

# 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



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.



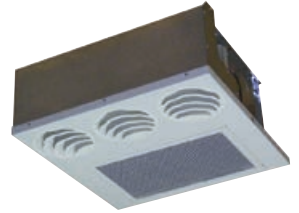
Coanda effect

## 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	
	Width	mm	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	
	Width	mm	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 riverberating time of 0,3 s.

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



Manufacturer reserves the rights to change specifications without prior notice.

# 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
	4 pipe system (+1)	0064021K	0064031K	0064022K	0064032K	0064023K
	4 pipe system (+2)	0064041K	-	0064042K	-	0064043K
Model with ECM motor						
Cassette YFCC-ECM	2 pipe system	0064201K	0064211K	0064202K	0064212K	0064203K
	4 pipe system (+1)	0064221K	0064231K	0064222K	0064232K	0064223K
	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 connections)				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		
<b>Control accessories for all versions (supplied with separate packaging)</b>						
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		
<b>CONTROLS for YFCC (AC versions) + MB</b>						
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		
<b>CONTROLS for YFCC-ECM</b>						
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 crystall 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		
<b>CONTROLS for YFCC-ECM + MB</b>						
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		
<b>Management system for a network of fan coils with MB electronic board (std. Motor and EC motor)</b>						
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		
<b>FREE wireless control system for YHKY basic model (AC motor)</b>						
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**

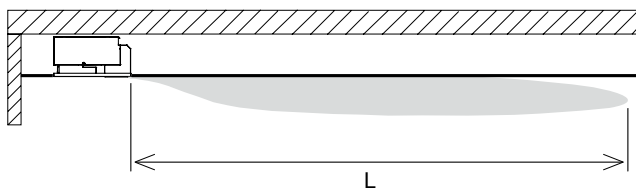
(1) Not to be used with valves. (2) Can be used with valves and/or low temperature cut-out. (3) Low temperature cut-out included.

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

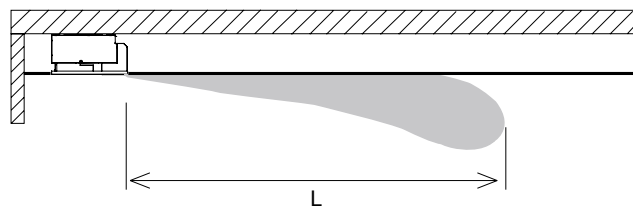
Note 1. Electric heaters must be factory supplied only - in ECM range the above controls can control the electric heater only if there is no hot water supply to the exchanger.

## 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