

YFCC Coanda Hydro Cassette

2 & 4 pipe system

A complete range from 0.9 kW to 4.0 kW



Thanks to its unique diffuser, YFCC cassette units generate an airflow with a "coanda" effect. The unit is suitable for installation in a suspended ceiling. Air intake is from the bottom while the air is supplied parallel to the ceiling.

The resulting "coanda" effect creates excellent draft free distribution of the air inside the room. Units can be supplied with 1 coil (2 pipe system) with optional electric heating element, or with 2 coils (4 pipe system) with one or two rows.



Coanda effect

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

TMO 503 SV2

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



Infrared control

Features

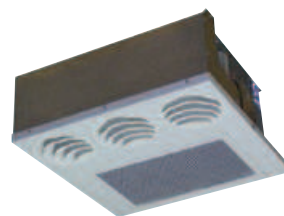
- Coanda effect units, allowing easier and cheaper installation
- Cooling duty from 0.9 to 4.0 kW
- 2 & 4 pipes systems in all range
- 3 sizes: 600 x 600, 600 x 1000 & 600 x 1200
- 2/3 way valves fitted or supplied loose in all range
- Left and right hand (optional) water connections
- 6 fan speeds (3 pre-wired)
- Air throw till 7.6m (cooling) and 9.5m (heating)



Selection software

YFCC Coanda Hydro Cassette

0.9 to 4.0 kW



Technical features

Model -2 pipes			YFCC 130	YFCC 140	YFCC 230	YFCC 240	YFCC 330	YFCC 340
Total cooling capacity 2 Pipes [kW]	(1)	max	1.5	1.74	2.37	2.57	3.34	4.02
		med	1.06	1.19	1.62	1.72	2.84	3.56
		min	0.88	0.97	1.37	1.44	1.97	2.49
Sensible cooling capacity 2 Pipes [kW]	(1)	max	1.18	1.31	1.77	1.88	2.51	2.98
		med	0.81	0.88	1.19	1.24	2.11	2.63
		min	0.66	0.71	1.0	1.04	1.44	1.81
Pressure drop in cooling 2 Pipes [kPa]	(1)	max	6.1	12.9	7.6	12.1	16.2	15.5
		med	3.3	6.7	3.9	6.0	12.1	12.6
		min	2.4	4.7	2.9	4.4	6.4	6.7
Heating capacity 2 pipes [kW]	(2)	max	1.93	2.1	2.86	3.12	4.02	4.77
		med	1.33	1.42	1.91	2.03	3.37	4.2
		min	1.08	1.1	1.6	1.69	2.3	2.9
Pressure drop in heating 2 pipes [kPa]	(2)	max	4.9	10.7	6.3	10.2	13.4	12.6
		med	2.6	5.4	3.1	4.8	9.8	10.0
		min	1.8	3.7	2.3	3.5	5.2	5.5
Air flow [m3/h]		max	280	280	380	380	540	620
		med	180	180	240	240	440	540
		min	140	140	200	200	290	360
Sound power level [dB(A)]		max	52	52	48	48	52	55
		med	41	41	36	36	46	52
		min	35	35	33	33	35	41
Sound pressure level [dB(A)]	(4)	max	43	43	39	39	43	46
		med	32	32	27	27	37	43
		min	26	26	24	24	26	32
Power supply [V-ph-Hz]			230V/1ph/50Hz					
Power input [W]		max	66	66	71	71	84	84
Absorbed current [A]		max	0.30	0.30	0.32	0.32	0.38	0.38
Dimensions	Height	mm	309	309	309	309	309	309
	Width	mm	592	592	592	592	592	592
	Depth	mm	592	592	970	970	1 192	1 192

Model -4 pipes			YFCC 130+1	YFCC 230+1	YFCC 330+1
Total cooling capacity 4 Pipes [kW]	(1)	max	1.5	2.37	3.34
		med	1.06	1.62	2.84
		min	0.88	1.37	1.97
Sensible cooling capacity 4 Pipes [kW]	(1)	max	1.18	1.77	2.51
		med	0.81	1.19	2.11
		min	0.66	1.0	1.44
Pressure drop in cooling 4 pipes [kPa]	(1)	max	6.1	7.6	16.2
		med	3.3	3.9	12.1
		min	2.4	2.9	6.4
Heating capacity 4 pipes [kW]	(3)	max	1.47	2.35	3.3
		med	1.08	1.71	2.87
		min	0.92	1.49	2.12
Pressure drop in heating 4 pipes [kPa]	(3)	max	3.6	2.0	4.3
		med	2.1	1.2	3.4
		min	1.6	0.9	2.0
Air flow [m3/h]		max	280	380	540
		med	180	240	440
		min	140	200	290
Sound power level [dB(A)]		max	52	48	52
		med	41	36	46
		min	35	33	35
Sound pressure level [dB(A)]	(4)	max	43	39	43
		med	32	27	37
		min	26	24	26
Power supply [V-ph-Hz]			230V/1ph/50Hz		
Power input [W]		max	66	71	84
Absorbed current [A]		max	0.30	0.32	0.38
Dimensions	Height	mm	309	309	309
	Width	mm	592	592	592
	Depth	mm	592	970	1 192

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

(2) Room temperature 20°C - Water inlet temperature: 50°C - Water flow rate as for the cooling conditions.

(3) Room temperature 20°C - Water inlet temperature: 70/60°C

(4) Sound pressure level in a 100 m² room, at 1,5 m distance and reverberating time of 0,3 s.

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

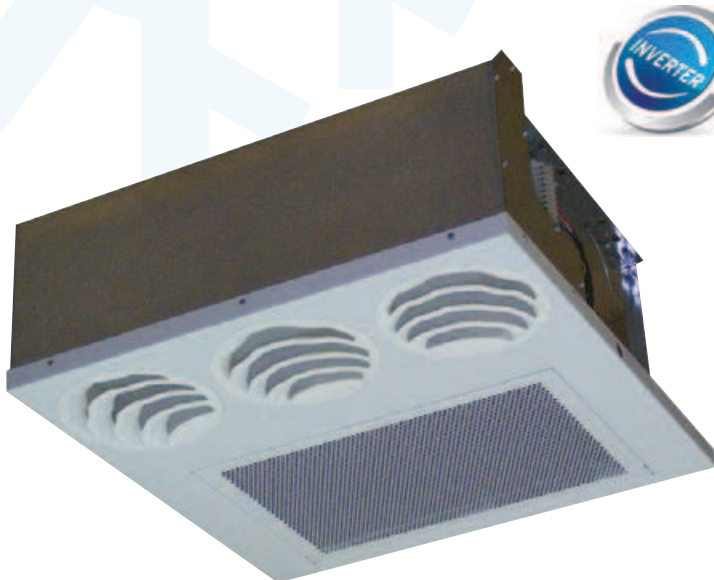


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YFCC-ECM Coanda Hydro Cassette

2 & 4 pipe system

A complete range from 0.8 kW to 4.0 kW



Wired controls

JWC-AU

Automatic remote controller



T-MB

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.



WM-S-ECM

Continuous fan speed control with electronic thermostat and s/w switch



Infrared control



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The resulting "coanda" effect creates excellent draft free distribution of the air inside the room. Units can be supplied with 1 coil (2 pipe system) with optional electric heating element, or with 2 coils (4 pipe system) with one or two rows.



Coanda effect

Features

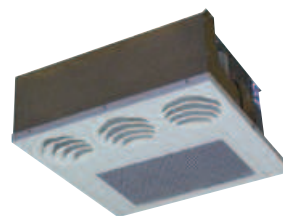
- Coanda effect units, allowing easier and cheaper installation
- Cooling duty from 0.8 to 4.0 kW
- 2 & 4 pipes systems in all range
- 3 sizes: 600 x 600, 600 x 1000 & 600 x 1200
- 2/3 way valves fitted or supplied loose in all range
- Left and right hand (optional) water connections
- 6 fan speeds (3 pre-wired)
- Air throw till 7.6m (cooling) and 9.5m (heating)
- ECM variable speed motor



Selection software

YFCC-ECM Coanda Hydro Cassette

0.8 to 4.0 kW



Technical features

Model -2 pipes			YFCC-ECM 130	YFCC-ECM 140	YFCC-ECM 230	YFCC-ECM 240	YFCC-ECM 330	YFCC-ECM 340
Total cooling capacity 2 Pipes [kW]	(1)	max 10v	1.56	1.81	3.16	3.5	3.75	4.02
		med 5v	1.18	1.34	2.31	2.51	2.78	2.94
		min 1v	0.82	0.91	1.46	1.55	1.87	1.95
Sensible cooling capacity 2 Pipes [kW]	(1)	max	1.24	1.38	2.41	2.6	2.83	2.98
		med	0.91	0.99	1.73	1.84	2.06	2.15
		min	0.62	0.66	1.07	1.11	1.37	1.41
Pressure drop in cooling 2 Pipes [kPa]	(1)	max	6.5	13.9	12.6	20.8	19.8	15.5
		med	4	8.1	7.3	11.6	11.7	8.9
		min	2.1	4.1	3.2	5	5.8	4.3
Heating capacity 2 pipes [kW]	(2)	max	2.02	2.2	3.85	4.32	4.54	4.78
		med	1.5	1.6	2.79	3.03	3.3	3.44
		min	1.02	1.07	1.72	1.82	2.19	2.25
Pressure drop in heating 2 pipes [kPa]	(2)	max	5.3	11.6	10.4	17.1	16.6	13
		med	3.3	6.6	6	9.4	9.4	7.4
		min	1.7	3.3	2.6	4.1	4.7	3.5
Air flow [m3/h]		max	295	295	540	540	620	620
		med	205	205	370	370	430	430
		min	130	130	215	215	275	275
Sound power level [dB(A)]		max	55	55	56	56	58	58
		med	46	46	46	46	48	48
		min	35	35	34	34	36	36
Sound pressure level [dB(A)]	(4)	max	46	46	47	47	49	49
		med	37	37	37	37	39	39
		min	26	26	25	25	27	27
Power supply [V-ph-Hz]			230V/1ph/50Hz					
Power input [W]		max	29	29	37	37	42	42
Absorbed current [A]		max	0.24	0.24	0.29	0.29	0.35	0.35
Dimensions	Height	mm	309	309	309	309	309	309
	Width	mm	592	592	592	592	592	592
	Depth	mm	592	592	970	970	1 192	1 192

Model -4 pipes			YFCC-ECM 130+1	YFCC-ECM 230+1	YFCC-ECM 330+1
Total cooling capacity 4 Pipes [kW]	(1)	max 10v	1.56	3.16	3.75
		med 5v	1.18	2.31	2.78
		min 1v	0.82	1.46	1.87
Sensible cooling capacity 4 Pipes [kW]	(1)	max	1.24	2.41	2.83
		med	0.91	1.73	2.06
		min	0.62	1.07	1.37
Pressure drop in cooling 4 pipes [kPa]	(1)	max	6.5	12.6	19.8
		med	4	7.3	11.7
		min	2.1	3.2	5.8
Heating capacity 4 pipes [kW]	(3)	max	1.52	3.01	3.64
		med	1.18	2.31	2.82
		min	0.87	1.58	2.04
Pressure drop in heating 4 pipes [kPa]	(3)	max	3.8	3.1	5.1
		med	2.5	2	3.3
		min	1.4	1	1.8
Air flow [m3/h]		max	295	540	620
		med	205	370	430
		min	130	215	275
Sound power level [dB(A)]		max	55	56	58
		med	46	46	48
		min	35	34	36
Sound pressure level [dB(A)]	(4)	max	46	47	49
		med	37	37	39
		min	26	25	27
Power supply [V-ph-Hz]			230V/1ph/50Hz		
Power input [W]	max	29	37	42	
Absorbed current [A]	max	0.24	0.29	0.35	
Dimensions	Height	mm	309	309	309
	Width	mm	592	592	592
	Depth	mm	592	970	1 192

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

(2) Room temperature 20°C - Water inlet temperature: 50°C - Water flow rate as for the cooling conditions.

(3) Room temperature 20°C - Water inlet temperature: 70/60°C

(4) Sound pressure level in a 100 m² room, at 1,5 m distance and reverberating time of 0,3 s.

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



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Options & Accessories YFCC / YFCC-ECM

Compatibility table / Codes

Model with AC motor		YFCC 130	YFCC 140	YFCC 230	YFCC 240	YFCC 330	YFCC 340
Cassette YFCC	2 pipe system	0064001K	0064011K	0064002K	0064012K	0064003K	0064013K
	4 pipe system (+1)	0064021K	0064031K	0064022K	0064032K	0064023K	0064033K
	4 pipe system (+2)	0064041K	-	0064042K	-	0064043K	-
Model with ECM motor							
Cassette YFCC-ECM	2 pipe system	0064201K	0064211K	0064202K	0064212K	0064203K	0064213K
	4 pipe system (+1)	0064221K	0064231K	0064222K	0064232K	0064223K	0064233K
	4 pipe system (+2)	0064241K	-	0064242K	-	0064243K	-
Options (Factory fitted)							
Right hand connection		Contact Johnson Controls					
Valves (220V On/Off) (factory fitted)							
Kit 3 way valve size 1-5 mounted MBVM-JC 1-5 V.220 (YFCC size 1-2)		9066561				-	
Kit 3 way valve size 6-9 mounted MBVM-JC 6-9 V.220 (YFCC size 3)		-				9060471	
Kit 3 way valve additional battery size 1-9 mounted ABVM-JC 1-7 V.220 (YFCC 4 pipes all sizes)		9060472					
Kit 2 way valve size 1-5 and additional battery mounted V2M-JC 1-5 V.220 (YFCC size 1-2)		9060476				-	
Kit 2 way valve size 6-9 primary battery mounted V2M-JC 6-9 V.220 (YFCC size 3)		-				9060477	
Kit 2 way valve all sizes 4 pipes to be used for the additional battery not mounted V2L-JC 1-5 V.220		9060476					
Simplified kit for 3 way valve for CD version fitted (sizes 1-5) VSDM-JC G1-5 V.220 (YFCC size 1-2)		9066571				-	
Simplified kit for 3 way valve for CD version fitted (sizes 6-9) VSDM-JC G6-9 V.220 (YFCC size 3)		-				9060484	
Simplified kit for 3 way valve for CD version fitted - additional battery (all sizes) VSAM-JC G1-9 V.220 (YFCC all sizes)		9060483					
3 way double valve kit for 4 tube installation and single coil + kit fitted on the unit (YFCC all sizes)		9066572W					
2 way DN 10 balance for main coil + kit fitted on the unit (YFCC size 1)		9066660			-		
2 way DN 15 balance for main coil + kit fitted on the unit (YFCC sizes 2-3)		-			9066661		
2 way DN 10 balance for additional coil + kit fitted on the unit (all sizes)		9066663					
Accessories (supplied loose)							
Valves 220V On/Off (supplied loose)							
Kit 3 way valve size 1-5 not mounted MBVL-JC 1-5 V.220 (YFCC size 1-2)		9066560				-	
Kit 3 way valve size 6-9 not mounted MBVL-JC 6-9 V.220 (YFCC size 3)		-				9060474	
Kit 3 way valve additional battery size 1-9 not mounted ABVL-JC 1-7 V.220 (YFCC all sizes)		9060475					
Kit 2 way valve size 1-5 and additional battery not mounted V2L-JC 1-5 V.220 (YFCC size 1-2)		9060478				-	
Kit 2 way valve size 6-9 primary battery not mounted V2L-JC 4-7 V.220 (YFCC size 3)		-				9060479	
Kit 2 way valve size 1-5 and to be used for the additional battery not mounted V2L-JC 1-5 V.220		9060478					
Simplified kit for 3 way valve for CD version not fitted (sizes 1-5) VSDS-JC G1-5 V.220 (YFCC size 1-2)		9066570				-	
Simplified kit for 3 way valve for CD version not fitted (sizes 6-9) VSDS-JC G6-9 V.220 (YFCC size 3)		-				9060481	
Simplified kit for 3 way valve for CD version not fitted - additional battery (all sizes) VSAS-JC G1-9 V.220 (YFCC all sizes)		9060480					
3 way double valve kit for 4 tube installation and single coil + kit not fitted on the unit (YFCC all sizes)		9066562W					
2 way DN 10 balance for main coil + kit not fitted (YFCC size 1)		9066650			-		
2 way DN 15 balance for main coil + kit not fitted (YFCC sizes 2-3)		-			9066651		
2 way DN 10 balance for additional coil + kit not fitted (all sizes)		9066653					
Other type of valves		Contact Johnson Controls					
Accessories							
Electrical heater and relays fitted on the unit - 350 W - size 1 - BEL-CCN 1/4 (note 1)		9064051			-		-
Electrical heater and relays fitted on the unit - 550 W - size 1 - BEL-CCN 1/6 (note 1)		9064031			-		-
Electrical heater and relays fitted on the unit - 700 W - size 2 - BEL-CCN 2/7 (note 1)		-			9064052		-
Electrical heater and relays fitted on the unit - 1150 W - size 1 - BEL-CCN 2/12 (note 1)		-			9064032		-
Electrical heater and relays fitted on the unit - 900 W - size 3 - BEL-CCN 3/9 (note 1)		-			-		9064053
Electrical heater and relays fitted on the unit - 1400 W - size 1 - BEL-CCN 3/14 (note 1)		-			-		9064033
Horizontal auxiliary condensate tray HC ACTH-SX (for units with LEFT hydraulic connectons		6060402					
Horizontal auxiliary condensate tray HC ACTH-DX (for units with RIGHT hydraulic connections)		6060403					
Condensate drain pipe SCR		6060420					
Drain condensate pump not fitted PCC-S		9064010					
Drain condensate pump fitted PCC-M		9064011					
Fresh air spigot 100dia - FCR 100		6064191					
Fresh air spigot 120dia - FCR 120		6064192					

Compatibility table / Codes

CONTROLS for YFCC (AC versions)		YFCC 130	YFCC 140	YFCC 230	YFCC 240	YFCC 330	YFCC 340
Remote three speed control JWC-3V (1) (5)					9066642		
Remote three speed control + electronic thermostat and manual S/W switch JWC-T (2)					9066330K		
Remote three speed control + electronic thermostat and centralized/manual S/W switch JWC-TQR (2) (4)					9066632K		
Automatic speed control with electronic thermostat and S/W switch - JWC-AU (to be used with JPF-AU and JP-AU only) (2) (4)					9066331E		
Automatic speed control with electronic thermostat to be mounted in the light wall box TMO-503-SV2 (3) (5)					9060172		
Electromechanical thermostat T2T (5) (6)					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		
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 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		
CONTROLS for YFCC (AC versions) + MB							
Mounted power unit MB-M					9066332		
Not mounted power unit MB-S					9066333		
IR remote control and not mounted IR receiver RS-RT03					9066337		
Not mounted IR receiver RS					9066338		
IR remote control RT03					3021203		
Wall control JTM-B					9066331E		
Multifunction control PSM-DI					3021293		
T2 sensor (to be used as change over or min.temp. sensor) T2					9025310		
CONTROLS for YFCC-ECM							
Automatic speed control with electronic thermostat and S/W switch - JWC-AU (to be used with JPF-AU and JP-AU only) (2) (4)					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) (4)					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		
CONTROLS for YFCC-ECM + MB							
Mounted power unit MB-M					9066332		
Not mounted power unit MB-S					9066333		
IR remote control and not mounted IR receiver RS-RT03					9066337		
Not mounted IR receiver RS					9066338		
IR remote control RT03					3021203		
Wall control JTM-B					9066331E		
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 (std. Motor and EC motor)							
Hardware / software supervisory system Net					9079118		
Router S					3021290		
Relay output board SIOS					3021292		
Router BMS for BMS systems which are not provided by YORK					3021340		
FREE wireless control system for YHKY basic model (AC motor)							
Remote Control FREE-COM					9060572		
Mounted Electronic Board FREE-UPM					9060571		
Not Mounted Electronic Board FREE-UPS					9060570		
Temperature sensor FREE-SEN					9060573		
Low temperature cut out FREE-NTC					3021090		

WARNING

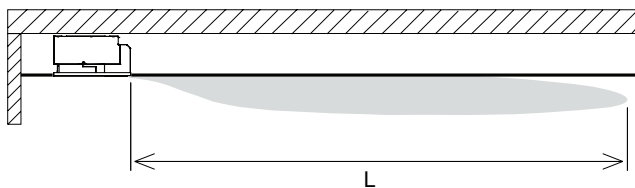
(1) Not to be used with valves. (2) Can be used with valves and/or low temperature cut-out. (3) Low temperature cut-out included.

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

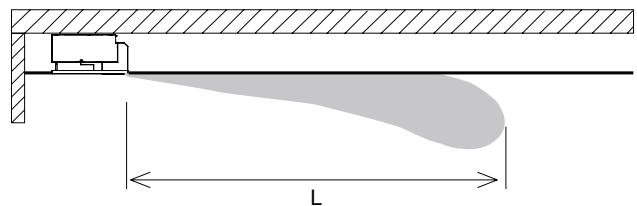
Note 1. Electric heaters must be factory supplied only - in ECM range the above controls can control the electric heater only if there is no hot water supply to the exchanger.

Air Throw

C1 - Heating



C2 - Cooling



Model		YFCC 1						YFCC 2						YFCC 3					
		1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
Air throw L (m)	C1	3.8	4.5	5.8	6.3	6.8	7.2	4	5	6.1	7	8	9	4.5	5.2	6.3	7.5	8.8	9.5
	C2	3	3.6	4.6	5	5.4	5.7	3.2	4	4.8	5.6	6.4	7.2	3.6	4.1	5	6	7	7.6