



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 specially designed indoor fan-coil unit matched to a conventional outdoor condensing unit or heat pump. The fan-coil unit distributes air through a system of small ducts with small jets discharging the air into the room. This provides quiet, uniform, and predictable air mixing and performance. The main duct (plenum) is one-fourth the size of a conventional duct and is easier to seal and has less thermal losses. The branch ducts, which are 2-inch (50 mm) or 2.5 inch (63 mm) inside diameter, are factory-insulated with gasket connection. The branch ducts are flexible 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 can be air conditioned and heated with a Unico System without major renovations or sacrifice of space. Newer buildings, custom homes, and commercial applications will benefit with a tighter, smaller, and more efficient duct system that provides an affordable path in achieving an energy efficient building. Recommended for affordable LEED platinum certified homes.

The modular series Unico fan/coil unit is for cooling and/or heating applications, and is available in four sizes which cover cooling capacities from 2 through 5 nominal tons and heating capacities from 20,000 to 120,000 Btu/h 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 (refrigerant or chilled water coil), the heating module (with hot water coil), and the blower module (with controls).



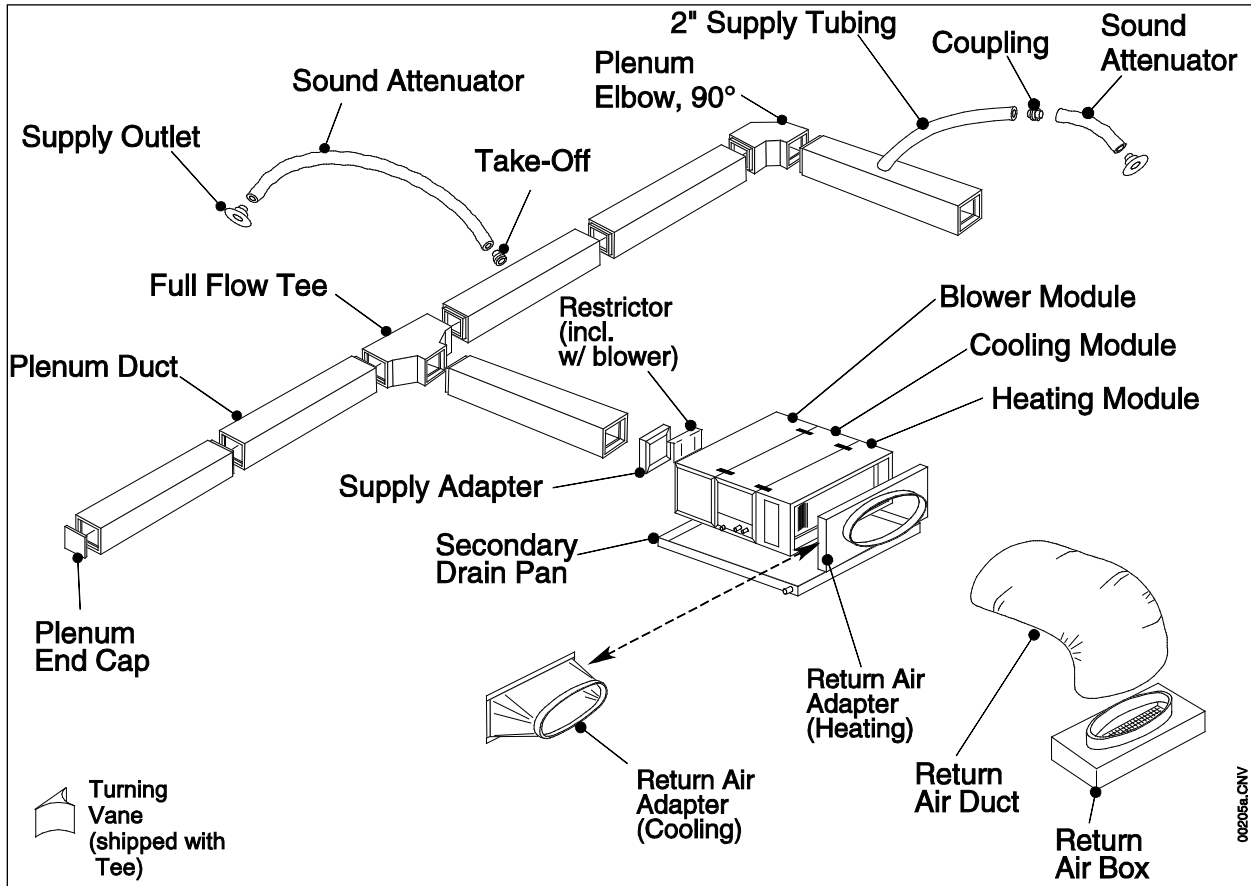
The unit may be matched with most conventional condensing units or heat pumps of proper capacity. An optional multi-staged electric duct heater, up to 20 kW, mounts to the discharge of the blower to provide the most compact installation.

Cabinet construction is galvanized steel and fully insulated. The Unico System cooling module uses a thick 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 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.

The blower module is available with a single or variable speed motor with direct-drive blower wheel. The variable speed motor also includes the S.M.A.R.T. control board for the best efficient. The standard blower uses 208/230 volt, single phase power. The variable speed is also available for 120V, single phase. The ducts, secondary drain pans, connectors, and fittings are ordered separately according to individual job requirements. There outlets are available in round or rectangular with plastic (standard) or wide variety of wood trim plates.

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.

Typical System (square main duct for illustrative purposes only)



Consult full catalog for exact model numbers.

BLOWER MODULE – 120 or 208/230 VOLT, 60 HZ, 1 PH (includes control box)

MFR. NO.	MOTOR		CFM @ 1.5" E.S.P.	DIMENSIONS H x W x D	SHIP WT. (LBS)
	HP	RPM			
M2430BL1-*	½	1700	600	17.5 x 25 x 13.75	62
M3036BL1-*	1	1700	800	17.5 x 30 x 13.75	72
M3642BL1-*	1	1700	1000	17.5 x 38 x 13.75	72
M4860BL1-*	1	1700	1250	17.5 x 38 x 13.75	85

* ST2=single speed 208-230V, EC1=variable speed 120V, EC2=variable speed 208-230V

COOLING COIL MODULE (air-conditioning or heat pump applications)

MFR. NO.	REFRIGERANT COIL**		MFR. NO.	CHILLED WATER COIL CAPACITY, BTUH	DIMENSIONS H x W x D	SHIP WT. (LBS)
	OUTDOOR UNIT (TONS)					
M2430CL1-*	2 to 2½		M2430CL1-C	37,900	17.5 x 25 x 13.75	62
M3036CL1-*	2½ to 3		M3036CL1-C	54,600	17.5 x 30 x 13.75	78
M3642CL1-*	3 to 4		M3642CL1-C	54,600	17.5 x 38 x 13.75	78
M4860CL1-*	4 to 5		M4860CL1-C	69,000	17.5 x 38 x 24.00	90

* A and B = C-style coil; D and E = H-style coil.

** Consult AHRI directory to select outdoor unit and for capacity and efficiency

HEATING COIL MODULE (includes hot water coil)

MFR. NO.	MAX CAPACITY, BTU/HR		DIMENSIONS H x W x D	SHIP WT. (LBS)
	120°F WATER	160°F WATER		
M2430CL1-H	27,700	50,100	17.5 x 25 x 12	20
M3036CL1-H	33,100	59,900	17.5 x 30 x 12	27
M3642CL1-H	45,200	81,800	17.5 x 38 x 12	27
M4860CL1-H	54,100	95,200	17.5 x 38 x 12	27