

 **YORK**[®]
INSTALL CONFIDENCE



YORK[®] Fan Coil Units Catalogue 2019



A more comfortable,
safe and sustainable world

Take advantage of a broader range of capabilities

Johnson Controls now provides a wider spectrum of innovative products, expert installation and services, and systems integration to help improve operational and energy outcomes for customers worldwide.



HVAC EQUIPMENT

Draw on the most comprehensive HVAC portfolio for commercial and residential buildings of all types, ages and sizes to enhance sustainability, energy use and the indoor environment.

- Chillers—air-cooled; water-cooled; connected
- Condensers and condensing units
- Dedicated outdoor air systems (DOAS)
- Duct-free mini-split systems
- Indoor packaged equipment and Rooftop units
- Variable refrigerant flow (VRF) systems

SECURITY

Help protect and enhance working and living environments today and tomorrow with integrated, customer-specific solutions from the world's leading security company.

- 24/7 remote monitoring
- Access control
- Advanced video surveillance
- Intrusion detection
- Managed services

CONTROLS

Equip facilities with intelligent HVAC controls to keep occupants comfortable, run equipment efficiently and optimize operating budgets.

- Actuators
- Control panels
- Control sensors
- Current sensors and transducers
- Thermostats
- Valves
- Variable speed drives

FIRE, LIFE-SAFETY & HAZARD PROTECTION

Help keep people and assets safe with comprehensive solutions, design, installation, service and monitoring from a world leading fire and life-safety systems provider.

- Fire alarm systems
- Fire sprinkler systems
- Fire suppression systems
- Mass notification systems
- Special hazard solutions

OPTIMIZATION & RETROFIT SERVICES

Make the most of existing building and financial assets through cost-effective upgrades, central plant strategies, and financing solutions.

- Central chiller plant optimization
- Clean energy assessments
- Energy performance contracts
- Energy retrofits
- Equipment financing
- Healthcare environment optimization
- Public/private partnerships
- Technology refresh services
- Turnkey upgrades and retrofits

LIGHTING CONTROLS & RETROFIT

Save energy, minimize costs and meet organizational goals with a range of services, from business remodels, to new construction lighting design, to municipal street lights.

- Lighting retrofits
- Street and roadway lighting
- Turn-key lighting upgrades

ENERGY STORAGE

Rely on our innovative distributed energy storage products to better manage energy use, cut costs and ensure electrical back-up for a building, campus or enterprise.

- In-building distributed energy storage system
- Modular distributed energy storage system

RETAIL SOLUTIONS

Gain real-time insights into retail facilities, inventories, employees & customers to achieve maximum business performance in a digitally driven shopping world.

- Loss Prevention
- Inventory Intelligence
- Traffic Insights

OPERATIONAL INTELLIGENCE & LOSS PREVENTION

Helps minimize costs, maximize operational performance and enhance return on investment in security programs with business intelligence solutions.

- Information management solutions
- Real-time location systems (RTLS) for asset management
- Video and traffic analytics

BUILDING SERVICES & PARTS

Tap into resources of the industry's largest service network for HVAC, security and life-safety system installation and product support. More than 12,000 technicians working out of nearly 500 local offices can provide 24x7x365 proactive monitoring, remote and on-site service and repair, and replacement parts.

- Aftermarket parts
- Building remote monitoring
- Building system and HVAC repair
- Planned and preventive maintenance
- Predictive and diagnostic services
- Security and life-safety system repair

BUILDING AUTOMATION SYSTEMS

Connect commercial HVAC, lighting, security and protection systems on one platform. Vital data and insights improve efficiency, productivity, and occupants' comfort and safety.

- Metasys® building automation system
- Metasys Enterprise Optimization applications

AIR SYSTEMS

Use efficient air flow building-wide to create healthy, comfortable and visually appealing environments that increase work productivity and occupant satisfaction.

- Air handling units
- Air measuring
- Chilled beams
- Dampers
- EcoAdvance™ HVAC load reduction (HLR) module
- Energy recovery ventilators
- Fan and blower
- Fans
- Filtration
- Grilles and diffusers
- Heating coils and cooling coils
- Louvers
- Under floor air distribution
- Unit ventilators
- Variable air volume (VAV) terminals
- Variable speed drives

BUILDING WIDE SYSTEMS INTEGRATION

Construct a smarter building by converging building, business/IT and specialty systems on an intelligent infrastructure. Let us streamline the process to measurably improve initial and lifecycle costs, enhance function, ensure connectivity and create an innovative, optimized, sustainable environment.



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YORK® Fan Coil units

Driven by innovative trends and modern technology, the YORK® Fan Coil Units have been designed around a platform of models, versions and accessories, which have been independently tested and certified by Eurovent. The YORK® Fan Coil range meets today's demanding requirements of performance, size, acoustics, low energy, ease of installation and maintenance.



An extensive offering

- One of the **most versatile** ranges of fan coils on the market today. Wall and ceiling mounted units, exposed or concealed with centrifugal fan, are included, and with cooling capacities ranging from 0.6 kW to 9.7 kW.
- Dramatic **electrical consumption reduction** of up to 40% comparative to previous models. This is achieved thanks to the supply of all YORK® Fan Coil Units equipped with centrifugal fans and electric motors, and with 6 speed motors as standard to offer greater flexibility in the selection of products.
- **Energy saving brushless motor** technology option available. Its combination with a dedicated frequency inverter and unit controller to regulate the fan speed enables higher efficiencies, even at low rotational speeds, lower unit noise, constant speed characteristics and an increase in motor lifetime expectancy. In comparison to the traditional units equipped with asynchronous three-speed-motors, units with brushless motors can obtain a considerable energy saving, by reducing the power consumption by up to 70%.
- A full range of **factory fitted Johnson Controls valve and pre-configured control options** is offered. This in addition to a patented 'wireless' control option - offering greater flexibility in the installation of units, with the highest precision in monitoring and maintaining the desired comfort conditions.
- Many of our ranges our available configured for use with 60Hz voltage, and specially designed cooling coils for **District Cooling applications**.
- **High pressure 'Blower' units** are also available. They can offer up to 29.4 kW of cooling at External Static Pressures of up to 250Pa, and are complemented with a full range of options and accessories covering items such as electrical heating battery, air inlet/outlet diffusers and condensate pumps.



Iconography

Infrared or Wired control	Wired control	Dry mode	Timer	Auto Restart	Sleep mode	Auto Sweep	Ducted Installation	4 Way Air Flow	Air Filter

YFCN Fan Coil Unit centrifugal fan

2 & 4 pipe system

A complete range from 0.7 kW to 7.4 kW



YFCN is a range of Fan Coil Units that continues the YORK® tradition based on high reliability and low noise levels. It is the result of great commitment in terms of energy and resources to offer a more modern product from every angle, while still delivering the convenience of easy access to the filters in all models.

Moreover each version has the same internal structure, identical in both horizontal and vertical models, in order to standardise production and guarantee a greater flexibility in distribution and installation.



Selection software

Wired controls



JWC-3V

Remote three speeds controller

JWC-T

JWC-3V + Electronic thermostat and Summer/Winter switch

JWC-AU

Automatic JWC-T



JTM-B

Digital Automatic Remote controller

WM-503

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



Infrared control



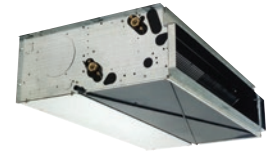
TUC03+ Terminal unit controller

BacNET and N2 Metasys network compatible



Features

- New casing, improved aesthetics, suitable for any modern indoor ambient
- Full range for all needs: 9 sizes suitable for horizontal or vertical mounting with or without casing
- Low noise operation
- 3 fan speeds (possible choice between 6 fan speeds)
- Single piece discharge grid
- Several coil choices. Single: 3 or 4 rows; Dual: 3 rows cooling & 2 rows heating
- Electrical heater optional
- Suction and discharge plenum optional
- Factory fitted valve (on/off or modulating) and controller packages
- Painted back panel option
- 4 available versions in all range:
 - VC = Vertical Discharge with Casing
 - VCB = Vertical Discharge with Casing (floor installation)
 - HC = Horizontal Discharge with Casing
 - CD = Concealed unit without Casing
- EUROVENT Certified



YFCN Fan Coil Unit centrifugal fan

0.7 to 7.4 kW



Technical features

Model		140	240	340	440	540	640	740	840	940	
Total cooling capacity [kW]	(1)	max	1.20	1.78	2.53	3.08	4.03	4.71	5.48	6.34	7.42
		med	1.00	1.41	1.87	2.25	3.21	3.81	4.56	5.63	6.41
		min	0.65	1.00	1.63	1.81	2.17	2.79	3.51	3.97	4.79
Sensible cooling capacity [kW]	(1)	max	0.94	1.35	1.86	2.30	3.01	3.52	4.13	4.93	5.87
		med	0.77	1.05	1.36	1.65	2.36	2.81	3.39	4.33	4.98
		min	0.49	0.73	1.18	1.32	1.58	2.03	2.57	2.98	3.63
Water flow in cooling [l/h]	(1)	max	212	311	442	537	703	824	960	1 113	1 307
		med	175	246	325	392	559	664	798	986	1 125
		min	115	174	284	315	377	487	612	693	839
Pressure drop in cooling [kPa]	(1)	max	5.6	13.9	11.5	15.5	31.3	36.2	27.7	32.2	23.2
		med	4	9.1	6.7	9	20.8	24.8	20	26.0	17.8
		min	1.9	4.9	5.3	6.1	10.4	14.4	12.5	14.0	10.6
Heating capacity 2 pipes [kW]	(2)	max	1.31	1.83	2.59	3.14	4.01	4.92	5.59	7.20	8.52
		med	1.07	1.43	1.87	2.27	3.16	3.90	4.62	6.27	7.18
		min	0.69	0.99	1.62	1.80	2.10	2.82	3.49	4.26	5.23
Water flow in heating 2 pipes [l/h] *	(2)	max	212	311	442	537	703	824	960	1 113	1 307
		med	175	246	325	392	559	664	798	986	1 125
		min	115	174	284	315	377	487	612	693	839
Pressure drop in heating 2 pipes [kPa]	(2)	max	5.3	11.8	9.8	12.8	25.2	31.8	23.2	31.7	23.7
		med	3.7	7.6	5.4	7.2	16.6	21.1	16.6	24.9	17.6
		min	1.7	4.0	4.2	5.0	8.1	11.9	10.1	12.8	10.0
Heating capacity 4 pipes [kW]	(3)	max	0.91	1.33	1.99	2.33	3.00	3.33	4.20	4.75	5.46
		med	0.77	1.09	1.56	1.81	2.50	2.79	3.59	4.26	4.79
		min	0.55	0.83	1.40	1.52	1.84	2.19	2.89	3.16	3.71
Water flow in heating 4 pipes [l/h] *	(3)	max	78	114	171	200	258	287	361	408	470
		med	66	94	134	156	215	240	309	366	412
		min	47	71	120	131	158	188	249	272	319
Pressure drop in heating 4 pipes [kPa]	(3)	max	1.3	3.1	7.8	10.3	3.2	3.8	6.7	8.3	10.7
		med	1.0	2.2	5.1	6.6	2.3	2.8	5.1	6.9	8.5
		min	0.5	1.3	4.2	4.9	1.3	1.8	3.5	4.1	5.4
Air flow [m3/h]		max	220	295	385	485	650	760	925	1 200	1 500
		med	175	220	270	335	495	590	735	1 020	1 210
		min	105	145	235	265	315	415	535	655	830
Sound power level [dB(A)]		max	45	47	49	47	48	52	56	60	64
		med	39	40	40	39	41	46	51	56	58
		min	32	30	36	33	31	37	42	45	50
Sound pressure level [dB(A)]	(4)	max	36	38	40	38	39	43	47	51	55
		med	30	31	31	30	32	37	42	47	49
		min	23	21	27	24	22	28	33	36	41
Power supply [V-ph-Hz]		230 / 1 / 50 + E									
Power input [W]	max	33	40	49	57	61	88	103	130	176	
Absorbed current [A]	max	0.16	0.18	0.23	0.26	0.27	0.39	0.47	0.58	0.78	
Dimensions **	Height	mm	530	530	530	530	530	530	530	530	530
	Width	mm	670	770	985	985	1 200	1 200	1 415	1 415	1 415
	Depth	mm	225	225	225	225	225	225	225	255	255

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

(2) Room temperature 20°C - Water temperature 45/40 °C. (3) Room temperature 20°C - Water temperature 65/55 °C.

(4) The sound pressure levels are 9 dB(A) lower than the sound power levels and apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.

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

** Dimensions refer to the units with casing.

Data shown is for 4 row cooling version, 2 pipe system.

For performance of 3 row cooling version please contact your local Johnson Controls sales office.



Manufacturer reserves the rights to change specifications without prior notice.

ECM Technology



Running costs. Energy consumption. Life cycle.

These are 3 issues that are becoming more and more important in the choice of Fan Coil Units. With these criteria in mind, Johnson Controls offers the ECM range of FCU.

ECM technology comprises a **brushless motor** combined to a **dedicated electronic device** (inverter). In comparison to conventional units equipped with asynchronous three-speed motors, the fancoil and cassette units with brushless motors can obtain a considerable energy saving, by **reducing power consumption up to 70%**.

Air flow rate can be varied in continuous by means of a 1-10 V signal generated both by our controls or by independent controls systems. The continuous air flow control improves the **acoustic comfort** and allows a more punctual reply to the variation of the thermal loads, enhancing the **stability of ambient temperature**.

Technology

ECM technology consists of a brushless motor combined with an inverter managed by specific regulators. The controller uses a 0-10 VDC modulating signal to regulate the fan speed.

The brushless electric motor is composed of a rotor having permanent magnets, whose magnetic fields interact with the ones produced by the stator winding. The **transfer of current is no longer by mechanical commutator** (sliding contacts) **but by an electronic commutation system**: one electronic controller (inverter) powers the motor's stator and generates rotating magnetic fields, that in turn determine the rotor's speed.

Brushless motor develop much less heat than the traditional brushed motors and they have much lower mechanical resistance than the standard asynchronous maintenance. The absence of brushes eliminates also the main source of electromagnetic noise.

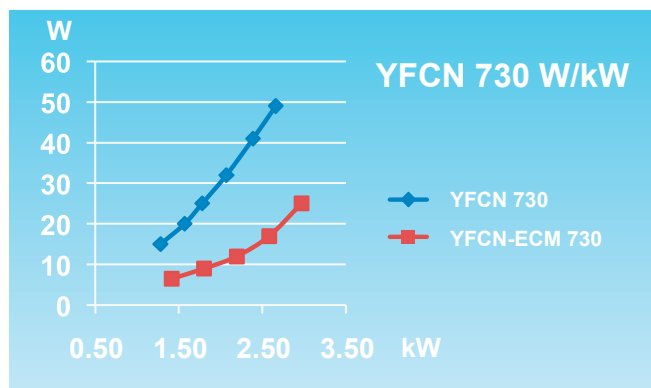
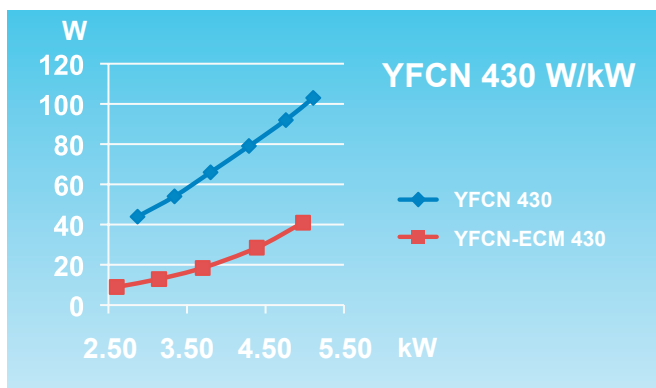
Features

- Brushless motor with inverter.
- 0-10VDC control signal.
- Low mechanical resistance and heat gain
- Continuous regulation of the fan speed.
- Specifically designed electronic and digital regulators, also for BMS systems.
- Possibility to manually set the desired three fan speeds (MIN/MED/MAX).
- Available for fan coil and cassette units.

Advantages (compared to traditional brushed motors)

- Energy saving: electrical absorption reduced up to 70%.
- Higher efficiency: possibility to adapt the air volume and the capacities according to the actual room loads.
- Higher comfort: reduced variation of the temperature and relative humidity in the room.
- Extremely quiet operation.
- Reduced wear and higher reliability.
- Longer life expectancy of the motor.

Power consumption: YFCN versus YFCN-ECM (W/kW)



YFCN-ECM Fan Coil Unit Inverter with centrifugal fan

0.7 to 7.1 kW



Technical features

Model		230	240	430	440	630	640	730	740	930	940	
Total cooling capacity [kW]	(1)	max 10v	1.59	1.86	2.95	3.17	3.96	4.51	4.94	5.30	6.26	7.04
		med 5v	1.18	1.32	2.18	2.27	2.93	3.19	3.68	3.82	4.82	5.21
		min 1v	0.73	0.77	1.41	1.43	1.96	2.05	2.60	2.61	3.45	3.59
Sensible cooling capacity [kW]	(1)	max	1.28	1.42	2.26	2.39	3.08	3.38	3.80	3.99	5.10	5.53
		med	0.92	0.98	1.64	1.67	2.22	2.34	2.77	2.82	3.79	3.99
		min	0.55	0.56	1.03	1.03	1.46	1.48	1.92	1.90	2.63	2.69
Water flow in cooling [l/h]	(1)	max	277	323	511	549	686	781	857	918	1 094	1 228
		med	205	229	377	392	506	550	636	660	836	903
		min	127	134	244	248	339	354	449	451	597	621
Pressure drop in cooling [kPa]	(1)	max	8.6	14.8	28.9	16.1	19	33	32.6	25.6	25.9	20.8
		med	5.1	8	17	8.9	11.1	17.8	19.4	14.3	16.1	12.1
		min	2.2	3.2	7.9	4	5.5	8.2	10.5	7.3	8.9	6.3
Heating capacity 2 pipes [kW]	(2)	max	1.80	1.98	3.14	3.32	4.14	4.68	5.08	5.43	7.38	7.93
		med	1.29	1.37	2.26	2.30	3.00	3.23	3.72	3.84	5.41	5.63
		min	0.77	0.78	1.42	1.42	1.96	2.02	2.56	2.57	3.74	3.76
Water flow in heating 2 pipes [l/h] *	(2)	max	277	323	511	549	686	781	857	918	1 094	1 228
		med	205	229	377	392	506	550	636	660	836	903
		min	127	134	244	248	339	354	449	451	597	621
Pressure drop in heating 2 pipes [kPa]	(2)	max	7.0	13.6	26.7	13.7	17.0	29.1	28.3	22.0	24.2	20.9
		med	3.9	7.1	14.9	7.3	9.6	15.1	16.4	12.0	14.0	11.4
		min	1.6	2.6	6.6	3.1	4.5	6.6	8.5	5.9	7.3	5.6
Heating capacity 4 pipes [kW]	(3)	max	1.43	-	2.41	-	3.22	-	4.06	-	5.24	-
		med	1.08	-	1.85	-	2.45	-	3.12	-	4.05	-
		min	0.71	-	1.29	-	1.76	-	2.33	-	2.99	-
Water flow in heating 4 pipes [l/h]	(3)	max	140	-	236	-	317	-	398	-	514	-
		med	106	-	181	-	241	-	306	-	397	-
		min	70	-	126	-	172	-	228	-	292	-
Pressure drop in heating 4 pipes [kPa]	(3)	max	3.5	-	11.0	-	3.6	-	6.3	-	9.9	-
		med	2.1	-	6.9	-	2.2	-	4.0	-	6.3	-
		min	1.0	-	3.6	-	1.2	-	2.4	-	3.7	-
Air flow [m ³ /h]		max	330	325	515	505	735	720	890	875	1 395	1 365
		med	220	210	350	340	495	475	610	585	945	910
		min	120	115	210	200	305	290	400	380	605	575
Sound power level [dB(A)]		max	51	51	51	51	54	54	57	57	64	64
		med	41	41	42	42	44	44	48	48	55	55
		min	30	30	30	30	33	33	37	37	44	44
Sound pressure level [dB(A)]	(4)	max	42	42	42	42	45	45	48	48	55	55
		med	32	32	33	33	35	35	39	39	46	46
		min	21	21	21	21	24	24	28	28	35	35
Power supply [V-ph-Hz]		230 / 1 / 50 + E										
Power input [W]	max	21	21	25	25	32	32	41	41	99	99	
Absorbed current [A]	max	0.18	0.18	0.22	0.22	0.28	0.28	0.34	0.34	0.81	0.81	
Dimensions **	Height	mm	530	530	530	530	530	530	530	530	530	
	Width	mm	770	770	985	985	1 200	1 200	1 415	1 415	1 415	
	Depth	mm	225	225	225	225	225	225	225	225	255	

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

(2) Room temperature 20°C - Water temperature 45/40 °C

(3) Room temperature 20°C - Water temperature: 65/55°C

(4) The sound pressure levels are 9 dB(A) lower than the sound power levels and apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.

* Water flow values as Cooling, accordingly to the EUROVENT standards and UNI ENV 1397 ** Dimensions refer to the units with casing



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Options / Accessories

Compatibility table / Codes

Model	YFCN AC motor + Standard control devices		
	VC/VCB 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 (1)	9060130	-	-
Three speed control + electronic thermostat and S/W switch TMV-S (2)	9060140	-	-
Three speed control + electronic thermostat and centralized S/W - TLC (2)	9060133	-	-
Automatic speed control with electronic thermostat and S/W switch ATL (2)	9066139	-	-
Controls for style HC/CD (supplied with separate packaging)			
Remote three speed control JWC-3V (1) (4)	-	9066642	9066642
Remote three speed control + electronic thermostat JWC-T and manual S/W switch (2)	-	9066630K	9066630K
Remote three speed control + electronic thermostat and centralized/manual S/W switch JWC-TQR (2) (3)	-	9066631K	9066631K
Automatic speed control with electronic thermostat and S/W switch - JWC-AU (to be used with JPF-AU and JP-AU only) (2) (3)	-	9066632K	9066632K
Automatic remote control with electronic thermostat, S/W switch and liquid crystal display JTM-B (to be used with JPF-AU and JP-AU only) (2) (3)	-	9066331E	9066331E
Automatic speed control with electronic thermostat to be mounted in the light wall box WM-503 (to be used with UP-503 only)	-	9066676E	9066676E
Electromechanical thermostat T2T (4) (5)	-	9060174	9060174
Power unit JPF-AU for JWC-AU and JTM-B remote controls, fitted on the unit	9066641	9066641	9066641
Power unit JP-AU for JWC-AU and JTM-B remote controls, not fitted on the unit	9066640	9066640	9066640
Power unit UP-503 for WM-503 remote control only, not fitted on the unit	9066677	9066677	9066677
Controls accessories for all versions (supplied with separate packaging)			
Low temperature cut-out for controls TLC	3021091	3021091	3021091
Low temperature cut-out for controls TMV-S, JWC-3V and JWC-T	9053048	9053048	9053048
Low temperature cut-out for controls ATL, ATL-E, JWC-TQR, WM-503 and JP-AU power unit	3021090	3021090	9053049
T2 sensor to be used as Change-over for controls ATL, ATL-E and JP-AU power unit	9025310	9025310	9025310
Change-over 15-25 for control TLC and JWC-TQR	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 SEL-CR	9066311	9066311	9066311
Terminal board adaptor kit KIT	9060103	-	-
Controls for style VC + additional electric resistance (supplied with separate packaging)			
Three speed control with electronic thermostat and S/W switch TMV-R-IAQ	9063006	-	-
Automatic speed control with electronic thermostat and S/W switch ATL-E (2) (3)	9066643	-	-
Controls for style HC/CD + additional electric resistance (supplied with separate packaging)			
Remote three speed control + electronic thermostat and centralized/manual S/W switch JWC-TQR (2) (3)	-	9066631K	9066631K
Automatic speed control with electronic thermostat and centralized S/W - JWC-AU (2) (3)	-	9066632K	9066632K
Automatic remote control with electronic thermostat, S/W switch and liquid crystal display JTM-B (2) (3)	-	9066331E	9066331E

WARNING

(1) Not to be used with valves. (2) Can be used with valves and/or low temperature cut-out. (3) Can be used with Change Over. (4) Not suitable with -E electric heater. (5) To be used with valve and not to be used with low temperature cut-out.

Options / Accessories

Compatibility table / Codes

Model	YFCN AC motor + MB control devices
Versions	ALL VERSIONS: VC/VCB - Vertical w. casing + HC - Horizontal with casing + CD without casing ALL VERSIONS: VC/VCB + HC + CD with electric heater
Controls and accessories for all versions	
Mounted power unit MB-M	9066332
Not mounted power unit MB-S	9066333
Wall control JTM-B	9066331E
IR remote control and mounted IR receiver RM-RT03	9066336
IR remote control and not mounted IR receiver RS-RT03	9066337
IR remote control RT03	3021203
Mounted IR receiver RM	9066339
Not mounted IR receiver RS	9066338
Multifunction wall control up to 60 units PSM-DI	3021293
T2 sensor (to be used as Change-over or minimum temp. Sensor)	9025310
Management system for a network of fan coils with MB electronic board	
Hardware/software supervisory system (to be used with MB board only) NET	9079118
Router-S for NET (default) or for BMS systems no provided by YORK	3021290
Relay output board SIOS	3021292

With T-MB wall control

One control for each unit
(Maximum length of the connection cable = 20 m)



One control for more units (20 units max.)
(Maximum total length of the connection cable = 800 m)



With RT03 Infra-red remote control

One control for each unit



One control for more units (20 units max.)
(Maximum total length of the connection cable = 800 m)

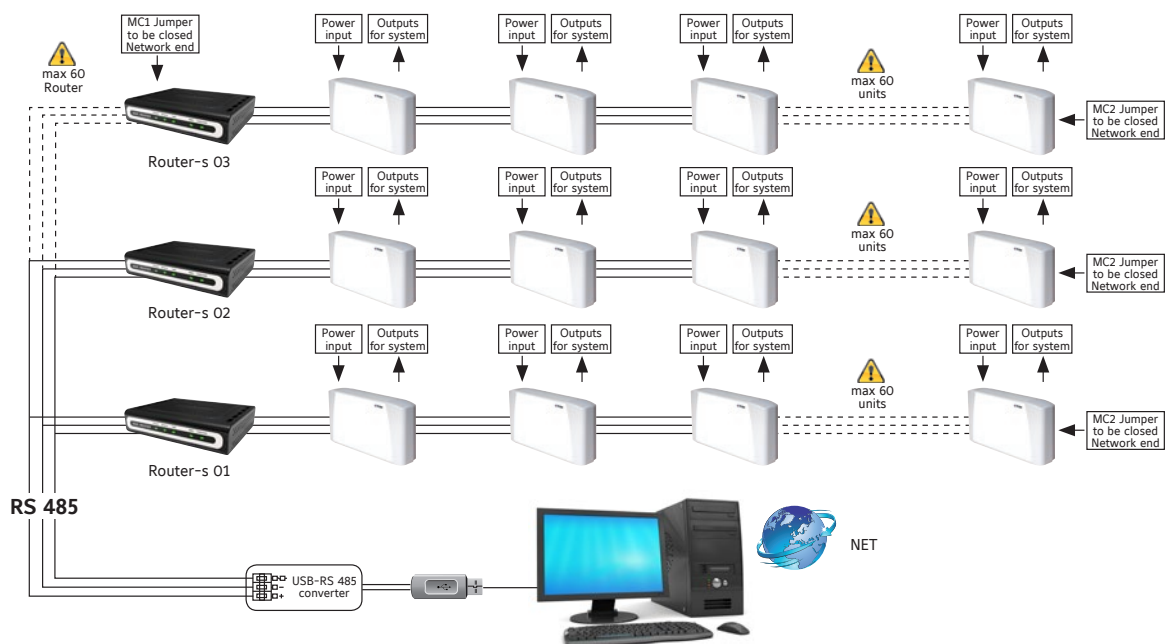


Options / Accessories

Compatibility table / Codes

Model	YFCN ECM motor + Standard control devices		
Versions	VC/VCB mod. - Vertical with casing	HC mod. - Horizontal with casing	CD mod. - Without casing
Controls accessories for all versions (supplied with separate packaging)			
Low temperature cut out NTC for control TMV-T-ECM, WM-S-ECM and JP-AU power unit		3021090	
T2 sensor to be used as Change-over for JP-AU power unit		9025310	
Change over CH 15-25 for control TMV-T-ECM		9053049	
Model	YFCN ECM motor + MB control devices		
Versions	VC/VCB mod. - Vertical with casing	HC mod. - Horizontal with casing	CD mod. - Without casing
Controls for style VC (supplied with separate packaging)			
Continuous fan speed control with electronic thermostat and S/W switch TMV-T-ECM	9060141	-	-
Controls for style HC/CD (supplied with separate packaging)			
JWC-AU Automatic speed control with electronic thermostat and centralized S/W switch (1) (2)	-	9066632K	9066632K
JTM-B Automatic remote control with electronic thermostat, S/W switch and liquid crystall display (1) (2)	-	9066331E	9066331E
WM-S-ECM Continuous fan speed control with S/W switch and liquid crystall display	-	9066644	9066644
JPF-AU power unit for JWC-AU and JTM-AU remote controls, fitted on the unit	9066641	9066641	9066641
JP-AU power unit for JWC-AU and JTM-AU remote controls, not fitted on the unit	9066640	9066640	9066640
Accessories of controls for VC, HC-VCB and CD models (supplied with separate packaging)			
MB-ECM-M mounted power unit for ECM fan coil	9066334	9066334	9066334
MB-ECM-S not mounted power unit for ECM fan coil	9066335	9066335	9066335
Wall control JTM-B	9066331E	9066331E	9066331E
IR remote control and mounted IR receiver RM-RT03	9066336	9066336	9066336
IR remote control and not mounted IR receiver RS-RT03	9066337	9066337	9066337
IR remote control RT03	3021203	3021203	3021203
Mounted IR receiver RM	9066339	9066339	9066339
Not mounted IR receiver RS	9066338	9066338	9066338
Multifunction wall control up to 60 units PSM-DI	3021293	3021293	3021293
T2 sensor (to be used as Change-over or minimum temperature Sensor)	9025310	9025310	9025310
Management system for a network of fan coils with MB electronic board			
Hardware / software supervisory system Net	9079118	9079118	9079118
Router-S for NET (default) or for BMS systems no provided by YORK	3021290	3021290	3021290
Relay output board SIOS	3021292	3021292	3021292

(1) Can be used with valves and/or low temperature cut-out. (2) Can be used with Change Over.



Options / Accessories

Compatibility table / Codes

Model	YFCN General accessories								
	130/140	230/240	330/340	430/440	530/540	630/640	730/740	830/840	930/940
Valves all versions									
3 way double valve kit for 4 tube installation and single coil + kit fitted on the unit					9066572W				
3 way double valve kit for 4 tube installation and single coil + kit not fitted on the unit					9066562W				
Kit 3 way valve mounted			9066561					9060471	
Kit 3 way valve additional battery mounted					9060472				
Kit 3 way valve not mounted			9066560					9060474	
Kit 3 way valve additional battery not mounted					9060475				
Kit 2 way valve primary and/or additional battery mounted			9060476					-	
Kit 2 way valve primary battery mounted			-					9060477	
Kit 2 way valve primary and/or additional battery not mounted			9060478					-	
Kit 2 way valve primary battery not mounted			-					9060479	
2 way DN 10 balance valve for main coil + kit fitted on the unit		9066660					-		
2 way DN 15 balance valve for main coil + kit fitted on the unit		-			9066661				-
2 way DN 20 balance valve for main coil + kit fitted on the unit				-					9066662
2 way DN 10 balance valve for additional coil + kit fitted on the unit			9066663					-	
2 way DN 15 balance valve for additional coil + kit fitted on the unit			-					9066664	
2 way DN 10 balance valve for main coil + kit not fitted on the unit		9066650					-		
2 way DN 15 balance valve for main coil + kit not fitted on the unit		-			9066651				-
2 way DN 20 balance valve for main coil + kit not fitted on the unit				-					9066652
2 way DN 10 balance valve for additional coil + kit not fitted on the unit			9066653					-	
2 way DN 15 balance valve for additional coil + kit not fitted on the unit			-					9066654	
Valves CD versions only									
	130/140	230/240	330/340	430/440	530/540	630/640	730/740	830/840	930/940
Simplified 3-way valve kit for CD version fitted			9066571					9060484	
Simplified 3-way valve kit for CD version not fitted			9066570					9060481	
Simplified 3-way valve kit for CD version not fitted - additional battery					9060480				
Electric heater VC/VCB/CH version									
	130/140	230/240	330/340	430/440	530/540	630/640	730/740	830/840	930/940
El. resistance and relays fitted on the unit (650 W) VC/HC	9066491E					-			
El. resistance and relays fitted on the unit (400 W) VC/HC	-	9066472E				-			
El. resistance and relays fitted on the unit (600 W) VC/HC	-	9066482E	9066473E				-		
El. resistance and relays fitted on the unit (750 W) VC/HC			-		9066475E			-	
El. resistance and relays fitted on the unit (900 W) VC/HC		-	9066483E				-		
El. resistance and relays fitted on the unit (1000 W) VC/HC	-	9066492E		-				9066477E	
El. resistance and relays fitted on the unit (1250 W) VC/HC			-		9066485E			-	
El. resistance and relays fitted on the unit (1500 W) VC/HC		-	9066493E		-			9066487E	
El. resistance and relays fitted on the unit (2000 W) VC/HC			-		9066495E			-	
El. resistance and relays fitted on the unit (2500 W) VC/HC			-					9066497E	
Electric heater CD version									
	130/140	230/240	330/340	430/440	530/540	630/640	730/740	830/840	930/940
El. resistance and relays fitted on the unit (700 W) CD	9066611					-			
El. resistance and relays fitted on the unit (400 W) CD	-	9066592				-			
El. resistance and relays fitted on the unit (600 W) CD	-	9066602	9066593				-		
El. resistance and relays fitted on the unit (750 W) CD			-		9066595			-	
El. resistance and relays fitted on the unit (900 W) CD		-	9066603				-		
El. resistance and relays fitted on the unit (1000 W) CD	-	9066612		-				9066597	
El. resistance and relays fitted on the unit (1250 W) CD			-		9066605			-	
El. resistance and relays fitted on the unit (1500 W) CD		-	9066613		-			9066607	
El. resistance and relays fitted on the unit (2000 W) CD			-		9066615			-	
El. resistance and relays fitted on the unit (2500 W) CD			-					9066617	

Options / Accessories

Compatibility table / Codes

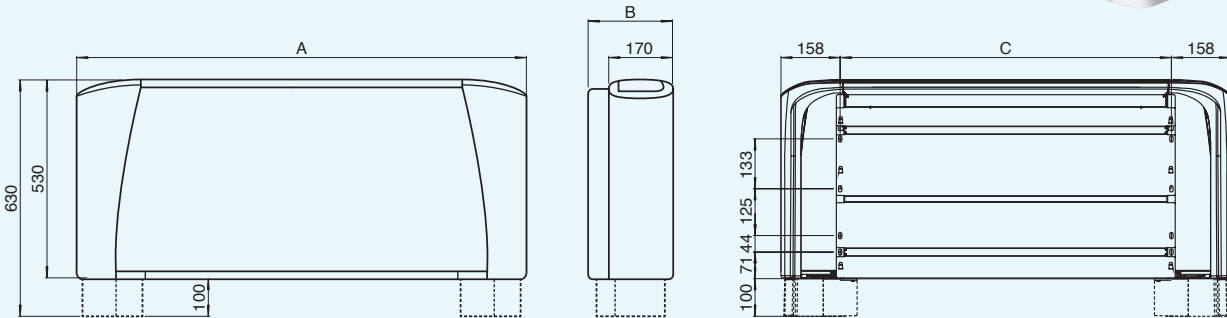
Model	YFCN General accessories								
Sizes	130/140	230/240	330/340	430/440	530/540	630/640	730/740	830/840	930/940
Accessories for all versions	130/140	230/240	330/340	430/440	530/540	630/640	730/740	830/840	930/940
Pair feet	9060150							9060151	
Vertical auxiliary condensate tray					6060400				
Horizontal auxiliary condensate tray for HC (left connections)					6060402				
Horizontal auxiliary condensate tray for HC (right connections)					6060403				
Horizontal auxiliary condensate tray for CD					6066039				
Condensate pump for VC - VCB - CD fitted on the unit auxiliary condensate collection tray included (vertical installation)					9066297				
Condensate pump for VC - VCB - CD not fitted on the unit auxiliary condensate collection tray included (vertical installation)					9066296				
Condensate pump for HD fitted on the unit auxiliary condensate collection tray to be ordered separately (horizontal installation)					9066295				
Condensate pump for CD not fitted on the unit auxiliary condensate collection tray included (horizontal installation)					9066180				
Condensate drain pipe					6060420				
Damper	9066531	9066532	9066533		9066535		9066537	9066538	
Kit breeze	-	9076452	9076453		9076455		-		
Recessed box	-	9076462	9076463		9076465		-		
Rear closing panel VC	9062005	9060180	9060181		9060182		9060183		
Rear closing panel HC	9060187	9060190	9060191		9060192		9060193	9060194	
Frontal air intake CD mounted	9066501	9066502	9066503		9066505		9066507	9066508	
Intake grid for VC	9060229	9060230	9060231		9060232		9060233		
Adaptor for terminal board VC for remote control					9060103				
Accessories only for concealed version CD	130/140	230/240	330/340	430/440	530/540	630/640	730/740	830/840	930/940
Outlet flange 90° FM90	9066381	9066382	9066383		9066385		9066387	9066388	
Inlet flange 90° FR90	9066441	9060710	9060711		9060712		9060713	9060714	
Straight inlet flange FRD	9066451	9060720	9060721		9060722		9060723	9060724	
Straight outlet flange FMD	9066371	9066372	9066373		9066375		9066377	9066378	
Outlet spigot diffuser PMC	9066361	9066362	9066363		9066365		9066367	9066368	
Air outlet grid BMA	9066411	9060750	9060751		9060752		9060753		
Air inlet grid GRAG	9066431	9060764	9060765		9060766		9060767		
Air inlet grid GRAP	9066421	9060760	9060761		9060762		9060763		
Air inlet spigot plenum PRC	9066461	9066462	9066463		9066465		9066467	9066468	
Intake grid with filter (to be used in combination with inlet flange 90°) GRAFP	9066391	9060770	9060771		9060772		9060773		
Intake grid with filter (to be used in combination with straight inlet flange) GRAFG	9066401	9060774	9060775		9060776		9060777		
NEW Silencer Plenum BXS	-	-	9069081		9069082		9069083		
NEW Hotel box kit for concealed installation for horizontal model (frontal return and air supply) CHK	-	-	9066783		9066785		9066787	-	-

Dimensions

YFCN / YFCN-ECM 130 to 940 (with casing)



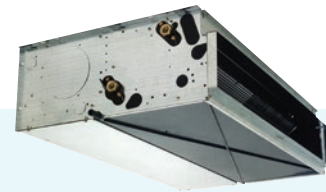
VC, VCB and HC models



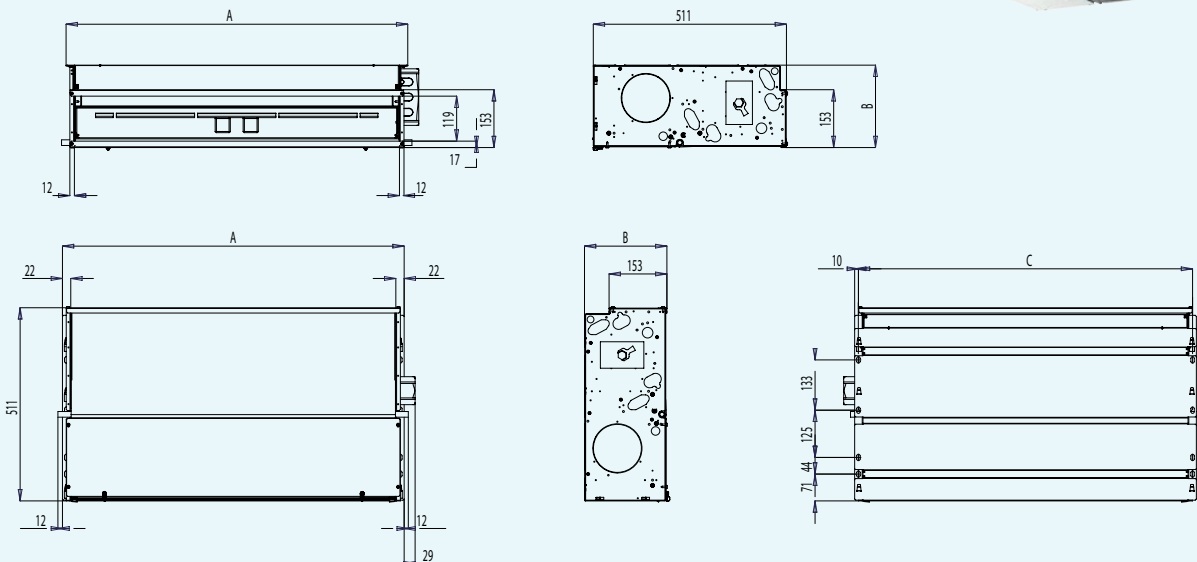
All dimensions in mm. Drawings not a scale.

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 / YFCN-ECM 130 to 940 (without casing)



CD models



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

LASER & LOW BODY Fan Coil Units

2 & 4 pipe system

A complete range from 0.6 kW up to 9.7 kW



TUC03+ Terminal unit controller
BacNET and N2 Metasys network compatible



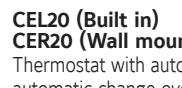
**CSL00 (Built in)
CSR00 (Wall mounted)**
Fan speed selector



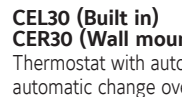
**CEL00 (Built in)
CER00 (Wall mounted)**
Thermostat with manual fan speed and automatic change over



**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

LASER fan coil units are simple and elegant, discreet in their design. High standards of quality and reliability, combined with a wide range of accessories ensure a total solution for all comfort cooling and heating requirements.

LOW BODY units are part of the LASER Fan Coils Units family. The reduced height cabinet makes them the ideal solution for new or replacement applications where dimensional limitations apply.

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)
- ECM inverter option available
- Option for district cooling coil
- EUROVENT Certified



Selection software

LASER & LOW BODY Fan Coil Units

0.6 to 9.7 kW



Technical features

Model		LASER: YLV, YLV-AF, YLH, YLH-AF, YLIV, YLIV-AF, YLIH, YLIH-AF										
Sizes		110	112	114	216	218	220	222	224	226	328	
Total cooling capacity [kW]	(1)	max	1.11	1.59	2.14	3.30	3.50	4.44	5.07	6.43	7.25	9.73
		med	0.95	1.31	1.88	2.67	2.99	3.68	4.39	5.75	6.67	8.75
		min	0.76	1.07	1.57	2.20	2.46	2.94	3.84	4.62	5.50	6.36
Sensible cooling capacity [kW]	(1)	max	0.93	1.25	1.90	2.46	3.06	3.53	4.42	5.06	5.70	8.04
		med	0.78	0.99	1.64	1.95	2.51	2.84	3.74	4.44	5.18	7.15
		min	0.61	0.79	1.33	1.56	2.00	2.20	3.20	3.45	4.15	5.03
Water flow in cooling [l/h]	(1)	max	191	274	368	568	602	764	873	1107	1248	1675
		med	164	225	324	460	515	633	756	990	1148	1506
		min	131	184	270	379	423	506	661	795	947	1095
Pressure drop in cooling [kPa]	(1)	max	3.4	7.1	5.8	14.8	13.6	24.1	28.4	18.8	21.0	74.6
		med	2.8	5.0	4.6	12.5	9.8	17.4	21.8	15.5	18.1	61.5
		min	2.0	3.4	3.3	8.5	6.7	11.6	17.2	10.5	12.8	30.8
Heating capacity 2 pipes [kW]	(2)	max	1.37	1.83	2.60	3.46	4.17	4.80	6.04	6.60	7.86	10.54
		med	1.13	1.46	2.07	2.90	3.51	3.89	5.11	5.84	7.17	9.64
		min	0.87	1.14	1.70	2.31	2.83	3.01	4.41	4.58	5.76	6.73
Water flow in heating 2 pipes [l/h]	(2)	max	236	315	448	596	718	826	1040	1136	1353	1814
		med	194	251	356	499	604	669	879	1004	1233	1658
		min	150	196	292	397	487	518	759	788	991	1158
Pressure drop in heating 2 pipes [kPa]	(2)	max	4.9	6.0	6.5	14.7	16.0	23.4	27.7	18.9	25.3	82.4
		med	4.6	6.0	5.1	10.5	11.7	16.3	21.1	15.3	21.6	67.7
		min	3.0	4.1	4.0	6.9	8.1	10.8	16.4	10.3	14.9	29.7
Heating capacity 4 pipes [kW]	(3)	max	0.91	1.31	1.93	2.79	3.20	4.33	4.92	6.16	6.30	8.00
		med	0.83	1.13	1.85	2.40	2.81	3.67	4.33	5.55	5.98	7.43
		min	0.71	0.95	1.51	2.06	2.38	2.99	3.84	4.55	5.03	5.83
Water flow in heating 4 pipes [l/h]	(3)	max	78	113	166	240	275	373	423	530	542	688
		med	71	97	159	207	242	316	373	478	515	639
		min	61	82	130	177	205	257	330	391	433	501
Pressure drop in heating 4 pipes [kPa]	(3)	max	1.3	3.4	6.7	14.7	7.1	10.3	11.7	33.0	31.7	46.5
		med	1.1	2.6	5.8	10.5	5.7	7.7	9.5	23.0	28.9	40.6
		min	0.9	1.8	5.2	9.4	4.0	5.4	7.7	16.3	21.4	24.7
Air flow [m ³ /h]		max	243	317	432	606	754	961	1115	1307	1507	2010
		med	181	253	352	488	616	776	928	1106	1318	1687
		min	136	185	279	377	486	594	742	779	986	1107
Sound power level [dB(A)]		max	48	50	54	53	55	54	60	60	63	67
		med	42	45	49	47	50	48	56	55	60	63
		min	36	38	42	40	43	40	50	47	53	52
Sound pressure level [dB(A)]	(4)	max	39	41	45	44	46	45	51	51	54	58
		med	33	36	40	38	41	39	47	46	51	54
		min	27	29	33	31	34	31	40	38	44	43
Power supply [V-ph-Hz]		230 / 1 / 50 + E										
Power input [W]	max	46	48	57	61	76	90	117	140	162	213	
Absorbed current [A]	max	0.21	0.21	0.25	0.27	0.33	0.39	0.52	0.64	0.71	0.95	
Dimensions	Height	mm	538	538	538	538	538	614	614	614	614	614
	Width	mm	648	773	898	1023	1148	1273	1273	1523	1523	1773
	Depth	mm	224	224	224	224	224	254	254	254	254	254

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

(2) Room temperature 20°C - Water inlet temperature: 45/40°C

(3) Room temperature 20°C - Water inlet temperature: 65/55°C.

(4) Sound pressure level in a 100 m³ room, at 1.5 m distance and riverberating time of 0.3 s. max = speed 2, med = speed 3, min = speed 5 when using selection software



Manufacturer reserves the rights to change specifications without prior notice.

LASER & LOW BODY Fan Coil Units

0.6 to 9.7 kW



Technical features

Model		LOW BODY: YLVR, YLIVR					
Sizes		110	112	114	216	218	
Total cooling capacity [kW]	(1)	max	0.98	1.21	1.87	2.74	3.23
		med	0.81	1.02	1.61	2.35	2.81
		min	0.64	0.80	1.37	1.84	2.37
Sensible cooling capacity [kW]	(1)	max	0.90	1.09	1.62	2.32	2.71
		med	0.73	0.92	1.39	1.97	2.34
		min	0.56	0.71	1.15	1.54	1.95
Water flow in cooling [l/h]	(1)	max	166	207	318	519	614
		med	139	175	274	442	531
		min	109	137	233	346	446
Pressure drop in cooling [kPa]	(1)	max	2.5	3.5	8.4	7.1	10.2
		med	1.9	2.6	6.5	5.4	7.9
		min	1.3	1.8	5.0	3.6	5.9
Heating capacity 2 pipes [kW]	(2)	max	1.18	1.53	2.22	3.16	3.78
		med	0.95	1.29	1.9	2.67	3.25
		min	0.76	1.02	1.58	2.18	2.71
Water flow in heating 2 pipes [l/h]	(2)	max	204	265	384	595	717
		med	163	224	328	501	612
		min	130	176	273	405	506
Pressure drop in heating 2 pipes [kPa]	(2)	max	2.5	4.2	9.3	7.3	11.8
		med	1.7	3.2	7.1	5.4	8.9
		min	1.2	2.1	5.2	3.7	6.4
Heating capacity 4 pipes [kW]	(3)	max	1.12	1.79	1.87	2.54	3.83
		med	0.93	1.54	1.65	2.22	3.37
		min	0.77	1.25	1.42	1.89	2.88
Water flow in heating 4 pipes [l/h]	(3)	max	98	157	165	224	338
		med	81	135	145	196	297
		min	68	109	125	167	254
Pressure drop in heating 4 pipes [kPa]	(3)	max	1.8	4.8	6.5	11.8	5.9
		med	1.3	3.7	5.2	9.4	4.7
		min	1.0	2.5	4.0	7.1	3.6
Air flow [m ³ /h]		max	243	317	432	606	754
		med	181	253	352	488	616
		min	136	185	279	377	486
Sound power level [dB(A)]		max	47	50	53	51	55
		med	41	44	49	45	50
		min	34	38	42	39	43
Sound pressure level [dB(A)]	(4)	max	37	40	44	42	46
		med	31	35	39	36	41
		min	25	29	33	29	34
Power supply [V-ph-Hz]		230 / 1 / 50 + E					
Power input [W]	max	46	48	57	61	76	
Absorbed current [A]	max	0.21	0.21	0.25	0.27	0.33	
Dimensions	Height	mm	430	430	430	430	430
	Width	mm	648	773	898	1023	1148
	Depth	mm	254	254	254	254	224

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

(2) Room temperature 20°C - Water inlet temperature: 45/40°C

(3) Room temperature 20°C - Water inlet temperature: 65/55°C.

(4) Sound pressure level in a 100 m³ room, at 1.5 m distance and riverberating time of 0.3 s. max = speed 2, med = speed 3, min = speed 5 when using selection software



Manufacturer reserves the rights to change specifications without prior notice.

Options / Accessories

Compatibility table / Codes

Model	Sizes	LASER										LOW BODY				
		110	112	114	216	218	220	222	224	226	328	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

Dimensions & Weights

YLV & YLH

- ▶ V= vertical
- ▶ H= horizontal

YLV-AF & YLH-AF

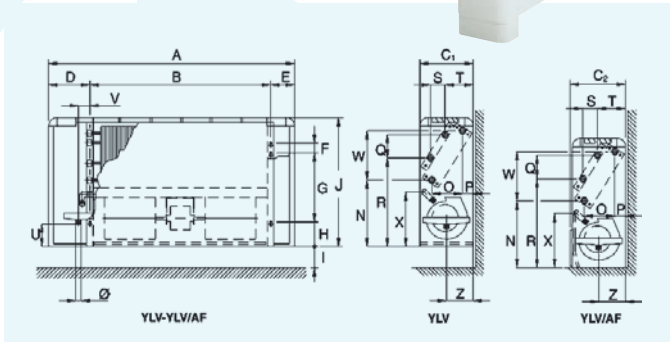
- ▶ AF= front air intake
- ▶ V= vertical
- ▶ H= horizontal

YLV-R

- ▶ R= low body
- ▶ V= vertical

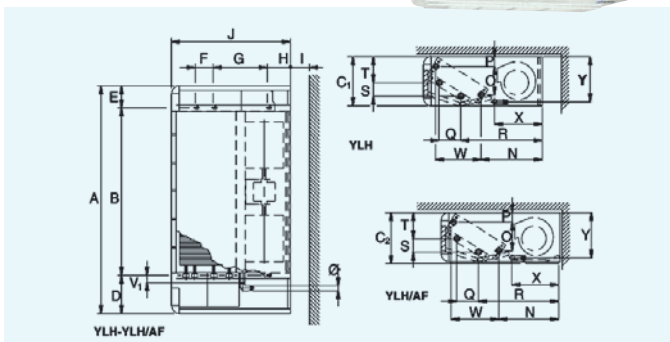
LASER: YLV - YLV/AF

VERTICAL



LASER: YLH - YLH/AF

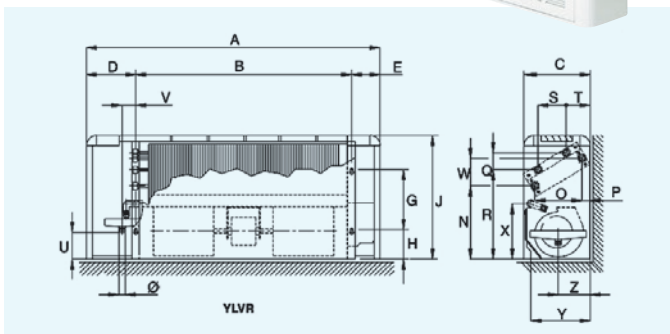
HORIZONTAL



Dim	110	112	114	216	218	220	222	224	226	328
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
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	205	205	205	205	205	235	235	235	235	235
Z	109	109	109	109	109	122	122	122	122	122
∅	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)

LOW BODY: YLVR



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
∅	20	20	20	20	20
kg	15	17	22	23	26

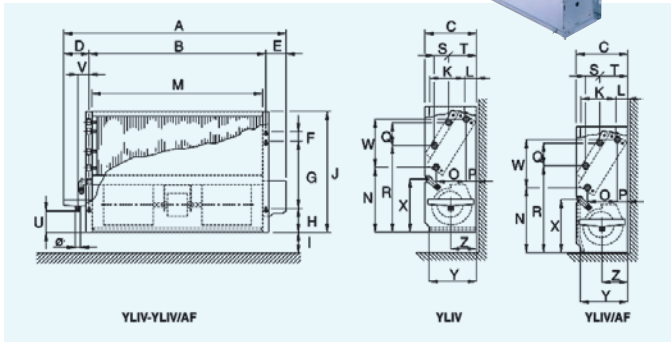
(All dimensions in mm)

Dimensions & Weights

- | YLIV & YLIH | YLIV-AF & YLIH-AF | YLIVR |
|--|--|--|
| <ul style="list-style-type: none"> ▶ V= vertical ▶ H= horizontal ▶ l= without cabinet | <ul style="list-style-type: none"> ▶ AF= front air intake ▶ V= vertical ▶ H= horizontal ▶ l= without cabinet | <ul style="list-style-type: none"> ▶ R= low body ▶ V= vertical ▶ l= without cabinet |

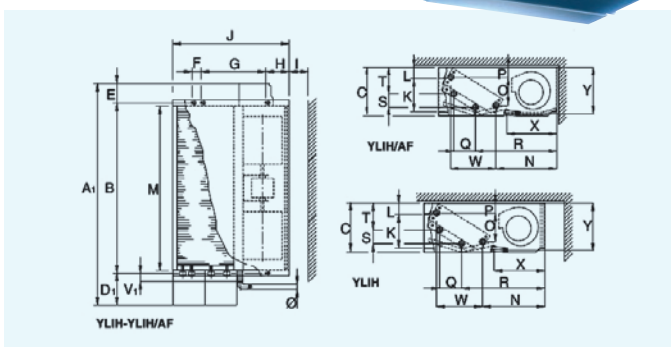
LASER: YLIV - YLIV/AF

VERTICAL

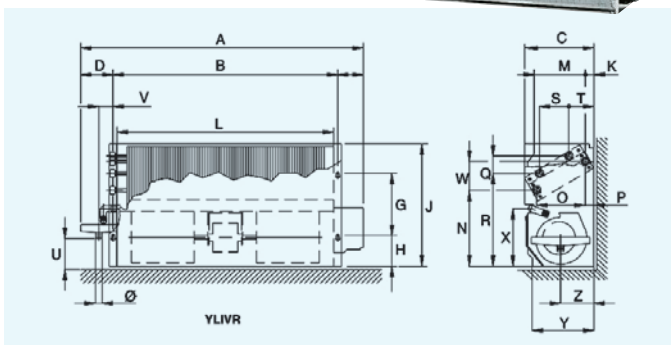


LASER: YLIH - YLIH/AF

HORIZONTAL



LOW BODY: YLIVR



Dim	110	112	114	216	218	220	222	224	226	328
A	555	680	805	930	1055	1180	1180	1430	1430	1680
A1	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
D1	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
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	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)

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 & LOW BODY Fan Coil Units

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 KREL	Parallel connection		Water sensor WS	Min. Temp. Thermostat TM
	J3A2 (2p)	J3AM (2p)	J3A2 (4p)	J3AM (4p)		ON/OFF CBL20	Modulating CBL30		
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 & LOW BODY Fan Coil Units

Compatibility tables



Compatibility Options / Accessories / Models

		STANDARD								LOW BODY	
		LASER				CONCEALED				YLVR	YLIVR
Code	Designation	YLV	YLH	YLV-AF	YLH-AF	YLIV	YLIH	YLIV-AF	YLIH-AF	YLVR	YLIVR
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.

LASER ECM and LOW BODY ECM

0.6 to 9.2 kW



Technical features

Model		LASER ECM							LOW BODY ECM			
Sizes	(*)	512	514	516	520	522	524	528	512	514	516	
Total cooling capacity [kW]	(1)	max ...v	1.98	2.56	3.81	5.05	5.81	7.47	9.18	1.56	2.37	3.40
		med ...v	1.43	1.81	2.53	3.86	4.42	5.64	6.94	1.18	1.78	2.34
		min ...v	0.74	0.93	1.51	2.72	3.05	4.07	4.89	0.61	1.29	1.53
Sensible cooling capacity [kW]	(1)	max	1.65	2.12	3.14	3.79	4.32	6.09	7.51	1.42	2.09	2.93
		med	1.16	1.48	2.01	2.78	3.16	4.42	5.50	1.04	1.54	1.96
		min	0.54	0.78	1.21	1.92	2.11	3.13	3.74	0.53	1.09	1.25
Water flow in cooling [l/h]	(1)	max	341	441	656	869	1000	1286	1580	265	404	644
		med	246	312	435	664	761	971	1194	200	304	440
		min	127	160	260	468	525	701	842	104	220	286
Pressure drop in cooling [kPa]	(1)	max	9.6	9.2	14.6	16.9	36.2	16.8	31.3	8.2	12.6	10.3
		med	5.4	4.8	8.5	10.6	22.0	10.0	18.5	5.1	7.8	5.4
		min	1.7	1.6	3.9	5.6	11.1	5.5	9.7	1.8	4.5	2.6
Heating capacity 2 pipes [kW]	(2)	max	2.05	3.04	4.40	5.76	6.53	8.43	10.4	2.07	2.85	4.00
		med	1.47	2.18	3.05	4.44	4.84	6.22	7.67	1.50	2.09	2.66
		min	0.78	1.15	1.87	3.11	3.37	4.50	5.38	0.8	1.49	1.77
Water flow in heating 2 pipes [l/h]	(2)	max	353	523	757	991	1124	1451	1790	358	495	763
		med	253	375	525	757	833	1071	1320	260	362	499
		min	134	198	322	535	580	775	926	138	258	325
Pressure drop in heating 2 pipes [kPa]	(2)	max	10.8	10.3	17.3	21.8	40.0	17.2	32.2	9.7	14.4	11.2
		med	6.0	5.5	8.6	13.0	23.5	9.8	18.0	5.6	8.4	5.3
		min	2.0	2.0	4.2	6.6	11.5	5.3	9.0	1.9	4.7	2.6
Heating capacity 4 pipes [kW]	(3)	max	1.84	2.39	3.20	5.00	5.55	6.46	7.90	2.19	2.29	3.06
		med	1.37	1.76	2.40	4.12	4.35	5.19	6.30	1.66	1.78	2.22
		min	0.87	1.09	1.77	3.22	3.29	4.09	4.94	0.97	1.36	1.60
Water flow in heating 4 pipes [l/h]	(3)	max	158	206	275	430	478	556	680	194	201	271
		med	118	151	207	355	374	447	542	146	157	196
		min	75	94	152	277	283	352	425	84	119	141
Pressure drop in heating 4 pipes [kPa]	(3)	max	4.7	9.3	15.6	23.3	21.5	36.0	46.2	6.9	9.2	16.5
		med	2.8	5.4	11.0	15.9	14.0	24.2	30.7	4.2	6.0	9.3
		min	1.2	2.4	5.6	9.8	7.7	15.4	19.5	1.0	3.7	5.3
Air flow [m ³ /h]		max	456	574	792	1082	1304	1567	1995	437	608	833
		med	298	373	489	757	904	1080	1370	284	400	486
		min	138	170	287	504	568	715	876	129	259	290
Sound power level [dB(A)]		max	55	59	60	57	62	63	69	55	53	56
		med	44	48	47	48	51	53	59	42	42	44
		min	29	29	33	37	39	43	48	30	33	30
Sound pressure level [dB(A)]	(4)	max	46	50	51	48	53	54	60	46	44	46
		med	35	39	38	37	42	44	50	33	32	34
		min	21	21	24	26	30	34	39	20	24	20
Power supply [V-ph-Hz]		230 / 1 / 50 + E										
Power input [W]	max	31	54	42	46	76	89	168	35	60	38	
	Height mm	623	623	623	699	699	699	699	395	395	395	
Dimensions	Width mm	773	898	1023	1273	1273	1523	1773	680	805	930	
	Depth mm	224	224	224	254	254	254	254	230	230	230	

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

(2) Room temperature 20°C - Water inlet temperature: 45/40°C

(3) Room temperature 20°C - Water inlet temperature: 65/55°C.

(4) Sound pressure level in a 100 m³ room, at 1.5 m distance and reverberating time of 0.3 s.

(*) 512 - 514 (3v-6v-9v)

(*) 516 (2v-5v-10v)

(*) 520 - 522 - 524 - 528 (3v-6v-10v)



Manufacturer reserves the rights to change specifications without prior notice.



LASER ECM and LOW BODY ECM

Compatibility tables

Compatibility Options / Accessories / Models

		STANDARD								LOW BODY-ECM	
		LASER-ECM				CONCEALED-ECM				YLVLR	YLIVR
Code	Designation	YLV	YLH	YLV-AF	YLH-AF	YLIV	YLIH	YLIV-AF	YLIH-AF		
Coils and heaters**											
BA1**	Additional 1 row heating	•	•	•	•	•	•	•	•	•	•
KREL**	Kit electrical heater with safety thermostat and relay	•	•	•	•	•	•	•	•		
Factory fitted thermostat (built in)											
EDCL	Microprocessor control for ECM units	•		•		•		•		•	•
OBV11-ODC711	Omnibus control for ECM units + Analogue Plus console	•		•		•		•		•	•
OBV11-ODC211	Omnibus control for ECM units + Display console	•		•		•		•		•	•
Remote controllers and thermostats (wall mounted)											
EDCR	Microprocessor control for ECM units, for wall installation	•	•	•	•	•	•	•	•	•	•
OBV10+ODC716	Omnibus control for ECM units + Remote Analogue Plus console	•	•	•	•	•	•	•	•	•	•
OBV10+ODC216	Omnibus control for ECM units + Remote Display console	•	•	•	•	•	•	•	•	•	•
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 all the above listed controllers									
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.

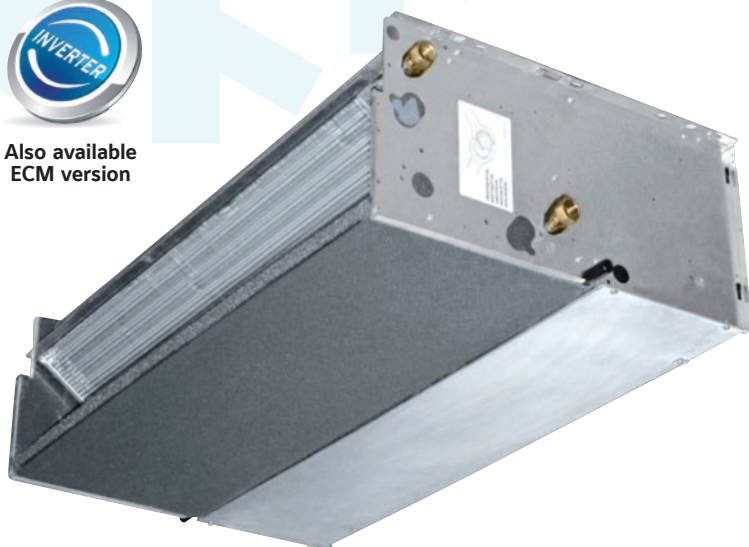
YHP-L / YHP-L-ECM High Static Pressure Blower

YHP-L / YHP-L-ECM 130-740 · 2 & 4 pipe system

A complete range from 2.1 kW to 12.3 kW



Also available
ECM version



Wired controls



JWC-3V
Remote three speeds controller

JWC-T
JWC-3V + Electronic thermostat and Summer/Winter switch

JWC-AU
Automatic JWC-T



JTM-B
Digital Automatic Remote controller

WM-503
Digital Automatic Remote controller to be mounted in the standard light wall box



Infrared control



TUC03+ Terminal unit controller
BacNET and N2 Metasys network compatible



YHP-L and YHP-L ECM offers a complete range able to satisfy all air conditioning need in working environments such as offices, shops, restaurants and hotel rooms, for ducted installations up to 80 Pa External Static Pressure.

These new ranges replace our earlier YHP-O series, offering lower noise levels, a strengthened structure and wider operating envelope.

The YHP-L series comes in 7 sizes from 340 to 1810 m³/h with option of 3 or 4 row cooling coils, offering up to 10.4 kW of cooling, with facility to add 1 or 2 row heating coil and offer a 4 pipe system.

ECM version comes in 4 sizes and covers the airflow capacity of 330 to 2460 m³/h and up to 12.3 kW of cooling.

Features

- 7 models
- From 3000 to 10400 w cooling
- Horizontal or vertical version
- Low noise operation
- 5 speed fan
- A wide range of thermostats and accessories
- Available with left or right connections

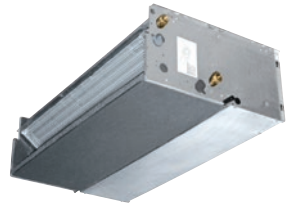
Optionally the main valve, auxiliary valve (4 tubes), controller and wiring can be assembled from factory, for an easy installation in a centralized management system.



Selection software

YHP-L High Static Pressure Blower

2.1 to 10.4 kW



Technical features

Model		130	140	230	240	330	340	430	440	530	540	630	640	730	740	
Total cooling capacity [kW]	(1)	max	2.93	3.37	4.47	5.45	6.00	6.95	6.74	7.42	7.24	8.01	8.56	9.55	9.22	10.42
		med	2.81	3.21	4.29	5.18	5.54	6.34	6.00	6.53	6.11	6.65	7.97	8.80	7.90	8.88
		min	2.14	2.39	3.16	3.69	3.36	3.71	4.12	4.41	3.98	4.24	4.77	5.10	5.87	6.45
Sensible cooling capacity [kW]	(1)	max	2.24	2.50	3.49	3.99	4.72	5.14	5.43	5.77	5.53	6.02	6.67	7.18	7.09	7.74
		med	2.09	2.33	3.23	3.69	4.19	4.54	4.58	4.85	4.42	4.76	5.99	6.42	6.08	6.60
		min	1.57	1.71	2.33	2.59	2.44	2.59	3.04	3.18	2.82	2.98	3.44	3.60	4.30	4.61
Water flow in cooling [l/h]	(1)	max	504	579	768	938	1033	1195	1160	1276	1246	1378	1473	1642	1586	1793
		med	484	551	738	890	952	1091	1033	1123	1050	1144	1370	1514	1359	1527
		min	369	410	543	635	578	638	709	758	684	730	821	878	1010	1109
Pressure drop in cooling [kPa]	(1)	max	38.5	23.0	28.8	48.3	27.1	57.4	33.7	23.2	50.6	28.5	26.1	22.4	28.8	25.4
		med	34.6	20.5	25.7	42.4	22.6	47.1	26.1	17.7	35.7	19.7	22.1	18.7	22.9	19.9
		min	21.7	12.3	15.3	23.8	9.4	18.4	13.8	9.0	17.0	9.0	9.0	7.2	13.4	11.2
Heating capacity 2 pipes [kW]	(2)	max	3.31	3.60	5.18	5.76	6.99	7.32	8.11	8.57	8.38	8.84	9.50	10.62	10.29	11.58
		med	3.08	3.33	4.78	5.29	6.16	6.43	6.80	7.12	6.59	6.90	8.49	9.42	8.80	9.80
		min	2.25	2.39	3.37	3.63	3.48	3.57	4.43	4.57	4.08	4.21	4.77	5.10	6.18	6.70
Water flow in heating 2 pipes [l/h] *	(2)	max	285	310	445	495	601	629	698	737	721	761	817	914	885	996
		med	265	286	411	455	530	553	585	613	567	593	730	810	757	843
		min	194	206	290	312	299	307	381	393	351	362	410	439	531	576
Pressure drop in heating 2 pipes [kPa]	(2)	max	40.3	24.8	29.4	43.6	28.0	49.7	36.6	23.5	51.4	28.8	24.7	23.1	28.6	27.0
		med	35.4	21.5	25.4	37.4	22.3	39.4	26.7	16.8	33.4	18.4	20.2	18.6	21.6	20.0
		min	20.2	11.9	13.6	19.0	8.0	13.6	12.3	7.6	14.1	7.6	7.2	6.2	11.4	10.1
Heating capacity 4 pipes [kW]	(3)	max	2.50	2.50	3.70	3.70	4.87	4.87	5.48	5.48	5.79	5.79	6.93	6.93	7.40	7.40
		med	2.36	2.36	3.48	3.48	4.44	4.44	4.78	4.78	4.81	4.81	6.35	6.35	6.53	6.53
		min	1.85	1.85	2.65	2.65	2.88	2.88	3.45	3.45	3.34	3.34	4.05	4.05	4.94	4.94
Water flow in heating 4 pipes [l/h] *	(3)	max	215	215	318	318	419	419	471	471	498	498	596	596	637	637
		med	203	203	299	299	382	382	411	411	413	413	547	547	562	562
		min	159	159	228	228	248	248	297	297	287	287	348	348	425	425
Pressure drop in heating 4 pipes [kPa]	(3)	max	14.1	14.1	6.9	6.9	11.2	11.2	13.8	13.8	13.7	13.7	21.1	21.1	23.8	23.8
		med	12.8	12.8	6.2	6.2	9.4	9.4	10.8	10.8	9.8	9.8	18.1	18.1	19.0	19.0
		min	8.3	8.3	3.8	3.8	4.3	4.3	6.0	6.0	5.1	5.1	8.0	8.0	11.5	11.5
Air flow [m3/h]		max	535	535	860	860	1115	1115	1340	1340	1375	1375	1635	1635	1810	1810
		med	490	490	780	785	960	960	1080	1080	1030	1030	1425	1425	1490	1490
		min	340	340	515	515	500	500	655	655	595	595	720	720	970	970
Sound power level [dB(A)]		max	51	51	55	55	57	57	63	63	62	62	61	61	63	63
		med	48	48	52	52	54	54	58	58	56	56	58	58	59	59
		min	40	40	42	42	38	38	45	45	43	43	42	42	48	48
Sound pressure level [dB(A)]	(4)	max	42	42	46	46	48	48	54	54	53	53	52	52	53	53
		med	39	39	43	43	44	44	49	49	47	47	48	48	49	49
		min	31	31	33	33	29	29	36	36	34	34	33	33	39	39
Power supply [V-ph-Hz]		230 / 1 / 50 + E														
Power input [W]	max	60.00	60.00	115.00	115.00	132.00	132.00	185.00	185.00	185.00	185.00	175.00	175.00	260.00	260.00	
Absorbed current [A]	max	0.30	0.30	0.50	0.50	0.60	0.60	0.90	0.90	0.90	0.90	0.80	0.80	1.20	1.20	
Dimensions	Height	mm	511	511	511	511	511	511	511	511	511	511	511	511	511	
	Width	mm	689	689	904	904	1119	1119	1119	1119	1334	1134	1549	1549	1549	
	Depth	mm	235	235	235	235	235	235	235	235	235	235	235	235	235	

Referred data at maximum speed fan and 0 Pa available static pressure.

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

(2) Room temperature 20°C - Water temperature 45/40 °C.

(3) Room temperature 20°C - Water temperature 65/55 °C.

(4) The sound pressure levels are 9 dB(A) lower than the sound power levels and apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.

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



Manufacturer reserves the rights to change specifications without prior notice.

YHP-L-ECM Inverter High Static Pressure Blower

2.1 to 12.3 kW



NEW



Technical features

Model		130	140	230	240	430	440	730	740	
Total cooling capacity [kW]	(1)	max 10V	3.34	3.85	5.44	6.87	6.82	7.52	10.91	12.32
		med 5V	3.04	3.48	4.46	5.48	5.75	6.27	8.43	9.36
		min 1V	2.11	2.33	3.27	3.87	3.95	4.21	5.58	6.03
Sensible cooling capacity [kW]	(1)	max 10V	2.62	2.93	4.48	5.25	5.54	5.90	9.00	9.83
		med 5V	2.34	2.60	3.51	4.04	4.51	4.77	6.57	7.10
		min 1V	1.54	1.67	2.44	2.75	2.92	3.05	4.09	4.34
Water flow in cooling [l/h]	(1)	max 10V	574	663	936	1181	1174	1294	1877	2118
		med 5V	523	598	766	942	990	1078	1449	1609
		min 1V	363	400	563	665	679	724	960	1038
Pressure drop in cooling [kPa]	(1)	max 10V	48.4	29.2	41.1	73.1	34.1	23.5	40.8	35.7
		med 5V	40.7	24.1	28.1	47.8	24.6	16.7	25.0	21.3
		min 1V	20.8	11.6	15.9	25.4	12.4	8.1	11.8	9.6
Heating capacity 2 pipes [kW]	(2)	max 10V	3.88	4.27	6.87	7.82	8.35	8.83	12.69	14.91
		med 5V	3.44	3.75	5.27	5.88	6.66	6.99	9.14	10.45
		min 1V	2.19	2.33	3.56	3.86	4.19	4.32	5.57	6.14
Water flow in heating 2 pipes [l/h]	(2)	max 10V	334	367	591	673	718	759	1092	1283
		med 5V	296	322	453	505	573	601	786	899
		min 1V	189	200	307	332	360	371	479	528
Pressure drop in heating 2 pipes [kPa]	(2)	max 10V	53.7	33.7	48.9	75.6	38.5	24.8	41.7	42.6
		med 5V	43.1	26.7	30.3	45.2	25.7	16.3	23.1	22.5
		min 1V	19.2	11.3	15.0	21.2	11.1	6.8	9.5	8.6
Heating capacity 4 pipes [kW]	(3)	max 10V	2.82	2.82	4.64	4.64	5.35	5.35	8.97	8.97
		med 5V	2.57	2.57	3.75	3.75	4.49	4.49	6.85	6.85
		min 1V	1.82	1.82	2.78	2.78	3.16	3.16	4.64	4.64
Water flow in heating 4 pipes [l/h]	(3)	max 10V	243	243	399	399	460	460	772	772
		med 5V	221	221	322	322	386	386	589	589
		min 1V	156	156	239	239	272	272	399	399
Pressure drop in heating 4 pipes [kPa]	(3)	max 10V	17.6	17.6	10.4	10.4	13.2	13.2	33.6	33.6
		med 5V	14.9	14.9	7.1	7.1	9.6	9.6	20.7	20.7
		min 1V	8.0	8.0	4.1	4.1	5.1	5.1	10.2	10.2
Air flow [m ³ /h]		max 10V	650	650	1235	1235	1390	1390	2460	2460
		med 5V	560	560	880	880	1055	1055	1605	1605
		min 1V	330	330	550	550	615	615	880	880
Sound power level [dB(A)]		max 10V	58	58	64	64	64	64	69.5	69.5
		med 5V	54	54	55	55	57	57	60.8	60.8
		min 1V	41	41	44	44	44	44	48	48
Sound pressure level [dB(A)]	(4)	max 10V	49	49	55	55	55	55	60.5	60.5
		med 5V	45	45	46	46	48	48	51.8	51.8
		min 1V	32	32	35	35	35	35	39	39
Power supply [V-ph-Hz]		230 / 1 / 50 + E								
Power input [W]	max	52	52	134	134	131	131	303	303	
Absorbed current [A]	max	0.4	0.4	1.1	1.1	1.1	1.1	1.4	1.4	
Dimensions	Height	mm	511	511	511	511	511	511	511	511
	Width	mm	689	689	904	904	1119	1119	1549	1549
	Depth	mm	235	235	235	235	235	235	235	235

Referred data at maximum speed fan and 0 Pa available static pressure.

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

(2) Room temperature 20°C - Water temperature 45/40 °C.

(3) Room temperature 20°C - Water temperature 65/55 °C.

(4) The sound pressure levels are 9 dB(A) lower than the sound power levels and apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.

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



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YHP-L and YHP-L-ECM High Static Pressure Blower

Compatibility tables



Compatibility table / Codes

Model YHP-L	130-140	230-240	330-340	430-440	530-540	630-640	730-740
Model YHP-L-ECM	130-140	230-240	-	430-440	-	-	730-740

Accessories (factory fitted)

Valves (220V On/Off)							
3 way valve for main coil VBPM-C G1-5 220V (factory fitted)	9066561				-		
3 way valve for main coil VBPM-C G6-9 220V (factory fitted)	-			9060471			-
3 way valve for main coil VBPM-C G8S 220V (factory fitted)			-				9069208
3 way valve for additional coil VBAM-C G1-9 220V (factory fitted)					9060472		
2 way valve for additional coil V2M-C G1-5 220V (factory fitted)	9060476				-		
2 way valve V2M-C G6-9 220V (factory fitted)	-			9060477			-
2 way valve V2M-C G8S 220V (factory fitted)			-				9069209
Simplified 3-way valve kit for additional coil VSPM-C G1-5 220 V (fitted)	9066571				-		
Simplified 3-way valve kit VSPM-C G6-9 220 V (factory fitted)	-			9060484			-
Simplified 3-way valve kit VSPM-C G8-S 220 V (factory fitted)			-				9069211

Accessories (supplied loose)

Valves (220V On/Off)							
3 way valve for main coil VBPS-C G1-5 220V (not fitted)	9066560				-		
3 way valve for main coil VBPS-C G6-9 220V (not fitted)	-			9060474			-
3 way valve for main coil VBPS-C G8S 220V (not fitted)			-				9069206
3 way valve for additional coil VBAS-C G1-9 220V (not fitted)					9060475		
2 way valve for additional coil V2S-C G1-5 220V (not fitted)	9060478				-		
2 way valve V2S-C G6-9 220V (not fitted)	-			9060479			-
2 way valve V2S-C G8S 220V (not fitted)			-				9069207
Simplified 3-way valve kit for additional coil VSPS-C G1-5 220 V (not fitted)	9066570				-		
Simplified 3-way valve kit VSPS-C G6-9 220 V (not fitted)	-			9060481			-
Simplified 3-way valve kit VSPS-C G8-S 220 V (not fitted)			-				9069210
Other type of valves					Contact Johnson Controls		

YHP-L and YHP-L-ECM High Static Pressure Blower

Compatibility tables



Compatibility table / Codes

Model YHP-L	130-140	230-240	330-340	430-440	530-540	630-640	730-740
Model YHP-L-ECM	130-140	230-240	-	430-440	-	-	730-740

Accessories (supplied loose)

Air inlet plenum PMC	9069191	9069222	9066368	9069195	9069196		
Straight inlet flange	9069371	9038002	9060724	9069375	9079376		
Inlet flange 90°	9069381	9038001	9060714	9069385	9069386		
Intake grid 90°	9060761	9060762	9060763	9068155	9038041		
Straight outlet flange	9069391	9069232	9066378	9069395	9069396		
Outlet flange 90°	9069400	9069242	9066388	9069405	9069406		
Outlet grid	9060751	9060752	9060753	9069415	9038040		
El. resistance and relays fitted on the unit (1500 W) BEL-I G3-4/15	9066613			-			
El. resistance and relays fitted on the unit (900 W) BEL-I G3-4/09	9066603			-			
El. resistance and relays fitted on the unit (600 W) BEL-I G3-4/06	9066593			-			
El. resistance and relays fitted on the unit (2000 W) BEL-I G5-6/20	-	9066615		-			
El. resistance and relays fitted on the unit (1250 W) BEL-I G5-6/12	-	9066605		-			
El. resistance and relays fitted on the unit (750 W) BEL-I G5-6/07	-	9066595		-			
El. resistance and relays fitted on the unit (2500 W) BEL-I G7-9/25		-	9066617		-		
El. resistance and relays fitted on the unit (1500 W) BEL-I G7-9/15		-	9066607		-		
El. resistance and relays fitted on the unit (1000 W) BEL-I G7-9/10		-	9066597		-		
El. resistance and relays fitted on the unit (2750 W) BEL-I SL5/27				9038037		-	
El. resistance and relays fitted on the unit (1650 W) BEL-I SL5/16				9038038		-	
El. resistance and relays fitted on the unit (1100 W) BEL-I SL5/11				9038039		-	
El. resistance and relays fitted on the unit (3500 W) BEL-I SL6-7/35			-				9038047
El. resistance and relays fitted on the unit (2500 W) BEL-I SL6-7/25			-				9038048
El. resistance and relays fitted on the unit (1000 W) BEL-I SL6-7/10			-				9038049
NC auxiliary condensate tray ACT-NC				6066039			
Mounted condensate pump DRCV - vertical units (auxiliary condensate tray included)				9066297			
Not mounted condensate pump DRCV - vertical units (auxiliary condensate tray included)				9066296			
Not mounted condensate pump DRPI-C - only horizontal installation (auxiliary condensate tray included)				9066180			
Condensate drain pipe SCR				6060420			
Front air intake KAF	9069071	9069072	9069073	9069365	9069366		



YHP-L and YHP-L-ECM High Static Pressure Blower

Compatibility tables

Compatibility table / Codes

Controls for YHP-L models	130-140	230-240	330-340	430-440	530-540	630-640	730-740
Remote three speed control JWC-3V (1) (4)				9066642			
Remote three speed control + electronic thermostat and manual S/W switch JWC-T (2)				9066630K			
Remote three speed control + electronic thermostat and centralized/manual S/W switch JWC-TQR (2) (3)				9066631K			
Automatic speed control with electronic thermostat and S/W switch - JWC-AU (to be used with JPF-AU and JP-AU only) (2) (3)				9066632K			
Automatic remote control with electronic thermostat, S/W switch and liquid crystal display JTM-B (2) (3)				9066331E			
Automatic speed control with electronic thermostat to be mounted in the light wall box WM-503 (to be used with UP-503 only)				9066676E			
Electromechanical thermostat T2T (4) (5)				9060174			
Power unit JPF-AU for JWC-AU and JTM-B remote controls, fitted on the unit				9066641			
Power unit JP-AU for JWC-AU and JTM-B remote controls, not fitted on the unit				9066640			
Power unit UP-503 for WM-503 remote control only, not fitted on the unit				9066677			
Control accessories for all versions (supplied with separate packaging)							
Low temperature cut-out for controls JWC-3V and JWC-T				9053048			
Low temperature cut-out for controls JWC-TQR, WM-503 and JP-AU power unit				3021090			
T2 sensor to be used as Change-over for JP-AU power unit				9025310			
Change-over 15-25 for control JWC-TQR				9053049			
Receiver board for control JWC-T and JWC-TQR				9066311			
Controls for YHP-L-ECM models	130-140	230-240	-	430-440	-	-	730-740
Automatic speed control with electronic thermostat and S/W switch - JWC-AU (to be used with JPF-AU and JP-AU only) (2) (3)				9066632K			
Automatic remote control with electronic thermostat, S/W switch and liquid crystal display JTM-B (to be used with JPF-AU and JP-AU only) (2) (3)				9066331E			
WM-S-ECM Continuous fan speed control with electronic thermostat, summer/winter switch and LCD display				9066644			
Power unit JPF-AU for JWC-AU and JTM-B remote controls, fitted on the unit				9066641			
Power unit JP-AU for JWC-AU and JTM-B remote controls, not fitted on the unit				9066640			

(1) Not to be used with valves. (2) Can be used with valves and/or low temperature cut-out.

(3) Can be used with Change Over. (4) Not suitable with -E electric heater. (5) Can be used with valve and not to be used with low temperature cut-out.

YEFB Hydro Blower

2 & 4 pipe system

A complete range from 4.3 kW up to 28.9 kW



CSR00 (Wall mounted)
Fan speed selector



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



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



TUC03+ Terminal unit controller
BacNET and N2 Metasys network compatible



YEFB Blower units are available in 6 sizes for horizontal concealed installations: thanks to their high ESP fans that can handle up to 250Pa, they are the ideal solution for air conditioning large spaces.



Selection software

Features

- 6 unit sizes for horizontal mounting
- Handles high external static pressure up to 250Pa
- Choice of 2 or 4 pipe systems
- Twin centrifugal fans
- Horizontal air return
- Air distribution plenum
- Electric heater option
- Optional paint finish
- F5 grade filter option
- 5 Row cooling coil option on sizes 060, 070
- EUROVENT Certified

YEFB Hydro Blower

4.3 to 28.9 kW



Unit performance at different Pa external static pressure, with 4 row cooling coil

Model YEFB		020-4	030-4	040-4	050-4	060-4	070-4*	
Total cooling capacity [kW]	(1)	max	6.95	9.49	11.77	13.72	23.83	28.99
		med	5.90	8.23	10.35	12.6	21.59	26.64
		min	4.30	7.11	8.91	11.36	17.15	24.28
Sensible cooling capacity [kW]	(1)	max	4.99	7.91	9.94	11.80	18.89	23.75
		med	4.14	6.7	8.61	10.60	16.84	21.50
		min	2.98	5.68	7.17	9.44	12.93	19.14
Water flow in cooling [l/h]	(1)	max	1195	1632	2024	2360	4099	4974
		med	1015	1416	1780	2167	3714	4571
		min	740	1223	1533	1954	2950	4167
Pressure drop in cooling [kPa]	(1)	max	17.4	31.5	30.6	40.4	28.0	39.2
		med	12.2	24.1	23.3	33.8	23.2	33.1
		min	6.5	18.4	17.9	28.3	15.1	28.2
Heating capacity 2 pipes [kW]	(2)	max	7.08	11.40	14.32	17.4	28.08	35.01
		med	6.20	9.62	12.19	15.53	24.95	32.16
		min	4.55	8.20	10.4	13.85	18.9	28.84
Water flow in heating 2 pipes [l/h]	(2)	max	1219	1962	2465	2727	4495	5555
		med	1067	1656	2098	2673	4034	4926
		min	783	1411	1788	2392	3047	4330
Pressure drop in heating 2 pipes [kPa]	(2)	max	13.3	34.0	36.1	51.0	30.2	47.2
		med	10.3	25.7	26.9	41.3	23.5	40.3
		min	4.8	19.2	20.0	33.4	14.6	32.8
Heating capacity 2 pipes [kW]	(3)	max	13.49	19.31	30.3	28.47	49.17	60.88
		med	9.8	14.51	22.93	24.81	41.75	55.4
		min	5.87	12.66	18.12	21.99	32.27	50.21
Water flow in heating 2 pipes [l/h]	(3)	max	1177	1688	2638	2492	4287	5305
		med	854	1266	1994	2169	3639	4827
		min	510	1104	1574	1921	2813	4374
Pressure drop in heating 2 pipes [kPa]	(3)	max	12.3	23.2	43.4	31.2	23.9	38.5
		med	7.1	14	26.5	24.5	17.9	32.6
		min	2.9	11.0	17.6	19.8	11.4	27.4
Air flow [m ³ /h]		max	1145	1910	2680	3250	4120	5493
		med	920	1520	2130	2870	3610	4926
		min	620	1205	1655	2470	2580	4330
Sound power level [dB(A)]		max	64.0	65.0	69.0	72.0	77.0	79.0
		med	58.0	61.0	63.0	68.0	74.0	76.9
		min	48.0	57.0	57.0	65.0	65.1	74.4
Sound pressure level [dB(A)]	(4)	max	53.0	54.0	58.0	61.0	66.0	67.0
		med	47.0	50.0	52.0	57.0	63.0	65.0
		min	37.0	46.0	46.0	54.0	54.0	63.0
Power supply [V-ph-Hz]		230 / 1 / 50						
Power input [W]	max	171	352	451	588	1007	1 767	
Absorbed current [A]	max	0.74	1.62	2.05	2.83	4.47	8.08	
Dimensions	Height	mm	407.6	407.6	407.6	407.6	517.6	517.6
	Width	mm	902	902	902	902	1 160	1 160
	Depth	mm	989.6	989.6	1 239.6	1 239.6	1 634.6	1 634.6

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

(2) Room temperature 20°C - Water inlet temperature: 45/40°C

(3) Room temperature 20°C - Water inlet temperature: 65/55°C at 50 Pascal ESP

(4) Sound pressure level in a 100 m³ room, at 1 m distance and reverberating time of 0.3 s.

4 pipe system not available with 4R heating coil

* Performances are out of scope Eurovent FCP.



Manufacturer reserves the rights to change specifications without prior notice.

YEFB Hydro Blower

Compatibility tables



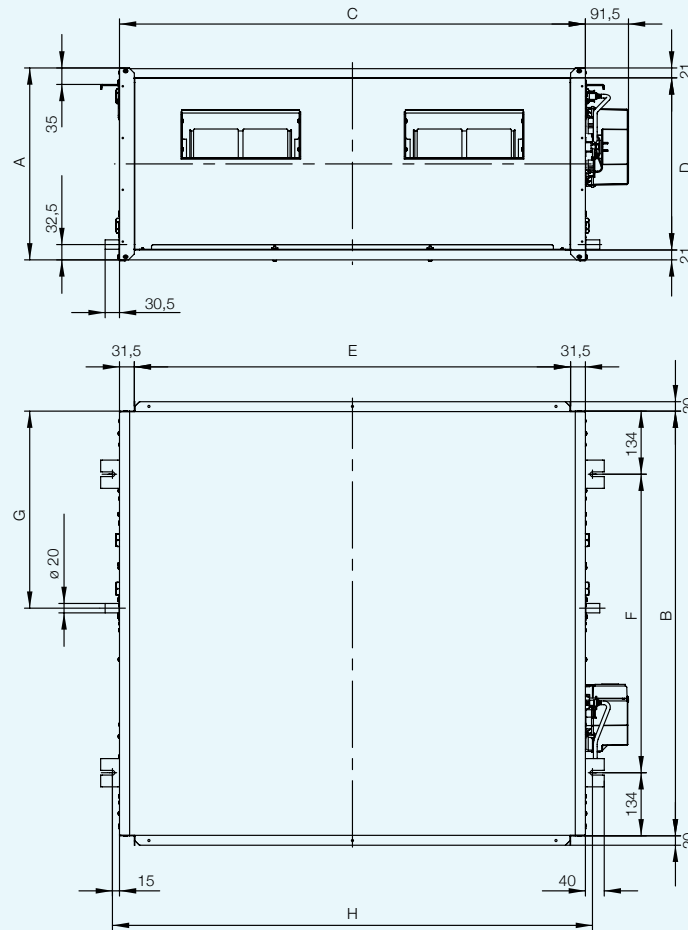
Compatibility Options / Accessories / Models

Code	Designation	YEFB					
		020	030	040	050	060	070
Coils and heaters**							
BA2**	Additional 2 row heating	•	•	•	•	•	•
BA3**	Additional 3 row heating	•	•	•	•	•	•
KREL**	Kit electrical heater with safety thermostat and relay	•	•	•	•	•	•
Factory fitted electric box							
CBL10	Transformer 230/24V	•	•	•	•	•	•
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	•	•	•	•	•	•
OPT10+OC716	Omnibus control for YEFB units + Remote Analogue Plus	•	•	•	•	•	•
OPT10+OC216	Omnibus control for YEFB units + Remote Display console	•	•	•	•	•	•
Valves (Supplied loose) / Condensate pump / Water sensor (Factory fitted)							
J3B2 (2p)	3-way 4-ports on/off valves for 2-pipe systems	•	•	•	•		
J3B2 (4p)	3-way 4-ports on/off valves for 4-pipe systems	•	•	•	•		
J3C2 (2p)	3-way 4-ports on/off valves for 2-pipe systems					•	•
J3C2 (4p)	3-way 4-ports on/off valves for 4-pipe systems					•	•
J3BM (2p)	3-way 4-ports modulating valves for 2-pipe systems	•	•	•	•		
J3BM (4p)	3-way 4-ports modulating valves for 4-pipe systems	•	•	•	•		
J3CM (2p)	3-way 4-ports modulating valves for 2-pipe systems					•	•
J3CM (4p)	3-way 4-ports modulating valves for 4-pipe systems					•	•
DT (2p)	Shut-off valves for 2-pipe systems supplied loose in addition to J3B2 and J3BM valves (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					
External air intake							
PAS	Air intake plenum collars	•	•	•	•	•	•
PM	Air delivery plenum with collars	•	•	•	•	•	•
PM + Grill	Air delivery plenum painted with air outlet grill	•	•	•	•	•	•

- 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.

Dimensions & Weights

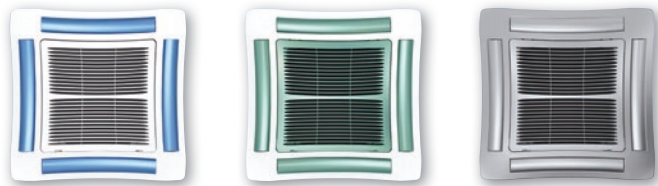


Model YEFB		020-4	030-4	040-4	050-4	060-4	070-4
A	min	407.6	407.6	407.6	407.6	517.6	517.6
B	mm	902	902	902	902	1160	1160
C	mm	989.6	989.6	1239.6	1239.6	1634.6	1634.6
D	min	365.6	365.6	365.6	365.6	475.6	475.6
E	mm	926.6	926.6	1176.6	1176.6	1571.6	1571.6
F	min	634	634	634	634	892	892
G	mm	418.5	418.5	418.5	418.5	446.5	446.5
H	mm	1019.6	1019.6	1269.6	1269.6	1664.6	1664.6
Weight (3R - 3 rows)	kg	64.3	64.3	79.3	79.3	126.0	126.0
		(2-3-4 rows)	(2-3-4 rows)	(2-3-4 rows)	(2-3-4 rows)	(2-3-4-5 rows)	(2-3-4-5 rows)
Weight of the coil	kg	1.2 - 2.0 - 2.6	1.2 - 2.0 - 2.6	1.9 - 2.9 - 3.7	1.9 - 2.9 - 3.7	3.4 - 4.6 - 6.3 - 9.0	3.4 - 4.6 - 6.3 - 9.0
Water connection		G1/2" F	G1/2" F	G1/2" F	G1/2" F	G1" M	G1" M
		(2-3-4 rows)	(2-3-4 rows)	(2-3-4 rows)	(2-3-4 rows)	(2-3-4-5 rows)	(2-3-4-5 rows)
Water content	l	1.4 - 2.2 - 2.9	1.4 - 2.2 - 2.9	1.9 - 2.8 - 3.8	1.9 - 2.8 - 3.8	3.4 - 5.0 - 6.7 - 8.4	3.4 - 5.0 - 6.7 - 8.4

YHK Hydro Cassette

2 & 4 pipe system

A complete range from 1.3 kW to 11.1 kW



Coloured versions available as an option

YHK Hydro Cassette units are simple and elegant, discreet in their design. High standards of quality and reliability, combined with a wide range of accessories ensure a total solution for all comfort cooling and heating requirements.



Selection software

Wired controls



JWC-3V

Remote three speeds controller

JWC-T

JWC-3V + Electronic thermostat and Summer/Winter switch

JWC-AU

Automatic JWC-T



JTM-B

Digital Automatic Remote controller

WM-503

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



Infrared control



TUC03+ Terminal unit controller

BacNET and N2 Metasys network compatible



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 choice between 6 fan speeds
- Condensate pump integrated in all range
- 2/3 way valves fitted or supplied loose in all range
- Coloured versions, possible 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
- EUROVENT Certified

YHK Hydro Cassette

1.3 to 11.1 kW



Technical features

Model YHK -2 pipes			20-2	25-2	40-2	50-2	65-2	95-2	110-2
Total cooling capacity 2 Pipes [kW]	(1)	max	1.92	2.64	4.26	4.93	6.08	9.39	10.93
		med	1.60	2.31	3.30	3.82	4.86	6.72	8.36
		min	1.25	1.82	2.23	2.91	4.18	5.27	5.27
Sensible cooling capacity 2 Pipes [kW]	(1)	max	1.58	2.00	3.11	3.65	4.51	6.36	8.08
		med	1.29	1.72	2.35	2.75	3.53	4.42	6.00
		min	0.99	1.33	1.55	2.05	3.00	3.42	3.67
Water flow in cooling 2 Pipes [l/h]	(1)	max	340	461	745	863	1060	1636	1909
		med	280	402	574	667	845	1166	1453
		min	219	316	387	506	724	913	913
Pressure drop in cooling 2 Pipes [kPa]	(1)	max	10	9.7	20.9	19.7	21.6	26.9	35.6
		med	7	7.6	13.0	12.4	14.3	14.7	21.8
		min	4.5	4.9	6.4	7.5	10.9	9.4	9.4
Heating capacity 2 pipes [kW]	(2)	max	2.24	2.80	4.37	5.15	6.50	9.23	11.72
		med	1.80	2.42	3.28	3.85	5.03	6.40	8.55
		min	1.38	1.85	2.12	2.85	4.27	4.92	5.12
Water flow in heating 2 pipes [l/h] *	(2)	max	340	461	745	863	1060	1636	1909
		med	280	402	574	667	845	1166	1453
		min	219	316	387	506	724	913	913
Pressure drop in heating 2 pipes [kPa]	(2)	max	10.7	9.0	10.2	17.8	15.0	22.0	33.8
		med	7.2	6.9	6.1	10.6	9.4	11.4	19.2
		min	4.4	4.3	2.8	6.2	7.0	7.1	7.6
Heating capacity 2 pipes [kW]	(3)	max	4.6	5.7	9.3	10.6	13.1	19.8	23.7
		med	3.7	4.9	7	8.3	10.7	13.4	17.3
		min	2.8	4.2	4.9	6.1	8.6	10.3	10.3
Water flow in heating 2 pipes [l/h]	(3)	max	393	488	795	914	1130	1699	2037
		med	315	422	598	709	874	1155	1484
		min	240	360	415	524	741	882	882
Pressure drop in heating 2 pipes [kPa]	(3)	max	9.9	8.4	12.5	16	17.5	20.9	28.9
		med	6.5	6.4	7.6	10	11.3	10.6	16
		min	4	4.8	4	5.9	8.4	6.7	6.7
Water content (2 pipes) [l]		0.8	1.4	2.1	2.1	3.0	4.0	4.0	

Model YHK -4 pipes			20-4	25-4	40-4	40-6	50-4	50-6	65-4	95-4	95-6	110-4	110-6
Total cooling capacity 4 Pipes [kW]	(1)	max	2.27	2.66	3.27	3.86	3.72	4.44	6.26	7.59	8.65	8.72	9.69
		med	1.93	2.33	2.61	3.02	2.96	3.47	4.98	5.60	6.27	6.84	7.75
		min	1.49	1.83	1.83	2.07	2.33	2.69	4.11	4.48	4.95	4.48	4.95
Sensible cooling capacity 4 Pipes [kW]	(1)	max	1.84	1.94	2.49	2.88	2.88	3.37	4.61	5.71	6.37	6.67	7.26
		med	1.52	1.68	1.94	2.20	2.23	2.56	3.60	4.09	4.49	5.09	5.64
		min	1.13	1.32	1.32	1.47	1.72	1.94	2.93	3.21	3.49	3.21	3.49
Water flow in cooling 4 pipes [l/h]	(1)	max	401	464	574	664	655	764	1090	1326	1488	1529	1667
		med	337	406	456	519	519	597	865	974	1078	1192	1333
		min	260	318	318	355	406	462	712	777	851	777	851
Pressure drop in cooling 4 pipes [kPa]	(1)	max	13.5	8.8	13.4	10.5	17	14.0	18.9	26.9	25.0	34.7	32.0
		med	10	6.9	8.8	7.0	11.2	9.0	12.5	15.4	14.0	22.1	20.0
		min	6	4.6	4.6	4.0	7.2	6.0	8.8	10.3	9.0	10.3	9.0
Heating capacity 4 pipes [kW]	(4)	max	2.66	3.04	3.86	2.91	4.19	3.29	8.02	9.66	7.50	11.16	9.48
		med	2.23	2.66	3.04	2.71	3.33	2.66	6.33	7.15	5.63	8.80	6.78
		min	1.72	2.13	2.13	1.73	2.61	2.14	5.21	5.69	4.59	5.69	4.59
Water flow in heating 4 pipes [l/h]	(4)	max	261	298	378	250	426	283	783	946	645	1092	815
		med	219	260	298	233	341	229	618	697	484	858	583
		min	169	209	209	149	267	184	508	555	395	555	395
Pressure drop in heating 4 pipes [kPa]	(4)	max	11.4	8.7	13.3	6.7	15.0	8.4	17.2	24.0	11.8	31.2	15.0
		med	8.3	6.8	8.7	4.6	9.9	5.7	11.2	14.0	7.0	20.3	9.9
		min	5.2	4.6	4.6	2.6	6.4	3.9	7.9	9.3	4.9	9.3	4.9
Air flow [m3/h]		max	610	520	710	710	880	880	1140	1500	1500	1820	1730
		med	420	420	500	500	610	610	820	970	970	1280	1225
		min	310	310	320	320	430	430	630	710	710	710	710
Sound power level [dB(A)]		max	49	45	53	53	59	59	48	53	53	58	58
		med	40	40	45	45	49	49	40	40	40	48	48
		min	33	33	33	33	41	41	33	34	34	34	34
Sound pressure level [dB(A)]	(5)	max	40	36	44	44	50	50	39	44	44	49	49
		med	31	31	36	36	40	40	31	31	31	39	39
		min	24	24	24	24	32	32	24	25	25	25	25
Power supply [V-ph-Hz]		230 / 1 / 50											
Power input [W]	max	69.5	56.5	80.5	80.5	102.5	102.5	89.5	132.5	132.5	182.5	182.5	
Absorbed current [A]	max	0.40	0.35	0.45	0.45	0.60	0.60	0.50	0.65	0.65	0.90	0.90	
Cooling water content (4 pipes) [l]		1.0	1.4	1.4	1.7	1.4	1.7	3.0	3.0	3.6	3.0	3.6	
Heating water content (4 pipes) [l]		0.6	0.7	0.7	0.5	0.7	0.5	1.4	1.4	1.0	1.4	1.1	
Dimensions	Height	mm	275	275	275	275	275	275	303	303	303	303	303
	Width	mm	575	575	575	575	575	575	820	820	820	820	820
	Depth	mm	575	575	575	575	575	575	820	820	820	820	820

(1) Room temperature 27°C d.b., 19°C w.b. - Water temperature 7/12 °C (2) Room temperature 20°C - Water temperature: 45/40 °C
 (3) Room temperature 20°C - Water inlet temperature: 70/60°C (4) Room temperature 20°C - Water inlet temperature: 65/55°C
 (5) The sound pressure levels are 9 dB(A) lower than the sound power levels and apply to the reverberant field of a 100 m³ room and a reverberant time of 0.5 sec.
 * Water flow values as Cooling, accordingly to the EUROVENT standards and UNI ENV 1397



Manufacturer reserves the rights to change specifications without prior notice.

YHK-ECM Inverter Hydro Cassette

2 & 4 pipe system

A complete range from 1.8 kW to 15.1 kW



Wired control



JTM-B

Wall control with display that allows controlling one or more units in Master/Slave mode. The control is equipped with internal sensor to detect the room temperature, which can be defined as a priority compared to the return air sensor on the fan coil.

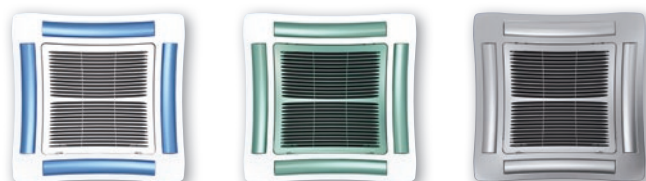


Infrared control



TUC03+ Terminal unit controller

BacNET and N2 Metasys network compatible



Coloured versions available as an option

YHK ECM water cassette is the result of significant technical and design research focused on providing an avant-garde product in terms of performance, low noise and control flexibility. YHK ECM series uses an innovative brushless electric motor controlled by an inverter card that varies the air flow continuously by means of a 1-10 V signal. The extreme efficiency, also at a low speed, makes it possible to greatly reduce electrical consumption (more than 75% less in comparison to a traditional motor) with absorption values, under normal operating conditions, that are no greater than 10 Watt in the entire range.

Features

- Cooling duty from 1.8 to 15.1 kW
- YHK: models with infrared control (standard)
- YHK-MP: models with wired control (accessory)
- 2 (-2) & 4 (-4 or -6) pipes systems
- 3 sizes: 600 x 600, 800 x 800 & 870 x 870
- Condensate pump integrated in all range
- 2/3 way valves fitted or supplied loose in all range
- Coloured versions, possible to change the colour of the grid 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
- EUROVENT Certified



Selection software

YHK-ECM Inverter Hydro Cassette

1.8 to 15.1 kW



Technical features

NEW

NEW

Model -2 pipes			YHK-ECM 25-2	YHK-ECM 40-2	YHK-ECM 50-2	YHK-ECM 65-2	YHK-ECM 95-2	YHK-ECM 125-2	YHK-ECM 150-2
Total cooling capacity 2 Pipes [kW]	(1)	max 10v	2.73	4.30	4.96	6.30	10.69	12.60	15.13
		med 5v	2.16	3.04	3.85	5.13	7.69	9.43	11.38
		min 1v	1.84	2.24	2.55	4.20	5.28	6.36	7.86
Sensible cooling capacity 2 Pipes [kW]	(1)	max	2.07	3.15	3.68	4.69	7.83	9.31	11.41
		med	1.60	2.16	2.79	3.75	5.50	6.77	8.30
		min	1.35	1.57	1.80	3.02	3.68	4.45	5.58
Water flow in cooling 2 Pipes [l/h]	(1)	max	473	744	864	1 089	1 848	2167	2602
		med	373	524	666	885	1 328	1622	1957
		min	317	385	441	723	909	1094	1352
Pressure drop in cooling 2 Pipes [kPa]	(1)	max	10.1	15.1	19.7	22.7	33.0	22.7	31.8
		med	6.6	9.4	12.4	15.6	18.5	13.4	18.8
		min	4.9	4.6	5.9	10.9	9.4	6.6	9.6
Heating capacity 2 pipes [kW]	(2)	max	2.87	4.36	5.15	6.70	10.56	13.39	16.40
		med	2.22	2.98	3.85	5.30	7.34	9.59	11.86
		min	1.85	2.12	2.46	4.27	4.90	6.18	7.82
Pressure drop in heating 2 pipes [kPa]	(2)	max	9.4	13.2	17.8	21.6	28.1	21.5	31.0
		med	5.9	6.6	10.6	14.2	14.6	11.8	17.3
		min	4.3	3.6	4.7	9.6	7.0	5.4	8.2

Model -4 pipes			YHK-ECM 25-4	YHK-ECM 40-6	YHK-ECM 50-6	YHK-ECM 65-4	YHK-ECM 95-6	YHK-ECM 125-4	YHK-ECM 150-4
Total cooling capacity 4 Pipes [kW]	(1)	max	2.75	3.90	4.47	6.48	9.76	11.61	13.59
		med	2.17	2.81	3.51	5.29	7.14	8.86	10.59
		min	1.85	2.09	2.37	4.29	4.97	6.07	7.45
Sensible cooling capacity 4 Pipes [kW]	(1)	max	2.06	2.92	3.40	4.80	7.29	8.87	10.68
		med	1.59	2.03	2.60	3.82	5.17	6.53	7.96
		min	1.34	1.49	1.70	3.07	3.51	4.33	5.4
Water flow in cooling 4 pipes [l/h]	(1)	max	476	676	779	1 120	1 697	1997	2337
		med	375	483	608	908	1 233	1524	1821
		min	318	359	409	740	856	1044	1281
Pressure drop in cooling 4 pipes [kPa]	(1)	max	9.5	10.3	13.1	19.8	30.1	22.6	30.4
		med	6.2	5.6	8.4	13.6	17.0	13.8	19.1
		min	4.6	3.3	4.1	9.4	8.8	7.0	10.1
Heating capacity 4 pipes [kW]	(3)	max	3.18	2.91	3.29	8.24	8.33	10.55	12.17
		med	2.51	2.20	2.66	6.65	6.27	8.4	9.8
		min	2.13	1.73	1.92	5.41	4.58	6.01	7.19
Water flow in heating 4 pipes [l/h]	(3)	max	311	288	326	805	818	907	1047
		med	245	217	263	649	616	722	843
		min	209	170	189	528	449	517	618
Pressure drop in heating 4 pipes [kPa]	(3)	max	9.4	6.7	8.4	18.1	14.3	19.9	25.7
		med	6.1	4.1	5.7	12.3	8.6	13.2	17.4
		min	4.6	2.6	3.2	8.5	4.9	7.2	10.0
Air flow [m ³ /h]		max	535	710	880	1 165	1 770	1 905	2480
		med	380	445	610	870	1 130	1 290	1 650
		min	310	310	360	630	710	790	1 025
Sound power level [dB(A)]		max	47	54	60	48	57	58	64
		med	39	43	50	39	47	49	55
		min	33	33	37	33	34	38	44
Sound pressure level [dB(A)]	(4)	max	38	45	51	39	48	49	55
		med	30	34	41	30	38	40	46
		min	24	24	28	24	25	29	35
Power supply [V-ph-Hz]		230 /1 /50							
Power input [W]	max	28.5	44.0	81.0	43.5	126.0	105.0	195.0	
Water content (2 pipes) [l]		1.4	2.1	2.1	3.0	4.0	4.6	4.6	
Absorbed current [A]	max	0.25	0.40	0.70	0.40	1.10	0.80	1.30	
Dimensions	Height	mm	275	275	275	303	303	304	304
	Width	mm	575	575	575	820	820	869	869
	Depth	mm	575	575	575	820	820	869	869

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

(2) Room temperature 20°C - Water temperature: 45/40 °C

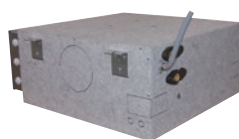
(3) Room temperature 20°C - Water inlet temperature: 65/55°C

(4) The sound pressure levels are 9 dB(A) lower than the sound power levels and apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.

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



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



Manufacturer reserves the rights to change specifications without prior notice.

Compatibility table / Codes

Model with AC motor (without air diffuser)		YHKY 20	YHKY 25	YHKY 40	YHKY 50	YHKY 65	YHKY 95	YHKY 110	-	-
Cassette YHKY	2 pipe system	0079100K	0079000K	0079001K	0079002K	0079003K	0079004K	0079005K	-	-
	4 pipe system	0079110K	0079010K	0079011K	0079012K	0079013K	0079014K	0079015K	-	-
Cassette YHKY-MP (IR remote control and sensor NOT included)	2 pipe system	0079170K	0079171K	0079172K	0079173K	0079174K	0079175K	0079176K	-	-
	4 pipe system	0079180K	0079181K	0079182K	0079183K	0079184K	0079185K	0079186K	-	-
Cassette YHKY-E - with electric resistance	2 pipe system	-	0079060K	0079061K	0079062K	0079063K	0079064K	0079065K	-	-
Cassette YHKY-MP-E - with electric resistance	2 pipe system	-	0079191K	0079192K	0079193K	0079194K	0079195K	0079196K	-	-
Cassette YHKY-REB with remote electric board	2 pipe system	0079120K	0079020K	0079021K	0079022K	0079023K	0079024K	0079025K	-	-
	4 pipe system	0079130K	0079030K	0079031K	0079032K	0079033K	0079034K	0079035K	-	-
Model with ECM motor (without air diffuser)		-	YHKY 25	YHKY 40	YHKY 50	YHKY 65	YHKY 95	-	YHKY 125	YHKY 150
Cassette YHKY-ECM - basic model	2 pipe system	-	0079801K	0079802K	0079803K	0079804K	0079805K	-	0079807K	0079808K
	4 pipe system	-	0079811K	0079812K	0079813K	0079814K	0079815K	-	0079817K	0079818K
Cassette YHKY-MP- ECM (IR remote control and sensor NOT included)	2 pipe system	-	0079911K	0079912K	0079913K	0079914K	0079915K	-	0079917K ⁽⁶⁾	0079918K ⁽⁶⁾
	4 pipe system	-	0079921K	0079922K	0079923K	0079924K	0079925K	-	0079927K ⁽⁶⁾	0079928K ⁽⁶⁾
Cassette YHKY-ECM-E - with electric resistance	2 pipe system	-	0079841K	0079842K	0079843K	0079844K	0079845K	-	0079847K	0079848K
Cassette YHKY-ECM-MP-E - with electric resistance	2 pipe system	-	0079901K	0079902K	0079903K	0079904K	0079905K	-	0079907K	0079908K

Mandatory accessories (units cannot work without them)

Air diffuser - intake grid, frame and louvres in RAL 9003 white colour	AKPA 600	AKPA 800	AKPA 900
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Accessories (factory fitted)

Valves (220V On/Off)			
3 way valve + mounting kit for 2 pipe models (factory fitted)	9079510	9079511	9079923
3 way valve + mounting kit for 4 pipe models (factory fitted)	9079512	9079513	9079933
2 way valve + mounting kit for 2 pipe models (factory fitted)	9079515	9079516	9079921
2 way valve + mounting kit for 4 pipe models (factory fitted)	9079517	9079518	9079931
2 way DN 15 balance valve for main coil + connection kit (fact. fitted) *	9079771	9079791	-
2 way DN 20 balance valve for main coil + connection kit (fact. fitted) *	-	9079792	-
2 way DN 15 balance valve for additional coil + connection kit (fact. fitted) *	9079773	9079793	-

Accessories (supplied loose)

Air diffusers / Panels	
Air diffuser - other colours (*)	Contact Johnson Controls

Valves (220V On/Off)			
3 way valve + mounting kit for 2 pipe models (not fitted)	9079500	9079501	9079922
3 way valve + mounting kit for 4 pipe models (not fitted)	9079502	9079503	9079932
2 way valve + mounting kit for 2 pipe models (not fitted)	9079505	9079506	9079920
2 way valve + mounting kit for 4 pipe models (not fitted)	9079507	9079508	9079930
2 way DN 15 balance valve for main coil + connection kit (not fitted) *	9079761	9079781	-
2 way DN 20 balance valve for main coil + connection kit (not fitted) *	-	9079782	-
2 way DN 15 balance valve for additional coil + connection kit (not fitted) *	9079763	9079783	-
Other type of valves	Contact Johnson Controls		

Other Accessories			
Outer casing OCA 600	9079240	-	-
Outer casing OCA 800	-	9079250	-
3 way valve + mounting kit for units with outer casing OCA (not fitted)	9079155	9079221	-
Fresh air duct FAD	6078005	-	-
Fresh air kit 1 way not suitable for units with outer casing OCA - FAK 600	9079230	-	-
Fresh air kit 1 way not suitable for units with outer casing OCA - FAK 800	-	9079231	-
Fresh air kit 1 way not suitable for units with outer casing OCA - FAK 900	-	-	9079235
MD-600 Metal Grid	9079420	-	-
MD-800 Metal Grid	-	9079417	-

CONTROLS for YHKY (AC versions)	
Remote three speed control JWC-3V (1) (4)	9066642
Remote three speed control + electronic thermostat and manual S/W switch JWC-T (2)	9066630K
Automatic speed control with electronic thermostat and S/W switch - JWC-AU (to be used with JPF-AU and JP-AU only) (2) (3)	9066632K
Automatic remote control with electronic thermostat, S/W switch and liquid crystall display JTM-B (to be used with JPF-AU and JP-AU only) (2) (3)	9066331E
Automatic speed control with electronic thermostat to be mounted in the light wall box WM-503 (to be used with UP-503 only)	9066676
Electromechanical thermostat T2T (4) (5)	9060174
Power unit JPF-AU for JWC-AU and JTM-B remote controls, fitted on the unit	9066641
Power unit JP-AU for JWC-AU and JTM-B remote controls, not fitted on the unit	9066640
Power unit UP-503 for WM-503 remote control only, not fitted on the unit	9066677

Control accessories for all versions (supplied with separate packaging)	
Low temperature cut-out for control JWC-T	9053048
Low temperature cut-out for controls JWC-TQR, WM-503 and JP-AU power unit	3021090
T2 sensor to be used as Change-over for JP-AU power unit	9025310
Change-over 15-25 for control JWC-TQR	9053049
Receiver SEL2M	9079109

* For 4 pipes unit must consider both the valve for main coil than the valve for additional coil.

(1) Not to be used with valves. (2) Can be used with valves and/or low temperature cut-out.

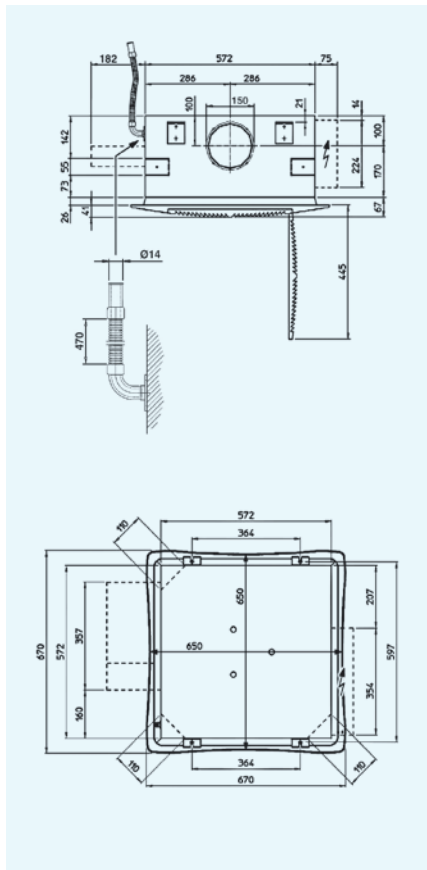
(3) Can be used with Change Over. (4) Not suitable with -E electric heater. (5) Not to be used with low temperature cut-out. (6) Receiver included.

Compatibility table / Codes

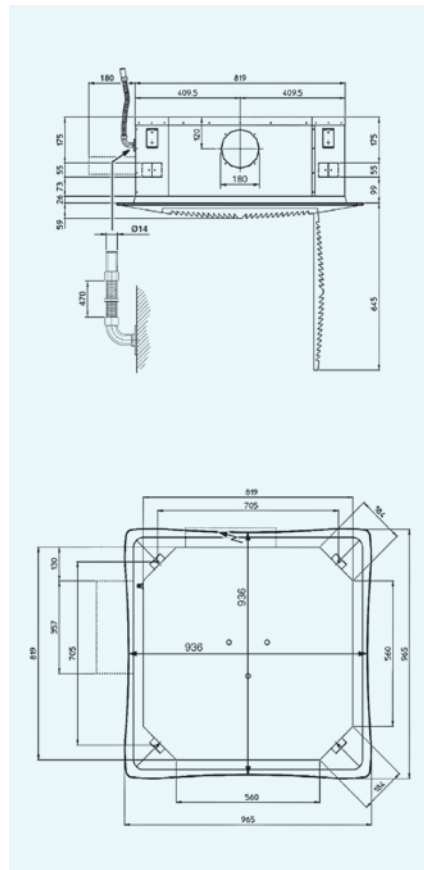
CONTROLS for YHKY-MP (AC versions)	YHKY 20	YHKY 25	YHKY 40	YHKY 50	YHKY 65	YHKY 95	YHKY 110	YHKY 125	YHKY 150
Wall control JTM-B				9066331E					-
Wire, receiver and IR remote control kit RCS-RT03				9079117					-
Infra red remote control RT-03				3021203					-
Wire and receiver kit RCS				9079116					-
Receiver for IR remote control for metal grid MD600 and MD800 RS		9066338				9066338			-
Multifunction control PSM-DI					3021293				
T2 sensor (to be used as change over or min.temp. sensor) T2					9025310				
CONTROLS for YHKY-ECM (ECM motor)									
Automatic speed control with electronic thermostat and S/W switch - JWC-AU (to be used with JPF-AU and JP-AU only) (2) (3)		9066632K				9066632K		9066632K	
Automatic remote control with electronic thermostat, S/W switch and liquid crystal display JTM-B (to be used with JPF-AU and JP-AU only) (2) (3)		9066331E				9066331E		9066331E	
WM-S-ECM Continuous fan speed control with electronic thermostat, summer/winter switch and LCD display					9066644				
Power unit JPF-AU for JWC-AU and JTM-B remote controls, fitted on the unit					9066641				
Power unit JP-AU for JWC-AU and JTM-B remote controls, not fitted on the unit					9066640				
Control accessories for all versions (supplied with separate packaging)									
Low temperature cut-out for JP-AU power unit					3021090				
T2 sensor to be used as Change-over for JP-AU power unit					9025310				
CONTROLS for YHKY-MP-ECM (ECM motor)									
Wall control JTM-B					9066331E				
Wire, receiver and IR remote control kit RCS-RT03				9079117					-
Infra red remote control RT-03					3021203				
Wire and receiver kit RCS					9079116				
Receiver for IR remote control for metal grid MD600 and MD800 RS		9066338							-
Multifunction control PSM-DI					3021293				
T2 sensor (to be used as change over or min.temp. sensor) T2					9025310				
Management system for a network of fan coils with MB electronic board									
Hardware / software supervisory system Net					9079118				
Router-S for NET (default) or for BMS systems no provided by YORK					3021290				
Relay output board SIOS					3021292				

Dimensions

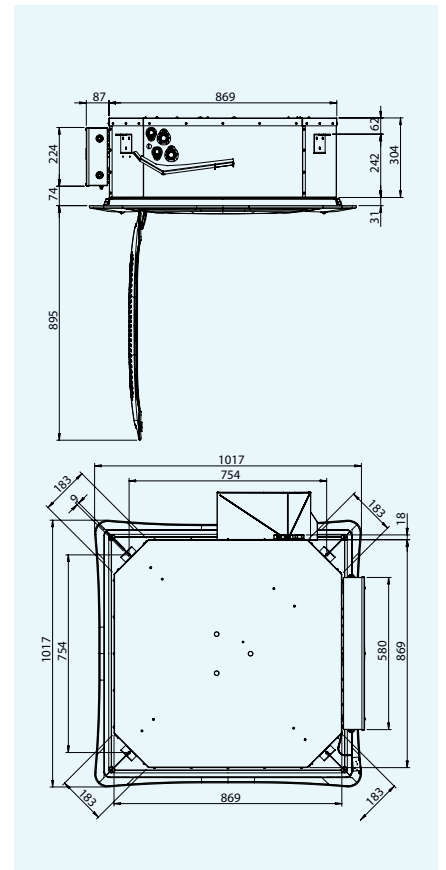
Sizes 20 to 50
(Version 600 x 600)



Sizes 65 to 110
(Version 800 x 800)



Sizes 125 to 150
(Version 870 x 870)



All dimensions in mm. Drawings not a scale.

YHVP & YHVP-ECM Hydro High Wall

2 pipe system
A range from 1.17 to 3.81 kW



JWC-T. Wired Control
Remote three speeds controller, electronic thermostat and Summer/Winter switch

JWC-AU. Wired Control
Automatic JWC-T



Electronic Infrared Control



TUC03+ Terminal unit controller
BacNET and N2 Metasys network compatible



Features

- Available with standard AC motors or low energy EC motors
- Wired control or infrared control
- Automatic air sweep (-T and -MB variants only)
- Choice of 2 or 3 way valves fitted
- Condensate collection tray
- Air filter included
- Heat exchange coil
- EUROVENT Certified



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

Wired control (YHVP)

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

Infrared control (YHVP-T)

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

Note: model shown is -T variant with automatic air sweep function

YHVP & YHVP-ECM Hydro High Wall

1.17 to 3.81 kW



Technical features

Model		YHVP 1	YHVP 2	YHVP 3	YHVP 4
Total cooling capacity [kW]	(1) max	1.85	2.16	3.00	3.76
	med	1.49	1.82	2.30	3.23
	min	1.23	1.42	1.87	2.60
Sensible cooling capacity [kW]	(1) max	1.44	1.73	2.24	2.93
	med	1.13	1.41	1.67	2.44
	min	0.91	1.06	1.33	1.91
Heating capacity [kW]	(2) max	2.18	2.62	3.23	4.28
	med	1.68	2.13	2.37	3.53
	min	1.34	1.58	1.89	2.73
Air flow [m ³ /h]	max	375	480	545	790
	med	270	365	375	610
	min	205	250	280	440
Sound power level [dB(A)]	max	48	53	48	57
	med	41	47	40	51
	min	35	39	35	43
Sound pressure level [dB(A)]	(3) max	39	44	39	48
	med	32	38	31	42
	min	26	30	26	34
Power supply [V-ph-Hz]		230V/1ph/50Hz			
Power input [W]	max	30	32	46	48
Absorbed current [A]	max	0.16	0.16	0.23	0.23
Dimensions	Height mm	322	322	322	322
	Width mm	880	880	1 185	1 185
	Depth mm	212	212	212	212

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

(2) Room temperature 20°C - Water inlet temperature: 45/40°C.

(3) The sound pressure levels are 9 dB(A) lower than the sound power levels and apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.

Technical features

Model		YHVP-ECM 1	YHVP-ECM 2	YHVP-ECM 3	YHVP-ECM 4
Total cooling capacity [kW]	(1) max 10v	1.98	2.24	3.27	3.72
	med 5v	1.57	1.86	2.52	3.03
	min 1v	1.16	1.46	1.82	2.33
Sensible cooling capacity [kW]	(1) max	1.56	1.81	2.48	2.89
	med	1.19	1.45	1.85	2.27
	min	0.85	1.09	1.30	1.69
Heating capacity [kW]	(2) max	2.35	2.74	3.57	4.20
	med	1.78	2.18	2.63	3.26
	min	1.26	1.63	1.83	2.40
Air flow [m ³ /h]	max	415	510	620	770
	med	290	375	420	550
	min	190	260	270	375
Sound power level [dB(A)]	max	52	55	53	57
	med	46	47	45	49
	min	35	40	37	43
Sound pressure level [dB(A)]	(3) max	43	46	44	48
	med	37	38	36	40
	min	26	31	28	34
Power supply [V-ph-Hz]		230V/1ph/50Hz			
Power input [W]	max	15	21	20	30
Absorbed current [A]	max	0.14	0.19	0.18	0.26
Dimensions	Height mm	322	322	322	322
	Width mm	880	880	1 185	1 185
	Depth mm	212	212	212	212

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

(2) Room temperature 20°C - Water inlet temperature: 45/40°C.

(3) The sound pressure levels are 9 dB(A) lower than the sound power levels and apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.



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Codes high wall fan coil units YHVP

Unit without IR control without valve	YHVP 1	YHVP 2	YHVP 3	YHVP 4
Unit codes	0025001K	0025002K	0025003K	0025004K
Unit without IR control with 2 way valve	YHVP-2V 1	YHVP-2V 2	YHVP-2V 3	YHVP-2V 4
Unit codes	0025101K	0025102K	0025103K	0025104K
Unit without IR control with 3 way valve	YHVP-3V 1	YHVP-3V 2	YHVP-3V 3	YHVP-3V 4
Unit codes	0025201K	0025202K	0025203K	0025204K
Unit with IR control without valve	YHVP-T 1	YHVP-T 2	YHVP-T 3	YHVP-T 4
Unit codes	0025021K	0025022K	0025023K	0025024K
Unit with IR control with 2 way valve	YHVP-T-2V 1	YHVP-T-2V 2	YHVP-T-2V 3	YHVP-T-2V 4
Unit codes	0025121K	0025122K	0025123K	0025124K
Unit with IR control with 3 way valve	YHVP-T-3V 1	YHVP-T-3V 2	YHVP-T-3V 3	YHVP-T-3V 4
Unit codes	0025221K	0025222K	0025223K	0025224K
Unit with MB board without valve	YHVP-MB 1	YHVP-MB 2	YHVP-MB 3	YHVP-MB 4
Unit codes	0025011K	0025012K	0025013K	0025014K
Unit with MB board with 2 way valve	YHVP-MB-2V 1	YHVP-MB-2V 2	YHVP-MB-2V 3	YHVP-MB-2V 4
Unit codes	0025111K	0025112K	0025113K	0025114K
Unit with MB board with 3 way valve	YHVP-MB-3V 1	YHVP-MB-3V 2	YHVP-MB-3V 3	YHVP-MB-3V 4
Unit codes	0025211K	0025212K	0025213K	0025214K
Unit without IR control without valve with electrical coil	YHVP-E 1	YHVP-E 2	YHVP-E 3	YHVP-E 4
Unit codes	0025031K	0025032K	0025033K	0025034K
Unit without IR control with 2 way valve with electrical coil	YHVP-E-2V 1	YHVP-E-2V 2	YHVP-E-2V 3	YHVP-E-2V 4
Unit codes	0025131K	0025132K	0025133K	0025134K
Unit without IR control with 3 way valve with electrical coil	YHVP-E-3V 1	YHVP-E-3V 2	YHVP-E-3V 3	YHVP-E-3V 4
Unit codes	0025231K	0025232K	0025233K	0025234K
Unit with IR control without valve with electrical coil	YHVP-T-E 1	YHVP-T-E 2	YHVP-T-E 3	YHVP-T-E 4
Unit codes	0025041K	0025042K	0025043K	0025044K
Unit with IR control with 2 way valve with electrical coil	YHVP-T-E-2V 1	YHVP-T-E-2V 2	YHVP-T-E-2V 3	YHVP-T-E-2V 4
Unit codes	0025141K	0025142K	0025143K	0025144K
Unit with IR control with 3 way valve with electrical coil	YHVP-T-E-3V 1	YHVP-T-E-3V 2	YHVP-T-E-3V 3	YHVP-T-E-3V 4
Unit codes	0025241K	0025242K	0025243K	0025244K
Unit with MB board without valve with electrical coil	YHVP-MB-E 1	YHVP-MB-E 2	YHVP-MB-E 3	YHVP-MB-E 4
Unit codes	0025051K	0025052K	0025053K	0025054K
Unit with MB board with 2 way valve with electrical coil	YHVP-MB-E-2V 1	YHVP-MB-E-2V 2	YHVP-MB-E-2V 3	YHVP-MB-E-2V 4
Unit codes	0025151K	0025152K	0025153K	0025154K
Unit with MB board with 3 way valve with electrical coil	YHVP-MB-E-3V 1	YHVP-MB-E-3V 2	YHVP-MB-E-3V 3	YHVP-MB-E-3V 4
Unit codes	0025251K	0025252K	0025253K	0025254K

Controls

JWM-3V Wall control	9066642
JWC-T Wall control	9066630K
JWC-TQR Wall control	9066631K
T2T Wall control	9060174
JTM-B Wall control (to be used with MB board only)	9066331E
RT03 infra-red remote control with receiver supplied with separate packaging (to be used with MB board only)	9025301
RT03 infra-red remote control supplied with separate packaging (to be used with MB board only)	3021203
Receiver for RT03 infra-red remote control supplied with separate packaging (to be used with MB board only)	9025300
PSM-DI Multifunction control (to be used with MB board only)	3021293
SEL-CVP Speed switch for controls: JWC-T and JWC-TQR	9025302
Electronic control accessories	
NTC low temperature cut-out thermostat for control JWC-TQR	3021090
TMM low temperature cut-out thermostat for control JWC-T	9053048
Change-Over CH 15-25 for control JWC-TQR	9053049
T2 Sensor (to be used as change-over or low temperature cut-out - for MB only)	9025310
Management system for a network of fan coils with MB electronic board	
Hardware / software supervisory system Net	9079118
Router-S for NET (default) or for BMS systems no provided by YORK	3021290
Relay output board SIOS	3021292

Codes high wall fan coil units YHVP-ECM

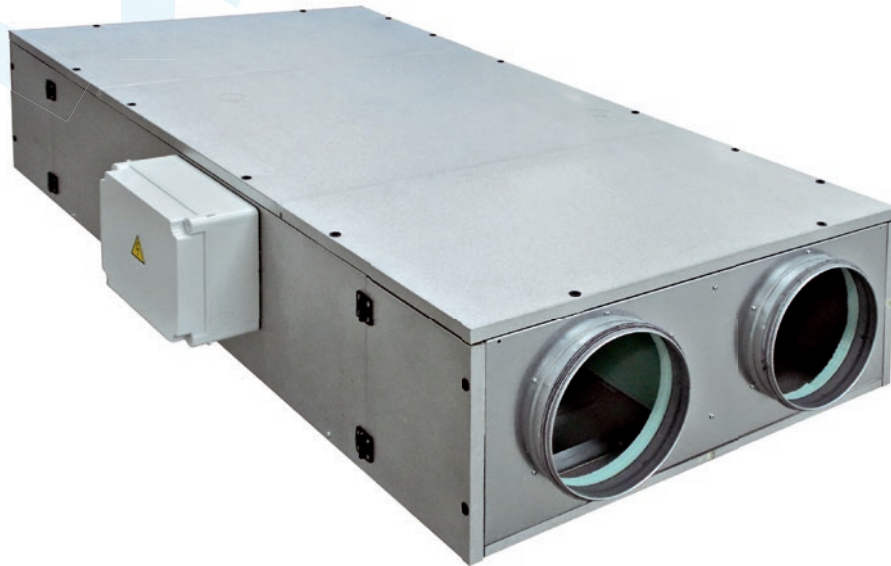
Unit without IR control without valve	YHVP-ECM 1	YHVP-ECM 2	YHVP-ECM 3	YHVP-ECM 4
Unit codes	0025501K	0025502K	0025503K	0025504K
Unit without IR control with 2 way valve	YHVP-ECM-2V 1	YHVP-ECM-2V 2	YHVP-ECM-2V 3	YHVP-ECM-2V 4
Unit codes	0025601K	0025602K	0025603K	0025604K
Unit without IR control with 3 way valve	YHVP-ECM-3V 1	YHVP-ECM-3V 2	YHVP-ECM-3V 3	YHVP-ECM-3V 4
Unit codes	0025701K	0025702K	0025703K	0025704K
Unit with IR control without valve	YHVP-ECM-T 1	YHVP-ECM-T 2	YHVP-ECM-T 3	YHVP-ECM-T 4
Unit codes	0025521K	0025522K	0025523K	0025524K
Unit with IR control with 2 way valve	YHVP-ECM-T-2V 1	YHVP-ECM-T-2V 2	YHVP-ECM-T-2V 3	YHVP-ECM-T-2V 4
Unit codes	0025621K	0025622K	0025623K	0025624K
Unit with IR control with 3 way valve	YHVP-ECM-T-3V 1	YHVP-ECM-T-3V 2	YHVP-ECM-T-3V 3	YHVP-ECM-T-3V 4
Unit codes	0025721K	0025722K	0025723K	0025724K
Unit with MB board without valve	YHVP-ECM-MB 1	YHVP-ECM-MB 2	YHVP-ECM-MB 3	YHVP-ECM-MB 4
Unit codes	0025511K	0025512K	0025513K	0025514K
Unit with MB board with 2 way valve	YHVP-ECM-MB-2V 1	YHVP-ECM-MB-2V 2	YHVP-ECM-MB-2V 3	YHVP-ECM-MB-2V 4
Unit codes	0025611K	0025612K	0025613K	0025614K
Unit with MB board with 3 way valve	YHVP-ECM-MB-3V 1	YHVP-ECM-MB-3V 2	YHVP-ECM-MB-3V 3	YHVP-ECM-MB-3V 4
Unit codes	0025711K	0025712K	0025713K	0025714K
Unit without IR control without valve with electrical coil	YHVP-ECM-E 1	YHVP-ECM-E 2	YHVP-ECM-E 3	YHVP-ECM-E 4
Unit codes	0025531K	0025532K	0025533K	0025534K
Unit without IR control with 2 way valve with electrical coil	YHVP-ECM-E-2V 1	YHVP-ECM-E-2V 2	YHVP-ECM-E-2V 3	YHVP-ECM-E-2V 4
Unit codes	0025631K	0025632K	0025633K	0025634K
Unit without IR control with 3 way valve with electrical coil	YHVP-ECM-E-3V 1	YHVP-ECM-E-3V 2	YHVP-ECM-E-3V 3	YHVP-ECM-E-3V 4
Unit codes	0025731K	0025732K	0025733K	0025734K
Unit with IR control without valve with electrical coil	YHVP-ECM-T-E 1	YHVP-ECM-T-E 2	YHVP-ECM-T-E 3	YHVP-ECM-T-E 4
Unit codes	0025541K	0025542K	0025543K	0025544K
Unit with IR control with 2 way valve with electrical coil	YHVP-ECM-T-E-2V 1	YHVP-ECM-T-E-2V 2	YHVP-ECM-T-E-2V 3	YHVP-ECM-T-E-2V 4
Unit codes	0025641K	0025642K	0025643K	0025644K
Unit with IR control with 3 way valve with electrical coil	YHVP-ECM-T-E-3V 1	YHVP-ECM-T-E-3V 2	YHVP-ECM-T-E-3V 3	YHVP-ECM-T-E-3V 4
Unit codes	0025741K	0025742K	0025743K	0025744K
Unit with MB board without valve with electrical coil	YHVP-ECM-MB-E 1	YHVP-ECM-MB-E 2	YHVP-ECM-MB-E 3	YHVP-ECM-MB-E 4
Unit codes	0025551K	0025552K	0025553K	0025554K
Unit with MB board with 2 way valve with electrical coil	YHVP-ECM-MB-E-2V 1	YHVP-ECM-MB-E-2V 2	YHVP-ECM-MB-E-2V 3	YHVP-ECM-MB-E-2V 4
Unit codes	0025651K	0025652K	0025653K	0025654K
Unit with MB board with 3 way valve with electrical coil	YHVP-ECM-MB-E-3V 1	YHVP-ECM-MB-E-3V 2	YHVP-ECM-MB-E-3V 3	YHVP-ECM-MB-E-3V 4
Unit codes	0025751K	0025752K	0025753K	0025754K

Controls

WM-S-ECM continuous fan speed control with S/W switch and liquid crystal display	9066644
JTM-B Wall control (to be used with MB board only)	9066331E
RT03 infra-red remote control with receiver supplied with separate packaging (to be used with MB board only)	9025301
RT03 infra-red remote control supplied with separate packaging (to be used with MB board only)	3021203
Receiver for RT03 infra-red remote control supplied with separate packaging (to be used with MB board only)	9025300
PSM-DI Multifunction control (to be used with MB board only)	3021293
Electronic control accessories	
T2 Sensor (to be used as change-over or low temperature cut-out - for MB only)	9025310
Management system for a network of fan coils with MB electronic board	
Hardware / software supervisory system Net	9079118
Router-S for NET (default) or for BMS systems no provided by YORK	3021290
Relay output board SIOS	3021292

YEPR Heat Recovery Units

A complete range from 300 up to 2,600 m³/h



Introduction

The high-efficiency heat recovery units of the **YEPR** series have been designed to ensure energy savings in ventilation systems of public and private premises such as bars, restaurants, offices, shops, etc., making it possible to recover heat from the exhaust air and transferring it to the air released into the room.

The heat exchange between the exhaust air and the intake air takes place through a static heat exchanger with countercurrent flow, sized to obtain a heat recovery up to 94%.

The **YEPR** series includes 4 sizes suitable for horizontal installation and covers a range of flow rates from 300 to 2600 m³/h. The units are available both in the version for installation on ceilings and floors.

Construction features

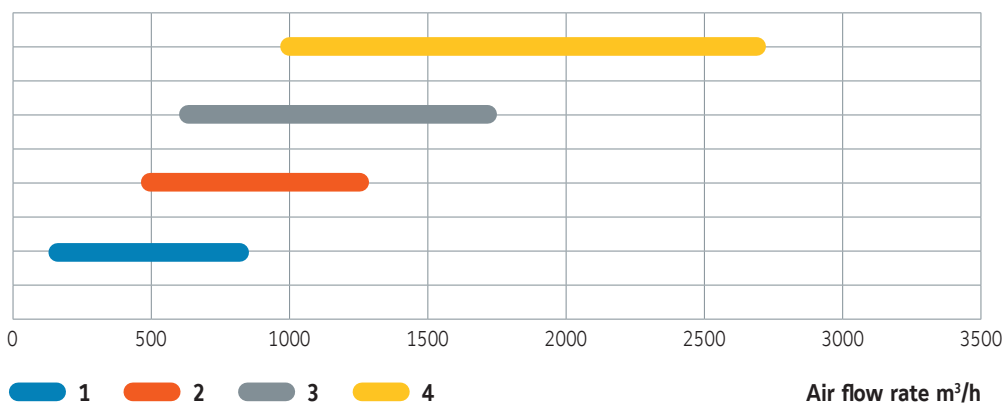
The **YEPR** are supplied in 2 versions:

- for ceiling installation (**YEPR 1-C, YEPR 2-C, YEPR 3-C, YEPR 4-C**)
- for floor installation (**YEPR 1-F, YEPR 2-F, YEPR 3-F, YEPR 4-F**)

and they are equipped with centrifugal fans, featuring backward-inclined blades, and a continuous modulation electronic motor which ensure variable flow control, so as to reduce power consumption to the minimum necessary.

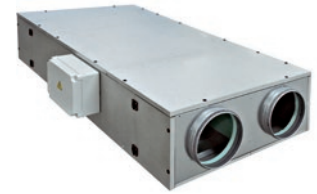
The YEPR units are ERP 2018 and therefore comply with the regulatory requirements of the European Ecodesign Directive (EU Regulation 1253/14). The checks concern both the energy performance relating to heat recovery and the intrinsic energy consumption parameter SFP_{int} in the nominal conditions declared by the manufacturer.

YEPR range



YEPR Heat Recovery Units

YEPR 1 to 4



Technical features

Model		YEPR 1	YEPR 2	YEPR 3	YEPR 4
Maximum supply and return air flow rate	m³/h	720	1150	1700	2600
	m³/h	0.20	0.32	0.47	0.72
Supply and return rated available static pressure	Pa	170	220	250	250
Minimum supply and return air flow rate	m³/h	270	300	600	690
Thermal efficiency EU regulation 1253/14 (1)	%	80	80	80	85
Total thermal output recovered (1)	kW	3.9	6.2	9.1	14.8
Maximum recovery efficiency (2)	%	90	90	90	94
Total thermal output recovered (2)	kW	6.5	10.5	15.4	24.5
Total number of fans	-	2	2	2	2
Rated absorbed electrical power (3)	W	330	770	1060	1460
Maximum total absorbed current (3)	A	2.8	3.4	4.7	6.5
Unit power supply (3)	V-Ph	230-1 + N / 50Hz	230-1 + N / 50Hz	230-1 + N / 50Hz	230-1 + N / 50Hz
Protection rating with machine installed	-	IP20	IP20	IP20	IP20
Unit weight	kg	90	140	170	320

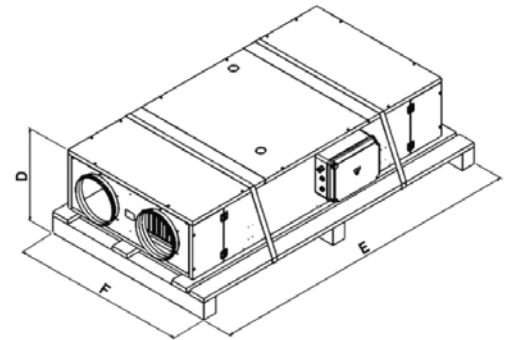
1) Air conditions: EAT = 5°C and t_i = 25°C, no condensate

2) Air conditions: EAT = -10°C and t_i = 20°C, RH_i 50% RH

3) Basic version

Overall dimensions of the packaged unit

Model		YEPR 1	YEPR 2	YEPR 3	YEPR 4
Dimensions	D mm	469	510	595	735
	E mm	1845	1845	2245	2345
	F mm	1030	1030	1430	1880
Weight	kg	119	165	198	370



Thermal performances - Internal conditions: t_i = 20°C - RH_i = 50%

Model	EAT: 10°C				EAT: 5°C			EAT: 0°C			EAT: -5°C			EAT: -10°C		
	Q _v m³/h	P _h kW	ε _t %	m _w kg/h	P _h kW	ε _t %	m _w kg/h	P _h kW	ε _t %	m _w kg/h	P _h kW	ε _t %	m _w kg/h	P _h kW	ε _t %	m _w kg/h
YEPR 1	100	0.30	90.4	0.00	0.46	90.5	0.15	0.62	91.7	0.26	0.79	94.3	0.36	0.97	96.5	0.44
	150	0.44	88.2	0.00	0.67	88.3	0.21	0.90	89.8	0.38	1.17	92.7	0.53	1.44	95.4	0.65
	300	0.85	84.6	0.00	1.28	84.7	0.42	1.74	86.4	0.72	2.26	90.0	1.03	2.81	93.2	1.25
	450	1.25	82.6	0.00	1.87	82.7	0.62	2.55	84.5	1.09	3.34	88.4	1.52	4.16	91.9	1.85
	600	1.63	81.2	0.00	2.45	81.3	0.81	3.35	83.2	1.43	4.39	87.3	2.01	5.49	90.9	2.47
YEPR 2	750	2.01	80.1	0.00	3.03	80.2	0.96	4.13	82.2	1.71	5.43	86.4	2.43	6.80	90.1	3.01
	200	0.60	89.4	0.00	0.90	89.5	0.29	1.22	90.8	0.51	1.57	93.5	0.70	1.93	96.0	0.86
	250	0.74	88.2	0.00	1.11	88.3	0.36	1.50	89.7	0.63	1.94	92.7	0.88	2.40	95.3	1.08
	500	1.42	84.6	0.00	2.13	84.7	0.69	2.90	86.4	1.20	3.77	90.0	1.72	4.69	93.2	2.08
	750	2.08	82.5	0.00	3.12	82.6	1.04	4.25	84.5	1.81	5.56	88.4	2.52	6.93	91.8	3.09
YEPR 3	1000	2.72	81.1	0.00	4.08	81.2	1.35	5.57	83.1	2.38	7.31	87.2	3.35	9.14	90.8	4.12
	1250	3.35	80.0	0.00	5.04	80.1	1.68	6.88	82.1	2.85	9.04	86.3	4.05	11.32	90.0	5.00
	300	0.89	88.4	0.00	1.34	88.5	0.43	1.81	89.9	0.76	2.34	92.9	1.06	2.88	95.5	1.31
	400	1.17	86.9	0.00	1.75	87.0	0.56	2.38	88.5	1.00	3.08	91.8	1.37	3.81	94.6	1.69
	800	2.24	83.4	0.00	3.36	83.5	1.10	4.57	85.2	1.91	5.97	89.0	2.66	7.44	92.4	3.36
YEPR 4	1200	3.27	81.4	0.00	4.92	81.5	1.64	6.71	83.4	2.88	8.79	87.4	3.90	10.99	91.0	4.97
	1650	4.42	79.8	0.00	6.63	79.9	2.20	9.06	81.9	3.88	11.91	86.1	5.31	14.92	89.9	6.57
	2000	5.29	78.9	0.00	7.95	79.0	2.53	10.87	81.0	4.54	14.31	85.4	6.49	17.95	89.2	8.05
	400	1.28	95.3	0.00	1.92	95.4	0.63	2.58	96.1	1.10	3.27	97.5	1.50	3.97	98.7	1.75
	550	1.72	93.5	0.00	2.59	93.6	0.84	3.49	94.5	1.49	4.44	96.4	1.98	5.42	98.0	2.43
YEPR 4	1100	3.31	89.7	0.00	4.97	89.8	1.61	6.72	91.1	2.82	8.65	93.8	3.89	10.64	96.1	4.74
	1700	4.98	87.4	0.00	7.48	87.5	2.45	10.14	89.0	4.34	13.13	92.1	5.87	16.23	94.9	7.25
	2300	6.62	85.8	0.00	9.94	85.9	3.22	13.50	87.5	5.77	17.53	90.9	7.90	21.74	93.9	9.83
	2900	8.23	84.6	0.00	12.36	84.7	4.02	16.81	86.4	6.97	21.88	90.0	9.99	27.19	93.2	12.09

t_i = Internal air temperature
 RH_i = Internal relative humidity
 EAT = External air temperature
 Q_v = Intake air flow rate
 Q_r = Return air flow rate
 P_h = Thermal recovery on the intake flow

ε_t = Recovery efficiency with balanced flow rates
 m_w = Condensate production
 b = Unbalance percentage
 ε_t* = Recovery efficiency with unbalanced flow rates
 F_r = Correction coefficient according to EAT variation
 F_Q = Correction coefficient according to Q_v variation

$$\epsilon_t = \frac{2980 P_h}{Q_v (t_i - TAE)}$$

$$b = Q_r / Q_v$$

$$\epsilon_t^* = \epsilon_t b F_r F_Q$$



Valves and Actuators

VALVES
ACTUATORS

VG3000 globe valves series for terminal units

DN10...25, PN16

All our terminal units can be supplied with VG3000 series valves and actuators factory fitted.

The VG3000 brass valve series is primarily designed to regulate the flow of water in response to the demand of a controller in zone and terminal unit applications such as fan coils, cassettes, chilled ceilings and small heating/cooling systems. The valves are available in 2-way, 3-way mixing and 3-way mixing with built-in bypass configuration with different type of valve threads.

The globe valve series has been designed to shift the boundaries to the next level.

Superior flow rate, inherent linear flow characteristic and close-off pressure up to 6 bar make the VG3000 enable to cover a wide range of applications and customer needs.



Designed without compromises

The VG3000 are suitable for Johnson Controls terminal unit actuators (VA-7480 / VA-7080 / VA-7090).

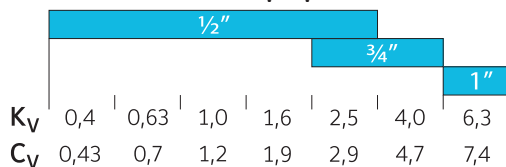
The compact design of the valve makes the VG3000 the best option for replacement without the need to change piping.

Trim 100% made in brass and stainless steel ensure superior product quality by reducing customer warranty and maintenance cost.

Features

- 2-way PDTTC (NO) with 6 bar close off pressure
- Extend range of KVS (0.4...6.3)
- Forged brass body, stainless steel stem and spring
- Actuator can be field installed after piping
- Commissioning cap available as accessory (VG3000-CAP)

Wide Range of K_v/C_v



Linear Inherent Flow Characteristic. EQ% behavior when mounted with VA-7480 Motorized Terminal Unit Actuator



High Close-off pressure model up to 6 bar to cover wider range of applications



Leakage rate Class IV for ANSI FCI 70-2 and EN 60534-4:2006, minimize energy waste

VA-7080 and VA-7480 Terminal Unit Valve Actuators

Thermal ON/OFF Control

Motorized floating and proportional control

In HVAC applications the VA-7080 series terminal unit valve actuators provide ON/OFF and DAT control and the VA-7480 series provides floating or proportional control.

The compact design of these actuators make them suitable for installations in confined spaces, such as fan-coil applications.

Due to the innovative concept of different strokes setting the VA-7480 can be installed over most of the terminal unit valve in the market.



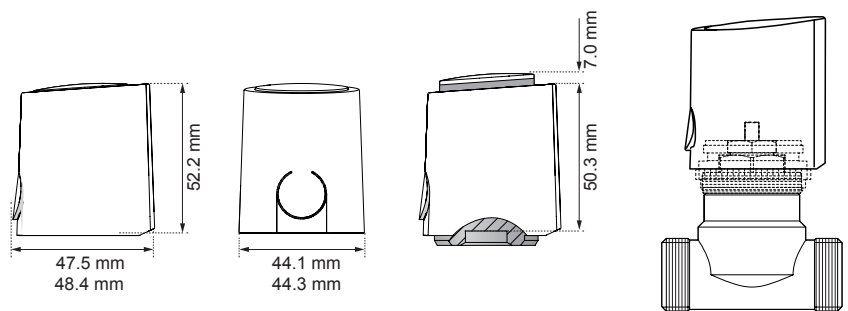
VA-7080



VA-7480

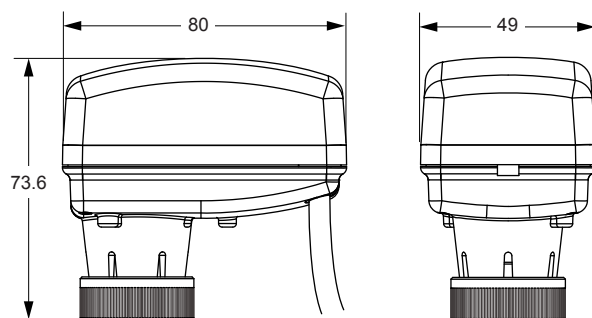
VA-7080 features

- 24 VAC/DC and 230 VAC power supply
- ON/OFF or DAT Controls
- NC version (stem retracts when energized)
- NO version (stem extends when energized)
- Easy mounting solution
- Factory mounted cable 1.5 m
- Models with auxiliary switch



VA-7480 features

- 24 VAC/VDC and 230 VAC power supply
- Floating and proportional control
- Threaded nut M28x1.5 and M30x1.5
- Auto stroke detection (NEW!)
- Configurable stroke
- Configurable to direct and reverse action
- Configurable analog inputs
- Max mechanical stroke 6.3 mm





Smart Control Solutions

VERASYS™ CONFIGURABLE BUILDING
CONTROLS SYSTEM FOR SMARTER BUILDINGS
CONTROL PRODUCTS



Configurable building controls system for smarter buildings

For Light Commercial Building Controls

Enterprises have more options to reduce costs and increase control of HVAC, refrigeration and lighting equipment. Verasys™ is a new plug-and-play control system with less complexity and more capabilities. It streamlines installation, commissioning, and servicing, and provides access to critical data – when you need it and where you need it – to help facilities perform at peak levels.

Verasys provides a simple user experience with configurable controllers (without tools), creating the first plug-and-play experience integrating HVACR equipment and controls for a certified system that’s compliant for energy efficient operations.

Making buildings smarter by optimizing equipment.

The Verasys control system leverages smart equipment technology from any manufacturer. Verasys is a straightforward, easy way to control and optimize single-site and multi-site enterprises. All mechanical equipment seamlessly connect to it and self-identify without requiring any special programming tools. As a result, you can take advantage of a new level of insight into building operations, and provide facilities that better serve occupants.

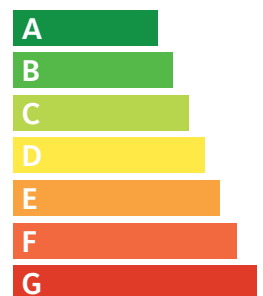


Smart, integrated control. Simplified and supported.

Verasys gives users remote access over a secure internet connection. Plus, optional fault detection and diagnostics deliver alarm notifications immediately via email or text, and user-friendly graphics provide easy access to critical facility information to help minimize the risk of unplanned downtime and costly repairs. You can take advantage of predictive technologies solutions that deliver the quality and value your enterprise requires.

Enhanced energy efficient control for smaller commercial buildings allow for an even higher energy class according to the EN15232. The advantage is that a facility owner can move from an average class D to a class A. The key to this efficiency is demand control, where the consumer spaces/rooms send the energy demands signals/requirements to the heating/cooling equipment. Matching the demand side and the supply side guarantees an energy efficient system overall.

Whether it’s one site, or one thousand, Verasys provides an advanced level of control flexibility, including scheduling, alarming, setpoints, custom trending, and more. It communicates using BACnet® MSTP, so Verasys is expandable to any BACnet® compliant system. And it works with third-party package equipment for greater application flexibility and to protect existing investments.



Leveraging Smart Equipment from Johnson Controls.

Smart Equipment from Johnson Controls identifies embedded equipment that has advanced technology and smarts already embedded. Verasys takes full advantage of our Smart Equipment technology. It provides real-time performance data. No programming or commissioning tools. No engineering required. Just plug-and-play.

The primary benefit of Smart Equipment is that it already has controls embedded by the manufacturer. This means it can connect seamlessly to controls systems like Verasys. It uses on-board controls to support data analytics, including fault detection, to support proactive maintenance and minimize downtime. Plus, control products/devices that are capable of controlling equipment without a supervisory controller provide a user interface experience. This allows it to self-discover and/or communicate with other Smart Equipment. In short, Smart Equipment helps maximize control for greater efficiency, extended equipment life and reduced operating costs.

To see how you can take advantage of Smart Equipment, visit www.getsmartequipment.com.



Built-in comfort and efficiency.

Verasys helps enable a smarter building which means more comfort, productivity and efficiency. Verasys connects you to data streams from smart controls in rooftop units, chillers, heat pumps, fan coils, zone dampers, refrigeration systems, lighting panels and more. Data can be accessed anywhere, at any time, from any mobile device. This unprecedented, real-time access to critical information ensures energy efficiency and lower operating costs throughout the building's lifecycle so you can identify issues before they result in unplanned downtime. This extends equipment life.

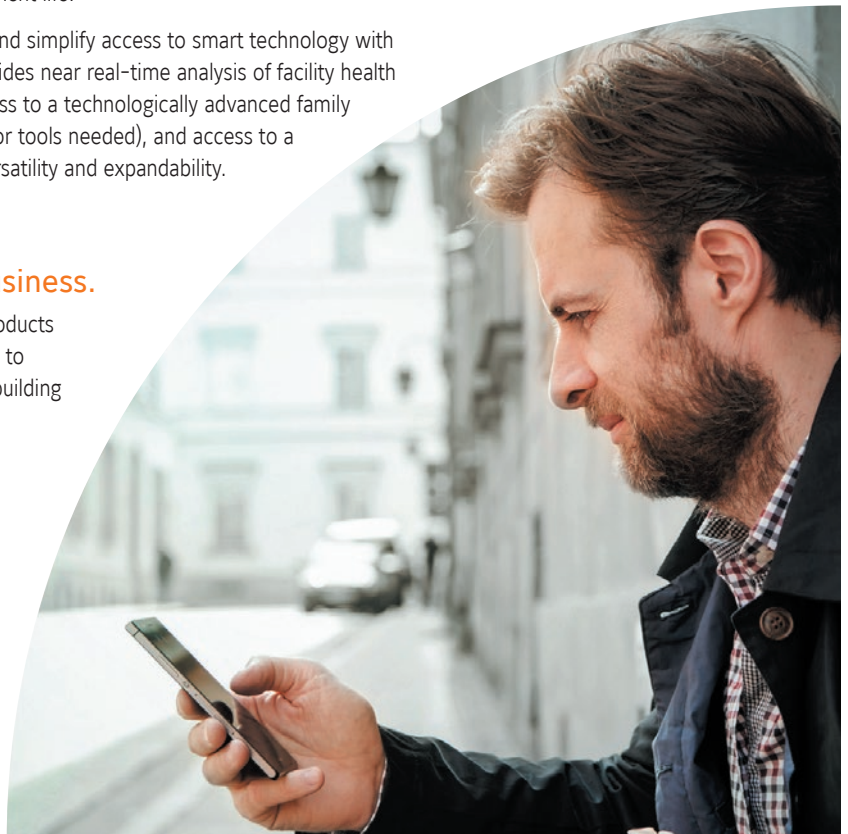
You also have the opportunity to save operating costs and simplify access to smart technology with Verasys, a complete buildings controls system that provides near real-time analysis of facility health and performance for optimal uptime. This includes access to a technologically advanced family of controllers which are configurable (no programming or tools needed), and access to a library with a vast array of applications that provides versatility and expandability.

A smarter way to transform your business.

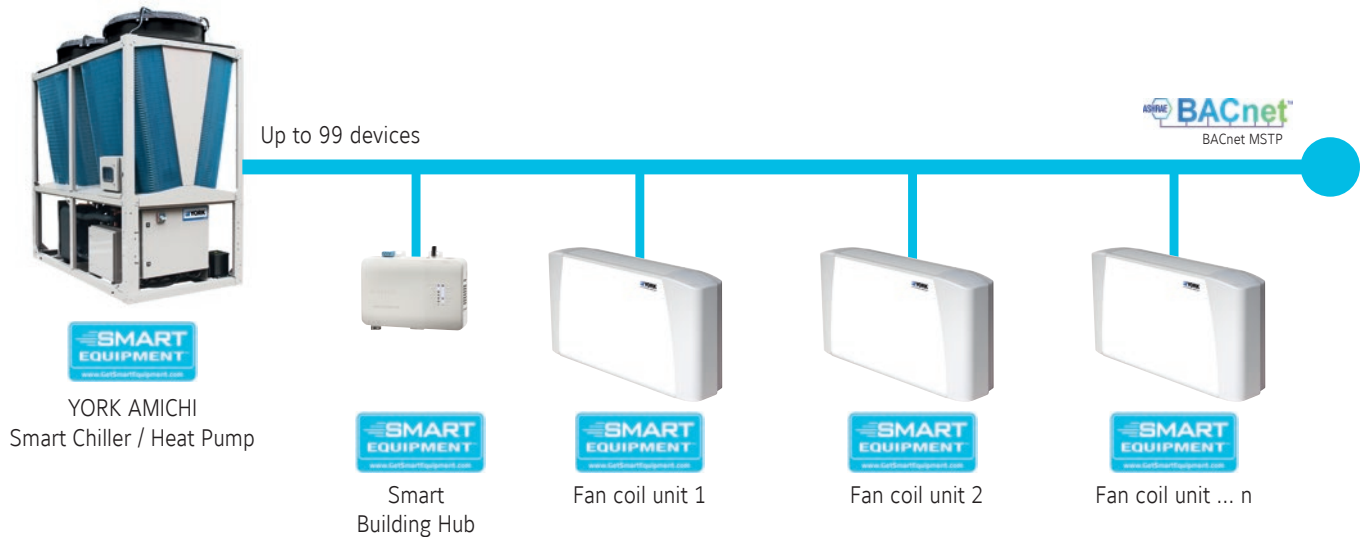
Verasys provides the means, capabilities and reliable products to deliver leading-edge, end-to-end control technology to building owners. You get the best value and optimized building environments that support enterprise needs to increase productivity, efficiency, and maximize energy and cost savings.

Plug and play control system to manage smart buildings.

In a single building, or across an entire enterprise, Verasys offers a new kind of plug-and-play controls solution. Through an advanced yet intuitive user interface, it delivers a higher level of building control intelligence that optimizes building ecosystems, resulting in a building that better serves its occupants.



Installation solutions



Single & Multizone Application Solution 1

Site Description

- 2 or 4 pipe system
- 1 Zone
- n Fan Coil Units

Bill of Material

- Smart Building Hub: 1 x LC-SBH200-0
- For each fan coil unit:
 - Terminal Unit Controller: n x TUC0312-2
 - Room Module (LCD with Fan Speed Override) n x RS-7080-0002
or as an option Touchscreen n x TRM-0312-0W

Single & Multizone Application Solution 2

Site Description

- 2 or 4 pipe system
- Zone 1: n Fan Coil Units
- Zone 2: n Fan Coil Units

Bill of Material

- Smart Building Hub: 1 x LC-SBH200-0
- For each fan coil unit:
 - Terminal Unit Controller (includes T. sensor and motion sensor) n x TEC3611-00-000 ON/OFF and Floating
or n x TEC3621-00-000 Proportional
- * 24AC power supply needed as part of the electrical installation

TEC3000 Electric Fan Coil Thermostat

Touch Screen Smart Thermostat

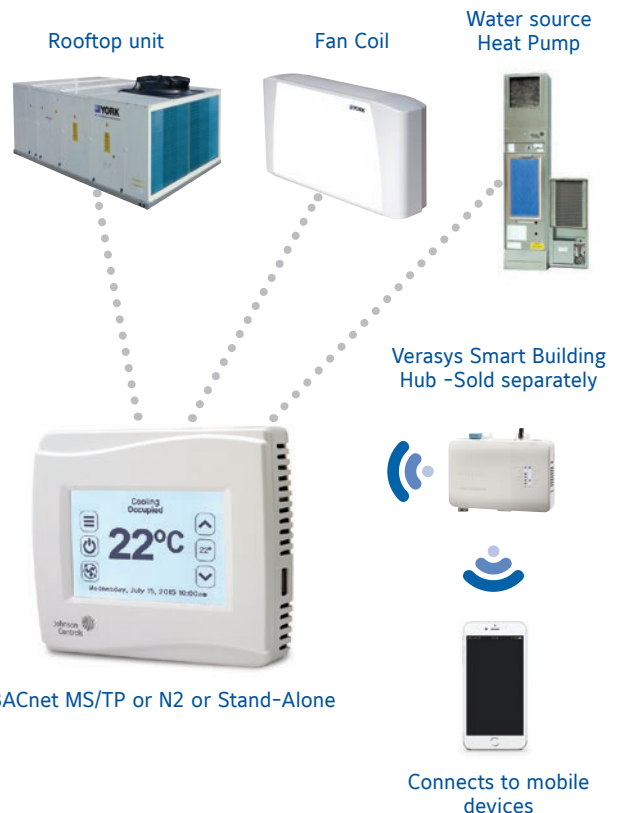
Once again, a thermostat designed by Johnson Controls delivers an innovative approach to controlling comfort and efficiency.

The TEC3000 Series delivers advanced functionality and easy access to powerful control and networked solutions.

The intuitive 4,2" touchscreen provides fast and easy configuration and real-time control status.

Models with the built-in occupancy sensor can achieve up to 30% energy savings in high-energy usage commercial buildings, such as schools and hotels.

- Ideal for rooftop, fan coil and heat pump equipment
- Stand alone or networked solution
- Programmable scheduling for savings and comfort
- Clear touch screen password protected



RS-7000 Electric Room Sensor

Analog Sensors

NEW



The Flush Mount RS-7000 Analog Sensors Series with LCD is an electronic room command module designed to work with Johnson Controls® controllers in heating, ventilating and air conditioning (HVAC) systems. Models in this series monitor the zone temperature and humidity, and transmit data to a field controller using up to three analog outputs.

RS-7060-0000 can toggle between Temperature and RH on the display, depending on desired default display.

The temperature only model RS-7080-0002 includes Fan mode push button to set the desired fan speed (OFF-LOW-MED-HIGH-AUTO).

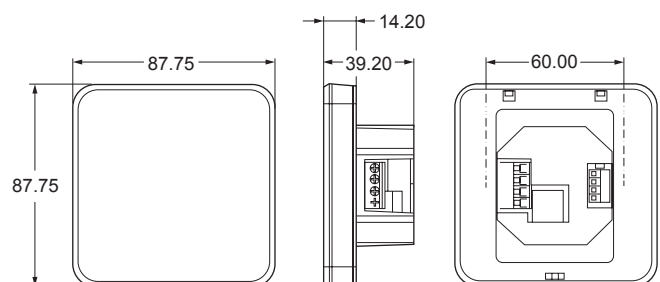
Both models with display have occupancy button, which allows user to select when the zone is occupied, to set the comfort mode only when is necessary.

The model without display RS-7040-0000 provides a combined measurement of the zone temperature and humidity.

Installation is quite easy, given the possibility to configure the Setpoint Mode and temperature limits during installation.

Features

- Temperature sensor with combined humidity for best comfort - RS-7000 range offers fan speed control or combined humidity sensor for best comfort.
- Configurable options reduce stock need - the setpoint mode adjust or warmer/cooler can be configured during the installation.
- Large backlit display in a low profile enclosure - provides a modern looking and clear user interface.
- Customizable display helps to meet building policy - RS-7000 can show actual values or setpoint only.
- Keypad lockable in public space - the RS-7000 sensor buttons can be locked against misuse in public space.
- Flush mount installation - suitable for various installation boxes, offers low profile enclosure.



Dimensions in mm

TUC03 Plus Terminal Unit Controller

Configurable Field Controllers

The TUC03 Plus configurable Terminal Unit Controller is specifically designed to provide an improved BACnet® integration.

It allows the direct digital control of terminal unit applications with heating and/or cooling coils, an electric heater and a three-speed or variable speed fan. These applications include close control units, fan coil units, unit ventilators and chilling or heating ceiling beam installations.

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.

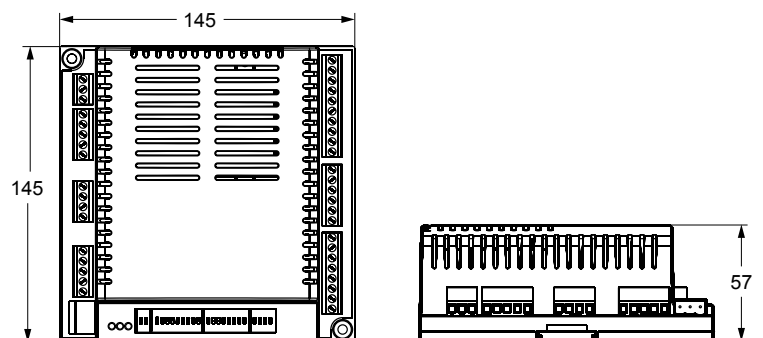
The controller is designed for field installation in a panel or enclosure or for mounting by original equipment manufacturers (OEMs) on DIN-rail or directly on a surface.

The space comfort set point, occupancy mode and fan speed may be adjusted from a wide range of room sensor modules with options for a digital display. The MS/TP field bus is available to enable the controller to be integrated into a BACnet network of a building automation system.



Features

- **Improved Performances** – TUC03 Plus BACnet Change-of-Value and Segmentation features improve the overall system communication performances allowing to reduce the number of components required to manage the whole network and therefore saving on the total installed costs.
- **Enhanced User Experience** – TUC03 Plus BACnet State Text features enable a quicker, simpler but enhanced user experience lowering engineers effort during integrations then reducing the engineering costs.
- **Dedicated Room Module** – TUC03 Plus features a new and unique room module with touch screen interface on both white and black colors widening the offering of room user interfaces.



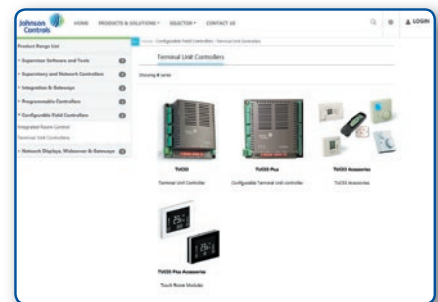
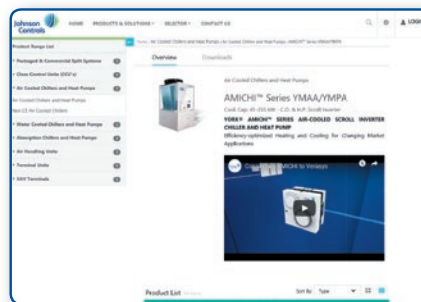
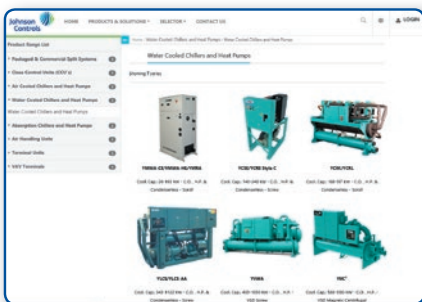
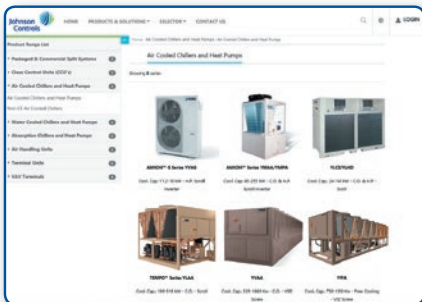
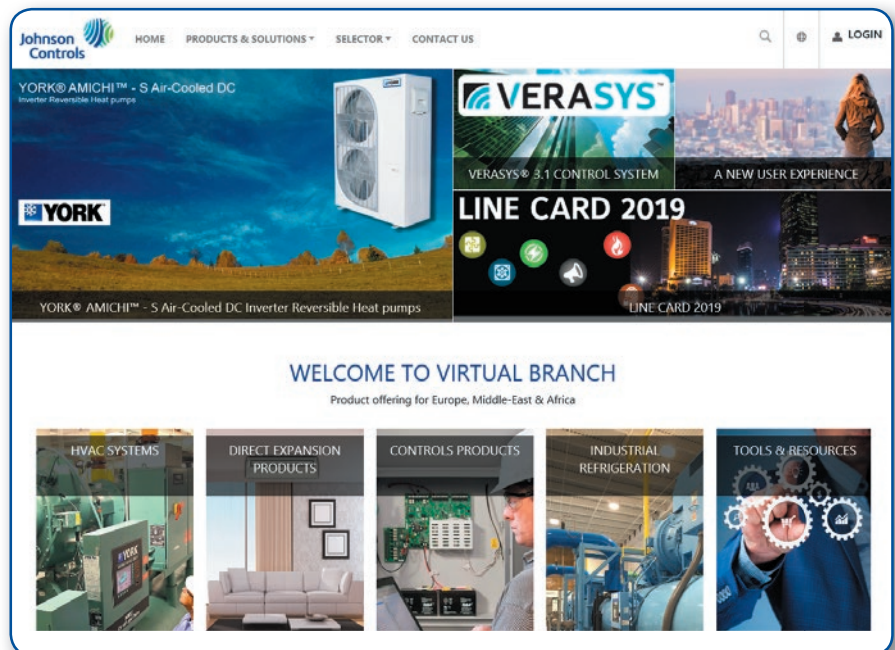
Dimensions in mm

Johnson Control's eCatalog

Johnson Control's eCatalog, also known as the "Virtual Branch", is not only an extensive database of product information but also a point of entry into our organization.

Within the eCatalog you are connected to the cloud and hence stay up-to-date on all new product launches, product selection tool releases and updates, technical documents, eLearning modules and much more. You will reach our products in 3-clicks or less through the use of a powerful search engine and a very easy-to-browse navigation menu. You can also view the purchase prices online for many of our products and check the availability of stocked items at a glance. Also, rest assured that access to our network of Sales Representatives and Technical Support teams is directly available for your use.

Call your Sales Representative and request access now.







About Johnson Controls

Johnson Controls delivers products, services and solutions that increase energy efficiency and lower operating costs in buildings for more than one million customers.

Operating from 500 branch offices in more than 150 countries, the company is a leading provider of equipment, controls and services for heating, ventilating, air-conditioning, refrigeration and security systems. Johnson Controls is involved in more than 500 renewable energy projects including solar, wind and geothermal technologies.

Its solutions have reduced carbon dioxide emissions by 13.6 million metric tons and generated savings of \$7.5 billion since 2000. Many of the world's largest companies rely on Johnson Controls to manage 1.5 billion square feet of their commercial real estate.



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