

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

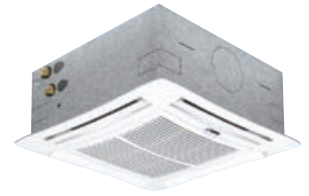


Features

- 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



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 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



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

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 [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	
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
--	----------	----------	----------

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
Remote three speed control + electronic thermostat and centralized/manual S/W switch JWC-TQR (2) (3)	9066632K
Automatic speed control with electronic thermostat and S/W switch - JWC-AU (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.

