B	609	609	909	909
kg	14	14	20	20



Mod.	10	20	30	40
A	710	710	1 010	1 010
B	609	609	909	909
kg	14	14	20	20



LASER & LOW BODY Fan Coil Units

2 & 4 pipe system

A complete range from 0.7 kW up to 9.9 kW



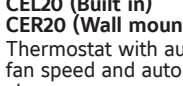
**CSL00 (Built in)
CSR00 (Wall mounted)**
Fan speed selector



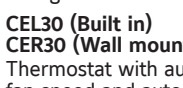
**CEL00 (Built in)
CER00 (Wall mounted)**
Thermostat with manual fan speed and automatic change over



**CML00 (Built in)
CMR00 (Wall mounted)**
Thermostat with manual fan speed and S/W change over



**CEL20 (Built in)
CER20 (Wall mounted)**
Thermostat with auto. fan speed and automatic change over



**CEL30 (Built in)
CER30 (Wall mounted)**
Thermostat with auto. fan speed and automatic change over for modulating valve



FX03 Terminal unit controller
BacNET and N2 Metasys network compatible (see page 99 for details)

Features

- 6 speed fan
- Cabinet factory fitted
- Valve factory fitted
- Electrical heater factory fitted
- Thermal or modulating valve
- Service valve
- Option front air intake (LASER)
- Optional plenum (LASER)
- Up to 110 pa static pressure (LASER)

Technical features

Model		LASER: YLV, YLV-AF, YLH, YLH-AF, YLIV, YLIV-AF, YLIH, YLIH-AF										LOW BODY: YLVR, YLIVR				
Sizes		110	112	114	216	218	220	222	224	226	228	110	112	114	216	218
Cooling capacity (1)	W	1 169	1 746	2 291	3 467	3 804	4 664	5 570	6 789	7 599	9 974	942	1 460	2 115	2 719	3 372
Heating capacity (2)	W	1 628	2 296	2 981	4 514	5 076	6 013	7 304	8 677	9 800	12 739	1 159	1 839	2 432	3 270	3 656
Pressure drop (4)	kPa	3.9	7.6	6.5	13.8	13.6	23.1	31.6	18.8	20.9	37.1	6.1	1.4	5.4	9.1	24.2
Power supply	V/Ph/Hz	230 / 1 / 50 + E														
Input	W	46	48	57	81	86	89	119	145	156	200	46	48	57	81	86
Sound power level (3)	dB(A)	49	50	53	53	55	55	59	60	63	67	49	50	53	53	55
Sound pressure level at 3 m (3)	dB(A)	31	32	35	35	37	37	41	42	45	49	31	32	35	35	37
Water connections	inch	1/2 "														

Dimensions indicated next page.

(1) Cooling capacities based on 7°C EWT Δt 5°C indoor temperature 27°C DB / 19°C WB (2 pipes - high speed fan) (3 rows).

(2) Heating capacities based on 50°C EWT (LASER) / 70°C EWT (LOW BODY) at nominal flow rate indoor temperature 20°C (2 pipes - high speed fan) (3 rows for LASER and 1 row for LOW BODY).

(3) Sound level at high speed fan. (4) In cooling mode. For other conditions contact Johnson Controls

LASER & LOW BODY Fan Coil Units

0.7 to 9.9 kW



Compatibility table / Codes

Model		LASER										LOW BODY				
Sizes		110	112	114	216	218	220	222	224	226	228	110	112	114	216	218
With Cabinet																
YLV-YLH	2/3/4 rows	•	•	•	•	•	•	•	•	•	•					
YLV-YLH/AF Front air intake	2/3/4 rows	•	•	•	•	•	•	•	•	•	•					
YLVR	2/3 rows											•	•	•	•	•
Without Cabinet																
YLIV-YLIH	2/3/4 rows	•	•	•	•	•	•	•	•	•	•					
YLIV-YLIH/AF Front air intake	2/3/4 rows	•	•	•	•	•	•	•	•	•	•					
YLIVR	2/3 rows											•	•	•	•	•
Options (Factory fitted)																
Coil and heaters																
1 row heating	BA1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Kit electrical heater (with relay and safety switch)	KREL	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Built in thermostat																
Fan speed selector	CSL00									•						
Thermostat with manual fan speed and S/W change over	CML00									•						
Thermostat with manual fan speed, dead band, automatic change over	CEL00									•						
Thermostat with automatic fan speed, dead band, automatic change over	CEL20									•						
Thermostat with automatic fan speed, dead band, automatic change over for modulating valve	CEL30									•						
Parallel connection																
For ON/OFF valve one/FCU	CBL20									•						
For modulating valve one/FCU	CBL30									•						
3 way valve factory fitted																
For 2 pipe systems ON/OFF	J3A2 (2p)									•						
For 4 pipe systems ON/OFF	J3A2 (4p)									•						
3 way modulating valve factory fitted																
For 2 pipe systems Modulating	J3AM (2p)									•						
For 4 pipe systems Modulating	J3AM (4p)									•						
Shut off valves factory fitted																
For 2 pipe systems	DT (2p)									•						
For 4 pipe systems	DT (4p)									•						
Condensate pump	PC									•						
WS sensor change over for CEL/CER	WS									•						
Minimum temperature thermostat	TM									•						
Accessories (Supplied loose)																
Remote controllers and thermostat (wall mounted)																
Fan speed selector	CSR00									•						
Thermostat with manual fan speed and S/W change over	CMR00									•						
Thermostat with manual fan speed, dead band, automatic change over	CER00									•						
Thermostat with automatic fan speed, dead band, automatic change over	CER20									•						
Thermostat with automatic fan speed, dead band, automatic change over for modulating valve	CER30									•						
Feet and panel (1)																
Set of painted feet	CP1	•	•	•	•	•	•	•	•	•	•					
Set of painted feet + frontal socle	ZL1	•	•	•	•	•	•	•	•	•	•					
Vertical painted back panel	PPV1	•	•	•	•	•	•	•	•	•	•					
Horizontal painted back panel	PPH1	•	•	•	•	•	•	•	•	•	•					
Plenums and air intake (1)																
Air intake plenum	PA	•	•	•	•	•	•	•	•	•	•					
Air intake plenum with collars	PAS	•	•	•	•	•	•	•	•	•	•					
90° air intake plenum	PA90	•	•	•	•	•	•	•	•	•	•					
Air intake duct fitting	RCA	•	•	•	•	•	•	•	•	•	•					
Air delivery plenum with collars	PM	•	•	•	•	•	•	•	•	•	•					
90° air delivery plenum	PM90	•	•	•	•	•	•	•	•	•	•					

(1) for check compatibility with the models of FCU see compatibility table on page 109

Dimensions & Weights

YLV & YLH

- V= vertical
- H= horizontal

YLV-AF & YLH-AF

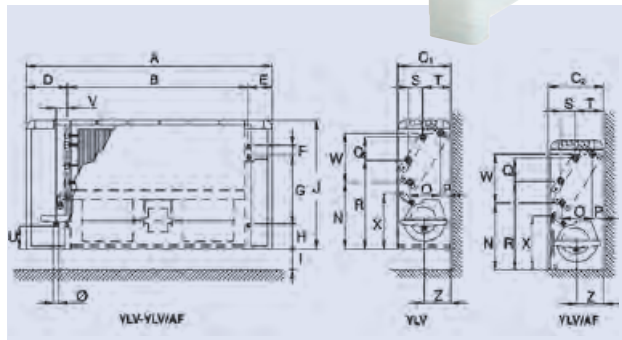
- AF= front air intake
- V= vertical
- H= horizontal

YLV-R

- R= low body
- V= vertical

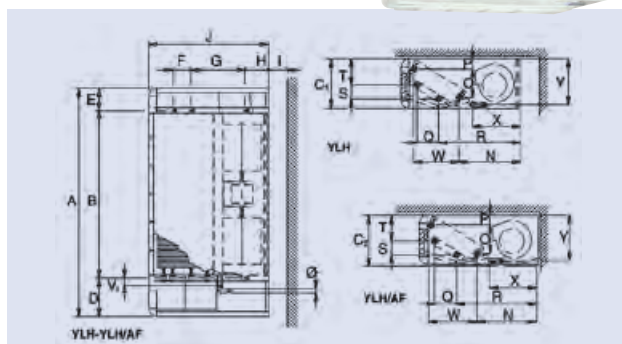
LASER: YLV - YLV/AF

VERTICAL

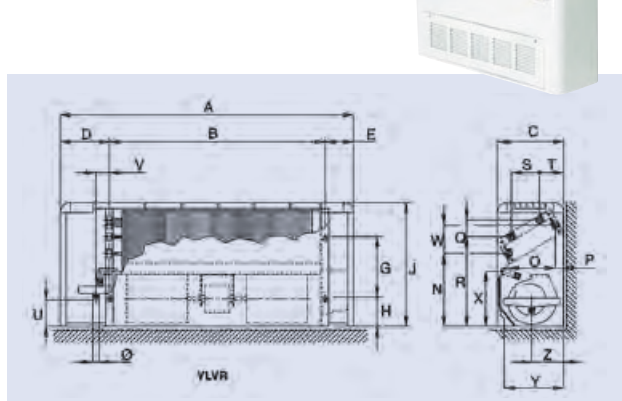


LASER: YLH - YLH/AF

HORIZONTAL



LOW BODY: YLVR



Dim	110	112	114	216	218	220	222	224	226	228
A	648	773	898	1023	1148	1273	1273	1523	1523	1773
B	374	499	624	749	874	999	999	1249	1249	1499
C1	224	224	224	224	224	254	254	254	254	254
C2	233	233	233	233	233	263	263	263	263	263
D	174	174	174	174	174	174	174	174	174	174
E	100	100	100	100	100	100	100	100	100	100
F	40	40	40	40	40	40	40	40	40	40
G	280	280	280	280	280	356	356	356	356	356
H	101	101	101	101	101	101	101	101	101	101
I	85	85	85	85	85	85	85	85	85	85
J	538	538	538	538	538	614	614	614	614	614
N	266	266	266	266	266	299	299	299	299	299
O	113	113	113	113	113	138	138	138	138	138
P	48	48	48	48	48	53	53	53	53	53
Q	87	87	87	87	87	87	87	87	87	87
R	355	355	355	355	355	409	409	409	409	409
S	50	50	50	50	50	50	50	50	50	50
T	117	117	117	117	117	135	135	135	135	135
U	90	90	90	90	90	116	116	116	116	116
V	47	47	47	47	47	47	47	47	47	47
V1	28	28	28	28	28	28	28	28	28	28
W	195	195	195	195	195	238	238	238	238	238
X	219	219	219	219	219	252	252	252	252	252
Y	205	205	205	205	205	235	235	235	235	235
Z	109	109	109	109	109	122	122	122	122	122
Ø	20	20	20	20	20	20	20	20	20	20
kg1	18	20	23	28	31	41	44	52	52	58
kg2	19	21	24	30	32	43	46	54	54	61

Notes: 1=YLV / YLH - 2=YLV/AF / YLH/AF (All dimensions in mm)

Dim	110	112	114	216	218
A	648	773	898	1023	1148
B	374	499	624	749	874
C	254	254	254	254	254
D	174	174	174	174	174
E	100	100	100	100	100
G	170	170	170	170	170
H	101	101	101	101	101
J	430	430	430	430	430
N	245	245	245	245	245
O	154	154	154	154	154
P	31	31	31	31	31
Q	47	47	47	47	47
R	304	304	304	304	304
S	88	88	88	88	88
T	87	87	87	87	87
U	65	65	65	65	65
V	47	47	47	47	47
W	84	84	84	84	84
X	214	214	214	214	214
Z	109	109	109	109	109
φ	20	20	20	20	20
kg	15	17	22	23	26

(All dimensions in mm)

Dimensions & Weights

YLIV & YLIH

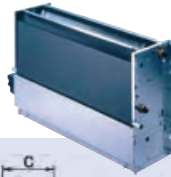
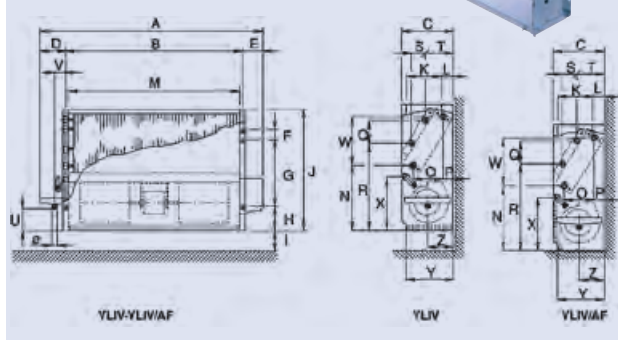
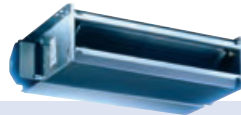
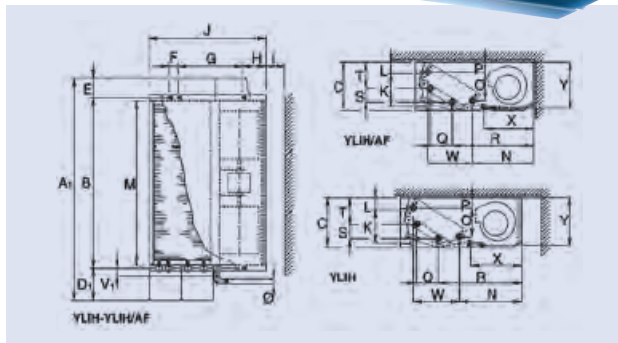
- ▶ V= vertical
- ▶ H= horizontal
- ▶ l= without Cabinet

YLIV-AF & YLIH-AF

- ▶ AF= front air intake
- ▶ V= vertical
- ▶ H= horizontal
- ▶ l= without Cabinet

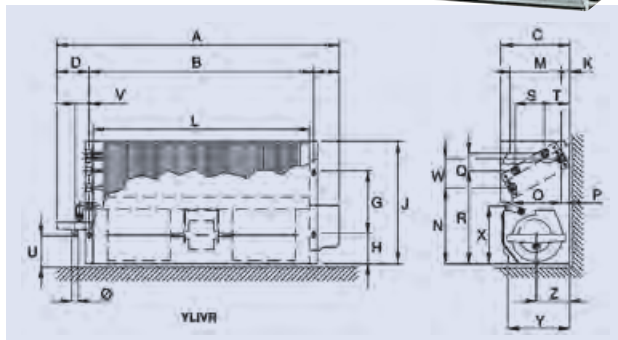
YLIVR

- ▶ R= low body
- ▶ V= vertical
- ▶ l= without cabinet

LASER: YLIV - YLIV/AF**VERTICAL****LASER: YLIH - YLIH/AF****HORIZONTAL**

Dim	110	112	114	216	218	220	222	224	226	228
A	555	680	805	930	1055	1180	1180	1430	1430	1680
A 1	574	699	824	949	1074	1199	1199	1449	1449	1699
B	374	499	624	749	874	999	999	1249	1249	1499
C	215	215	215	215	215	245	245	245	245	245
D	109	109	109	109	109	109	109	109	109	109
D 1	128	128	128	128	128	128	128	128	128	128
E	72	72	72	72	72	72	72	72	72	72
F	40	40	40	40	40	40	40	40	40	40
G	280	280	280	280	280	356	356	356	356	356
H	101	101	101	101	101	101	101	101	101	101
I	85	85	85	85	85	85	85	85	85	85
J	505	505	505	505	505	581	581	581	581	581
K	110	110	110	110	110	125	125	125	125	125
L	55	55	55	55	55	60	60	60	60	60
M	349	474	599	724	849	974	974	1224	1224	1474
N	266	266	266	266	266	299	299	299	299	299
O	113	113	113	113	113	138	138	138	138	138
P	48	48	48	48	48	53	53	53	53	53
Q	87	87	87	87	87	87	87	87	87	87
R	355	355	355	355	355	409	409	409	409	409
S	50	50	50	50	50	50	50	50	50	50
T	117	117	117	117	117	135	135	135	135	135
U	90	90	90	90	90	116	116	116	116	116
V	47	47	47	47	47	47	47	47	47	47
V 1	28	28	28	28	28	28	28	28	28	28
W	195	195	195	195	195	238	238	238	238	238
X	219	219	219	219	219	252	252	252	252	252
Y	200	200	200	200	200	230	230	230	230	230
Z	109	109	109	109	109	122	122	122	122	122
Ø	20	20	20	20	20	20	20	20	20	20
kg	10	13	16	19	22	29	31	38	38	42

(All dimensions in mm)

LOW BODY: YLIVR

Dim	110	112	114	216	218
A	555	680	805	930	1055
B	374	499	624	749	874
C	230	230	230	230	230
D	108	108	108	108	108
E	73	73	73	73	73
G	170	170	170	170	170
H	101	101	101	101	101
J	395	395	395	395	395
K	61	61	61	61	61
L	349	474	599	724	849
M	127	127	127	127	127
N	245	245	245	245	245
O	154	154	154	154	154
P	31	31	31	31	31
Q	47	47	47	47	47
R	304	304	304	304	304
S	88	88	88	88	88
T	87	87	87	87	87
U	65	65	65	65	65
V	47	47	47	47	47
W	84	84	84	84	84
X	214	214	214	214	214
Y	201	201	201	201	201
Z	109	109	109	109	109
Ø	20	20	20	20	20
kg	9	11	14	16	19

(All dimensions in mm)

LASER and LOW BODY

Compatibility tables



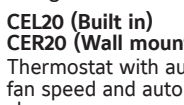
**CSL00 (Built in)
CSR00 (Wall mounted)**
Fan speed selector



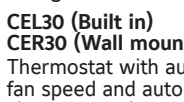
**CEL00 (Built in)
CER00 (Wall mounted)**
Thermostat with manual fan speed and automatic change over



**CML00 (Built in)
CMR00 (Wall mounted)**
Thermostat with manual fan speed and S/W change over



**CEL20 (Built in)
CER20 (Wall mounted)**
Thermostat with auto. fan speed and automatic change over



**CEL30 (Built in)
CER30 (Wall mounted)**
Thermostat with auto. fan speed and automatic change over for modulating valve

Features CEL/CER

- Dead band for change over 5°C or 2°C (factory set 2°C)
- Manual fan speeds or automatic (models 20 and 30)
- Thermostated fan control or continuous fan running
- Option water sensor WS for change over on coil (for 2 pipes)
- Led indicated status summer, winter or dead band
- Temperature setting for 7 to 30°C (comfort 20–25°C)
- Plastic pins for limiting temperature range
- Input for window contact
- Input for Economy/ occupancy mode
- Output for remote alarm
- Filter alarm 600 or 1200 running hours (factory set 1200 hours)
- With electrical heater post ventilation
- With Air sensor in the air intake destratification function (CEL only)

Compatibility table Thermostats / Valves / Heaters / Parallel connection / Water sensor / Minimum temperature thermostat

Factory fitted thermostat (built in)	Valves for 2 pipes		Valves for 4 pipes		Heaters	Parallel connection		Water sensor	Min. Temp. Thermostat
	J3A2 (2p)	J3AM (2p)	J3A2 (4p)	J3AM (4p)		ON/OFF	Modulating		
CSL00 Fan speed selector						•			•
CML00 Thermostat with manual fan speed and S/W change over	•		•			•			•
CEL00 Thermostat with manual fan speed, dead band, automatic change over	•		•		•	•		•	•
CEL20 Thermostat with automatic fan speed, dead band, automatic change over	•		•		•	•		•	•
CEL30 Thermostat with automatic fan speed, dead band, automatic change over for modulating valve		•		•			•	•	•
Remote controllers and thermostats (wall mounted)									
CSR00 Fan speed selector						•			•
CMR00 Thermostat with manual fan speed and S/W change over	•		•			•			•
CER00 Thermostat with manual fan speed, dead band, automatic change over	•		•		•	•		•	•
CER20 Thermostat with automatic fan speed, dead band, automatic change over	•		•		•	•		•	•
CER30 Thermostat with automatic fan speed, dead band, automatic change over for modulating valve		•		•			•	•	•

• Compatible ☐ Not compatible

LASER and LOW BODY

Compatibility tables



Compatibility Options / Accessories / Models

		STANDARD								LOW BODY	
		LASER				CONCEALED					
Code	Designation	YLV	YLH	YLV-AF	YLH-AF	YLIV	YLIH	YLIV-AF	YLIH-AF	YLV-R	YLIV-R
Coils and heaters**											
BA1**	Additional 1 row heating	•	•	•	•	•	•	•	•	•	•
KREL**	Kit electrical heater with safety thermostat and relay	•	•	•	•	•	•	•	•		
Factory fitted thermostat (built in)											
CSL00	Fan speed selector (built in)	•		•		•		•		•	•
CML00	Thermostat with manual fan speed and S/W change over	•		•		•		•		•	•
CEL00	Thermostat with manual fan speed, dead band, automatic change over	Compatible with electrical heaters								•	•
CEL20	Thermostat with automatic fan speed, dead band, automatic change over	Compatible with electrical heaters								•	•
CEL30	Thermostat with automatic fan speed, dead band, automatic change over for modulating valves	•		•		•		•		•	•
CBL20	Parallel connection for ON/OFF valve	•	•	•	•	•	•	•	•	•	•
CBL30	Parallel connection for modulating valve	•	•	•	•	•	•	•	•	•	•
Remote controllers and thermostats (wall mounted)											
CSR00	Fan speed selector (wall mounted)	•	•	•	•	•	•	•	•	•	•
CMR00	Thermostat with manual fan speed and S/W change over	•	•	•	•	•	•	•	•	•	•
CER00	Thermostat with manual fan speed, dead band, automatic change over	Compatible with electrical heaters								•	•
CER20	Thermostat with automatic fan speed, dead band, automatic change over	Compatible with electrical heaters								•	•
CER30	Thermostat with automatic fan speed, dead band, automatic change over for modulating valves	•		•		•		•		•	•
Valves / Condensate pump / Water sensor / Minimum temperature thermostat (Factory fitted)											
J3A2 (2p)	3-way 4-ports on/off valves for 2-pipe systems	•	•	•	•	•	•	•	•	•	•
J3A2 (4p)	3-way 4-ports on/off valves for 4-pipe systems	•	•	•	•	•	•	•	•	•	•
J3AM (2p)	3-way 4-ports modulating valves for 2-pipe systems	•	•	•	•	•	•	•	•	•	•
J3AM (4p)	3-way 4-ports modulating valves for 4-pipe systems	•	•	•	•	•	•	•	•	•	•
DT (2p)	Shut-off valves for 2-pipe systems (in addition to J3A2/J3AM valves)	•	•	•	•	•	•	•	•	•	•
DT (4p)	Shut-off valves for 4-pipe systems (in addition to J3A2/J3AM valves)	•	•	•	•	•	•	•	•	•	•
PC	Condensate pump	•	•	•	•	•	•	•	•	•	•
WS	Water sensor	Compatible with CEL/CER									
TM	Minimum temperature thermostat	•	•	•	•	•	•	•	•	•	•
Feet and panels											
CP1	Set of painted feet	•				•					
ZL1	Set of feet + frontal socle	•				•					
PPV1	Vertical painted back panel	•		•						•	
PPH1	Horizontal painted back panel		•		•						
External air intake											
PA	Air intake plenum						•				
PAS	Air intake plenum collars						•				
PA90	90° air intake plenum						•				
RCA	Air intake duct fitting						•				
PM	Air delivery plenum with collars					•	•	•	•		•
PM90	90° air delivery plenum					•	•	•	•		•

• Compatible

• Compatible with conditions

□ Not compatible

** Maximum of rows is indicated in the documentation, the maximum number of rows includes the heating row or electrical heater.

YEFB Hydro Blower

2 & 4 pipe system

A complete range from 3.2 kW up to 23.3 kW



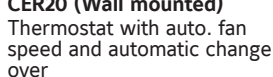
CSR00 (Wall mounted)
Fan speed selector



CER00 (Wall mounted)
Thermostat with manual fan speed and automatic change over



CMR00 (Wall mounted)
Thermostat with manual fan speed and S/W change over



CER20 (Wall mounted)
Thermostat with auto. fan speed and automatic change over



CER30 (Wall mounted)
Thermostat with auto. fan speed and automatic change over for modulating valve

Features

- Horizontal air return
- Twin centrifugal fans
- High static pressure up to 250 Pa
- Air distribution plenum
- Electric heater option
- Optional paint finish



FX03 Terminal unit controller
BacNET and N2 Metasys network compatible
(see page 99 for details)

Technical features at 50 Pa external static pressure

Model	YEFB	130	140	230	240	330	340	430	440	
Total cooling capacity [kW]	(1)	max	6.00	6.91	8.81	10.60	11.15	14.06	17.86	23.31
		med	5.13	5.81	7.27	8.55	9.39	11.58	16.28	20.95
		min	3.22	3.49	6.08	7.01	7.51	9.00	14.39	18.20
Heating capacity [kW]	(2)	max	7.89	8.90	12.34	14.62	15.20	18.84	24.38	30.36
		med	6.61	7.32	9.83	11.36	12.48	15.06	21.83	26.79
		min	3.96	4.20	8.01	9.04	9.70	11.33	18.90	22.77
Air volume [m³/h]		max	1153	1130	2158	2116	2639	2587	4129	4048
		med	916	898	1553	1523	1994	1955	3505	3436
		min	494	484	1174	1151	1422	1394	2853	2797
Max. available external static pressure [Pa]		100	100	175	175	250	250	250	250	
Sound pressure level [dB(A)](3)		max	49.3		55.6		58.7		65.4	
		med	48.3		52.6		54.2		63.1	
		min	44.4		49.1		48.5		61.5	
Power supply [V-ph-Hz]		230 - 1- 50								
Water connections		G 1/2" F	G 1/2" F	G 1/2" F	G 1/2" F	G 1/2" F	G 1/2" F	G 1" M	G 1" M	

(1) Room temperature 27°C d.b., 48% R.H. - Water temperature 7/12 °C

(2) Room temperature 20°C, 50% R.H. - Water inlet temperature: 50°C - Water flow values as Cooling, accordingly to the EUROVENT standards and UNI ENV 1397

(3) Sound pressure level in 1 meter distance open field and 0 Pa external static pressure

YEFB Hydro Blower

3.2 to 23.3 kW

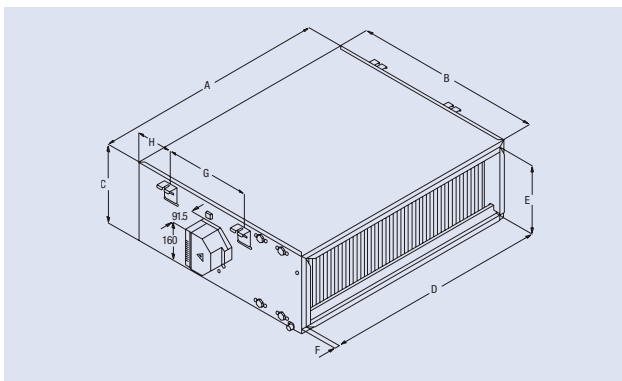


Compatibility table / Codes

Models	YEFB 130-140	YEFB 230-240	YEFB 330-340	YEFB 430-440
Options (factory fitted)				
Auxiliary hot water coil (2 or 3 rows)	•	•	•	•
Paint finish	•	•	•	•
F5 Filter	•	•	•	•
Accessories (supplied loose)				
Valve kits 3 ways 4 ports				
On/off 2 and 4 pipes	J3B2			J3C2
Modulating 2 and 4 pipes	J3BM			J3CM
Electrical heaters				
Capacity (W)	3000		6000	9000
Controls				
CSR00 fan speed selector	•	•	•	•
CMR00 2 and 4 pipe, on/off valves	•	•	•	•
CER00 2 and 4 pipe, on/off valves (or El. heater)	•	•	•	•
CER20 2 and 4 pipe, on/off valves (or El. heater)	•	•	•	•
CER30 2 and 4 pipe, modulating valves	•	•	•	•
Discharge plenum	KPM 100-200		KPM 300	KPM 400
Condensate pump	KPC 100-400			

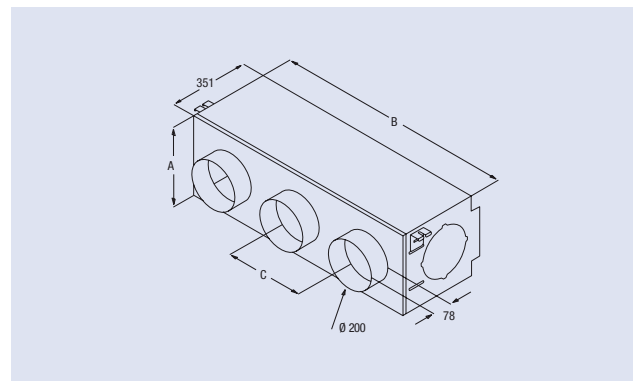
- Available

Dimensions and minimum spaces



Mod.	A	B	C	D	E	F	G	H
100-200	990	800	330	949	290	21.5	362	158
300	1 240	900	350	1 199	309	21.5	462	158
400	1 630	900	440	1 592	398	21.5	450	158

All dimensions in mm



Mod.	A	B	C
100-200	330	954	306
300	350	1 204	300
400	440	1 597	311

All dimensions in mm





Heating Systems

HEAT PUMP GEYSIR SERIES

HEAT PUMP GEYSIR AIR SERIES

HEAT PUMP GEYSIR VARIO SERIES

HEAT PUMP FOR SWIMMING POOL

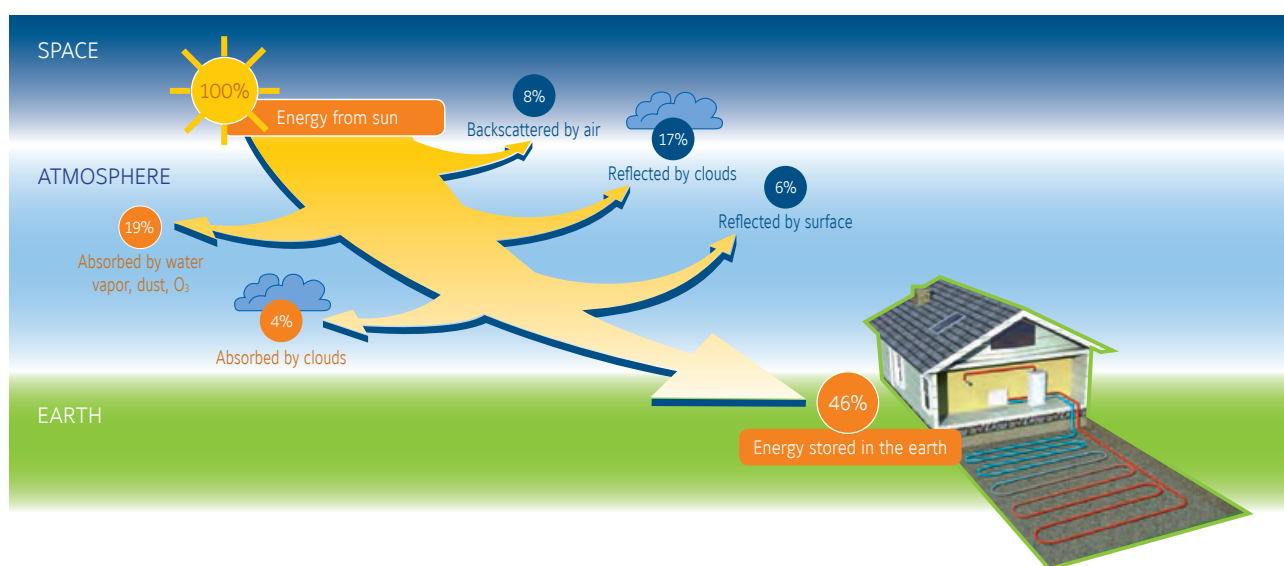
DID YOU KNOW THAT...

- Almost half of the sun's energy is stored in the earth? (Fig.1)
- A heat pump can be more than 4 times more efficient than a conventional gas boiler? (Fig.2)
- A heat pump requires 3 circuits to retrieve, store and transmit the free energy in the environment into hot sanitary water and heating for the home? (Fig.3)
- Heat pumps are classified depending on their environmental energy source? (Fig.4)

Learn more about heat pump technology...

HOW IS THE SUN'S ENERGY ABSORBED BY THE EARTH?

Fig. 1



WHY A HEAT PUMP IS MORE EFFICIENT?

Fig. 2

The earth is heated by the sun and stores a lot of energy. Heat pumps take advantage of this

inexhaustible energy that can be stored in the air, in the rock, in the ground and in the water in such

an efficient way that you can save up to 50% of your heating costs compared to a traditional gas boilers.

That's why these systems are considered as a renewable energy source by governments.



HOW DOES A HEAT PUMP WORK?

A heat pump is an electrically powered system that uses mechanical compression technology to absorb the free energy from the environment to produce hot sanitary water and heating (cooling as an option).

It is composed of 3 circuits:

- **Brine circuit ①:** Collector loop responsible for the absorption and storage of the free energy from the air or ground.
- **Refrigeration circuit ②:** Incorporates all the necessary components (compressor,

valves and heat exchangers) to convert the energy stored in the brine circuit into hot water. The hot water is stored in a water tank and it is available for further use.

- **Tap/heating circuit ③:** Brings the hot water stored in the tank to hot sanitary water or heating purposes.

Finally, a complex electronic control ④ manages the full system to make sure that the process always runs in the most efficient way.

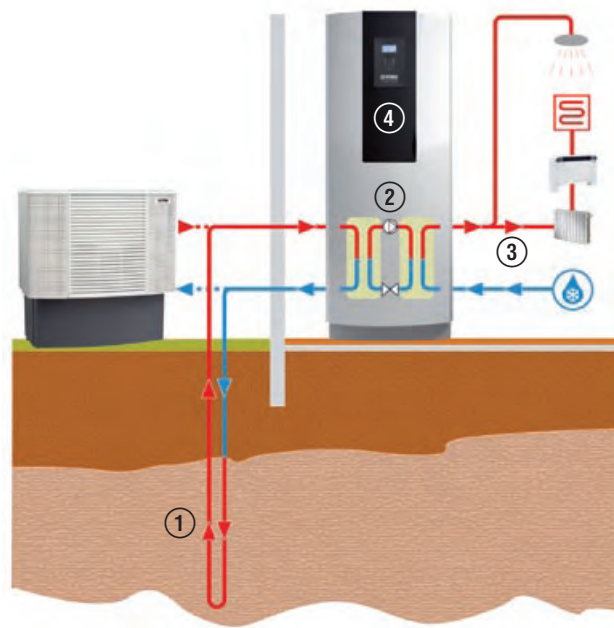


Fig. 3

WHAT KIND OF HEAT PUMP INSTALLATIONS ARE AVAILABLE?

Fig. 4



GSHP
Bedrock source

By means of setting a pipe in a drilled bore hole, a bedrock heat pump absorbs the heat stored in the rock. The depth of the borehole depends on the heating demand but can be drilled down to 130m. These systems take advantage from the fact that at a certain depth (~15m) the temperature of the rock remains constant at any period of the year and therefore performance is almost unaffected by the outdoor temperature.



GSHP
Ground source

A long hose is buried in loops in the ground around 1m depth and retrieves the energy in the same way as a bedrock heat pump. The surface buried is about 1.5 times the surface of the area to be heated and has no influence on the surrounding vegetation. It is suitable where rock shelf is deep, as there is no need for drilling (low investment costs).



WSHP
Ground Water
source

Retrieving energy from groundwater is the most efficient way since it retains the advantages as bedrock and ground heat pumps, but it requires less hose length for the same heating needs. However, the WSHP systems working with open loops require special equipment to stop particles in the pumped water from damaging components.



ASHP
Air source

Unlike the previous systems, air source heat pumps absorb the heat in the surrounding air through an additional outdoor terminal. Not as efficient as the systems retrieving the energy from the ground, and with a performance more sensitive by outdoor temperatures, these kind of installations require much lower investment costs and they are still up to 3 times more efficient than current conventional gas boilers.

System Components

Heat pump

The "brain" of the system, controls all the components to supply heating & water as per user demand whilst optimizing the efficiency.

Water tank

Can be either integrated in the heat pump or aside, stores the hot sanitary water for heating systems or sanitary water purposes.

Outdoor unit

Absorbs, stores and transmits the heat available in the air to the heat pump for further use (for ASHP only).

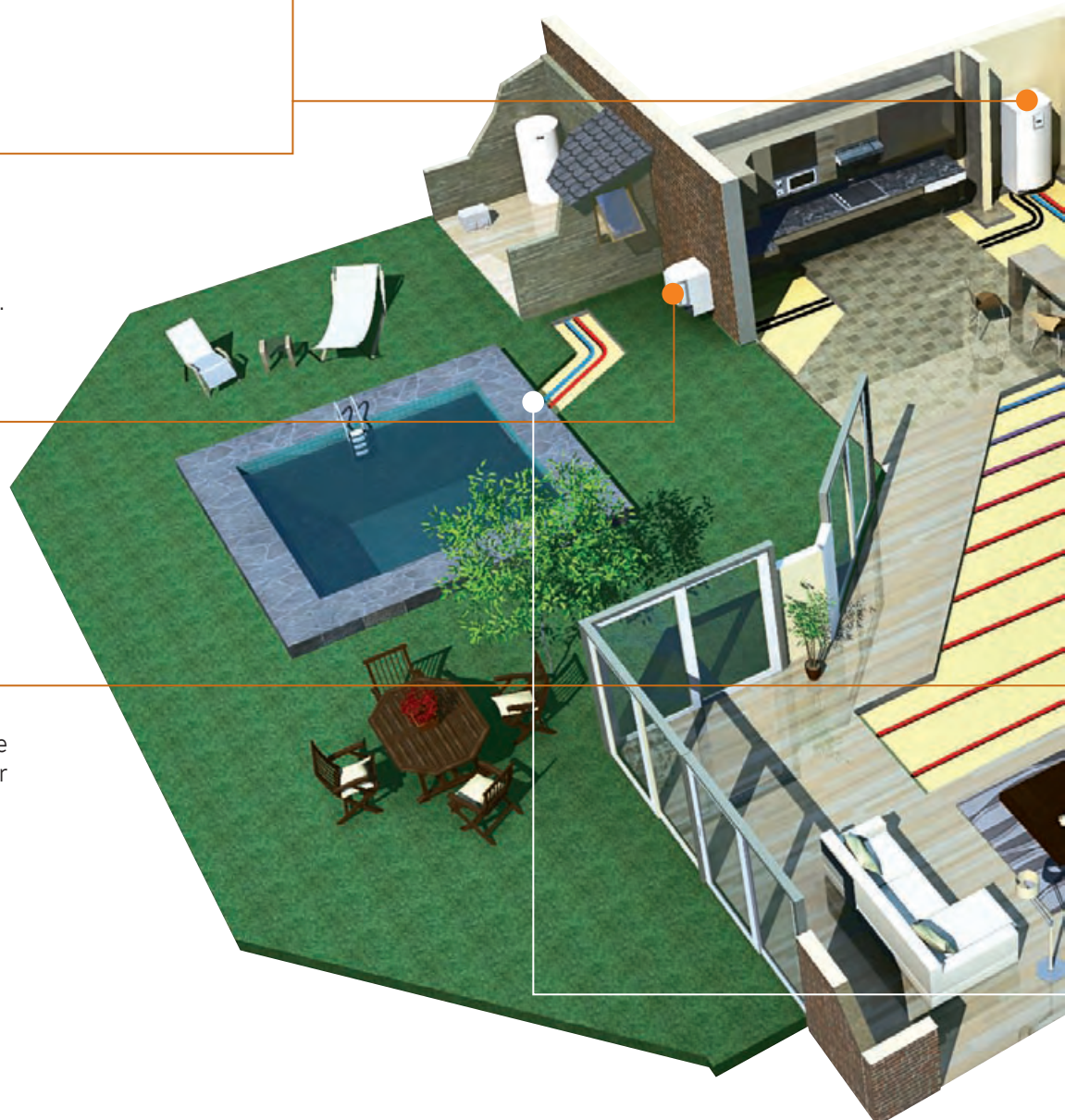
Indoor unit

Responsible for the supply of heat to the room, can be radiant floor, fan coil unit or radiator.



Room temperature control

Allows the user to set the parameters of comfort, it also measures room temperature and sends the information to the heat pump.





Heat pump unit

Applications

- Hot sanitary water*
- Fancoil**
- Radiator*
- Radiant floor**
- Heats swimming pools*

* Cooling as an option



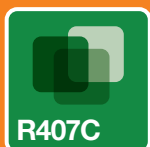
GEYSIR SERIES

Ground source heat pump

YHGS 06 to 16

A complete range from 5.8 kW to 16.6 kW

NEW



Control Panel

Intelligent control system to fully adjust and monitor heat pump parameters according to heating needs for optimal performance.

Cold outside? I don't care...

The new GEYSIR Series are the most suitable option for those houses where ground is the preferred source of energy. With COP up to 4.5, these units are the cheapest option to supply heat and hot sanitary water to your home.

Features

- High efficiency even in extreme winter conditions
- Optimized hot water production
- Leaving water temperature up to +65°C
- Integrated 180 l tank
- Passive/Active cooling optional
- Aesthetic design
- User friendly control and monitoring system
- Stainless steel water tank
- Optional models with passive cooling (for sizes 06 to 10)

GEYSIR SERIES

YHGS 06 to 16



Technical features

Set reference			YHGS				
Models	Sizes		06 G1MA - 06 G1TA	08 G1MA - 08 G1TA	10 G1MA - 10 G1TA	12 G1MA - 12 G1TA	16 G1TA
Heating capacity (*)	kW		5.8	8.1	9.5	11.1	16.6
COP (*)			4.2	4.6	4.4	4.5	4.4
Power supply	V/ph/Hz		230 / 1 / 50 - 400 / 3 / 50				400 / 3 / 50
Rated power	G1TA kW		2.0	2.3	3.6	4.4	5.6
compressor	G1MA kW		3.3	4.2	5.4	5.7	-
Number of compressors			1				
Type of compressors			Scroll				
Starting current	G1TA A		14	25	29	32	45
	G1MA A		58	56	97	108	-
Max leaving water temperature	°C		65°C				
Number of heating circuits			2				
Working range brine circuit	°C		-10°C / +20°C				
Working range heating circuit	°C		+20°C / +55°C				
Type of refrigerant			R407C				
Quantity of refrigerant	kg		1.20	1.30	1.45	1.55	2.10
Auxiliary heating	G1TA kW		3 / 6 / 9 (3 ph)				
	G1MA kW		1.5 / 3 / 4.5 (1 ph)				-
External available pressure (heating)	kPa		44	42	39	51	57
Nominal flow (heating circuit)	l/h		360	720	720	1 080	1 440
Sound pressure at 1m	dB(A)		31	33	33	34	36
Dimensions (W x H x D)	mm		596 x 1 754 x 690				
Net weight	kg		229			238	242
Hot sanitary water tank	l		included (180 l)				
Water connections	Service water and heating		22 Cu				
	Brine		28 Cu				
Cooling module (Passive / Active)			Optional / Optional				

(*) Tested as per EN 255, 0/35°C G1MA: Single phase / G1TA: Three phases

Options / Accessories

Models	Codes	06 G1MA - 06 G1TA	08 G1MA - 08 G1TA	10 G1MA - 10 G1TA	12 G1MA - 12 G1TA	16 G1TA
Cooling Module Active	YHACC3318	●	●	●	●	●
Cooling Module Pasive	YHACC3319	●	●	●	●	●
3 Way Valve 20 24V	YHACC3803	●	●	●	●	●
3 Way Valve 25 230V	YHACC3801	●	●	●		
3 Way Valve 32 230V	YHACC3802				●	●
Pump Set complete	YHACC1870	●	●	●	●	●
	YHACC1871	●	●	●	●	●
	YHACC1977	●				
	YHACC1978		●			
Plate heat exchanger for ground water	YHACC1979			●		
	YHACC1983				●	
	YHACC1984					●
Heat Recovery System	YHACC5122	●	●	●	●	●
Flowguard UR32CTNR 12/80	YHACC3809	●	●	●	●	●
Electronic Flowguard zz7009	YHACC6002	●	●	●	●	●
Filter for Filling Device Brine DN25	YHACC1865	●	●	●		
Filter for Filling Device Brine DN32	YHACC1866				●	●
Room Sensor Controller 901150	YHACC2698	●	●	●	●	●
Filter 1" 5064084L	YHACC3776	●	●	●		
Filter 1-1/4" 5064085L	YHACC3777	●	●	●		
Filter 1-1/2" 5064086L	YHACC3778				●	●
Flexible hose 22L600mm	YHACC6015	●	●	●		
Flexible hose 25L600mm	YHACC6000	●	●	●		
Flexible hose 32L600mm	YHACC6001				●	●
Rubber hose 2x28L600mm	YHACC6012	●	●	●	●	●
Pool control, complete with 3 Way Valve	YHACC3754	●	●	●	●	●
Expansion card for cooling/shunt/pool	YHACC6009	●	●	●	●	●

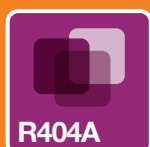
GEYSIR AIR SERIES

Air source heat pump

YHAS 06 to 12

A complete range from 5.9 kW to 11.3 kW

NEW



When comfort and economy come together

For those for whom the ground source installation is not an option, the GEYSIR AIR Series, by retrieving the energy from the air, combines the heat pump technology and low installation costs but still keeps efficiencies up to 3 times greater than a conventional gas boiler.

Features

- User friendly control and monitoring system
- Low noise level
- Easy installation
- Intelligent defrosting
- Anti corrosion coated condenser fins
- Heat recovery for exhaust air as option

GEYSIR AIR SERIES

YHAS 06 to 12



Technical features

Set reference			YHAS			
Models	Sizes		06 G1MA - 06 G1TA	08 G1MA - 08 G1TA	10 G1MA - 10 G1TA	12 G1MA - 12 G1TA
Heating capacity (*)	kW		5.9	8.0	9.9	11.3
COP (*)			3.9	4.1	4.2	4.9
Power supply	V/ph/Hz		230 / 1 / 50 - 400 / 3 / 50			
Rated power compressor	G1TA	kW	2.0	2.3	3.6	4.4
	G1MA	kW	3.3	4.2	5.4	5.7
Number of compressors			1			
Type of compressors			Scroll			
Starting current	G1TA	A	14	25	29	32
	G1MA	A	58	56	97	108
Max leaving water temperature	°C		65°C			
Number of heating circuits			2			
Working range brine circuit	°C		-20°C / +20°C			
Working range heating circuit	°C		+20°C / +55°C			
Type of refrigerant			R404A			
Quantity of refrigerant	kg		0.95	1.45	1.50	1.60
Auxiliary heating	G1TA	kW	3 / 6 / 9 / 12 / 15 (3 ph)			
	G1MA	kW	1.5 / 3 / 4.5 (1 ph)			
External available pressure (heating)	kPa		44	41	38	52
Nominal flow (heating circuit)	l/h		360	720	720	1 080
Sound pressure at 1m (Indoor / Outdoor)	dB(A)		31 / 51	33 / 51	33 / 61	34 / 61
Dimensions Indoor / Outdoor (W x H x D)	mm		596 x 1 754 x 690 / 1 145 x 1 175 x 612			
Net weight Indoor / Outdoor	kg		260 / 80			
Hot sanitary water tank	l		included (180 l)			
Water connections	Service water and heating		22 Cu			
	Brine		28 Cu			
Cooling module (Passive / Active)			Optional / Optional			

(*) Tested as per EN 14.511 7/35°C excluding circulation pumps and outdoor unit

G1MA: Single phase / G1TA: Three phases

Options / Accessories

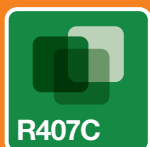
Models	Codes	06 G1MA - 06 G1TA	08 G1MA - 08 G1TA	10 G1MA - 10 G1TA	12 G1MA - 12 G1TA
Cooling Module Active	YHACC3318	●	●	●	●
Cooling Module Passive	YHACC3319	●	●	●	●
3 Way Valve 20 24V	YHACC3803	●	●	●	●
3 Way Valve 25 230V	YHACC3801	●	●	●	
3 Way Valve 32 230V	YHACC3802				●
Pump Set complete	YHACC1870	●	●	●	●
	YHACC1871	●	●	●	●
	YHACC1977	●			
	YHACC1978		●		
Plate heat exchanger for ground water	YHACC1979			●	
	YHACC1983				●
	YHACC1984				
	YHACC5122	●	●	●	●
Flowguard UR32CTNR 12/80	YHACC3809	●	●	●	●
Electronic Flowguard zz7009	YHACC6002	●	●	●	●
Filter for Filling Device Brine DN25	YHACC1865	●	●	●	
Filter for Filling Device Brine DN32	YHACC1866				●
Room Sensor Controller 901150	YHACC2698	●	●	●	●
Filter 1" 5064084L	YHACC3776	●	●	●	
Filter 1-1/4" 5064085L	YHACC3777	●	●	●	
Filter 1-1/2" 5064086L	YHACC3778				●
Flexible hose 22L600mm	YHACC6015	●	●	●	
Flexible hose 25L600mm	YHACC6000	●	●	●	
Flexible hose 32L600mm	YHACC6001				●
Rubber hose 2x28L600mm	YHACC6012	●	●	●	●
Pool control, complete with 3 Way Valve	YHACC3754	●	●	●	●
Expansion card for cooling/shunt/pool	YHACC6009	●	●	●	●

GEYSIR VARIO SERIES

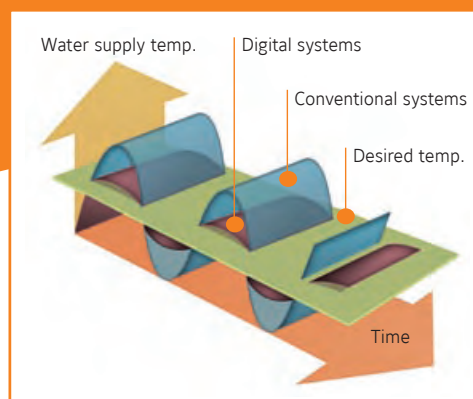
Ground source heat pump digital

YHGD 11 to 30

A complete range from 11.7 kW to 30.5 kW



NEW



Variable capacity compressor

By changing the capacity of the compressor, Digital Systems provide a more stable water temperature, energy saving and increase the lifetime of the unit.

Varying the capacity until the top of comfort

Following the impact of inverter technology on the residential air conditioning market, the variable capacity compressor has reached the heat pump market bringing the same benefits such as improved efficiency and increased lifetime of the unit.

Features

- Variable capacity compressor
- Constant leaving water temperature
- Passive/Active cooling as an option
- Water tank optional (160 or 300l)
- Compact unit
- Up to 30 kW heating capacity

GEYSIR VARIO SERIES

YHGD 11 to 30



Technical features

Set reference		YHGD					
Models	Sizes	11 G1TA	14 G1TA	17 G1TA	19 G1TA	23 G1TA	30 G1TA
Heating capacity (*)	kW	11.7	14.3	17.1	19.2	23.5	30.5
COP (*)		4.5	4.5	4.5	4.6	4.6	4.6
Power supply	V/ph/Hz	400 / 3 / 50					
Power input	kW	2.9	3.5	4.2	4.7	5.7	7.3
Number of compressors		1					
Type of compressors		Digital Scroll					
Starting current	A	48	63	69	95	95	110
Max leaving water temperature	°C	61°C					
Number of heating circuits		2					
Working range brine circuit	°C	-10°C / +20°C					
Working range heating circuit	°C	0°C / +45°C					
Type of refrigerant		R407C					
Quantity of refrigerant	kg	2.4	3.0	3.5	4.0	4.3	4.8
External available pressure (heating)	kPa	42	45	39	35	70	47
Nominal flow (heating circuit)	l/h	2 010	2 460	2 940	3 300	4 040	5 200
Sound pressure at 1m	dB(A)	46	47	47	48	49	49
Dimensions (W x H x D)	mm	590 x 1 200 x 700			790 x 1 200 x 800		
Net weight	kg	150	162	170	200	226	249
Hot sanitary water tank	l	Optional (160 / 300 l)				Optional (300 l)	
Water connections	heating and brine	inches	1 1/4"	1 1/4"	1 1/4"	1 1/2"	1 1/2"
	service water	inches	3/4"	3/4"	1"	1"	1"
Cooling module (Passive / Active)		Optional / Optional					
Cooling capacity	kW	12.1	15.0	18.0	20.1	24.5	32.3
Working range cooling circuit	°C	+7°C / +20°C					

(*) Tested as per EN 255, 0/35°C

Options / Accessories

Models	Codes	11 G1TA	14 G1TA	17 G1TA	19 G1TA	23 G1TA	30 G1TA
3Way valve for circuit 2 - Kvs 4	YHACCCV4	●	●	●	●	●	●
3Way valve for circuit 2 - Kvs 10	YHACCCV10	●	●	●	●	●	●
Flow switch (factory fitted)	YHACCF51	●	●	●	●	●	●
Plate heat exchanger for ground water	YHACCGWWT11	●					
	YHACCGWWT14		●				
	YHACCGWWT17			●			
	YHACCGWWT19				●		
	YHACCGWWT23					●	
	YHACCGWWT30						●
Temperature sensor circuit 2	YHACCA99	●	●	●	●	●	●
Reference-room controller	YHACCLPNRM	●	●	●	●	●	●
Adjustable feet-set	YHACCAVMS1	●	●	●	●	●	●
Expansion vessel for brine-circuit 8l	YHACCEV8	●	●	●	●	●	●
Soft starter	YHACSSKDS1117	●	●	●			
	YHACSSKDS1930				●	●	●
Water filter 2"	YHACCF1123	●	●	●	●	●	
Water filter 2 1/2"	YHACCF30						●
Electric heater for Water tank 3 kW	YHACCEH3	●	●	●	●		
Electric heater for Water tank 5 kW	YHACCEH5					●	●
Water tank 160l	YHACCSWB160	●	●	●	●		
Water tank 300l	YHACCSWB300				●	●	●

YPP-Heat pump for swimming pool

YPP-A and YPP-C 7 to 120

A complete range from 7 kW to 116 kW



YPP-A-22T



YPP-A-39T

Special Scroll Plate Heat Exchanger In Titanium (fig.1)

100% Titanium

Bigger
exchange surface

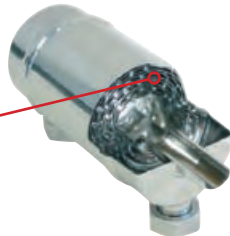
Inalterable metal

Better COP

Compatible with all
kind of water treatment
(salt, chlorine...)

Section

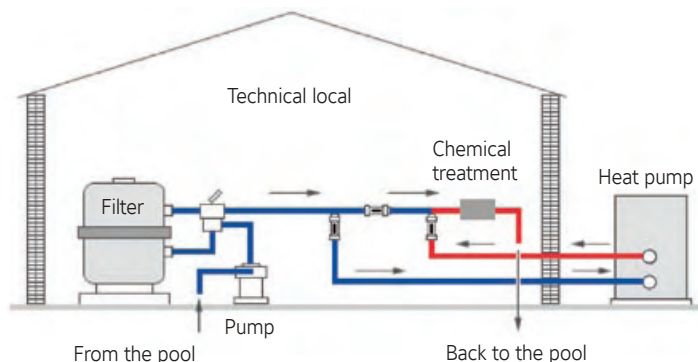
Scroll plate
heat exchanger



Features

- The cheapest solution to heat the water of your outdoor or indoor swimming pool with a **high COP around 5**.
- **A large range** available to heat from a spa till a 25-metre long pool with 2 ranges:
 - YPP-A with axial fans (7-23 kW)
 - YPP-C with centrifugal fans to be installed inside the building (29-116 kW) (consult us for more details)
- Special scroll plate heat exchanger in **TITANIUM** (fig. 1)
- **"PLUG and PLAY"** units with very easy electric and water connections without opening the unit.
- **Well-protected** units with mechanical flow switch, high and low pressure automatic pressostat and Gold-Fins coil (for small YPP-A).
- **Thermodynamic defrost system** with 4-way valve included to heat till -15°C outside temperature.
- As an accessory, 2 sizes of detached titanium plate heat exchanger to be connected between a standard heat pump (as YLHA units) and the pool installation.
- A water pump is not included since the filtration pump of the pool installation can be used instead (fig. 2).

Easy Working (fig.2)



1. When the filtration pump starts, the mechanical flow switch unlocks the YPP.
2. If the cleaned-water temperature is 1°C below the set temperature, the compressor starts.
3. The compressor stops if either the set temperature is reached or the filtration cycle stops.

NB: as option, we can force the filtration cycle to start each 2 hours to heat more often.

YPP-Heat pump for swimming pool

YPP-A and YPP-C 7 to 120



Technical features : YPP-A range

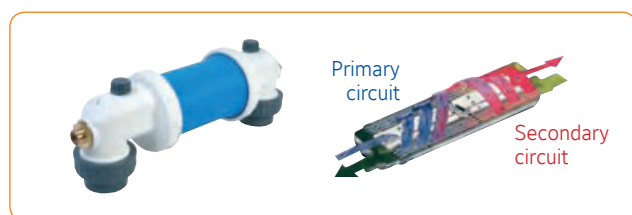
Horizontal air discharge

Models		YPP-A-7M	YPP-A-10M	YPP-A-14M	YPP-A-17M	YPP-A-14T	YPP-A-17T	YPP-A-22T
Codes		S687800408	S687800808	S687801808	S687903108	S687901908	S687903309	S687804109
Working conditions At 15° C air temperature; 15° C inlet water temperature; 18° C outlet water temperature								
Heating capacity	kW	7.1	10.7	14.5	20.4	15.0	20.8	23.8
Total input power	kW	1.2	1.8	2.4	3.5	2.5	3.9	4.7
COP		5.8	6.0	6.0	5.9	6.1	5.4	5.1
Working conditions At 15° C air temperature; 24° C inlet water temperature; 27° C outlet water temperature								
Heating capacity	kW	6.9	10.5	14.3	20.0	14.7	20.5	23.4
Total input power	kW	1.4	2.1	2.8	4.1	2.9	4.5	5.4
COP		4.9	5.0	5.0	4.9	5.1	4.5	4.3
Working conditions At 15° C air temperature; 27° C inlet water temperature; 30° C outlet water temperature								
Heating capacity	kW	6.2	9.4	12.7	17.9	13.1	18.3	20.9
Total input power	kW	1.6	2.3	3.1	4.5	3.2	5.0	6.0
COP		4.0	4.1	4.1	4.0	4.2	3.7	3.5
Sound pressure level Lp at 10m	dB(A)	44	44	46	48	46	48	48
Voltage / Phases / Frequency		230 - 1 - 50				400 - 3 - 50		
Running current	A	7.1	11.1	15.8	20	5.6	8.8	8.8
Electric cable section	mm²	2.5	4	4	4	2.5	2.5	2.5
Fuse	A	12	16	20	25	12	16	16
Net weight	kg	56	95	118	140	118	143	143
Dimensions	Height	653	762	965	1270	965	1270	1270
	Width	866						
	Depth	373				905		460

Vertical air discharge (preliminary data)

Models		YPP-A-30T	YPP-A-39T	YPP-A-45T	YPP-A-56T	YPP-A-73T	YPP-A-91T	YPP-A-120T
Codes		S687914800	S687915700	S687916000	S687916400	S687917200	S687917700	S687919000
Working conditions At 15° C air temperature; 24° C inlet water temperature; 27° C outlet water temperature								
Heating capacity	kW	29.0	38.0	43.0	55.0	71.0	88.0	116.0
Total input power	kW	5.9	7.9	10.0	12.2	16.1	20.0	25.8
COP		4.9	4.8	4.3	4.5	4.4	4.4	4.5
Voltage / Phases / Frequency	V	400 - 3 - 50						
Running current	A	13.9	19.3	25.5	2 x 13.9	2 x 19.3	2 x 25.5	2 x 28
Electric cable section	mm²	4	6	10	16	25	25	25
Fuse	A	25	32	40	50	63	80	80
Net weight	kg	268	276	342	450	495	610	940
Dimensions	Height	1 028		1180		1 230	1 180	1 452
	Width	894		1 644			1 629	1 976
	Depth				1 284			2 019
Maximum pool size orientation		180 m³	220 m³	270 m³	350 m³	450 m³	550 m³	700 m³

Accessory of pool plate heat exchanger



Models		ET-NU 20			ET-NU 42		
Codes		689200200			689200600		
Heating capacity in kW	Secondary circuit temperature	Primary circuit					
		50 °C	70 °C	80 °C	50 °C	70 °C	80 °C
	10 °C	14	22	27	31	49	58
	20 °C	11	20	24	24	42	52
	30 °C	8	17	21	17	35	45
Net weight	kg	4			4.5		
Dimensions	Height	197			197		
	Width	493			648		
	Depth	166			166		

Quick Selection Guide of YPP units

Pool size in m³	YPP 7M	YPP 10 M	YPP 14 M/T	YPP 17 M/T	YPP 22 T
10					
20					
30					
40					
50					
60					
70					
80					
90					
100					
110					
120					
130					
140					
150					
Cold and nordic climate					
Temperate climate					
Mediterranean climate					
Tropical climate					

Note: this calculation is for an outdoor private pool of 1.5 metre depth open from april to september with a thermic cover. Contact with us if you have others parameters like a public pool, without cover, used all year long, etc...





Air Systems

ROOMTOP

ROOFTOP

LARGE SPLIT

Common Specifications



Cabinet features

- Build to last, all cabinet with heavy gauge galvanized steel and powder paint backed on oven.
- Copper-copper coils or blue fin delivered upon request.
- Side or bottom duct connections to be realized on site. No additional parts needed.
- Excellent water-tightness even with high internal negative pressure.
- External slopes to remove rain water.
- Only 4 solid points to crane.



Copper-copper coil



Blue fin



Designed to service

- Quick and easy access to all components.
- Doors equipped with hinges and 1/4 turn lock.
- Service valves.
- Inspection window for sight glass.
- Internal drain pan slope to remove drain water.
- YKtool for comissioning, monitoring and controlling unit parameters.



Electrical features

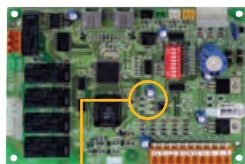
- YKlon V3 regulation and control.
- Vertical hermetic scroll compressor, with compressor module and crankcase heater.
- Smooth start indoor fan.
- Phase detector.
- Main power switch.
- Numbered wires in cable trunking.
- Motor protection.



Quality and ELT

Design, built and tested under ISO9001 quality system certification, we are constantly listening to customer comments. For this reason, our End of Line Test ELT strives to be as close as possible to the commissioning you carry out on site.

Control System



Led Diagnostic Code

YKlon✓3 and YKlonFT10

The YKlon is a controller regulating all components and accessories. It will pro actively manage cool and heat stages to maintain a stable room temperature. Additionally, the benefits are:

- Redundancy on cool and heat stages (if one step is locked out, the PCB starts another one automatically).
- Random start between units to minimise electrical tariff.
- All stages will start in sequence to reduce peak inrush.
- Reduces nuisance calls by using 3 times "you are out" on all safeties before a hard lockout occurs.
- Automatic restart after power failure. Compressors run time priority.
- Alarm output relay and led diagnostic code. No parameters to check before starting.
- Lockout and incident level of protection. Last 10 lockouts stored in a non-volatile memory.
- Use a standard 2-stage thermostat but get 98% of YKlon features.
- 4 heating stages on hot water heating.
- YKlonFT10: Same as YKlonV3 with BMS connection (LonWorks).



YKphone485

The YKphone485 is a complete communication pack that YORK can offer in order to provide a local network between units. Without any specific communication protocol knowledge, you can download the software and have a direct access to the units, change thermostat parameters, reset lockout, etc.... For more detail, see the following pages or contact you local agency.



YKtool

The Yktool is the perfect tool to use on a regular basis for comissioning and service on site. For comissioning, it will override the thermostat and start the cooling or heating stages. Being a plug and play device, you will have direct access to all sensors and status of each components and accessories installed (lockout & incidents, temperatures, defrost test...).



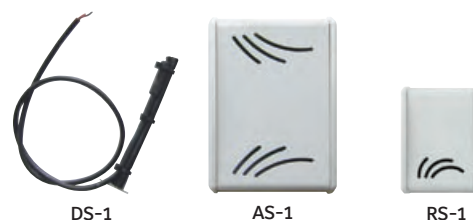
Features and benefits Thermostat DPC-1

- Day (normal), night (economy) and unoccupied (stand by).
- Lockout code on screen gives direct diagnostics.
- ON/OFF or programmable from dip switch setting.
- Day or night programmable state avoids wide internal temperature variation.
- 3 preset and 3 programmable profiles.
- Temperature override.
- Select the control sensor you want to use (integrated in the thermostat, return air in duct or room sensor).
- Turbo, normal or economy logic from dip switch setting.
- From -3°C to +3°C sensor offset.
- Average temperature with room or duct sensors.

Thermostats with integrated sensors

Thermostat models		DPC-1	DPC-1R
	Code	S603786044	S603786045
Roomtop	RTC and RTH	X	0
Rooftop	All models	X (1)	0
Split system	VAC and VAH	X	0
	VCH	X	0
Main features			
Strategy	Turbo, normal or economy		
Auto restart after power failure	•		•
Number of cool stages	2	1	2
Number of heat stages	2	1	2
Auxiliary Heat	•		•
Automatic Heat/Cool change over	•		•
Continuous or auto indoor fan	•		•
Manual setback (Day/Night key)	Day, night and unoccupied		
Override possibility	•		•
Compressor anti short cycle	•		•
°C Range cooling / heating	10 to 32°C / 9 to 32°C		
Programmable, 7-day	•		•
Lockout codes	•		•
Outdoor air temperature	•		with YKlon
Sensor selection	•		•

X : Delivered as standard with the unit. X (1) : Standard but has to be ordered separately.
O : Optional. • : Function available.



Duct sensor	Ambiance sensor*	Room sensor
DS-1	AS-1	RS-1
S603786047	S603786049	S603786042

* To control up to 4 temperature sensors.
To be fitted with DPC-1 version 2.0 or superior.

YKphone485

Do it yourself!

Main Screen

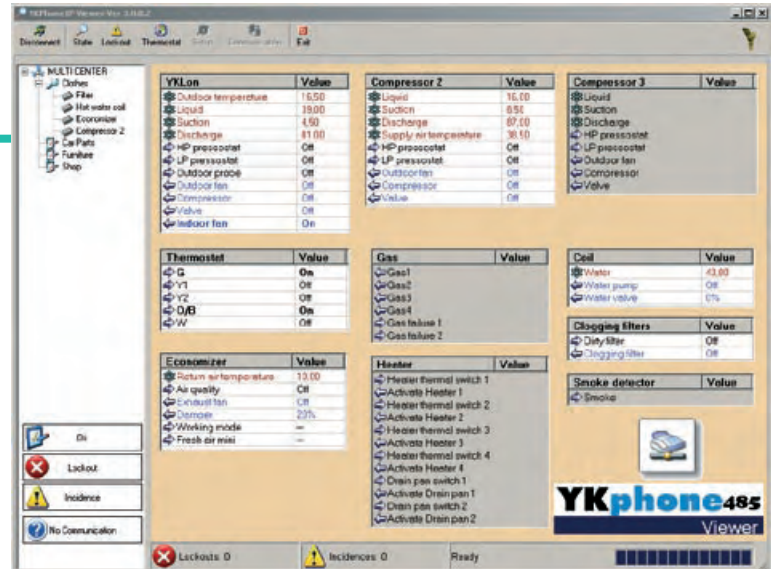


l. max. 1,5m.

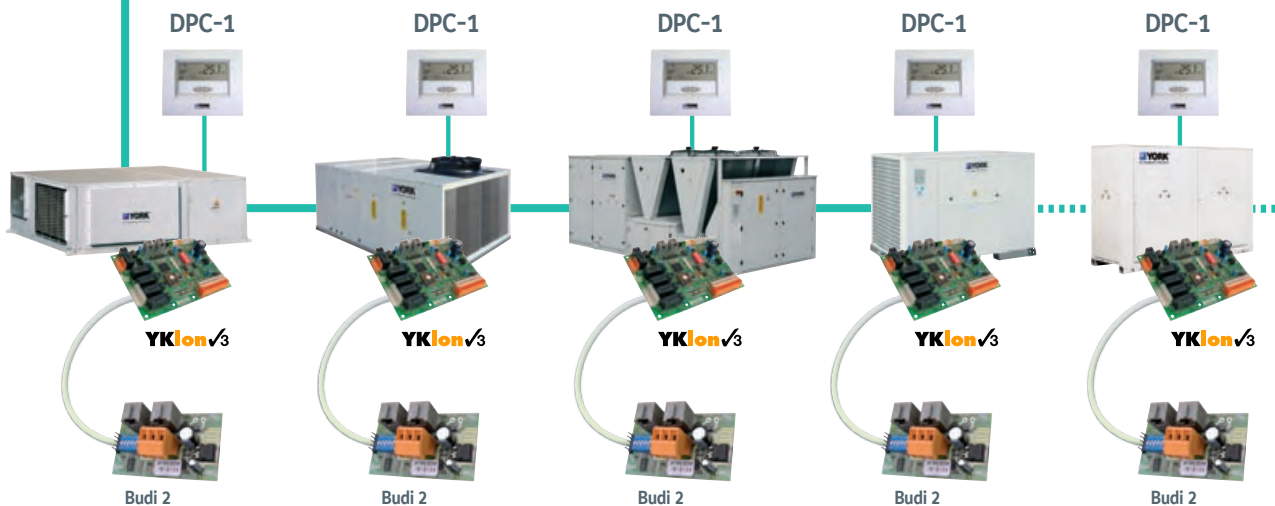


YKphone485

*l. max. 1000m.
BELDEN or equivalent
com cable*



- YKphone485 is a simple monitoring tool to be used with a maximum of 16 units equipped with YKLon ✓3 board or superior.
- It has been developed for internal or external maintenance team in supermarket, factory, etc...
- Monitor all main parameters as Inputs, Outputs, Temperatures & Accessories.
- Consult & modify thermostat DPC-1 setting (communication).
- Reset the unit.



BMS Connection



LONWORKS®
CONNECTION

YKlonFT10*



LONWORKS®
CONNECTION

- YKlon FT10 brings all features and benefits of YKlon ✓3 but incorporates additional components to allow the unit to communicate and being operated remotely by BMS system (LonWorks).
- Possibility to fully monitor and CONTROL the units.
- Full documentation specifying variables and meanings.
- Supplied kit with all necessary to perform a communication test available upon request (Ask JCI sales Office).



* with YKlon ✓3 models

Roomtop

RTC-RTH - L

A complete range from 7.6 kW up to 27.0 kW



YKlon√3

Features

- YKlon√3 board
- Possibility to be installed outdoor
- Scroll Compressors
- High COP and EER
- 1/4 turn on electrical panel
- Expansion valves for models 20, 25 and 30
- High external static pressure on evaporator and condenser
- Digital thermostat DPC-1 and indoor air filter included

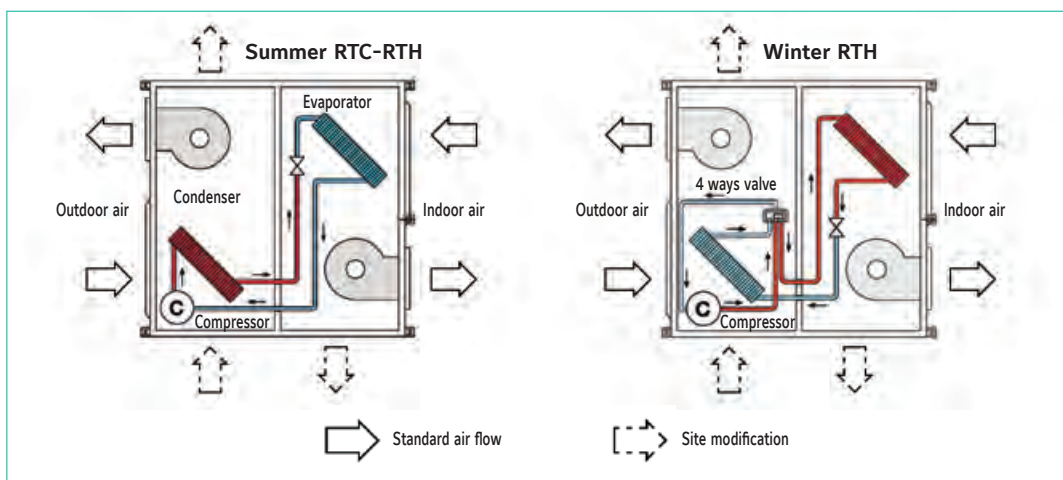
RTC 10 L

Nomenclature

L = version

Capacity range:
10 = 10 kW

Product category:
RTC = Cooling only
RTH = Heat pump



Roomtop

RTC-RTH 07 to 30 - L



Technical features

Cooling only models			RTC 07 L	RTC 10 L	RTC 15 L	RTC 20 L	RTC 25 L	RTC 30 L
Cooling capacities		kW	7.60	9.90	14.60	19.90	22.20	27.00
Power input in cooling		kW	3.00	3.95	5.50	8.60	10.00	12.00
In duct outdoor side sound power level		dB(A)	71	71	72	74	77	81
In duct indoor side sound power level		dB(A)	70	71	71	73	75	75
Heat pump models			RTH 07 L	RTH 10 L	RTH 15 L	RTH 20 L	RTH 25 L	RTH 30 L
Cooling capacities		kW	7.40	9.30	14.10	19.90	22.20	26.80
Power input in cooling		kW	3.00	3.88	5.40	8.32	10.04	11.63
Heating capacities		kW	7.40	11.70	13.80	17.80	20.80	25.40
Power input in heating		kW	2.76	3.64	4.84	7.15	7.89	9.67
In duct outdoor side sound power level		dB(A)	71	72	74	74	81	81
In duct indoor side sound power level		dB(A)	70	72	73	73	81	81
Common characteristics								
Power supply			230V/1/50Hz		400V/3 + N/ 50Hz			
Nominal current RTC / RTH	A		14.3 / 16	9.5 / 9.7	11.6 / 11.5	19 / 19	21 / 21	23 / 23
Starting current	A		82	48	64	95	111	118
Main switch (1)	A		25	16	20	25	25	32
Main cable (1)	Nbr.xmm ²		3 x 4	5 x 2.5	5 x 4	5 x 4	5 x 4	5 x 6
Cable to standard thermostat (2)	Nbr.xmm ²		10 x 0.22					
Evaporator fan at nominal airflow	Airflow	m ³ /h	1 490	2 015	3 580	4 100	5 060	5 300
	Standard ESP	Pa	25	37	50	50	62	62
Condenser fan at nominal airflow	Airflow	m ³ /h	2 420	3 520	3 890	4 810	5 640	7 450
	Standard ESP	Pa	50	50	50	50	50	50
Nett dimensions	Height	mm	480	557	557	585	650	650
	Length	mm	1 102	1 155	1 312	1 575	1 750	1 770
	Depth	mm	1 102	1 155	1 312	1 575	1 656	2 056
Nett weight	RTC	kg	172	180	235	305	358	420
Nett weight	RTH	kg	178	190	243	317	379	434

(1) For information only. These should be checked for compliance with local regulations depending also on installation and cable type

(2) Shield type cable only

All the data are at EUROVENT conditions with 230V/1/50Hz or 400V/3+N/50Hz.

Cooling : Entering indoor coil temp. 27°C / 19°C WB and outdoor temperature 35°C

Heating : Entering indoor coil temp. 20°C and outdoor temperature 7°C / 6°C WB

Compatibility table / Codes

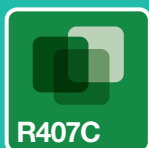
Cooling only models			RTC 07 L	RTC 10 L	RTC 15 L	RTC 20 L	RTC 25 L	RTC 30 L
			S661240701	S661241003	S661241503	S661242003	S661242503	S661243003
Heat pump models			RTH 07 L	RTH 10 L	RTH 15 L	RTH 20 L	RTH 25 L	RTH 30 L
			S662040701	S662041003	S662041503	S662042003	S662042503	S662043003
Thermostat								
Delivered as standard with the unit			DPC-1					
Accessories or options	Remarks	Code	RTC 07 L	RTC 10 L	RTC 15 L	RTC 20 L	RTC 25 L	RTC 30 L
			RTH 07 L	RTH 10 L	RTH 15 L	RTH 20 L	RTH 25 L	RTH 30 L
Electrical Heaters * (in duct)	5 kW / 1ph.	S611765561	A					
	5 kW / 3ph.	S611765573	A	A				
	10 kW / 3ph.	S611765533	A	A				
	5 kW / 3ph.	S611765653			A	A	A	A
	10 kW / 3ph.	S611765583			A	A	A	A
	15 kW / 3ph.	S611765513			A	A	A	A
Low ambient regulation		S613111533	O	O	O			
		S613113087 *				O	O	O
Copper-copper coils unit	Contact us		O	O	O	O	O	O
Blue fin	Contact us		O	O	O	O	O	O

A= Accessory (supplied loose). O= Option (factory fitted). * Not protected against external conditions.

Rooftop

DIC-BIH-DIG

A complete range from 25.3 kW up to 40.2 kW


YKlon✓3

Features

- YKlon ✓3 board
- Duct work configuration side or down flow
- Cooling, heat pump and gas versions
- Auxiliary heating with electric heater or hot water coil as option
- Compact and with proven reliability
- Wide range of accessories
- Suitable for use in harsh climates
- New indoor motor power input

D 5 IC 150 G 50

Nomenclature

Voltage code:

50 = 400V / 3 + N / 50 Hz

Heating installed:

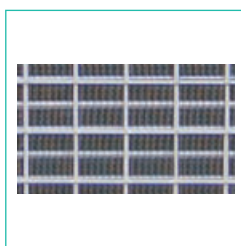
G = R407C

Capacity range:
150 = 150.000 Btu/h
1.000 Btu/h = 293 W
Product identification:
IC = Cooling only
IH = Heat pump
IG = Heat gas
Product generation:

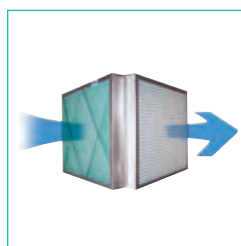
5 = 5th generation

Product category:
D = Packaged air conditioner
(air-cooled)
B = Heat pump

Johnson Controls participate to the Eurovent certification program for rooftop units



Coil guard



Removable media filter



1/4 turn lock



Scroll compressor models 150 to 300

Rooftop

DIC-BIH-DIG 090 to 150 G



Technical features

Cooling only models		D5IC 090G	D5IC 120G	D5IC 150G
Net cooling capacities (1)	kW	25.30	32.00	40.20
Power input (2)	kW	10.40	12.80	17.10
Heat pump models		B5IH 090G	B5IH 120G	B5IH 150G
Net cooling capacities (1)	kW	23.20	31.00	37.00
Power input in cooling (2)	kW	9.79	12.80	15.00
Heating capacities	kW	24.30	32.30	37.7
Power input in heating	kW	8.21	10.40	14.7
Cooling only + Gas heating		D5IG 090G	D5IG 120G	D5IG 150G
Net cooling capacities (1)	kW	25.30	32.00	40.20
Cooling power input (2)	kW	10.40	12.80	17.10
Standard Heating capacities (3)	kW	47.5 + 1.5	57 + 2.2	57 + 4
Natural gas 2ND-H, G20	m³/h	5.4	6.5	6.5
Common characteristics				
Power supply		400V/3 + N/ 50Hz		
Main switch (4)	A	32	32	50
Main cable (4)	Nbr. x mm²	5 x 4	5 x 6	5 x 10
Cable to thermostat (6)	Nbr. x mm²	10 x 0,22		
Number of circuits / Compressor type		2 x reciprocating		2 x scroll
Thermostat (to be ordered separately)		DPC-1		
Technical characteristics for D5IC and D5IG				
Ambient outdoor side sound power level	dB(A)	87	87	88
Ambient outdoor side sound pressure level at 5 m	dB(A)	59	59	61
In duct indoor side sound power level	dB(A)	81	83	84
Nominal / Starting current	A	19.9 / 76	24.3 / 83	32 / 99
Evaporator fan at nominal airflow (5)	Airflow	m³/h	5 100	6 800
	Standard ESP	Pa	330	413
	ESP with HSD	Pa	Consult us	>450
	Power input	kW	2.2	3
	Drive	Pulley-belts (6-turn adjustable pulley)		
Nett dimensions	Height	mm	855	1 007
	Length	mm	2 552	2 552
	Depth	mm	1 800	1 800
Nett weight DIC / DIG		kg	437 / 472	472 / 537
Technical characteristics for B5IH				
Ambient outdoor side sound power level	dB(A)	83	83	83
Ambient outdoor side sound pressure level at 5 m	dB(A)	60	60	61
In duct indoor side sound power level	dB(A)	79	79	79
Nominal / Starting current	A	19.9 / 76	24.3 / 83	32 / 101
Evaporator fan at nominal airflow	Airflow	m³/h	5 100	6 800
	Standard ESP	Pa	275	300
	ESP with HSD	Pa	Consult us	>450
	Power input	kW	2.2	3
	Drive	Pulley-belts (6 turn adjustable pulley)		
Nett dimensions	Height	mm	855	1 210
	Length	mm	2 552	2 552
	Depth	mm	1 800	1 800
Nett weight BIH		kg	477	637

(1) Add evaporator fan motor input to get Gross capacity

(2) including evaporator fan motor

(3) net heating capacity + indoor fan power input

(4) For information only. They should be checked to comply local norms and regulations depending also on installation and conductor type

(5) ESP = External static pressure HSD = High speed drive

(6) Shield type cable only

(*) : Indoor air flow should be set at least at 10.000 m³/h

All data are at Eurovent conditions

Codes

Cooling only models		D5IC 090 G50	D5IC 120 G50	D5IC 150 G50
		S661750903	S661751203	S661751503
Heat pump models		B5IH 090 G50	B5IH 120 G50	B5IH 150 G50
		S661940903	S661941203	S661941503
Cooling only + gas models		D5IG 090 G16550	D5IG 120 G20050	D5IG 150 G20050
		S661760903	S661761203	S661761503
Thermostat				
to be ordered separately		DPC-1		

Accessories & options

Accessories & options

	Code	Cooling only		
		D5IC 90	D5IC 120	D5IC 150
Thermostat DPC-1	S603786044	A	A	A
YKlon FT10 for BMS communication (LonWorks)	S606791211	O/A	O/A	O/A
YKphone 485, computer cable and transformer	S613786017	A	A	A
Budi board for YKphone 485	S606791239	A	A	A
Dry bulb triple input economizer or motorized air damper with rain hood	S613991582	O	O	O
Enthalpy probes *	S613990081	O	O	O
Indoor air quality sensor *	S606819964	O	O	O
Power Exhaust *	S613994582	A	A	A
Fresh air or barometric damper and rain hood (2)	S613990483	A	A	A
Soft start for indoor fan motor	S606744690	O	O	O
High speed drive	S611991281		O	
	S611991581			O
Low ambient control	S613190150	O	O	O
Fixed roof curb **	S613991881	A	A	A
Adjustable roof curb **	S613992080	A	A	A
Filter dirty switch	S613990084	O	O	O
Smoke detector ***	S613995381	O	O	O
Fire detection thermostat	S613903002	O	O	O
Hot water coil with control	S611083551	O		
	S611083151		O	O
Electric heaters	16 kW	S611761582	O	O
	25 kW	S611762282	O	O
	37 kW	S611763382	O	O
Propane conversion Kit	S611801780			
G4 air Filter (1)	S611300980	A		
	S611301281		A	
	S611301580			A
Copper-copper coil	Contact us	O	O	O
Blue fin	Contact us	O	O	O

O = Option (factory fitted) A = Accessory (supplied loose)

* It is mandatory to order the economizer with this item ** Delivered in kit form

(1) Removable media G3 filter as standard

(2) Fresh air damper can not be installed if economizer or motorized damper is fitted

*** For multiple units, consult Johnson Controls office



Accessories & options

	Code	Heat pump			Cooling and gas		
		B5IH 90	B5IH 120	B5IH 150	D5IG 90	D5IG 120	D5IG 150
Thermostat DPC-1	S603786044	A	A	A	A	A	A
YKlon FT10 for BMS communication (LonWorks)	S606791211	O/A	O/A	O/A	O/A	O/A	O/A
YKphone 485, computer cable and transformer	S613786017	A	A	A	A	A	A
Budi board for YKphone 485	S606791239	A	A	A	A	A	A
Dry bulb triple input economizer or motorized air damper with rain hood	S613991582	O	O	O	O	O	O
Enthalpy probes *	S613990081	O	O	O	O	O	O
Indoor air quality sensor *	S606819964	O	O	O	O	O	O
Power Exhaust *	S613994582	A	A	A	A	A	A
Fresh air or barometric damper and rain hood (2)	S613990483	A	A	A	A	A	A
Soft start for indoor fan motor	S606744690	O	O	O	O	O	O
High speed drive	S611991281		O			O	
	S611991581			O			O
Low ambient control	S613190150	O	O	O	O	O	O
Fixed roof curb **	S613991881	A	A	A	A	A	A
Adjustable roof curb **	S613992080	A	A	A	A	A	A
Filter dirty switch	S613990084	O	O	O	O	O	O
Smoke detector ***	S613995381	O	O	O	O	O	O
Fire detection thermostat	S613903002	O	O	O	O	O	O
Hot water coil with control	S611083551	O					
	S611083151		O	O			
Electric heaters	16 kW	S611761582	O	O	O		
	25 kW	S611762282	O	O	O		
	37 kW	S611763382		O	O		
Propane conversion Kit	S611801780				A	A	A
G4 air Filter (1)	S611300980	A			A		
	S611301281					A	
	S611301580		A	A			A
Copper-copper coil	Contact us	O	O	O	O	O	O
Blue fin	Contact us	O	O	O	O	O	O

O = Option (factory fitted) A = Accessory (supplied loose)

* It is mandatory to order the economizer with this item ** Delivered in kit form

(1) Removable media G3 filter as standard

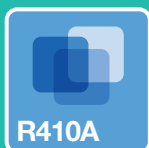
(2) Fresh air damper can not be installed if economizer or motorized damper is fitted

*** For multiple units, consult Johnson Controls office

ACTIVA Rooftop

ARC-ARG-ARH-ARD

A complete range from 45.1 kW up to 84 kW



YKN2open



Features

- High efficiency EER and COP
- Low noise level
- All configurations: Cooling only, Cooling + gas, Heating, Heating + Gas
- New board with BMS connection (N2open protocole as standard)
- Energy recovery (enthalpy wheel)
- EC Return fan
- External HP & LP access
- Filters G4, F6 & F7 available
- Tandem configuration (up to 52°C outdoor temperature)

A R C 045 A A Nomenclature

- A = Aluminium fin
- B = Blue fin
- C = Copper fin
- A = version
- Capacity range:**
045 = 45 kW
- Product category:**
C = Cooling
H = Heat pump
G = Cooling & Gas
D = Heat pump & Gas (Dual)
- Rooftop
- Activa series

ACTIVA Rooftop

ARC-ARG-ARH-ARD 45 to 90 A



Technical features

Cooling only models			ARC 045 A	ARC 060 A	ARC 075 A	ARC 090 A
Net cooling capacities		kW	45.1	61.0	71.5	84.0
Power input		kW	16.0	23.0	30.0	36.0
EER			2.96	2.91	2.67	2.60
Working range (full load / partial load)		°C	7°C ~ 46°C / -10°C ~ 52°C			
Heat pump models			ARH 045 A	ARH 060 A	ARH 075 A	ARH 090 A
Net cooling capacities		kW	47.6	61.9	71.4	83.4
Power input in cooling		kW	17.0	20.0	28.0	36.0
EER			3.00	3.06	2.67	2.60
Heating capacities (1)		kW	45.2	58.0	71.7	86.5
Power input in heating		kW	16.0	19.0	27.0	33.0
COP			2.80	2.96	2.81	2.60
Working range (full load / partial load)		°C	-10°C ~ 46°C / -10°C ~ 52°C			
Cooling only + Gas heating models			ARG 045 A	ARG 060 A	ARG 075	ARG 090 A
Net cooling capacities		kW	45.1	61.0	71.5	84.0
Cooling power input		kW	16.0	23.0	30.0	36.0
Standard Heating capacities (1)		kW	76.0	76.0	76.0	76.0
Natural gas 2ND-H, G20		m³/h	8.60	8.60	8.60	8.60
High Heating capacities (1)		kW	90.0	90.0	90.0	90.0
Natural gas 2ND-H, G20		m³/h	9.80	9.80	9.80	9.80
Working range (full load / partial load)		°C	-15°C ~ 46°C / -15°C ~ 52°C			
Heat pump + Gas heating models			ARD 045 A	ARD 060 A	ARD 075	ARD 090 A
Net cooling capacities		kW	47.6	61.9	71.4	83.4
Cooling power input		kW	17.0	20.0	28.0	36.0
Heating capacities (1)		kW	45.2	58.0	71.7	86.5
Power input in heating		m³/h	16.0	19.0	27.0	33.0
Standard Heating capacities (1)		kW	76.0	76.0	76.0	76.0
Natural gas 2ND-H, G20		m³/h	8.60	8.60	8.60	8.60
High Heating capacities (1)		kW	90.0	90.0	90.0	90.0
Natural gas 2ND-H, G20		m³/h	9.80	9.80	9.80	9.80
Working range (full load / partial load)		°C	-15°C ~ 46°C / -15°C ~ 52°C			
Common characteristics						
Power supply			400V/3 + N/ 50Hz			
Main switch		A	50	63	80	80
Main cable		Nbr. x mm²	5 x 10	5 x 16	5 x 25	5 x 25
Cable to thermostat		Nbr. x mm²	10 x 0,22			
Number of circuits / Compressor type			2 x scroll			
Evaporator fan at nominal airflow	Airflow	m³/h	8 500	11 500	13 500	16 000
	Power input	kW	3	4	5,5	7,5
Nett dimensions	Height	mm	1 316	1 316	1 367	1 367
	Length	mm	3 180	3 180	3 495	3 495
	Depth	mm	2 337	2 337	2 337	2 337
Nett weight	ARC / ARG	kg	900 / 1 010	945 / 1 055	1 118 / 1 228	1 142 / 1 252
Nett weight	ARH / ARD	kg	930 / 1 040	985 / 1 095	1 145 / 1 255	1 220 / 1 330

All the data are at EUROVENT conditions with 400V/3+N/50Hz.

Cooling : Entering indoor coil temp. 27°C / 19°C WB and outdoor temperature 35°C - Heating : Entering indoor coil temp. 20°C and outdoor temperature 7°C / 6°C WB

(1) Add indoor fan motor consumption to know total heating capacity.

Codes

Cooling only models		ARC 045 A	ARC 060 A	ARC 075 A	ARC 090 A
		S661752440	S661752460	S661752470	S661752490
Heat pump models		ARH 045 A	ARH 060 A	ARH 075 A	ARH 090 A
		S661752443	S661752463	S661752473	S661752493
Cooling only + Gas heating models		ARG 045 A	ARG 060 A	ARG 075 A	ARG 090 A
		S661752441	S661752461	S661752471	S661752491
Heat pump + Gas heating models		ARD 045 A	ARD 060 A	ARD 075 A	ARD 090 A
		S661752442	S661752462	S661752472	S661752492
Thermostat					
to be ordered separately		DPC-1			

Activa rooftop details & features



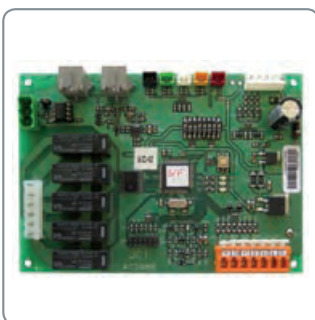
Condenser fan

New condenser fans with high technology blades and outdoor bell that reduce the turbulences in the air and therefore increase the efficiency and improve the noise level performance.



Tandem scroll compressors

Tandem compressors configuration allows the unit to operate at partial load (only with one compressor) with higher efficiency and increases the working range up to +52°C ambient temperature.



PCB board

The new control board keeps same features and benefits as YKlon V3 (see pg. 129) and adds new logical to control the tandem circuit, the new options (heat recovery, return fan) and the possibility to communicate with BMS system as standard (N2Open).



PCB board

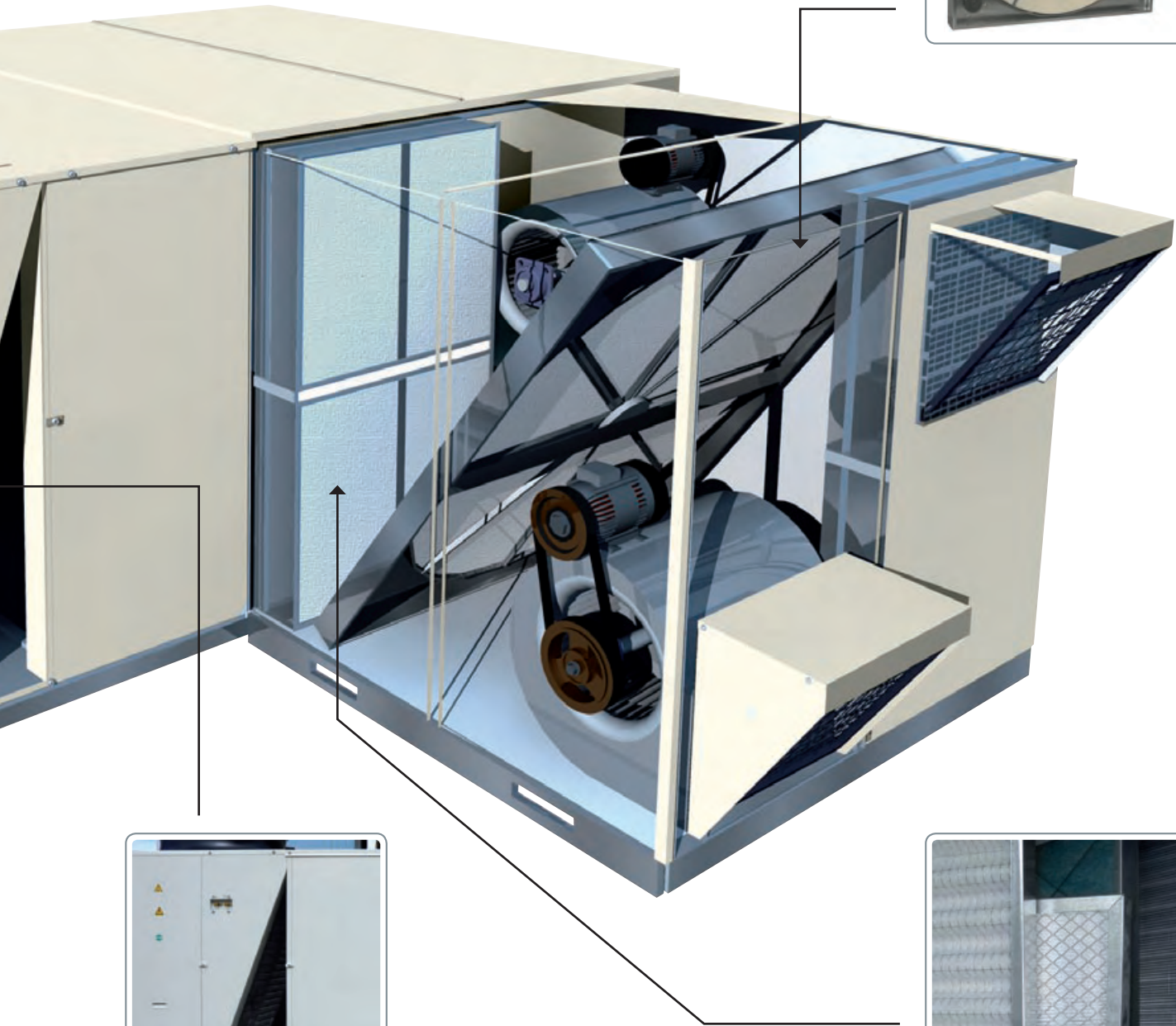


Return fan

Located in a special roof curb underneath the rooftop, it works simultaneously with the indoor fan in order to balance the amount of air supplied to and removed from the space. It is the best suited for systems with high return path static pressures. Also, incorporates EC technology and a differential pressure gauge to easy set up and maintain automatically the working point in the installation.

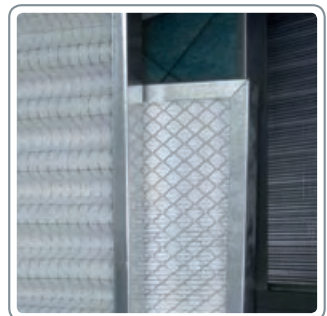
Energy recovery system

It is the preferred solution to solve two conflicting requirements: reduce running costs (increase efficiency) while maintaining the indoor air quality at high levels (through ventilation). An enthalpy rotary wheel retains the energy from the exhaust air and transmits it to the fresh air stream that is being supplied in the conditioned space. The material used is manufactured with the latest technology to increase the energy transmission in both sensible and latent heat. The wheel is split into 6 portions that can be easily removed for cleaning.



V-Coils

Can be made in aluminium, blue fin or in copper (for harsh conditions), increases the heat exchange surface for a given rooftop footprint. The floor pan is sloped for easy condensates drainage.



Filter options

Washable air filters: G4 class filter (gravimetric efficiency above 90%) and M1 fire class, it comes with galvanized sheet metal frame that allows easy cleaning and replacement. Delivered as standard.
 Filter kit F6: for Average Opacimetric efficiency (em) $60\% \leq em \leq 80\%$
 Filter kit F7: for Average Opacimetric efficiency (em) $80\% \leq em \leq 90\%$
 As per EN 779

Accessories & options

Accessories & options

	Code	Cooling only				Heat pump			
		45	60	75	90	45	60	75	90
Thermostat DPC-1	S603786044	A	A	A	A	A	A	A	A
Dry bulb triple input economizer or motorized air damper with rain hood	S661752301	O	O			O	O		
	S661752311			O	O			O	O
Enthalpy probes	S613990081	O	O	O	O	O	O	O	O
Indoor air quality sensor	S606819964	A	A	A	A	A	A	A	A
Power Exhaust	S661752302	A	A			A	A		
	S661752322			A	A			A	A
Barometric relief damper and rain hood	S613990472	A	A			A	A		
	S613990473			A	A			A	A
Fresh air damper and rain hood (2)	S661752303	A	A			A	A		
	S661752323			A	A			A	A
High speed drive	4 kW	O				O			
	5.5 kW		O				O		
	7.5 kW			O				O	
	9.2 kW				O				O
	11 kW				O				O
Soft start indoor fan	5.5 kW	O	O	O	O	O	O	O	O
	11.5 kW	O	O	O	O	O	O	O	O
Low ambient kit	S613118301	O	O	O	O	O	O	O	O
Side duct flanges	S613991482	A	A			A	A		
	S613991483			A	A			A	A
Fixed roof curb	S613991884	A	A			A	A		
	S613991885			A	A			A	A
Adjustable roof curb	S613992081	A	A			A	A		
	S613992082			A	A			A	A
Filter dirty switch	S613990085	O	O	O	O	O	O	O	O
Smoke detector	S613903003	O	O	O	O	O	O	O	O
Fire detection thermostat	S613995382	O	O	O	O	O	O	O	O
Hot water coil	S611083351	O	O	O	O	O	O	O	O
Electric heaters	12 kW	O	O	O	O	O	O	O	O
	25 kW	O	O	O	O	O	O	O	O
	37 kW	O	O	O	O	O	O	O	O
	50 kW	O	O	O	O	O	O	O	O
Propane conversion Kit	S611801780	A	A	A	A	A	A	A	A
High heat gas conversion kit	S611803080	O	O	O	O	O	O	O	O
Filter kit F6	S611300401	O	O			O	O		
	S611300701			O				O	
	S611300901				O				O
Filter kit F7	S611300402	O	O			O	O		
	S611300702			O				O	
	S611300902				O				O
Grill condenser coil protection	S661752304	O				O			
	S661752324		O				O		
	S661752314			O	O			O	O
Antivibration mounting kit	S613990411	A	A	A	A	A	A	A	A
Return fan indoor duct	S613993042	A	A			A	A		
	S613993072			A	A			A	A
Energy recovery	Q6000 (1)	A	A			A	A		
	Q3000 (1)	A	A			A	A		
	Q9000 (1)			A	A			A	A
	Q4500 (1)			A	A			A	A
Filter kit F6 for energy recovery	S611994506	O/A	O/A			O/A	O/A		
	S611997506			O/A	O/A			O/A	O/A
Filter kit F7 for energy recovery	S611994507	O/A	O/A			O/A	O/A		
	S611997507			O/A	O/A			O/A	O/A
Copper-copper coil	Contact us	O	O	O	O	O	O	O	O
Blue fin	Contact us	O	O	O	O	O	O	O	O

O=Option (factory fitted). A=Accessory (supplied loose). O/A=If you want this item factory fitted, precise it in the order form.

(1) = Energy recovery accessory include: economizer, rain hood, indoor air quality sensor, enthalpy probe and G4 filters.

(2) Fresh air damper can not be installed if economizer or motorized damper is fitted



Accessories & options

	Code	Cooling + gas heating				Heat pump + gas heating			
		45	60	75	90	45	60	75	90
Thermostat DPC-1	S603786044	A	A	A	A	A	A	A	A
Dry bulb triple input economizer or motorized air damper with rain hood	S661752301	O	O			O	O		
	S661752311			O	O			O	O
Enthalpy probes	S613990081	O	O	O	O	O	O	O	O
Indoor air quality sensor	S606819964	A	A	A	A	A	A	A	A
Power Exhaust	S661752302	A	A			A	A		
	S661752322			A	A			A	A
Barometric relief damper and rain hood	S613990472	A	A			A	A		
	S613990473			A	A			A	A
Fresh air damper and rain hood (2)	S661752303	A	A			A	A		
	S661752323			A	A			A	A
High speed drive	4 kW	O				O			
	5.5 kW		O				O		
	7.5 kW			O				O	
	9.2 kW				O				O
	11 kW				O				O
Soft start indoor fan	5.5 kW	O	O	O	O	O	O	O	O
	11.5 kW	O	O	O	O	O	O	O	O
Low ambient kit	S613118301	O	O	O	O	O	O	O	O
Side duct flanges	S613991482	A	A			A	A		
	S613991483			A	A			A	A
Fixed roof curb	S613991884	A	A			A	A		
	S613991885			A	A			A	A
Adjustable roof curb	S613992081	A	A			A	A		
	S613992082			A	A			A	A
Filter dirty switch	S613990085	O	O	O	O	O	O	O	O
Smoke detector	S613903003	O	O	O	O	O	O	O	O
Fire detection thermostat	S613995382	O	O	O	O	O	O	O	O
Hot water coil	S611083351	O	O	O	O	O	O	O	O
Electric heaters	12 kW	O	O	O	O	O	O	O	O
	25 kW	O	O	O	O	O	O	O	O
	37 kW	O	O	O	O	O	O	O	O
	50 kW	O	O	O	O	O	O	O	O
Propane conversion Kit	S611801780	A	A	A	A	A	A	A	A
High heat gas conversion kit	S611803080	O	O	O	O	O	O	O	O
Filter kit F6	S611300401	O	O			O	O		
	S611300701			O				O	
	S611300901				O				O
Filter kit F7	S611300402	O	O			O	O		
	S611300702			O				O	
	S611300902				O				O
Grill condenser coil protection	S661752304	O				O			
	S661752324		O				O		
	S661752314			O	O			O	O
Antivibration mounting kit	S613990411	A	A	A	A	A	A	A	A
Return fan indoor duct	S613993042	A	A			A	A		
	S613993072			A	A			A	A
Energy recovery	Q6000 (1)	A	A			A	A		
	Q3000 (1)	A	A			A	A		
	Q9000 (1)			A	A			A	A
	Q4500 (1)			A	A			A	A
Filter kit F6 for energy recovery	S611994506	O/A	O/A			O/A	O/A		
	S611997506			O/A	O/A			O/A	O/A
Filter kit F7 for energy recovery	S611994507	O/A	O/A			O/A	O/A		
	S611997507			O/A	O/A			O/A	O/A
Copper-copper coil	Contact us	O	O	O	O	O	O	O	O
Blue fin	Contact us	O	O	O	O	O	O	O	O

O=Option (factory fitted). A=Accessory (supplied loose). O/A=If you want this item factory fitted, precise it in the order form.

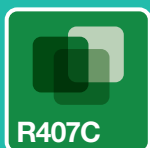
(1) = Energy recovery accessory include: economizer, rain hood, indoor air quality sensor, enthalpy probe and G4 filters.

(2) Fresh air damper can not be installed if economizer or motorized damper is fitted

Large Rooftop

DIC-BIH-DIG

A complete range from 119.1 kW up to 155.6 kW



YKlon✓3

Features

- YKlon ✓3 board
- Duct work configuration side or down flow
- Cooling, heat pump, gas and electric heating
- Compact unit
- Wide range of accessories
- Suitable for use in harsh climates

D 4 IC 360 G 50

Nomenclature

Voltage code:

50 = 400V / 3 + N / 50 Hz

Heating installed:

G = R407C

Capacity range:

360 = 360.000 Btu/h
1.000 Btu/h = 293 W

Product identification:

IC = Cooling only
IH = Heat pump
IG = Heat gas

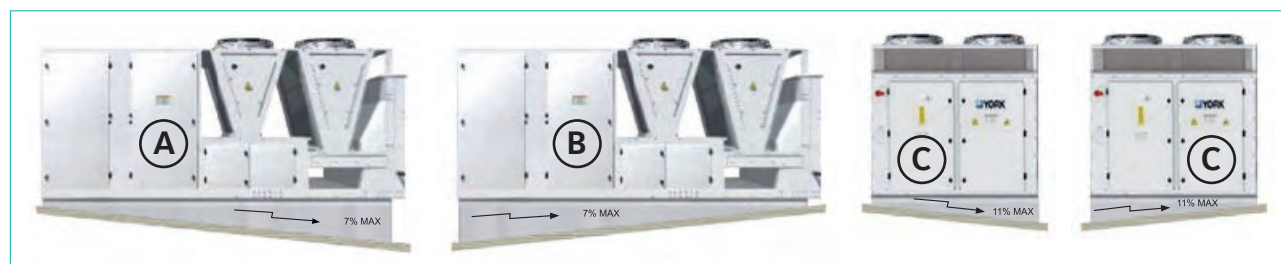
Product generation:

4 = 4th generation

Product category:

D = Packaged air conditioner (air-cooled)
B = Heat pump

Adjustable roof curb types



Large Rooftop

DIC-BIH-DIG 360 to 480 G



Technical features

Models		D4IC 360 G	D4IC 480 G	B4IH 360 G	B4IH 480 G	D4IG 360 G*	D4IG 480 G*
Gross cooling capacities (1)	kW	119.1	155.6	115.1	151.0	119.1	155.6
Power input in cooling (2)	kW	31.4	37.2	32.0	44.5	31.4	37.2
Heating capacities	kW	-	-	127.1	163.3	-	-
Power input in heating	kW	-	-	41.9	56.7	-	-
Cooling capacities (3)	kW	111.6	144.6	107.6	140.0	111.6	144.6
Power input in cooling (3)	kW	42.4	52.2	43.0	59.5	42.4	52.2
Heating capacities (3)	kW	-	-	127.1	163.3	-	-
Power input in heating (3)	kW	-	-	41.9	56.7	-	-
Gas heating capacities (3)	kW					117 + 9.2	117 + 11
Natural gas 2ND-H, G20	m³/h					12.8	12.8
Power supply		400V/3 + N/ 50Hz					
Nominal / Starting current	A	89 / 167	109 / 250	83 / 169	109 / 250	89 / 167	109 / 250
Main switch	A	125	160	125	160	125	160
Main cable	Nbr x mm²	5 x 50	5 x 70	5 x 50	5 x 70	5 x 50	5 x 70
Cable to thermostat DPC-1	Nbr x mm²	10 x 0,22 shield cable only					
Number of circuits		3	3	3	3	3	3
Thermostat		DPC-1					
Evaporator fan at nominal airflow	Airflow	m³/h	21 000	25 000	21 000	25 000	21 000
	Standard ESP	Pa	250	250	250	250	250
	ESP with HSD	Pa	400 (Side duct connections) - 450 (Down duct connections)				
	Power input	kW	9.2	11	9.2	11	9.2
	Power input HSD	kW	11	15	11	15	11
	Drive		Pulley - Belt (6 turns adjustable)				
Nett dimensions	Height	mm	1.815				
	Length	mm	4.580				
	Depth	mm	2.200				
Nett weight	kg	2 010	2 295	2 060	2 350	2 125	2 410

(1) : without heat from evaporator fan motor (2) : without evaporator fan motor (3) : All the data are at EUROVENT conditions with 230V/1/50Hz or 400V/3+N/50Hz
Cooling : Entering indoor coil temp. 27°C / 19°C WB and outdoor temperature 35°C - Heating : Entering indoor coil temp. 20°C and outdoor temperature 7°C / 6°C WB
* You should indicate airflow connection (side or down) when placing order.

Compatibility table / Codes

Cooling only models	D4IC 360 G	D4IC 480 G
	S661723623	S661724823
Heat pump models	B4IH 360 G	B4IH 480 G
	S661923623	S661924823
Cooling and gas heating models	D4IG 360 G	D4IG 480 G
	S661763603	S661764803
Thermostat		
to be ordered separately		DPC-1

Accessories or options

Models		D4IC 360 G	D4IC 480 G	B4IH 360 G	B4IH 480 G	D4IG 360 G	D4IG 480 G
Thermostat DPC-1	S603780044	A	A	A	A	A	A
Dry bulb triple input economizer or motorized air damper with rain hood (1)	S613993601	O	O	O	O	O	O
Enthalpy probe *	S613990081	O	O	O	O	O	O
Indoor air quality sensor *	S606819964	O/A	O/A	O/A	O/A	O/A	O/A
Power exhaust *	S613994880	O/A	O/A	O/A	O/A	O/A	O/A
Barometric relief damper + rain hood	S613990471	O/A	O/A	O/A	O/A	O/A	O/A
Fresh air damper and rain hood (2)	S613990488	O	O	O	O	O	O
High pressure drive 360	S611993680	O		O		O	
High pressure drive 480	S611994880		O		O		O
Low ambient control 360 and 480	S613113680	O	O	O	O	O	O
Hot water coil with control	S611083651	O	O	O	O		
Electric heater 37 kW (2 stages)	S611763384	O	O	O	O		
Electric heater 50 kW (2 stages)	S611764484	O	O	O	O		
Electric heater 60 kW (2 stages)	S611765581	O	O	O	O		
Washable air filter set G4 (EU4)	S611303680	O	O	O	O	O	O
Dirty filter switch	S613990084	O	O	O	O	O	O
Smoke detector	S613995381	O	O	O	O	O	O
Fire detection thermostat	S613903002	O	O	O	O	O	O
Fixed roof curb **	S613991980	A	A	A	A	A	A
Adjustable roof curb **	A	S613992084	A	A	A	A	A
	B	S613992085	A	A	A	A	A
	C	S613992086	A	A	A	A	A

O=Option (factory fitted). A=Accessory (supplied loose). O/A=If you want this item factory fitted, precise it in the order form.

* It is mandatory to order the economizer with this item. ** Delivered in kit form.

(1) You should indicate airflow connection (side or down) when placing order. (2) Fresh air damper can not be installed if economizer or motorized damper is fitted

Large rooftop details & features



Cabinet features

- Build to last, all cabinet with heavy gauge galvanized steel and powder paint backed on oven.
- Copper-copper coils or Blue fin delivered upon request.
- Side or bottom duct connections to be realized on site. No need to order specific models or roofcurb accessories.
- Excellent water-tightness even with high internal negative pressure.
- External slopes to remove rain water.
- Only 4 solid points to crane.



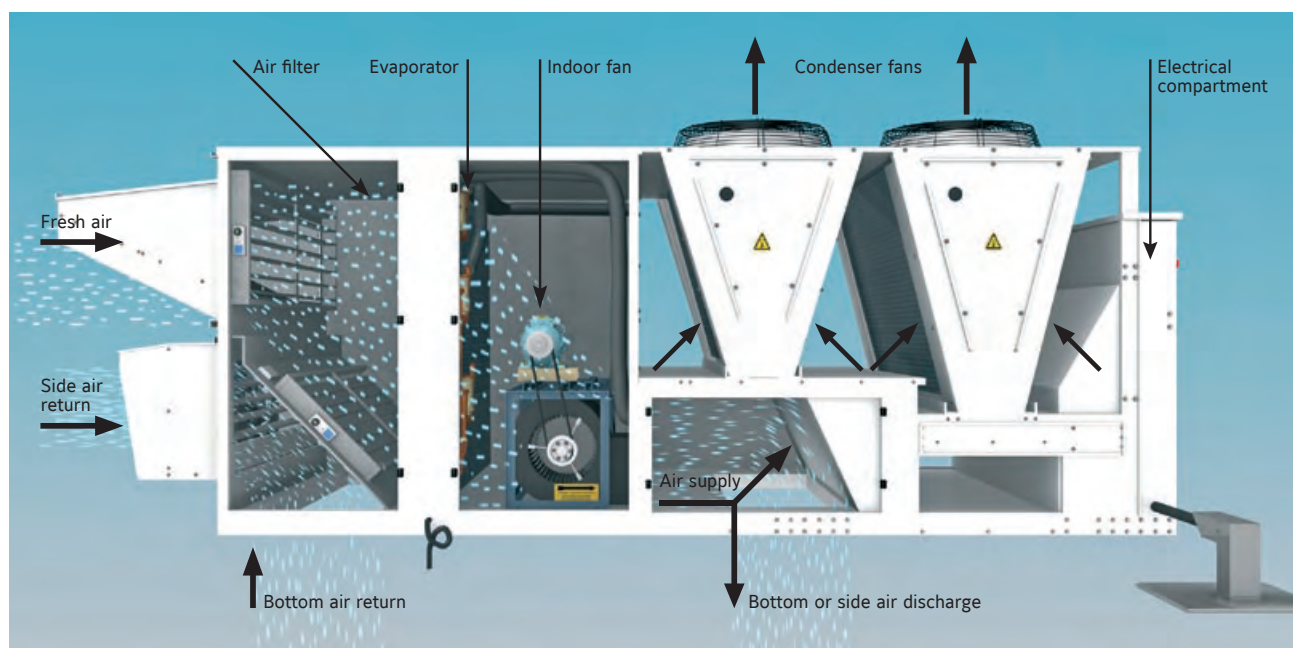
Maintenance and service access

- Anti vibration bush reduces vibrations
- V Coils ensure Good access to main components
- No direct sun or snow accumulation on the coil



Outdoor fan

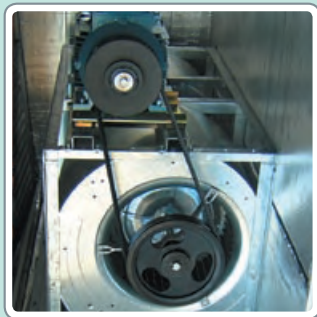
- Galvanised sheet metal frame filters easy to dismount.
- Solid rain hood air filter mesh to avoid rain penetration.
- Smooth start indoor fan motor as standard.
- Adjustable motor pulley to get required airflow on site.





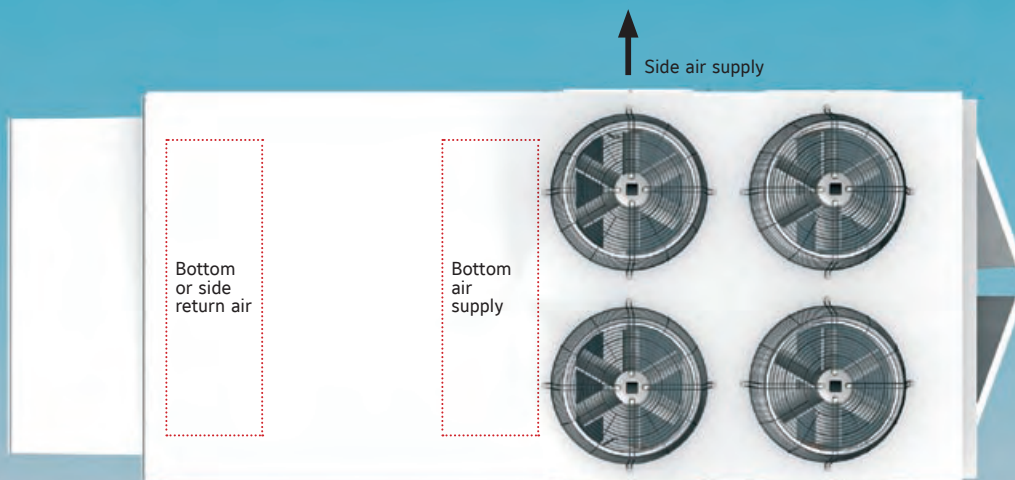
Electrical compartment

- YKlon V3 regulation and control.
- Vertical hermetic scroll compressor, with compressor module and crankcase heater.
- The compressors with 3 independent circuits are located in a closed compartment, equipped with acoustical insulation in all internal surfaces.
- 3-Phase relay for detection of incorrect phase sequence especially important as we are using scroll compressors. Also protect the rooftops against total and partial phase loss with a regenerated voltage up to 85% of the nominal voltage (phase to phase).
- Main power switch, numbered wires in the cable trucking and motor protection.



Indoor fan

- Doors equipped with hinges 1/4 turn lock.
- Quick and easy access to all components.
- Inspection window for sight glass.
- Internal drain pan slope to remove drain water.
- Adjustable airflow.



Rooftop & Large Rooftop accessories & options



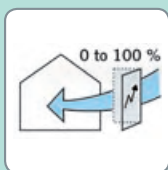
Triple input economizer

This system utilizes 3 probes: Return Air, Outdoor Air and Supply Air. The Outdoor Air damper and the Return Air dampers are mechanically interconnected in order to provide the same airflow at the coil inlet, with a single damper motor. The PCB compares sensor values and modulates the dampers providing maximum efficiency of the economiser system (free cooling) and comfort (Supply Air > 12°C). Combined with the air quality sensor, your payback will be ensured within few months. The rain hood is painted to match the basic unit and aluminium mesh pre-filter prevents water penetration.



Indoor air quality

This sensor measures concentrations of pollutant gases, such as tobacco smoke, human body odours, kitchen odours, carbon monoxide, etc... It automatically overrides the economizer when pollutant levels rise above preset limits. A shorting plug will set the algorithm to acceptable, good or very good air quality. This VOC sensor (Volatile Organic Compounds) sends an ON/OFF signal to the control PCB. The YKlon will then adjust the fresh air damper, optimising indoor air quality and minimising the energy consumption.



Motorised outdoor air damper

Equipped with the same dampers as the economizer, the Return Air probe is not used. Outdoor air damper opens to pre-set position whenever the indoor fan is operating (selected from the thermostat, the indoor fan can be activated with the compressor or to operate continuously) and will drive fully closed when the indoor fan shuts down. The rain hood is painted to match the basic unit and aluminium mesh pre-filter prevents water penetration.



Power Exhaust

Used to mechanically relieve internal air pressure from the Return Air section and ensure efficient fresh air introduction on units equipped with triple input economiser or motorised air damper. The power exhaust fan motor works when enough Outdoor Air is blowing into the room and if Outdoor Air temperature is acceptable ($12^{\circ}\text{C} < t^{\circ} < 30^{\circ}\text{C}$).



Enthalpy sensors

To control the economizer in humid areas, or when indoor air humidity needs to remain dry, you should select enthalpy regulation. Enthalpy sensors will be used with the triple input economizer.



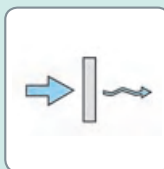
High speed drive

The high speed drive will increase the supply fan performance for applications requiring greater air flow and/or static pressure. Please consult technical guide for more information.



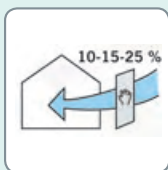
Barometric relief damper

This accessory can be used to relieve internal air pressure on units equipped with triple input economiser or motorised air damper but no power exhaust. When the rooftop is working in free cooling or introducing fresh air, the damper opens to relieve over pressure from the return air section. This accessory is comprised of a rain hood, a protective grille and a fully assembled damper.



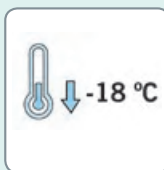
Dirty filter switch

Ensures that clean air is being supplied, advises when maintenance is required to prevent excessive depression and ensures water integrity of the AHU. These are the main advantages of filter dirty switch. Connected with the DPC-1 thermostat, the filter icon will appear on the thermostat screen when a filter change is required.



Fresh air damper and rain hood

The most cost effective method with a complete rain hood and a fixed damper that can be adjusted to provide approximately 10, 15 or 25% of fresh air.



Low ambient control

All our rooftops are designed to work in cooling mode down to 7°C ambient temperatures. Although this working range suits most applications, the units can operate correctly down to -18°C with optional low ambient control.



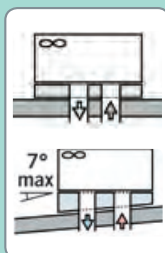
Fire detection thermostat

This fire detection thermostat is protecting the AHU but must not be used to ensure a full building protection against fire danger. The standard AHU is protected as standard with a Supply Air probe that shuts the unit down (lockout) when temperature exceeds 80°C . The electro-mechanical fire detection thermostat is used to fulfil specific local requirement. A manual reset is necessary.



Smoke detector

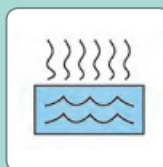
The smoke detector is protecting the AHU but must not be used to ensure a full building protection against smoke danger. If smoke is detected the AHU is shutdown (lockout). A manual reset is necessary.



Fixed and adjustable roof curbs

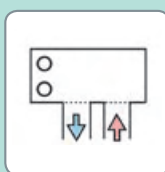
Ideal for down-flow applications, it is a great help for installation allowing duct connections, electrical connection and weatherproofing between the roofcurb and the roof of the building. Shipped in kit form, it also gives sufficient height for condensate trap operation.

The adjustable roof curbs have the same benefits as the fixed roof curb, it allows the rooftop to be levelled on a roof with up to 7° slope (4%).



Hot water coil with control

The hot water coil and his control are always fitted, wired and factory tested. Located in the supply air section, side or bottom duct connection is possible without any modification. Complete with an anti-frost thermostat, the PCB will activate the modulated valve (24V supply, 0 – 10V modulating signal) in order to get the best comfort. A jumper will allow using hot water coil as 1st heating stage.



Side duct flanges

Fitted as standard on units 90, 120 and 150, this accessory is composed of easy to install sheet metal panels to allow ductwork connections on the side of the AHU for horizontal return air and/or supply air.



Electric heaters

Available on cooling only and Heat pump units, the electric heater is protected with two overheats per element. When the overheat operates, there is a lock out of the faulty electric heater stage and the PCB starts automatically another heat stage.



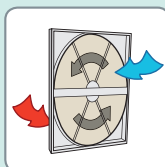
Kit conversion propane

This kit comprises replacement burner, pilot injectors and all necessary instructions for converting the natural gas burner to propane gas. The nominal pressure of the propane gas should be 37 mbar.



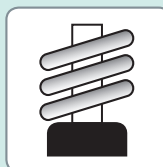
High heat gas

This kit comprises replacement burner injectors and all necessary instructions to provide high heat capacity for gas rooftop.



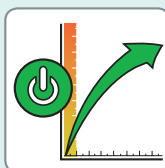
Energy recovery

Attached to the return air box of the rooftop, a rotary enthalpy wheel retrieves the energy of the exhausted air and transmits it to the fresh air intake. A special material used in the wheel allows that latent heat as well as sensible heat are transmitted.



Antivibration mounting kit

It is composed by a set of stainless steel springs, to be assembled underneath the rooftop in a specific position. Their installation avoids the potential vibration transmission of the equipment to the building and reduces therefore the noise level (compressors have their own shock absorbers delivered as standard).



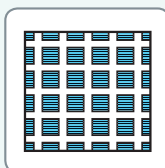
Indoor fan soft start

Compact control unit with a motor with AC semiconductors, designed for soft starting and stopping of three-phase motors for centrifugal fans. The starting time, the stopping time and the initial torque are adjusted by mean of independent potentiometers.



Return fan

Used to overcome high return path pressure drops, works in series with the indoor fan to maintain the air pressure of the conditioned space within acceptable levels.



Grill condenser protection

Metallic frame painted with oven-baked polymerized paint (800h salt spray resistance) to protect the fins of the coils from external damages.



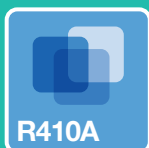
Air filters

G4, F6 and F7 filters are available to purify the air in the room. M1 fire class and manufactured in sheet metal frame, they are easy to install and clean.

VITALITY Axial Large Split

VAC/VAH - VIR 20 to 90 A

A complete range from 19.1 kW up to 86.1 kW



YKN2open

Features

- New YKN2open board
- High technology fan blades increases efficiency and reduces noise level
- Service valves
- Economizer or motorized damper
- Return fan
- Indoor air quality
- Hot water coil and control
- Scroll compressor with crankcase heater
- Digital thermostat DPC-1 included

V A H 40 A

Nomenclature*

A = version

Capacity range:
40 = 40 kW

Product category:

C = Cooling only

H = Heat Pump

R = Reversible

I = Indoor

A = Axial

V = Vitality

* Check codes in next page for discharge configuration

VITALITY Axial Large Split

VAC/VAH - VIR 20 to 90 A



Technical features (preliminary data)

INDOOR UNITS									
Cooling only and Heat pump	VIR	25A		40A		45A	60A	75A	90A
OUTDOOR UNITS									
Cooling only models	VAC	20A	25A	30A	40A	45A	60A	75A	90A
Cooling capacities	kW	19.10	23.00	28.80	38.00	43.00	55.00	72.30	86.10
Power input in cooling	kW	5.60	6.99	9.60	11.88	13.44	17.74	23.09	28.60
EER (4)		3.41	3.29	3.00	3.20	3.20	3.10	3.13	3.01
Refrigerant charge on site for 7 m piping length	kg	12	12	12.5	13.5	2 x 11	2 x 11.5	2 x 15.5	2 x 15
Heat pump models	VAH	20A	25A	30A	40A	45A	60A	75A	90A
Cooling capacities	kW	19.10	23.00	28.80	38.00	43.00	55.00	72.30	86.10
Power input in cooling	kW	5.60	6.99	9.60	11.88	13.44	17.74	23.09	28.60
EER (4)		3.41	3.29	3.00	3.20	3.20	3.10	3.13	3.01
Heating capacities	kW	21.20	25.20	31.90	40.00	46.00	60.00	81.00	93.10
Power input in heating	kW	4.94	6.73	8.41	10.53	12.10	16.21	22.13	28.82
COP (4)		4.29	3.74	3.79	3.80	3.80	3.70	3.66	3.23
Refrigerant charge on site for 7 m piping length	kg	12	12	12.5	13.5	2 x 11	2 x 11.5	2 x 15.5	2 x 15
Power supply		400V/3 + N/ 50Hz							
Nominal / Starting current	A	8.5 / 74	11.8 / 95	15 / 118	19.3 / 140	2 x 12 / 95	2 x 15 / 118	2 x 19 / 140	2 x 25 / 198
Main switch (1)	A	20	25	32	40	50	63	80	100
Main cable to the outdoor unit (1)	Nbr x mm²	5 x 4	5 x 4	5 x 6	5 x 10	5 x 10	5 x 16	5 x 25	5 x 35
Interconnecting cable (1)	Nbr x mm²	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 2.5
Cable to standard thermostat (2)	Nbr x mm²	10 x 0.22							
Insulated refrigerant piping	Suction	1-1/8"	1-1/8"	1-1/8"	1-1/8"	2 x 1-1/8"	2 x 1-1/8"	2 x 1-3/8"	2 x 1-3/8"
	Liquid	1/2"	1/2"	5/8"	5/8"	2 x 1/2"	2 x 5/8"	2 x 7/8"	2 x 7/8"
Evaporator fan VIR at nominal airflow (3)	Airflow	m³/h	4 590	4 590	7 500	7 500	9 000	10 500	13 000
	Standard ESP	Pa	172		153		150	178	240
	ESP with HSD	Pa	267		242		203	277	399
	ESP with HSDM	Pa	267		242		203	277	289
Nett dimensions outdoor VAC / VAH	Height	mm	1 230	1 230	1 382	1 378	1 378 / 1 429	1 378 / 1 429	1 534
	Length	mm	882	882	882	1 627	1 627	1 627	1 627
	Depth	mm	1 354	1 354	1 354	1 453	1 453	1 453	2 099
Nett dimensions indoor VIR	Height	mm	592		665		764	764	838
	Length	mm	1360		1740		2240	2240	2653
	Depth	mm	785		785		772	772	892
Nett weight	VAC / VAH	kg	227	228	250	397	560	562	610
	VIR	kg	128		173		250	250	342

(1) For information only. These should be checked for compliance with local regulations depending also on installation and conductor type.

(2) Shield type cable only.

(3) ESP = External static pressure HSD = High speed drive HSDM = High speed drive and motor

(4) All the data are at EUROVENT conditions with 400V/3+N/50Hz.

Cooling : Entering indoor coil temp. 27°C / 19°C WB and outdoor temperature 35°C

Heating : Entering indoor coil temp. 20°C and outdoor temperature 7°C / 6°C WB

Codes

INDOOR UNITS								
Cooling only & heat pump models	VIR 25		VIR 40		VIR 45	VIR 60	VIR 75	VIR 90
	S662562574		S662564074		S662564574	S662566074	S662567574	S662569074
OUTDOOR UNITS								
Cooling only models	VAC 20	VAC 25	VAC 30	VAC 40	VAC 45	VAC 60	VAC 75	VAC 90
	S661502063	S661502563	S661503063	S661504163	S661504663	S661506163	S661507663	S661509163
Heat pump models	VAH 20	VAH 25	VAH 30	VAH 40	VAH 45	VAH 60	VAH 75	VAH 90
	S662512063	S662512563	S662513063	S662514163	S662514663	S662516263	S662517663	S662519163
Thermostat								
Delivered with the unit		DPC-1						

Accessories or options

Compatibility table / Codes

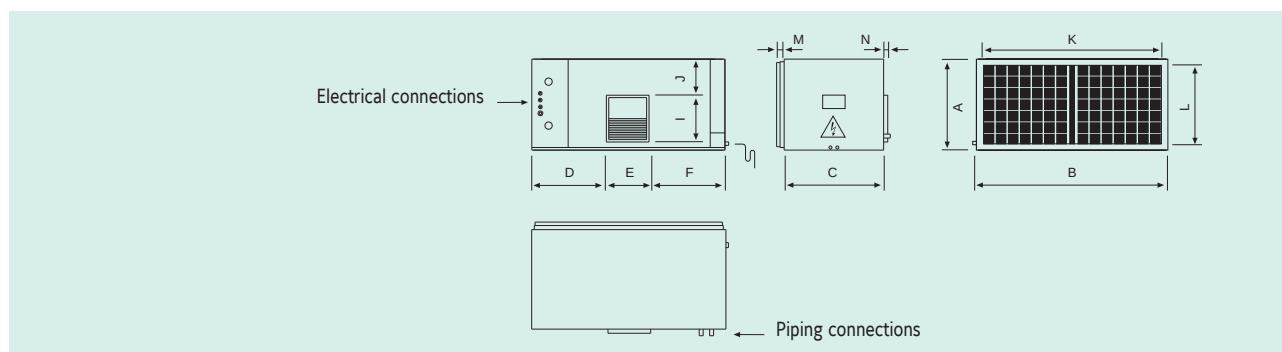
INDOOR UNITS									
Cooling only & heat pump		VIR 25A		VIR 40A		VIR 45A	VIR 60A	VIR 75A	VIR 90A
		S662562574		S662564074		S662564574	S662566074	S662567574	S662569074
OUTDOOR UNITS									
Cooling only models		VAC 20A	VAC 25A	VAC 30A	VAC 40A	VAC 45A	VAC 60A	VAC 75A	VAC 90A
		S661502063	S661502563	S661503063	S661504163	S661504663	S661506163	S661507663	S661509163
Heat pump models		VAH 20A	VAH 25A	VAH 30A	VAH 40A	VAH 45A	VAH 60A	VAH 75A	VAH 90A
		S662512063	S662512563	S662513063	S662514163	S662514663	S662516263	S662517663	S662519163
Thermostat									
Delivered with the unit		DPC-1							
Accessories or options for outdoor units									
		20A	25A	30A	40A	45A	60A	75A	90A
Low speed condenser motor	S613119011	0	0						
	S613111201			0	0	0			
	S613112401						0		
Compressor soft starter	Contact us	0	0	0	0	0	0	0	0
Copper-copper coil	Contact us	0	0	0	0	0	0	0	0
Blue fin	Contact us	0	0	0	0	0	0	0	0
Accessories or options for indoor units									
VIR models			25A	40A	45A	60A	75A	90A	
Electrical Heaters (inside the unit) (cable 20 m included)	10 kW (1 stage)	S611763704	O/A						
	15 kW (1 stage)	S611763714	O/A						
	10 kW (1 stage)	S611763724		O/A					
	20 kW (2 stages)	S611763734		O/A					
	15 kW (1 stage)	S611763744			O/A	O/A			
	30 kW (2 stages)	S611763754			O/A	O/A			
	30 kW (2 stages)	S611763764					O/A	O/A	
	40 kW (2 stages)	S611763774					O/A	O/A	
50 m connecting cable	1 stage	S611763780	A	A	A	A			
	2 stages	S611763781		A	A	A	A	A	A
Economizer or Motorised damper (dry bulb sensors included) (cable 20 m included)		S613994250	A						
		S613994400		A					
		S613994450			A	A			
		S613994750					A	A	
Indoor air quality		S606819964	A	A	A	A	A	A	
		S611082513	O						
Hot water coil and control (cable 20 m included)		S611084010		O					
		S611084512			O	O			
		S611087510					O	O	
50 m communication cable (Economizer/HWC)		S611087520 *	A	A	A	A	A	A	A
Return fan		S613995450			A	A			
		S613995750					A	A	
Vertical discharge Kit		S669482502	O						
		S669484002		O					
		S669486002			O	O			
		S669487502					O	O	
Indoor fan smooth start up to 5,5 kW		S606744690	O	O	O	O	O	O	
High speed drive		S611991087	O						
		S611991089		O					
		S611991091			O		O		
		S611991092				O			
		S611991095							O
High speed drive and motor		S611991088	O						
		S611991090			O				
		S611991093				O			
		S611991094					O		
		S611991096							O

O = Option (factory fitted) A = Accessory (supplied loose) O/A = If you want this item factory fitted, precise it in the order form
(1) Factory fitted, for horizontal airflow only.

* If the unit is equipped with economizer and hot water coil, only 1 communication cable is necessary.

Indoor units dimensions

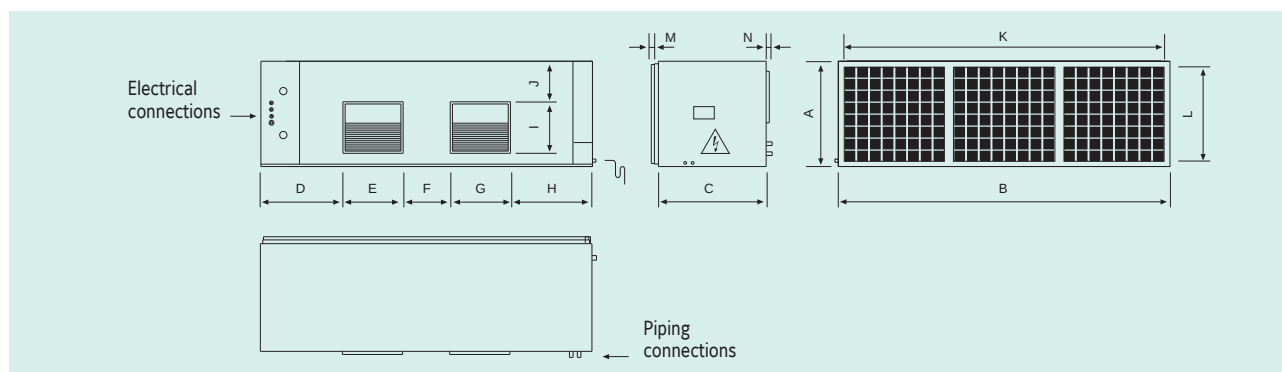
VIR 25A



All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N
VIR25A	592	1360	785	480	403	480	-	-	347	40	1094	520	21	25

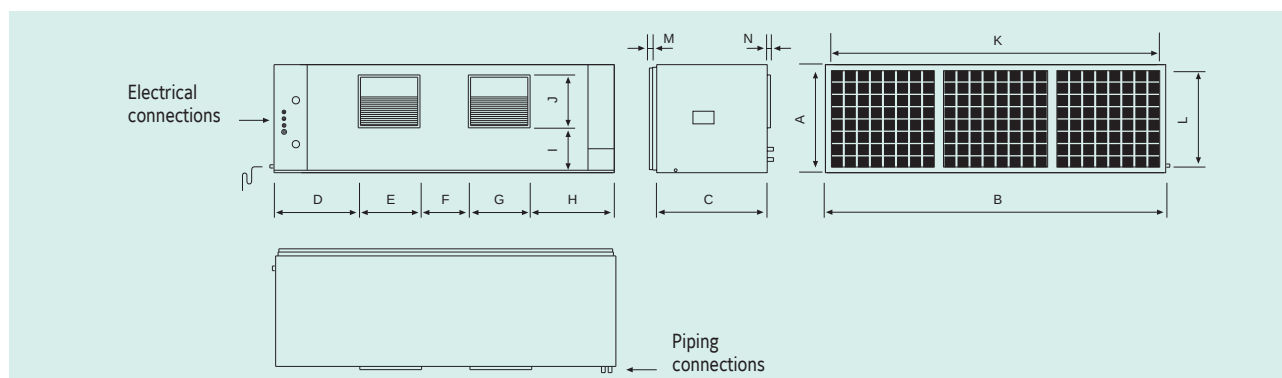
VIR 40-45-60A



All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N
VIR40A	665	1740	785	442	316	229	316	442	347	79	1337	593	21	25
VIR45A	764	2240	772	567	401	309	401	567	347	79	1920	692	21	25
VIR60A	764	2240	772	567	401	309	401	567	347	79	1920	692	21	25

VIR 75-90A

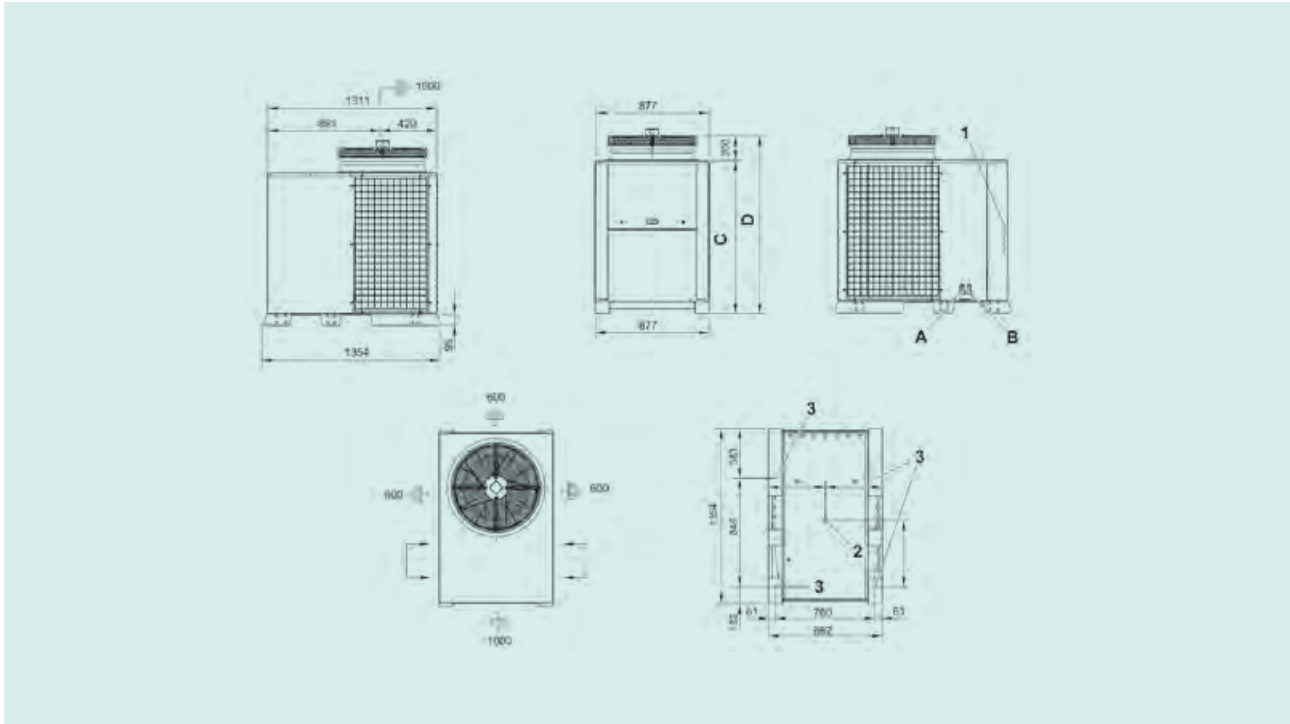


All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N
VIR75A	838	2653	892	663	478	376	478	663	409	79	2196	766	21	25
VIR90A	838	2653	892	663	478	376	478	663	409	79	2196	766	21	25

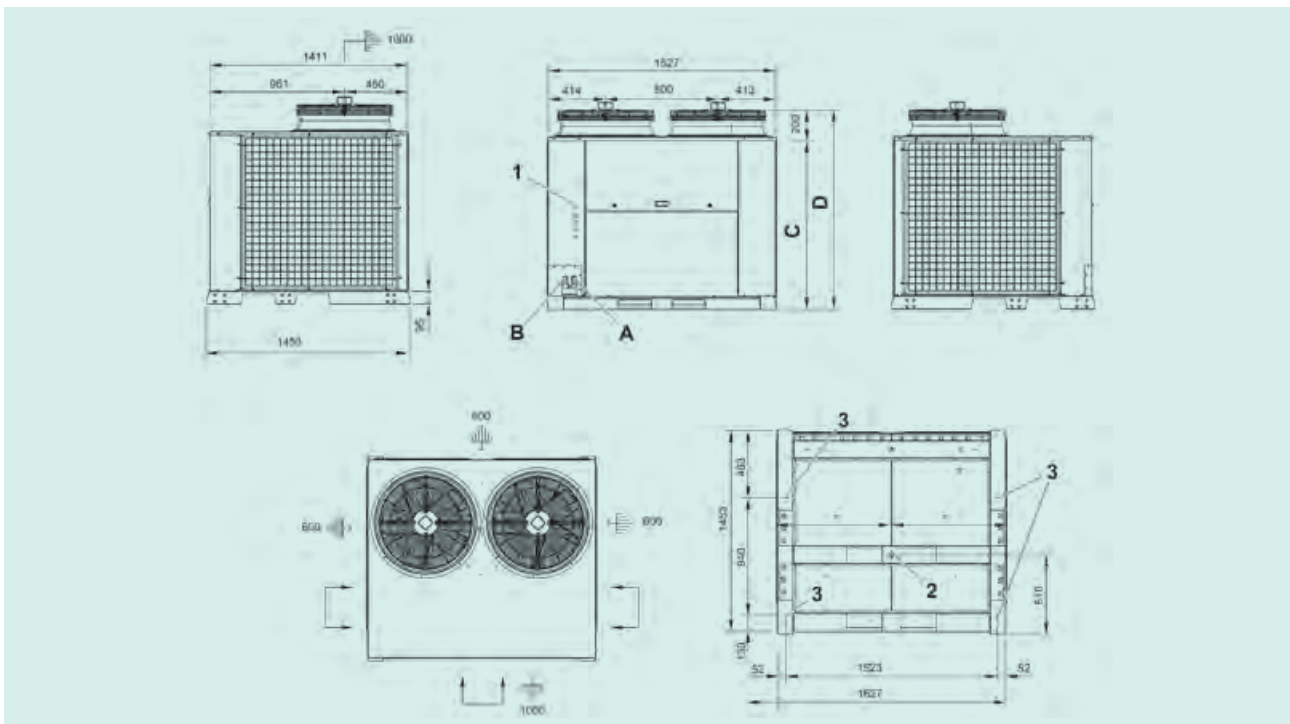
Dimensions and space requirements for outdoor units

VAC-VAH 20-25-30 A



All dimensions in mm. Drawings not a scale.

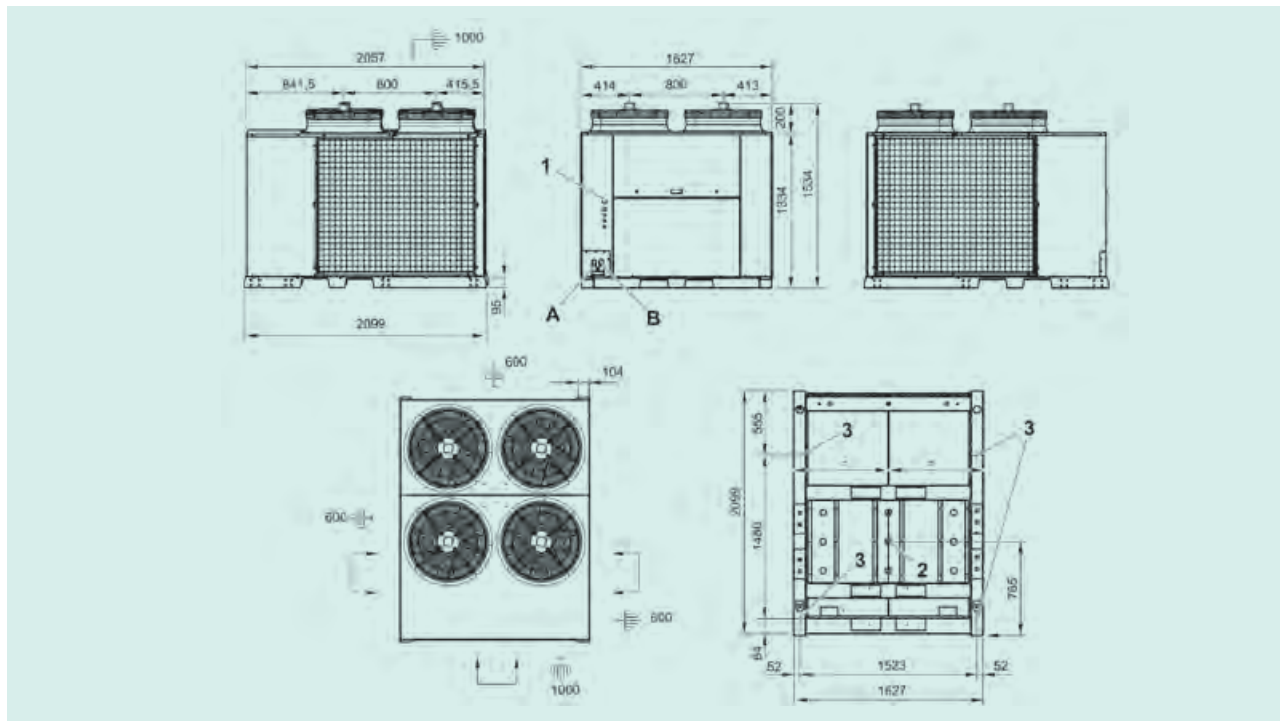
VAC-VAH 40-45-60 A



All dimensions in mm. Drawings not a scale.

Dimensions and space requirements for outdoor units

VAC-VAH 75-90 A



All dimensions in mm. Drawings not a scale.

VAC-VAH 20-25-30 A

	A	B	C	D
Unit	Gas piping diameter	Liquid piping diameter	mm	mm
VAC20A	1-1/8"	1/2"	1 030	1 230
VAH20A	1-1/8"	1/2"	1 030	1 230
VAC25A	1-1/8"	1/2"	1 030	1 230
VAH25A	1-1/8"	1/2"	1 030	1 230
VAC30A	1-1/8"	5/8"	1 182	1 382
VAH30A	1-1/8"	5/8"	1 182	1 382

VAC-VAH 40-25-60 A

	A	B	C	D
Unit	Gas piping diameter	Liquid piping diameter	mm	mm
VAC40A	1-1/8"	5/8"	1 178	1 378
VAH40A	1-1/8"	5/8"	1 178	1 378
VAC45A	2 x 1-1/8"	2 x 1/2"	1 178	1 378
VAH45A	2 x 1-1/8"	2 x 1/2"	1 129	1 429
VAC60A	2 x 1-1/8"	2 x 5/8"	1 178	1 378
VAH60A	2 x 1-1/8"	2 x 5/8"	1 129	1 429

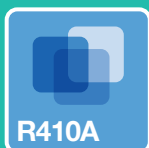
VAC-VAH 40-25-60 A

	A	B	C	D
Unit	Gas piping diameter	Liquid piping diameter	mm	mm
VAC75A	2 x 1-3/8"	2 x 7/8"	-	-
VAH75A	2 x 1-3/8"	2 x 7/8"	-	-
VAC90A	2 x 1-3/8"	2 x 7/8"	-	-
VAH90A	2 x 1-3/8"	2 x 7/8"	-	-

VITALITY Centrifugal Large Split

VCH-VIR 20 to 90 A

A complete range from 16.8 kW up to 87.3 kW



YKlon√3

Features

- YKlon √3 board
- High efficiency EER and COP
- Economizer or motorized damper
- Indoor air quality
- Hot water coil and control
- Scroll compressor with crankcase heater
- Possibility to be installed outdoor
- Return fan
- Digital thermostat DPC-1 included

V C H 40 A

Nomenclature*

A = version

Capacity range:
40 = 40 kW

Product category:

H = Heat Pump

R = Reversible

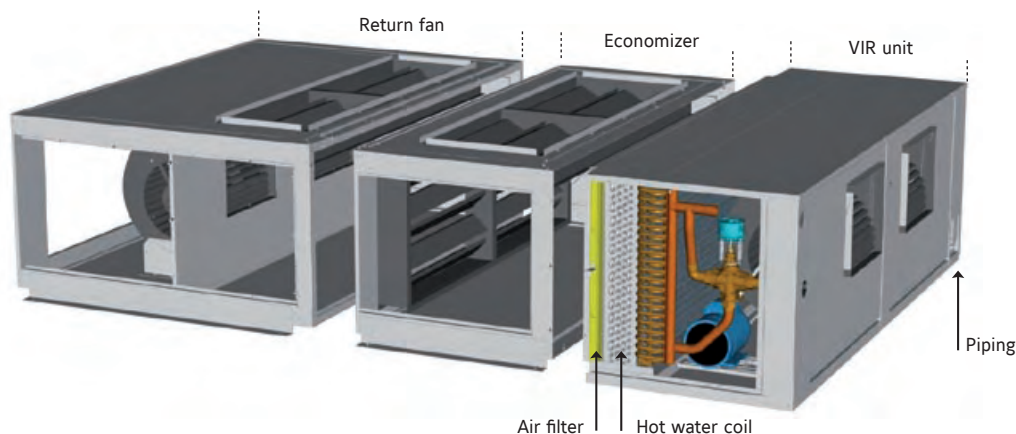
C = Centrifugal

I = Indoor

V = Vitality

* Check codes in next page for discharge configuration

VIR - Indoor unit details



VITALITY Centrifugal Large Split

VCH-VIR 20 to 90 A



Technical features

VITALITY UNITS									
Heat pump models	VCH/VIR	20	25	30	40	45	60	75	90
Cooling capacities	kW	16.8	20.6	28.7	32.4	43.5	54.1	76.1	87.3
Power input in cooling	kW	5.9	7.48	10.25	12.81	14.81	20.86	29.21	34.92
EER		2.85	2.75	2.8	2.53	2.94	2.6	2.61	2.5
Heating capacities	kW	21.5	23.2	32.3	39.3	47.4	53	77.7	89.9
Power input in heating	kW	5.68	6.84	9.95	12.87	13.75	20	27.56	33.19
COP		3.79	3.39	3.25	3.05	3.45	2.8	2.82	2.71
Refrigerant charge on site for 7m piping length	kg	8.5	8.5	12	12	2 x 9.5	2 x 10.5	2 x 15	2 x 16
Power supply		400V/3 + N/ 50Hz							
Nominal / Starting current	A	13 /	16 /	22 /	27 /	33 /	43 /	59 /	72 /
Main switch (1)	A	20	25	32	40	50	63	80	100
Main cable to the condensing unit (1)	Nbr x mm ²	5 x 4	5 x 4	5 x 6	5 x 10	5 x 10	5 x 16	5 x 25	5 x 35
Interconnecting cable (1)	Nbr x mm ²	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 2.5
Cable to standard thermostat (1) (2)	Nbr x mm ²	10 x 0.22							
Insulated refrigerant piping	Suction	1 1/8"	1 1/8"	1 1/8"	1 1/8"	2 x 1 1/8"	2 x 1 1/8"	2 x 1 3/8"	2 x 1 3/8"
	Liquid	1/2"	1/2"	5/8"	5/8"	2 x 1/2"	2 x 5/8"	2 x 7/8"	2 x 7/8"
Evaporator fan VIR at nominal airflow (3)	Airflow	m ³ /h		4 590		7 500		9000	10500
	Standard ESP	Pa		117		118		130	137
	ESP with HSD	Pa		-		217		188	246
	ESP with HSDM	Pa		222		-		188	246
Condenser fan at nominal airflow	Airflow	m ³ /h		6235		6235		11975	11975
	Standard ESP	Pa		50		50		50	50
Nett dimensions VCH condensing units	Height	mm		1392		1392		1526	1526
	Length	mm		1362		1362		1740	1740
	Depth	mm		790		790		785	785
Nett dimensions VIR indoor units	Height	mm		592		592		665	665
	Length	mm		1360		1360		1740	1740
	Depth	mm		785		785		772	772
Nett weight	VCH	kg		285		310		355	375
	VIR	kg		128		128		173	173

(1) For information only. These should be checked for compliance with local regulations depending also on installation and conductor type.

(2) Shield type cable will have a better insulation against electromagnetic interference. It is recommended for sensitive sites and for communications.

(3) ESP = External static pressure HSD = High speed drive HSDM = High speed drive and motor

All the data are at EUROVENT conditions with 400V/3+N/50Hz.

Cooling : Entering indoor coil temp. 27°C / 19°C WB and outdoor temperature 35°C

Heating : Entering indoor coil temp. 20°C and outdoor temperature 7°C / 6°C WB

Codes

INDOOR UNITS								
Cooling only & heat pump models	VIR 25		VIR 40		VIR 45	VIR 60	VIR 75	VIR 90
	S662562574		S662564074		S662564574	S662566074	S662567574	S662569074
OUTDOOR UNITS								
Heat pump models	VCH 20	VCH 25	VCH 30	VCH 40	VCH 45	VCH 60	VCH 75	VCH 90
with horizontal discharge	S662512033	S662512643	S662513033	S662514054	S662514533	S662516143	S662517533	S662519033
with vertical discharge	-	-	-	-	S662514564	S662516173	S662517563	S662519063
Thermostat								
Delivered with the unit	DPC-1							

Accessories or options

Compatibility table / Codes

INDOOR UNITS									
Cooling only & heat pump models		VIR 25		VIR 40		VIR 45	VIR 60	VIR 75	VIR 90
		S662562574		S662564074		S662564574	S662566074	S662567574	S662569074
OUTDOOR UNITS									
Heat pump models		VCH 20	VCH 25	VCH 30	VCH 40	VCH 45	VCH 60	VCH 75	VCH 90
with horizontal discharge		S662512033	S662512643	S662513033	S662514054	S662514533	S662516143	S662517533	S662519033
with vertical discharge		-	-	-	-	S662514564	S662516173	S662517563	S662519063
Thermostat									
Delivered with the unit		DPC-1							
Accessories or options for condensing units									
VCH models		20	25	30	40	45	60	75	90
Low ambient regulation *	S613112583	0	0						
	S613114084			0	0				
	S613116084					0	0		
	S613111084							0	0
Vertical discharge kit	S612828305	0	0						
	S612828405			0	0				
	S612828505 **					0			
	S612828605 **						0		
Condensate tray heater	S612828205 **							0	0
	S611080789	A	A	A	A				
	S611080790					A	A	A	A
Copper-copper coil	Contact us	0	0	0	0	0	0	0	0
Blue fin	Contact us	0	0	0	0	0	0	0	0
Accessories or options for indoor units									
VIR models			25	40	45	60	75	90	
Electrical Heaters (inside the unit) (cable 20 m included)	10 kW (1 stage)	S611763704	O/A						
	15 kW (1 stage)	S611763714	O/A						
	10 kW (1 stage)	S611763724		O/A					
	20 kW (2 stages)	S611763734		O/A					
	15 kW (1 stage)	S611763744			O/A	O/A			
	30 kW (2 stages)	S611763754			O/A	O/A			
	30 kW (2 stages)	S611763764					O/A	O/A	
	40 kW (2 stages)	S611763774					O/A	O/A	
50 m connecting cable	1 stage	S611763780	A	A	A	A			
	2 stages	S611763781		A	A	A	A	A	
Economizer or Motorised damper (dry bulb sensors included) (cable 20 m included)	S613994250	A							
	S613994400			A					
	S613994450				A	A			
	S613994750						A	A	
Indoor air quality	S606819964	A		A	A	A	A	A	
Hot water coil and control (cable 20 m included)	S611082513	0							
	S611084010			0					
	S611084512				0	0			
	S611087510						0	0	
50 m communication cable (Economizer/HWC)	S611087520 ***	A		A	A	A	A	A	
Return fan	S613995450				A	A			
	S613995750							A	A
Vertical discharge Kit	S669482502	0							
	S669484002			0					
	S669486002				0	0			
	S669487502						0	0	
Indoor fan smooth start up to 5,5 kW	S606744690	0		0	0	0	0	0	0
	S611991087	0							
High speed drive	S611991089			0					
	S611991091				0		0		
	S611991092					0			
	S611991095								0
High speed drive and motor	S611991088	0							
	S611991090				0				
	S611991093					0			
	S611991094						0		
	S611991096								0

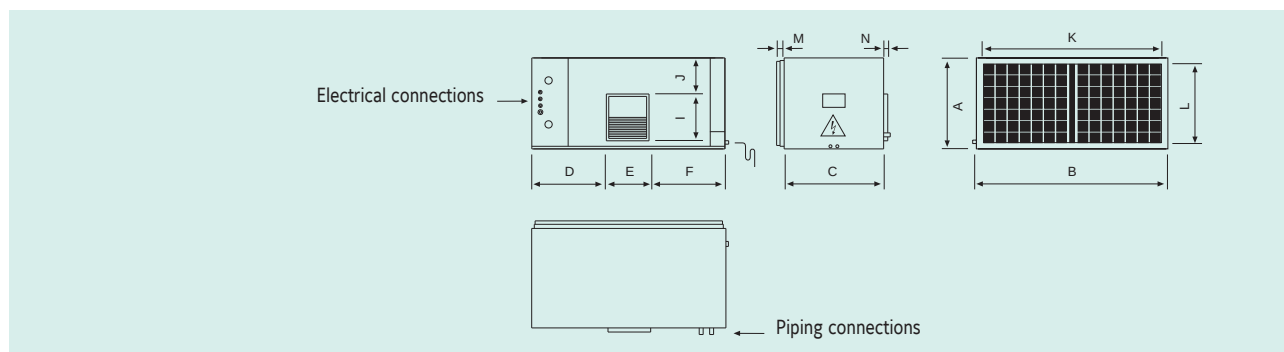
O = Option (factory fitted). A = Accessory (supplied loose). O/A = If you want this item factory fitted, precise it in the order form.

* Not protected against external condition. ** To be used only with horizontal discharge models

*** If the unit is equipped with economizer and hot water coil, only 1 communication cable is necessary.

Indoor units dimensions

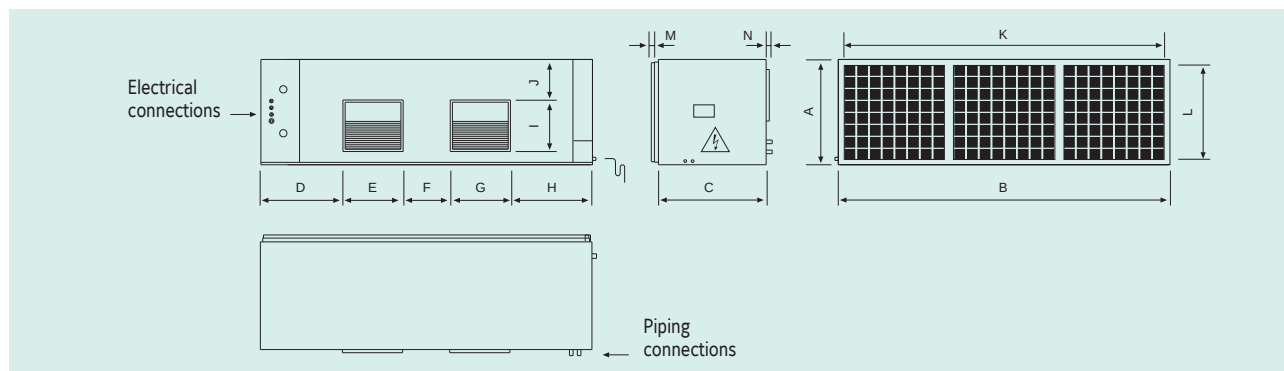
VIR 25A



All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N
VIR25A	592	1360	785	480	403	480	-	-	347	40	1094	520	21	25

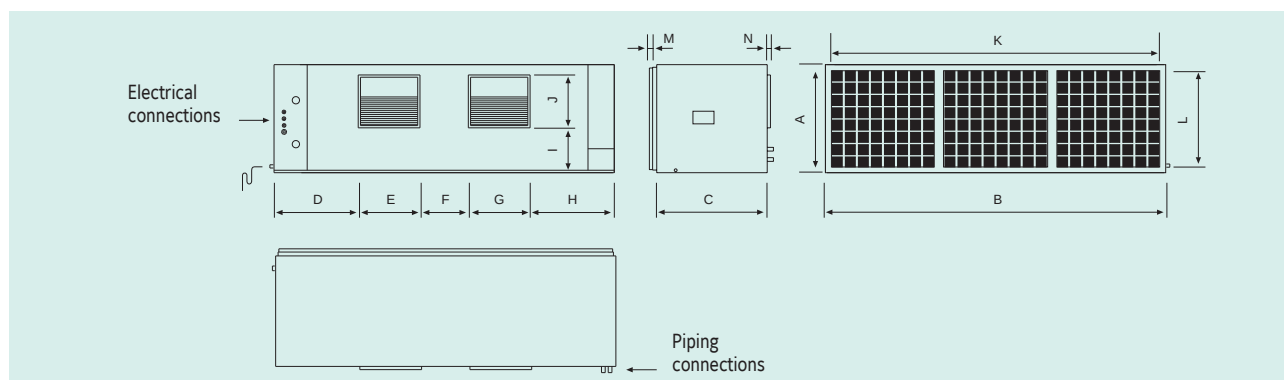
VIR 40-45-60A



All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N
VIR40A	665	1740	785	442	316	229	316	442	347	79	1337	593	21	25
VIR45A	764	2240	772	567	401	309	401	567	347	79	1920	692	21	25
VIR60A	764	2240	772	567	401	309	401	567	347	79	1920	692	21	25

VIR 75-90A

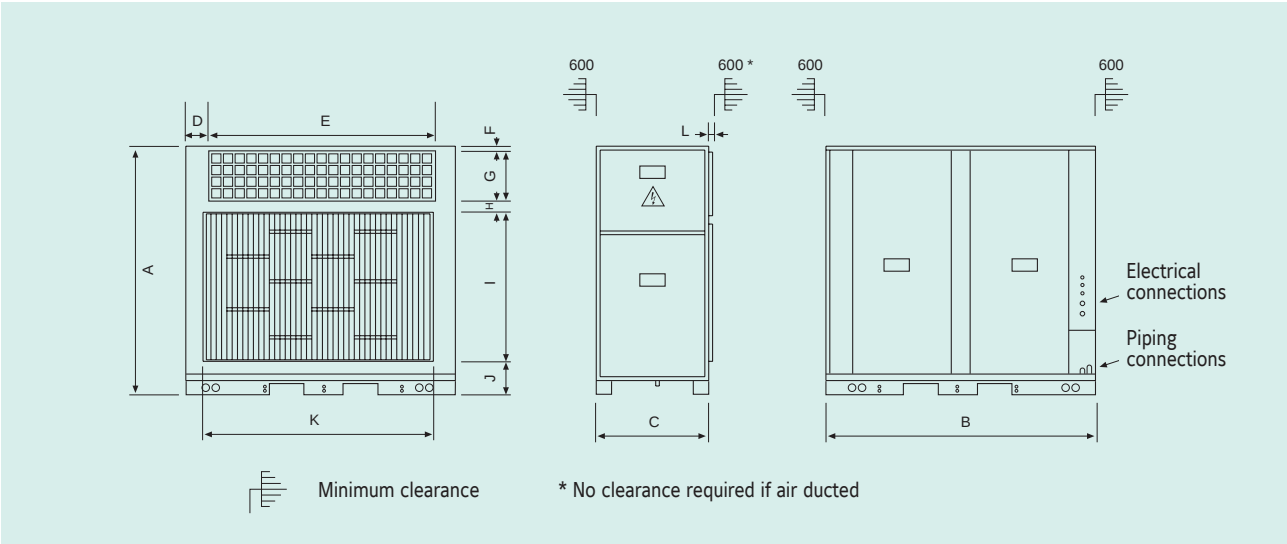


All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N
VIR75A	838	2653	892	663	478	376	478	663	409	79	2196	766	21	25
VIR90A	838	2653	892	663	478	376	478	663	409	79	2196	766	21	25

Dimensions and space requirements for condensing units

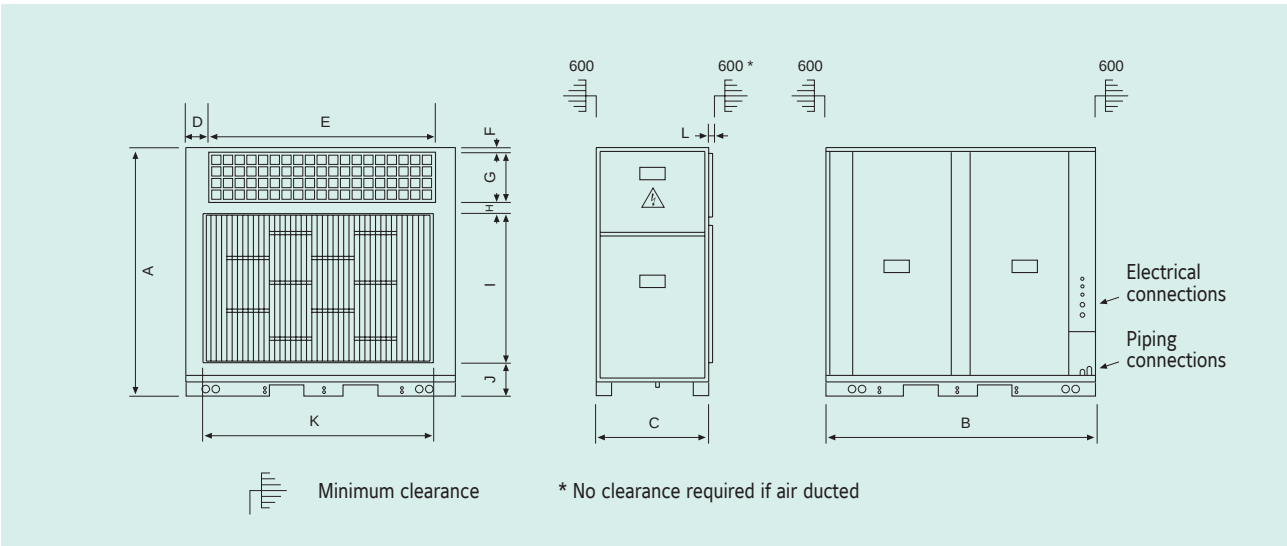
VCH 20-25A



All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L
VCH20A	1 392	1 362	790	147	1 069	30	268	37	919	138	1 100	24
VCH25A	1 392	1 362	790	147	1 069	30	268	37	919	138	1 100	24

VCH 30-40A

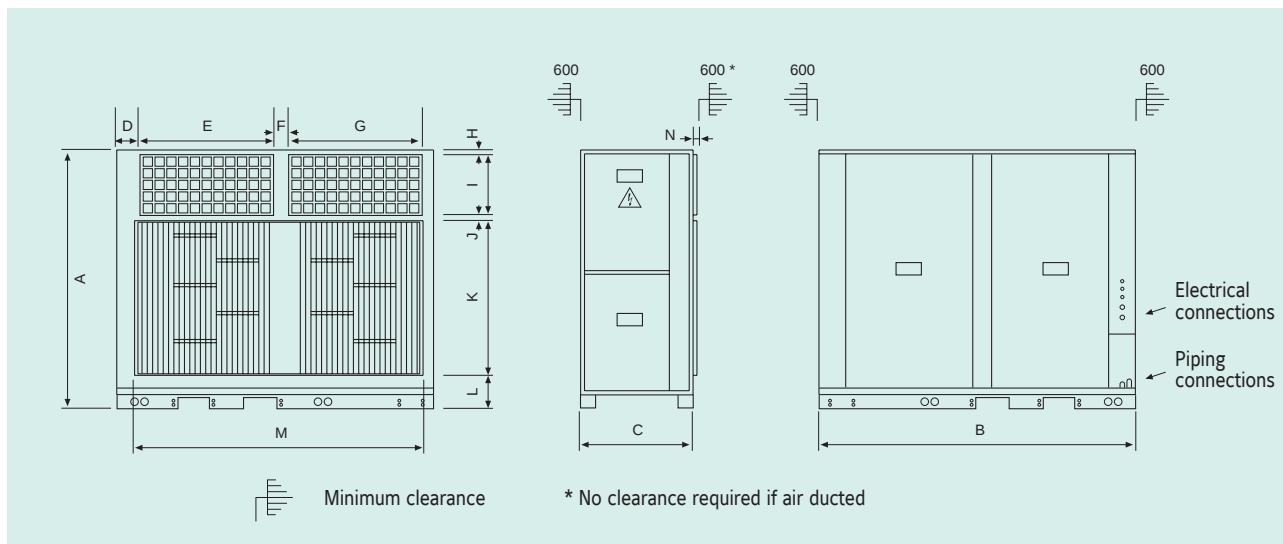


All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L
VCH30A	1 526	1 740	785	151	1 436	30	324	37	994	141	1 476	24
VCH40A	1 526	1 740	785	151	1 436	30	324	37	994	141	1 476	24



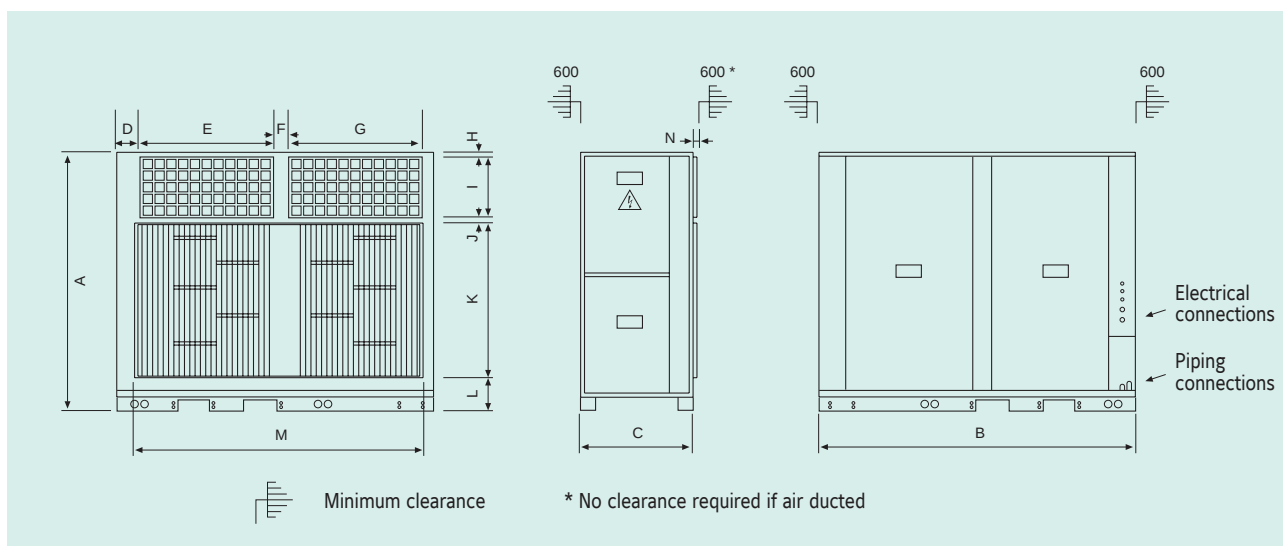
VCH 45-60A



All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N
VCH45A	1 641	2 240	778	148	945	95	945	38	389	38	1044	140	2 060	23
VCH60A	1 641	2 240	778	148	945	95	945	38	389	38	1044	140	2 060	23

VCH 75-90A



All dimensions in mm. Drawings not a scale.

Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N
VCH75A	1 794	2 658	897	148	1155	95	1155	30	389	37	1 200	138	2 479	23
VCH90A	1 794	2 658	897	148	1155	95	1155	30	389	37	1 200	138	2 479	23

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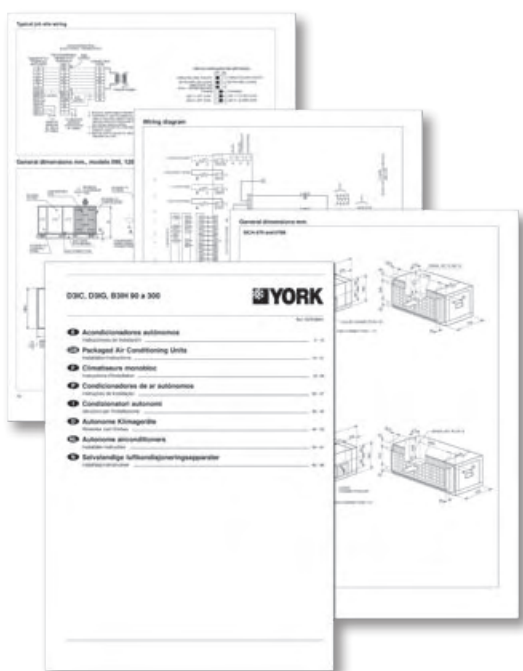
CD available at
Johnson Controls
office

Minimum system requirements

- Operating system Windows 98 or better
- Pentium II processor or superior
- 32 MB of RAM
- Screen resolution 800 x 600 pixels, 16 bits

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Multi-language Technical Information



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