The Unico System®

M SERIES MODULAR AIR CONDITIONING AND HEAT PUMP FAN/COIL UNITS

for space-saving installations

The innovative Unico System allows central air conditioning and heating installation in applications where the highest comfort is the goal. The Unico System uses a conventional outdoor condensing unit or heat pump in conjunction with a specially designed indoor evaporator fan/coil unit, which distributes air through a high static pressure system of small ducts



and plenums. Supply ducts to individual rooms are only 2-inch (50 mm) inside diameter, and can be run over or around structural obstacles or through existing walls and closets where conventional duct will not fit. Plenum duct inside dimensions are 7, 9, or 10-inch. Older buildings, custom homes, commercial offices, and other applications can be air conditioned and heated with a Unico System without major renovations or sacrifice of space.

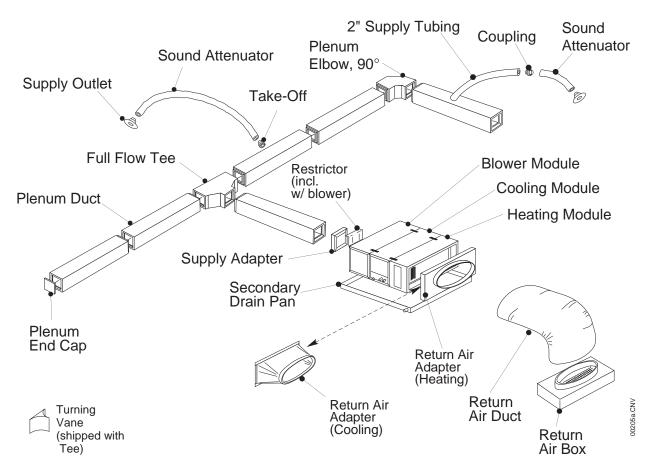
The modular series Unico fan/coil unit is for cooling and/or heating applications, and is available in three sizes which cover cooling capacities from 2 through 5 nominal tons and heating capacities from 20,000 to 120,000 Btuh using the hot water coil. The unit is modular in construction to accommodate the widest range of options and configurations. The modules easily clamp together and are light enough for one person to install. They can be arranged in a horizontal, upflow, or downflow configuration. There are three basic modules: a cooling module (either an evaporator, heat pump coil, or chilled water coil), the heating module (with hot water coil), and the blower module (with control box). The unit may be matched with most conventional condensing units or heat pumps of proper capacity. An optional multi-staged electric duct heater, up to 20 kW, mounts to the discharge of the blower to provide the most compact installation.



Cabinet construction is galvanized steel and fully insulated. The Unico System cooling module (MC) uses a deep copper tube/aluminum fin coil that produces superior moisture removal compared to a more conventional system. It comes standard with a corrosion resistant primary drain pan to provide lifetime protection; the condensate drain is ¾-inch FPT. The refrigerant coil module is equipped with a factory installed thermostatic expansion valve and freeze protection controls for proper operation and to prevent icing. Water coils are equipped with a drain and a vent valve.

All Unico System blower modules (MB) include a 208/230 volt, single phase direct-drive blower isolated from the conditioned air stream. The control box, which houses the variable speed motor control, blower relay(s), control transformer, and high and low voltage terminal blocks, is shipped with the blower module and can be installed either on the top or side of the unit. The blower module can also be purchased or upgraded with the ACB control for additional functions. Duct, plenums, secondary drain pans, connectors, and fittings are ordered separately according to individual job requirements. Specify round or square plenum connection when ordering.

NOTE: The Unico System operates at a higher static pressure than conventional duct systems and has unique design and layout requirements for proper air distribution. It is important that the manufacturer's installation instructions be followed exactly to achieve maximum effectiveness.



BLOWER MODULE - 208/230 VOLT, 60 HZ, 1 PH (Includes control box)

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	MOTOR		CFM	DIMENSIONS	SHIP	SHIP
MFR. NO.	HP	RPM	@ 1.5" E.S.P.	$H \times W \times D$	WT.	
MB2430L	1/2	1700	600	$17.5\times25\times13.75$	62	
MB3642L	1	1700	1000	$17.5\times38\times13.75$	72	
MB4860L	1	1700	1250	$17.5\times38\times13.75$	85	

HEATING MODULE (Without heating coil)

	DIMENSIONS	SHIP	MATCHI	NG HOT WATER COIL	ELECTRIC HEAT	
MFR. NO.	$H \times W \times D$	WT.	MFR. NO.	MAX. CAPACITY, BTUH	OPTIONS, kW	
MH2430	$17.5\times25\times12$	20	HW2430	73,800	5, 7.5, 10, 15	
MH3660*	$17.5\times38\times12$	27	HW3642	120,000	5, 7.5, 10, 15, 20	
*The MH3660 matches both the 3642 and 4860 blower and cooling modules						

REFRIGERANT COOLING MODULE

COOLING ONLY	HEAT PUMP	NOMINAL	CONNE	CTIONS	DIMENSIONS	SHIP
MFR. NO.	MFR. NO.	TONS	INLET	OUTLET	$H \times W \times D$	WT.
MC2430(C, CX)*	MC2430H	2 THRU 21/2	3/8" OD	7/8" OD	$17.5\times25\times13.75$	62
MC3642(C, CX)*	MC3642H	3 THRU 31/2	3/8" OD	7/8" OD	$17.5\times38\times13.75$	78
MC4860(C, CX)*	MC4860H	4 THRU 5	3/8" OD	7/8" OD	$17.5\times38\times24.00$	90

^{*}C – includes R-22 refrigerant coil and expansion valve.

CX – includes R-410A refrigerant coil and expansion valve.

CHILLED WATER COOLING MODULE (Includes water coil*
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	MAX. COOLING		DIMENSIONS	SHIP
MFR. NO.	CAPACITY, BTUH	CONNECTIONS	$H \times W \times D$	WT.
MC2430W	37,900	7/8" OD	$17.5\times25\times13.75$	60
MC3642W	54,600	7/8" OD	$17.5\times38\times13.75$	78
MC4860W	69,000	1-1/8" OD	$17.5\times38\times18.00$	105

^{*} can also be used with hot water for 2-pipe systems