

> MERCURY 2

DUCTED FAN COIL



Unit specifications

Ducted unit for heating and cooling system with prevalence of roughly 70 Pa. The units of MERCURY 2 series are ideal for small centralized and reduced height air conditioning system, with air distribution in the spaces by special ducts.

The new product range has a height from 300 to 375 mm and it has been developed with high quality components, making easier the installation, accessibility and maintenance operation by the final installer. Fans are sized to provide roughly 70 Pa of pressure at nominal flow. This data includes the pressure drop of the standard filter G3 class. MERCURY 2 is available with horizontal or vertical configuration for ceiling or wall installation in two different rows number coil. 3 rows as standard and 6 rows as option. Accompanying the base unit there is a wide range of accessories.

Fan system

Double suction centrifugal fan with single or double forward blades directly coupled to single-phase electric motor

Electronic balancing against induced vibrations.

Structure

Galvanized panels thick. 1,00÷1,50 mm. Insulating material absorbing sp. 10 mm. class according to UL94 HF1 (self-extinguishing, non-drip).

EASY Service

The filter, can be removed from the bottom, without any tool. The plate of the fan deck can be removed without disconnecting ducts, it can be done from the front or the bottom.

Energy Saving

The heat exchangers are of the type Cu/Al diameter 3/8" with corrugated aluminum fins with high efficiency and air purge valves easily accessible. Nominal pressure PN10.

Flex

Possibility to change the side water connections on site. Configuration air flow reversible.

Technical data

			Model	21			31			38			41			81		
			Speed	min	med	max	min	med	max	min	med	max	min	med	max	min	med	max
3 Row standard Coil	AIR	Air flow	mc/h	508	752	880	1374	1555	1630	1619	1854	2009	2326	2722	3071	2980	3516	4037
		Pressure	Pa	23	50	68	40	50	56	38	50	59	37	50	64	35	50	67
	COOLING*	Total rating	kW	2.74	3.63	4.06	6.78	7.38	7.62	7.6	8.31	8.76	12.05	13.42	14.62	14.27	16.06	17.62
		Sensible rating	kW	1.96	2.59	2.87	4.74	5.16	5.32	5.29	5.8	6.14	8.45	9.4	10.21	9.97	11.09	12.25
		Water flow	l/h	470	623	697	1163	1266	1307	1303	1425	1503	2067	2302	2509	2449	2756	3024
		Δp water	kPa	8	13.5	16.6	14.4	16.8	17.8	17.7	20.9	23.1	11.2	13.7	16	15.3	19	22.5
	HEATING**	Rating	kW	3.6	4.83	5.41	8.91	9.75	10.06	10.02	10.8	11.65	15.74	17.65	19.28	18.85	21.22	23.38
		Water flow	l/h	470	623	697	1163	1266	1307	1303	1397	1503	2067	2302	2509	2449	2756	3024
		Δp water	kPa	6.9	11.7	14.4	12.3	14.3	15.2	15.1	17.2	19.7	9.5	11.5	13.5	12.9	16	19
	CONNECTION	Water IN	"		3/4			3/4			3/4			1			1	
		Water OUT	"		3/4			3/4			3/4			1			1	
6 Row Optional Coil	COOLING *	Total rating	kW	3.70	5.10	5.90	9.70	10.70	11.10	11.10	12.30	13.20	17.20	19.60	21.70	21.10	24.10	26.90
		Sensible rating	kW	2.70	3.70	4.20	6.80	7.50	7.80	7.80	8.70	9.20	12.00	13.60	15.00	14.70	16.70	18.60
		Water flow	l/h	642	882	1009	1659	1836	1912	1903	2119	2265	2946	3365	3722	3624	4140	4616
		Δp water	kPa	6.4	11.5	14.8	15.0	18.0	19.4	19.2	23.4	26.5	16.5	21.0	25.3	24.1	30.6	37.3
	HEATING**	Rating	kW	4.60	6.50	7.40	11.90	13.20	13.80	13.70	15.30	16.40	20.70	23.70	26.30	25.70	29.50	33.10
		Water flow	l/h	642	882	1009	1659	1836	1912	1903	2119	2265	2946	3365	3722	3624	4140	4616
		Δp water	kPa	5.5	9.9	12.8	12.6	15.2	16.4	16.3	19.8	22.4	13.8	17.5	21.1	20.1	25.6	31.2
	CONNECTION	Water IN	"		3/4			3/4			3/4			1			1	
		Water OUT	"		3/4			3/4			3/4			1			1	
2 Row additional Heating Coil	HEATING***	Rating	kW	4.90	6.30	7.00	11.60	12.50	12.90	12.90	14.10	14.80	21.00	23.30	25.20	24.70	27.40	30.10
		Water flow	l/h	428	553	615	1019	1098	1136	1134	1240	1304	1845	2043	2213	2166	2411	2648
		Δp water	kPa	3.9	6.2	7.6	6.7	7.7	8.2	8.2	9.7	10.7	4.4	5.3	6.1	5.9	7.2	8.6
	CONNECTION	Water IN	"		3/4			3/4			3/4			3/4			3/4	
			Water OUT		3/4			3/4			3/4			3/4			3/4	
ELECTRICAL		Power consumption	W	70	129	150	168	191	225	233	258	303	402	486	549	620	814	914
		Max current	A		0.8			1.3			1.6			2.5			4.5	
NOISE		Sound pressure suction+radial	dB(A)	42	51	56	55	59	60	56	58	61	56	59	61	61	65	68
		Sound pressure outlet	dB(A)	41	50	55	54	58	59	55	57	60	55	58	60	60	64	67

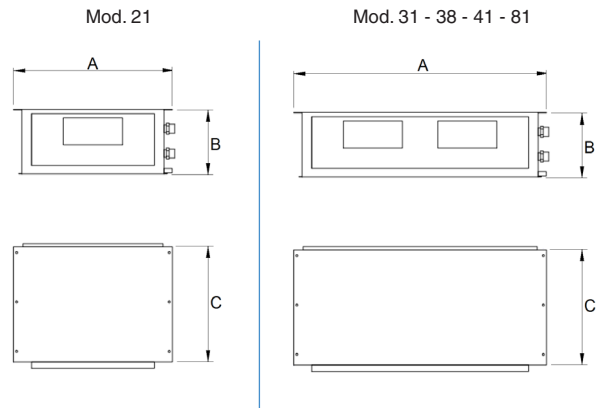
NOTES:

Cooling Mode * Air T=27°C D.B. / 19°C W.B. , water IN/OUT 7°/12°C,

Heating Mode ** Air T=20°C D.B. , water IN 50°C, water flow same as Cooling Mode

Heating Mode *** Air T=20°C D.B. , water IN/OUT 70/60°C, water flow same as Cooling Mode

Dimensions



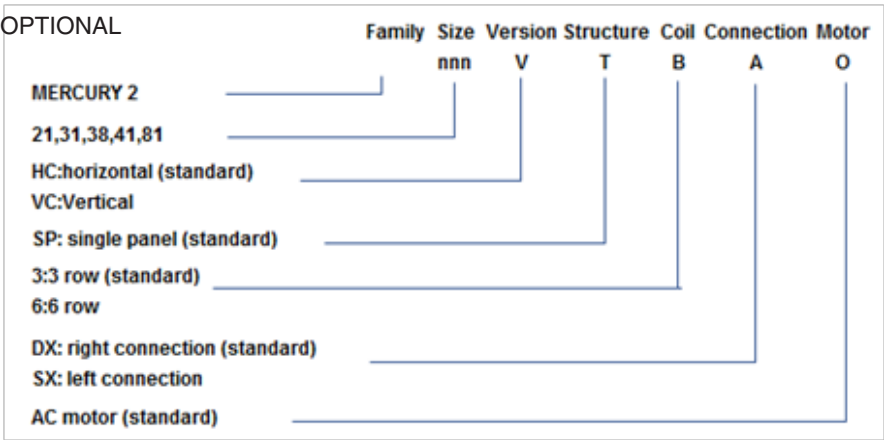
Mod	A (mm)	B (mm)	C (mm)	Peso 3R (kg)
21	738	300	550	38
31	1178	300	550	54
38	1178	300	550	55
41	1728	375	650	90
81	1728	375	650	94

Version

STANDARD

The standard version is horizontal, single panel, 3 row coils, three-speed AC motor, right hydraulic connections. All other versions are optional.

OPTIONAL



Accessories

AERAULIC ACCESSORIES	
B2	Additional Heating Coil 2 Rows
V23K	3 way valve ON-OFF 230V
V43K	3 way valve ON-OFF 230V for 4 pipes
VCS	Auxiliary drain pan for valves
ELECTRICAL ACCESSORIES	
ETBN	Power relay board for Models 21-31-38-41
ETBN-6A	Power relay board for Model 81 only
EH	Electric heater (installed inside the unit)
EHR	Relay for electric heater

AERAULIC ACCESSORIES	
FP	Flat flange (inlet or outlet)
FRAB	Inlet flange with filter extraction from the bottom
FRAL	Inlet flange with filter extraction from the side
FRAV	Inlet flange for vertical version with filter extraction from the front
GM2	Outlet grill with double louver regulation
GRD	Decorative inlet grill
GR	Alluminium Inlet grill
P90	Plenum 90° (inlet or outlet)
PMA	Air mixture suction plenum
PD	Plenum (inlet or outlet)
PGM2	Plenum with outlet grill with double regulation
PGR	Plenum with inlet grill
PS	Plenum with spigot (inlet or outlet)
PRA	Plenum of air regulation
COIB	Thermal isolation for plenum
FILTERS	
FA2	Synthetic fiber filter class G3 thickness 20mm
FA4	Filter of mesh of galvanized steel class G1 thickness 15mm
CONTROLLER	
-	Remote terminal master
-	Main Board Controller 3V - EC

