

YHK Hydro Cassette

2 and 4 pipe system

A complete range from 1.3 kW to 11 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



T9000 Series

Red Dot Product Design Award Winner 2020

- Touch Screen Display
- 2 or 4 pipes FCU
- 3-speed motors or ECM motors
- 2-wiring/3-wiring on/off valves or proportional valves
- Relay designed for 100,000 switching cycles
- Modbus or BACnet protocols



T7600 Series

- LCD Screen Display
- 2 or 4 pipes FCU
- On/off or proportional
- 3-speed motors or ECM motors
- Modbus RTU



Infrared control



TUC03+ Terminal unit controller

BacNET and N2 Metasys network compatible



Features

- Cooling duty from 1.3 to 11 kW
- 2 and 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-ECM Inverter Hydro Cassette

2 and 4 pipe system

A complete range from 1.8 kW to 15.1 kW



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.

Wired controls

T9000 Series

- **Red Dot Product Design Award Winner 2020**
- Touch Screen Display
- 2 or 4 pipes FCU
- 3-speed motors or ECM motors
- 2-wiring/3-wiring on/off valves or proportional valves
- Relay designed for 100,000 switching cycles
- Modbus or BACnet protocols



T7600 Series

- LCD Screen Display
- 2 or 4 pipes FCU
- On/off or proportional
- 3-speed motors or ECM motors
- Modbus RTU



Infrared control



TUC03+ Terminal unit controller

BacNET and N2 Metasys network compatible



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 kW to 15.1 kW



ECM the Energy Saving Technology

Brushless motor with inverter managed by dedicated controls. It permits to maintain extremely low electrical absorption and a continuous modulation of the air flow.

Technical features

YHK-ECM model -2 pipes			25-2	40-2	50-2	65-2	95-2	125-2	150-2
Total cooling capacity [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 [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 [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 [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 [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 [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
Water content [l]		1.4	2.1	2.1	3.0	4.0	4.6	4.6	

YHK-ECM model -4 pipes			25-4	40-6	50-6	65-4	95-6	125-4	150-4
Total cooling capacity [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 [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 [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 [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 [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 [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 [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

Common features			25-4	40-6	50-6	65-4	95-6	125-4	150-4
Air flow [m³/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	
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)		YHK 20	YHK 25	YHK 40	YHK 50	YHK 65	YHK 95	YHK 110	-	-
Cassette YHK	2 pipe system	0079100K	0079000K	0079001K	0079002K	0079003K	0079004K	0079005K	-	-
	4 pipe system	0079110K	0079010K	0079011K	0079012K	0079013K	0079014K	0079015K	-	-
Cassette YHK-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 YHK-E - with electric resistance	2 pipe system	-	0079060K	0079061K	0079062K	0079063K	0079064K	0079065K	-	-
Cassette YHK-MP-E - with electric resistance	2 pipe system	-	0079191K	0079192K	0079193K	0079194K	0079195K	0079196K	-	-
Cassette YHK-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)		-	YHK 25	YHK 40	YHK 50	YHK 65	YHK 95	-	YHK 125	YHK 150
Cassette YHK-ECM - basic model	2 pipe system	-	0079801K	0079802K	0079803K	0079804K	0079805K	-	0079807K	0079808K
	4 pipe system	-	0079811K	0079812K	0079813K	0079814K	0079815K	-	0079817K	0079818K
Cassette YHK-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 YHK-ECM-E - with electric resistance	2 pipe system	-	0079841K	0079842K	0079843K	0079844K	0079845K	-	0079847K	0079848K
Cassette YHK-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
3 way valve + mounting kit for 4 pipe models (factory fitted)		9079512		9079513
2 way valve + mounting kit for 2 pipe models (factory fitted)		9079515		9079516
2 way valve + mounting kit for 4 pipe models (factory fitted)		9079517		9079518
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
3 way valve + mounting kit for 4 pipe models (not fitted)		9079502		9079503
2 way valve + mounting kit for 2 pipe models (not fitted)		9079505		9079506
2 way valve + mounting kit for 4 pipe models (not fitted)		9079507		9079508
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 YHK (AC versions)			
Remote three speed control WM-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 UPM-AU and UP-AU only) (2) (3)			9066632K
Automatic remote control with electronic thermostat, S/W switch and liquid display T-MB (to be used with UPM-AU and UP-AU only) (2) (3)			9066331E
Automatic speed control with electronic thermostat to be mounted in the light wall box WM-503-AC-EC (to be used with UP-503-AC-EC only)			9066686
Electromechanical thermostat T2T (4) (5)			9060174
Power unit UPM-AU for JWC-AU and T-MB remote controls, fitted on the unit			9066641
Power unit UP-AU for JWC-AU and T-MB remote controls, not fitted on the unit			9066640
Power unit UP-503-AC-EC for WM-503-AC-EC remote control only, not fitted			9066687

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 UP-AU power unit			3021090
T2 sensor to be used as Change-over for UP-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

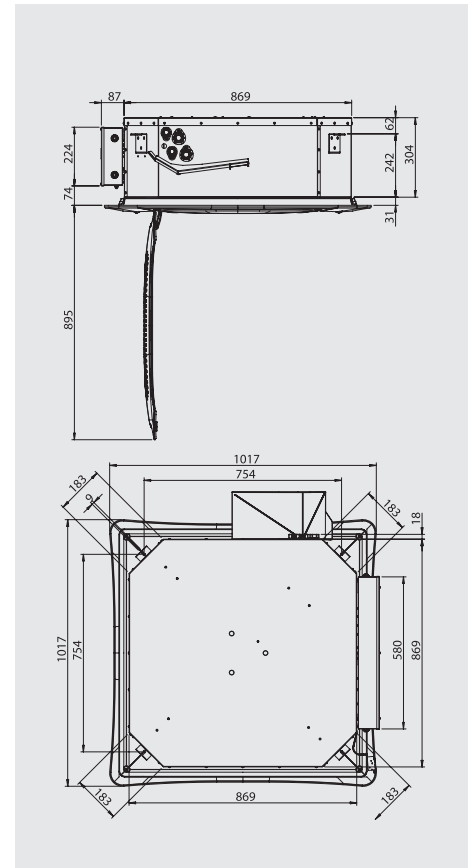
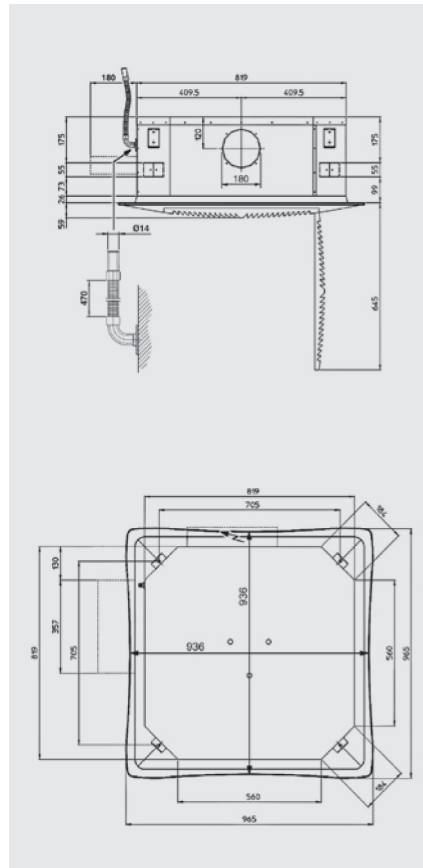
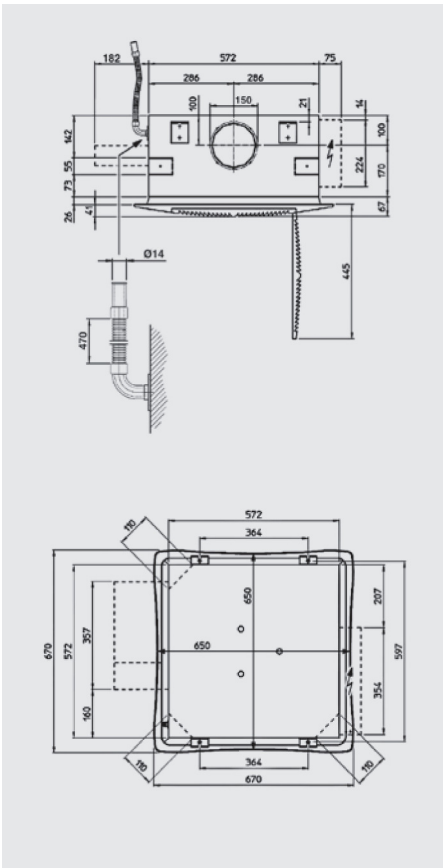
CONTROLS for YHK-MP (AC versions)	YHK 20	YHK 25	YHK 40	YHK 50	YHK 65	YHK 95	YHK 110	YHK 125	YHK 150
Wall control T-MB				9066331E					-
Wire, receiver and IR remote control kit RCS-RT03				9079117					-
Infra red remote control RT-03				3021203					-
Wire and receiver kit RCS				9079116					-
Receiver 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 YHK-ECM (ECM motor)									
Automatic speed control with electronic thermostat and S/W switch - JWC-AU (to be used with UPM-AU and UP-AU only) (2) (3)		9066632K				9066632K		9066632K	
Automatic remote control with electronic thermostat, S/W switch and liquid crystal display T-MB (to be used with UPM-AU and UP-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 UPM-AU for JWC-AU and T-MB remote controls, fitted on the unit					9066641				
Power unit UP-AU for JWC-AU and T-MB remote controls, not fitted on the unit					9066640				
Control accessories for all versions (supplied with separate packaging)									
Low temperature cut-out for UP-AU power unit					3021090				
T2 sensor to be used as Change-over for UP-AU power unit					9025310				
CONTROLS for YHK-MP-ECM (ECM motor)									
Wall control T-MB					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.