

MINI-TEMP CEILING MOUNT SYSTEMS 1, 1.5 & 2 TON

Specialized Environmental Air Conditioning Systems for Computer Rooms, School Rooms, and Telecommunications facilities









ISO 9001:2000 REGISTERED C O M P A N Y

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Mini-Temp[™]

Provides precision cooling and humidity control of small areas where space is at a premium.





PROVIDES TOTAL ENVIRONMENTAL (TEMPERATURE, HUMIDITY AND AIR FILTRATION) CONTROL FOR

CAD / CAM Installations, Commercial / Office Buildings, Control Rooms, Desktop Publishing, Laboratories, Network Facilities, Telecommunications Equipment and other critical electronic system facilities.

$\textbf{MINI-TEMP}^{\text{\tiny TM}}$

AIR CONDITIONING YOU PUT IN YOUR CEILING, NOT IN YOUR WAY

Today's breed of minicomputer is taking on information - processing jobs once reserved only for the big mainframe. But for all the amazing difference in size vs. computing power, there is one inescapable similarity - the need for process cooling. It is essential for protection against environmental-related problems such as hot spots, static electricity, and card jams.

Compu-Aire understands the special environmental control need for such applications and presents the Mini-Temp^M Series.

Mini-Temp[™] offers close environmental control of both new construction and tenant improvement installations for many applications requiring spot equipment temperature/humidity control independent of the building comfort system.

 $Mini-Temp^{TM}$ is a line of ceiling mounted spot cooler, precision engineered, which provides the regulated environment the minicomputer needs without taking up valuable floor space. $Mini-Temp^{TM}$ units are self contained modular systems which can be used single, or in multiples to build the high sensible cooling capacity required, utilizing the space provided by a standard 2 x 4 feet ceiling tile. $Mini-Temp^{TM}$ cooling (blow thru) system establishes and maintains dedicated control of all fundamental environmental conditions, continuously, and reliably.

UL listed Mini-Temp[™] Series is also designed to save installation time and cost as no expensive supply - airduct work is required, unless a ducted system is required. Ready to install, every system is fully assembled, wired, charged, and tested prior to shipment to ensure 365 days and 24 hours operation at your site. Mini-Temp[™] allows rapid, wide open access to system components while equipment is in place for servicing.

For maximum system design and flexibility, Mini-Temp[™] Series is available in Air , Water, Glycol, and Chilled ceiling mounted versions. As well as many flexible configurations to meet your spot cooling needs!

AVAILABLE SYSTEMS



^{*} OPTIONAL

STANDARD FEATURES

- Self contained package ceiling / roof mounted closed loop system available in Air, Water, Glycol, or Chilled Water configuration.
- High efficiency coil provided with blow-through air configuration to meet space capacity. Designed for high sensible cooling capacity.
- Thermally insulated galvanized steel pan is provided for the evaporator coil in order to prevent any water from reaching the floor.
 Rugged cabinet construction, thermally and acoustically insulated cabinet. Entire cabinet is suspended on rubber isolators to minimize
- the sound level, as well as vibration transmission, providing quiet, vibration free operation.
- Side access is made easy for servicing via well insulated access panels.
- Single point electrical connection for year-round operation, ceiling plenum air can be used for condenser air supply. Discharge air can be ducted away.
- Air cooled models have a copper-tube, aluminum fin type condenser coil.

1. NON-PROGRAMMABLE WALL T-STAT

Thermostat continually samples temperature to regulate the individual system and automatically turns on cooling as needed. If optional humidifier is required, a humidistat shall be shipped for field installation.



2. DIRECT- DRIVE HIGH EFFICIENCY FAN SUPPLY Two (2) speed direct drive centrifugal type, dynamically

balanced prior to shipment for further vibration free performance.



3. HERMETIC COMPRESSOR

High efficiency hermetic compressor has an internal muffler and spring for quiet, vibrationless performance. Compressor rests on rubber isolators in an acoustically enclosed cabinet out of air stream.



4. OPERATING RELIABILITY

Compressorized models have an internal pressure relief system and an electrical overload service for maximum reliable performance. The system has high and low pressure switches, and an external crankcase heater. The refrigerant piping is equipped with service pressure fittings.

5. CONDENSER/AIR FAN PACKAGE (AIR COOLED UNITS ONLY)

Direct-drive centrifugal fan with a low ambient pressure control for operation down to 35°F when outside air is utilized. Shipped loose for field mounting.



6. WATER COOLED CONDENSER (WATER/GLYCOL COOLED UNITS ONLY) Heavy duty counter flow co-axial

condenser.



7. WATER REGULATING VALVE (WATER/GLYCOL COOLED UNITS ONLY)

Two (2) way, 150 psig head adjustable pressure actuated valve. Higher psig rated valves available as options - consult factory.



 CHILLED WATER VALVE (CHILLED WATER UNITS ONLY) Two (2) way, two (2) position chilled water valve.



9. SUPPLY/RETURN GRILLE FRAME ASSEMBLY Hinged supply/return air grille provided to mount below unit for air discharge and return. 1" filter provided for air filtration.



10. STAINLESS STEEL DRAIN PAN The Condensate Drain Pan shall be of Stainless Steel construction with nonferrous connections. The exterior of the pan shall be treated with thermal mastic to avoid condensation.

11. DISCONNECT SWITCH(S) Fused Disconnect: A fused disconnect switch can be supplied with the indoor unit.

OPTIONAL FEATURES

Mini-Temp[™] system offers many optional features to meet your application requirements.

1. SYSTEM 2000 MICROPROCESSOR CONTROLS

Dual display, digitally operated, remote controller for precise temperature and humidity control.

16 character LCD display and six push button switches. Displays current room temperature, unit status and alarm messages. Five year battery back up for volatile memory. Firestat standard in microprocessor.



2. SYSTEM 2200 **MICROPROCESSOR-XS**

Designed to resolve the need for compactness and reliability in the control of small ceiling mount units (single-circuit precision air conditioners), which until now have been covered only by parametric controllers. The flexibility of System 2200

Microprocessor-XS allows the rapid and extended customization of the software. The compactness of the controller (8 DIN modules) and the number of inputs and outputs (21 in total) make System 2200-XS a versatile and competitive solution for ceiling mount air-conditioning units. Remote communication is available.

3. ADVANCED TECHNOLOGY **CONTROLS - SYSTEM 2200**

The remote wall mounted microprocessor based, solid state controls has 4 rows, 40 characters, back lit, supertwist liquid crystal display (LCD). Information is displayed and presented in a format that is easily viewed and understood. Remote communication available. Firestat standard in microprocessor.



4. REMOTE TEMPERATURE & HUMIDITY SENSORS

Temperature & Humidity Sensors provided in attractive case for remote sensing of temperature and humidity.

Requires field wiring. Cable is optional. Note: Remote Temperature & Humidity sensors option available when used with microprocessor only.

PROGRAMMABLE 5. WALL T'STAT

A remote Wall Mounted Programmable Thermostat shall be provided for field installation. T-Stat shall provide an economical control solution for single stage. Programmable Thermostat shall have the following features:

- Full Function LCD Display
- P & PI control
- **Energy Saver Set Points**
- 7-Day, 4-Event / Day Programmable feature

If optional humidifier is required, a humidistat is also shipped for field installation.

6. OFF-WHITE ENAMEL FINISH

Mini-Temp Unit Cabinet shall be painted with Compu-Aire Standard Enamel Finish.

7. SIDE DISCHARGE, REAR **RETURN (DUCTED UNIT)**

The unit shall be provided with the Supply (side) and Return (rear) air duct connection. (see page 5)

8. CONDENSATE PUMP

A condensate pump 35gph capacity with 20 ft. head shall be provided for field installation specially adapted to

the unit. Power shall be 115 or 230V/1/60 and shall be for field installation.



PAD-TYPE 9. HUMIDIFIER

> An evaporative panel humidifier slips into an access opening in the side of the unit.

10. DISPOSABLE CYLINDER TYPE HUMIDIFIER

Pre-wired, pre-piped maintenance free, steam generating humidifier. Humidifier is equipped with disposable cylinder and shall be mounted externally to the unit.



11. ELECTRIC REHEAT

A nichrome, open wire, electric reheat

coil including contractor and limit control is available. The reheat coil is fitted into a side access panel and is connected to power wiring already provided in the unit.



12. SCR ELECTRIC REHEAT CONTROL

External mount controller with special enclosure provided to modulate electric reheat capacity.

13. HOT GAS BYPASS

Hot gas bypass valve is factory installed in the compressor discharge for precise capacity control in the cooling mode and for protection against coil freeze up during partial or low load conditions.

14. FOUR (4) YEAR EXTENDED COMPRÉSSOR WARRANTY

Compressor is warranted for additional 4 years. This additional warranty takes effect after expiration of the 1st year standard warranty. Total coverage is extended to 5 years from the date of start up.

15. LOW AMBIENT

CONTROL TO 0°F (AIR COOLED UNITS ONLY) Pneumatic Type-Damper good down to 0°F. Damper is available for use with ducted outside air.



16. AIR COOLED CONDENSER (AIR COOLED UNITS ONLY)

Remote air cooled condenser is a low profile design constructed of copper tube and high efficiency aluminum fin coil. A factory wired control panel is provided in a weather proof housing on the condenser. (See Dimensional Data page 14)



17. VARIABLE FAN SPEED CONTROL Solid state, pressure sensitive vari-speed fan controller shall modulate condenser

fan rpm to maintain operable head

pressure down to -20°F.

18. FLOODED RECEIVERS WITH HEAD PRESSURE CONTROL (AIR COOLED CONDENSER ONLY)

The air cooled condensers shall be provided with factory installed and prepiped head pressure regulating valve. This valve shall maintain operable head pressure by flooding the condenser coil in low ambient condition down to -30°F.





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MINI-TEMPTM AIR COOLED

Table #2

MCA

COOL ONLY WITHOUT REHEAT

Table #1	TECHNICAL DATA				
	MTA: AIR COOLED				
MODEL	MTA-1 MTA-1.5 MTA-2				
NOMINAL TONNAGE	1	1.5	2		
COOLING CAPACITY					
80°F DB, 67°F WB (26.	7°C DB, 19.4°C	WB), 50% RH B	Entering Air		
Total-Btu/hr (kW)	14,900 (4.4)	19,800 (5.8)	25,900 (7.8)		
Sensible-Btu/hr (kW)	12,000 (3.7)	16,500 (4.8)	23,300 (6.8)		
	2 0°0 DD 40 0°	0 M(D) 50% DI	. Entenin a Ain		
75 F DB, 62.5 F WB (2	3.9 C DB, 16.9	C WB), 50% RF	Entering Air		
Sensible Btu/hr (KW)	13,200 (3.9)	15,600 (5.2)	22,200 (6.5)		
	[11,800 (3.4)	15,600 (4.5)	10,200 (3.3)		
72°F DB. 60°F WB (22.	2°C DB. 15.5°C	WB), 50% RH B	Entering Air		
Total-Btu/hr (kW)	12,600 (3.7)	17,000 (4.9)	21,000 (6.1)		
Sensible-Btu/hr (kW)	11,500 (3.4)	14,800 (4.3)	17,800 (5.2)		
72°F DB, 58.6°F WB (2	2.2°C DB, 14.8°	C WB), 45% R⊦	I Entering Air		
Total-Btu/hr (kW)	11,200 (3.2)	15,300 (4.5)	20,200 (5.9)		
Sensible-Btu/hr (kW)	10,600 (3.1)	12,900 (3.7)	17,000 (5.0)		
EVAPORATOR SECTION					
CFM (L/s)	600 (283)	700 (330)	850 (401)		
Fan Motor HP	0.25	0.25	0.25		
		uminum Fine			
Eace Area- Et ² (m ²)	1 10 (0 10)	1 84 (0 17)	1 84 (0 17)		
Rows/FPI	5/12	5/12	5/12		
		0.12			
CONDENSER SECTION					
AIR FLOW DATA					
CFM (L/s)	1,200 (566)	1,500 (708)	1,500 (708)		
Fan Motor HP	0.25	0.75	0.75		
CONDENSER COIL - Cop	per Tubing, Alu	iminum Fins			
Face Area- Ft ² (m ²)	1.75 (0.16)	1.84 (0.17)	1.84 (0.17)		
Rows/FPI	4/12	4/12	4/12		
			. Hormotio		
Scroll Compressor B-407C	gn Enclency, i	Heat Fullip Dut	y, nermetic		
Tonnage/Quantity	1/1	1.5/1	2/1		
EER	8.5	9.8	9.8		
	0.0	0.0	0.0		
REHEAT (Optional) - Elec	tric - 1 Stage				
kW /Electric	5.0	5.0	5.0		
Btu/hr.	17,060	17,060	17,060		
HUMIDIFIER DATA (Optio	nal) -				
Pad type - 140° (60°C), 0.2	25 GPM Water	Suppy			
Lbs/hr (kg/hr)	3.0 (1.3)	3.0 (1.3)	3.0 (1.3)		
Condensate Drain	1 1/8"	1 1/8"	1 1/8"		
Humidifier Supply	1/4"	1/4"	1/4"		
Weight					
l bs (kG)	275 (125)	300 (136)	300 (136)		

AND / OR HUMIDIFIER				
MODEL	MTA-1	MTA-1.5	MTA-2	
TONNAGE	1	1.5	2	
		208/1/60		
FLA	9.8	17.6	17.8	
MCA	11.8	21.5	21.8	
MFS	20A	30A	35A	
		277/1/60		
FLA	7.9	14.9	16.6	
MCA	9.5	18.2	20.4	
MFS	15A	30A	35A	
· _ · _ ·				
WITH REHE	AT AND HU	IMIDIFIER (PA	D-TYPE)	
MODEL	MTA-1	MTA-1.5	MTA-2	
TONNAGE	1	1.5	2	
		208/1/60		
FLA	29.0	36.8	37.2	
MCA	35.2	44.1	44.6	
MFS	45A	60A	60A	
277/1/60				
FLA	22.3	29.3	31.0	

ELECTRICAL DATA

MTA: AIR COOLED

MFS 35A 45A 50A CONSULT FACTORY FOR THE ELECTRICAL DATA USING CYLINDER TYPE HUMIDIFIER.

35.0

37.2

27.1



MTA w/ STANDARD FEATURES COMPLETE WITH CONDENSER AIR / FAN PACKAGE.

BOLD FACE DATA IN METRIC UNITS

MINI-TEMP[™] WATER COOLED

Table #3	TECHNICAL DATA				
	MTW: WATER COOLED				
MODEL	MTW-1	MTW-1.5	MTW-2		
NOMINAL TONNAGE	1	1.5	2		
	7°C DB 40 4°C		Entoring Air		
Total-Btu/br (kW)	15 200 (4 4)	20 200 (5 9)	26 600 (7 8)		
Sensible-Btu/hr (kW)	12,800 (3,7)	16,900 (4,9)	24,200 (7.0)		
	12,000 (011)	10,000 (110)	21,200 (110)		
75°F DB, 62.5°F WB (2	3.9°C DB, 16.9°	C WB), 50% RH	I Entering Air		
Total-Btu/hr (kW)	13,400 (3.9)	19,600 (5.7)	24,800 (7.2)		
Sensible-Btu/hr (kW)	11,900 (3.5)	17,200 (5.0)	19,100 (5.6)		
72°F DB, 60°F WB (22.)	2°C DB, 15.5°C	WB), 50% RH E	Entering Air		
Total-Btu/hr (kW)	12,800 (3.7)	17,800 (5.2)	22,500 (6.6)		
Sensible-Btu/hr (kW)	11,700 (3.4)	15,900 (4.6)	18,400 (5.4)		
72°E DD 60 6°E WD (2	2 2°C DB 44 9°	C WD) 45% DL	L Entoring Air		
Total-Btu/br (kW)	11 600 (3 A)	16 900 (1 9)	21 200 (6 2)		
Sensible-Btu/hr (kW)	10,900 (3.2)	15 200 (4.4)	17 300 (5.0)		
	10,000 (0.2)	10,200 (4.4)	17,000 (0.0)		
EVAPORATOR SECTION					
AIR FLOW DATA					
CFM (L/s)	600 (283)	700 (330)	850 (401)		
Fan Motor HP	0.25	0.25	0.25		
EVAPORATOR COIL- Cop	per Tubing, A	uminum Fins			
Face Area- Ft ² (m ²)	1.10 (0.10)	1.75 (0.16)	1.75 (0.16)		
Rows/FPI	5/12	5/12	5/12		
	TA Co avial tu	uha in tuha con	donsor		
85°F(29°C) Entering water	150 PSIG Wor	king Pressure	uensei		
GPM (L/s)	3.0 (0.19)	4.5 (0.28)	6.0 (0.38)		
Pressure Drop Ft. of H ₂ O (kPA)	6.5 (44.7)	7.0 (48.2)	8.0 (55.0)		
COMPRESSOR DATA - Hi	gh Efficiency, I	Heat Pump Dut	y, Hermetic		
Scroll Compressor R-407C		-	-		
Tonnage/Quantity	1/1	1.5/1	2/1		
EER	8.5	9.8	9.8		
REHEAT (Optional) - Elec	tric - 1 Stage	5.0	50		
RVV /Electric	17.060	17.060	5.0		
Dtu/III	17,000	17,000	17,000		
HUMIDIFIER DATA (Optio	nal) -				
Pad type - 140° (60°C), 0.2	Pad type - 140° (60°C), 0.25 GPM Water Supply				
Lbs/hr (kg/hr)	3.0 (1.3)	3.0 (1.3)	3.0 (1.3)		
PIPING DATA		· · · · · · · · · · · · · · · · · · ·			
Condensate Drain	1 1/8"	1 1/8"	1 1/8"		
Water Supply	1/2"	1/2"	1/2"		
Water Return	1/2"	1/2"	1/2"		
Humidifier Supply	1/4"	1/4"	1/4"		
NAC 1 - 1 - 4					
vveignt	250 (44 4)	275 (425)	275 (425)		
BOLD FACE DATA IN MET		210 (120)	210 (120)		

 Table #4
 ELECTRICAL DATA

MTW: WATER COOLED

COOL ONLY WITHOUT REHEAT AND / OR HUMIDIFIER

MODEL	MTW-1	MTW-1.5	MTW-2
TONNAGE	1	1.5	2
		208/1/60	-
FLA	7.8	12.0	12.2
MCA	9.8	15.0	15.3
MFS	15A	25A	25A
277/1/60			
FLA	6.3	10.1	11.8
MCA	7.9	12.6	14.8
MFS	15A	20A	25A

WITH REHEAT AND HUMIDIFIER (PAD-TYPE)

MODEL	MTW-1	MTW-1.5	MTW-2
TONNAGE	1	1.5	2
		208/1/60	
FLA	27.0	31.2	31.6
MCA	33.3	38.5	39
MFS	40A	50A	50A
	277/1/60		
FLA	20.7	24.5	26.2
MCA	25.5	30.2	32.4
MFS	30A	35A	45A

CONSULT FACTORY FOR THE ELECTRICAL DATA USING CYLINDER TYPE HUMIDIFIER.

★ MTG CAPACITIES: MULTIPLY WATER COOLED CAPACITY BY 0.853 TO OBTAIN CAPACITIES FOR GLYCOL/WATER SOLUTION @ 30%.

CONSULT FACTORY FOR GLYCOL PRESSURE DROP, FLUID COOLER, AND PUMP SELECTIONS.



MTW w/ OPTIONAL OFF-WHITE ENAMEL PAINT, PAD-TYPE HUMIDIFIER AND ELECTRICAL REHEAT.

MINI-TEMPTM WATER COOLED

Table #3	TECHNICAL DATA				
	MTW: WATER COOLED				
MODEL	MTW-1	MTW-1.5	MTW-2		
NOMINAL TONNAGE	1	1.5	2		
	7°C DB 40.4°C	WD) 50% DU			
Total-Btu/br (kW)	15 200 (4 4)	20 200 (5 9)	26 600 (7 8)		
Sensible-Btu/hr (kW)	12,800 (3.7)	16,900 (4.9)	24,200 (7.0)		
	12,000 (011)	10,000 (110)	21,200 (110)		
75°F DB, 62.5°F WB (2	3.9°C DB, 16.9°	C WB), 50% RH	Entering Air		
Total-Btu/hr (kW)	13,400 (3.9)	19,600 (5.7)	24,800 (7.2)		
Sensible-Btu/hr (kW)	11,900 (3.5)	17,200 (5.0)	19,100 (5.6)		
72°F DB, 60°F WB (22.	2°C DB, 15.5°C	WB), 50% RH I	Entering Air		
Total-Btu/hr (kW)	12,800 (3.7)	17,800 (5.2)	22,500 (6.6)		
Sensible-Btu/hr (kW)	11,700 (3.4)	15,900 (4.6)	18,400 (5.4)		
70°E DD 50 6°E WD (2	2 2°C DB 14 9°		L Entoring Air		
Total-Btu/br (kW)	11 600 (3 4)	16 900 (4 9)	21 200 (6 2)		
Sensible-Btu/hr (kW)	10,900 (3.2)	15 200 (4.4)	17 300 (5.0)		
	10,000 (012)	10,200 (111)	11,000 (010)		
EVAPORATOR SECTION					
AIR FLOW DATA					
CFM (L/s)	600 (283)	700 (330)	850 (401)		
Fan Motor HP	0.25	0.25	0.25		
		-	-		
EVAPORATOR COIL- Cop	per Tubing, A	uminum Fins	/_ /_		
Face Area- Ft ² (m ²)	1.10 (0.10)	1.75 (0.16)	1.75 (0.16)		
Rows/FPI	5/12	5/12	5/12		
	TA - Co-avial tu	uha in tuha con	donsor		
85°F(29°C) Entering water	150 PSIG Wor	king Pressure	uensei		
GPM (L/s)	3.0 (0.19)	4.5 (0.28)	6.0 (0.38)		
Pressure Drop Ft. of H ₂ O (kPA)	6.5 (44.7)	7.0 (48.2)	8.0 (55.0)		
COMPRESSOR DATA - Hi	gh Efficiency, I	Heat Pump Dut	y, Hermetic		
Compressor R-22		-	-		
Tonnage/Quantity	1/1	1.5/1	2/1		
EER	8.5	9.8	9.8		
	(
KEHEAI (Optional) - Elec		5.0	5.0		
Rtu/br	17.060	17.060	17.060		
Diam	17,000	17,000	17,000		
HUMIDIFIER DATA (Optio	nal) -				
Pad type - 140° (60°C), 0.2	25 GPM Water S	Supply			
Lbs/hr (kg/hr)	3.0 (1.3)	3.0 (1.3)	3.0 (1.3)		
PIPING DATA					
Condensate Drain	1 1/8"	1 1/8"	1 1/8"		
Water Supply	1/2"	1/2"	1/2"		
Water Return	1/2"	1/2"	1/2"		
Humidifier Supply	1/4"	1/4"	1/4"		
Wainh					
weight	250 (114)	275 (125)	275 (125)		
BOLD FACE DATA IN ME		2.0(123)	2.0(123)		

 Table #4
 ELECTRICAL DATA

MTW: WATER COOLED

COOL ONLY WITHOUT REHEAT AND / OR HUMIDIFIER

MODEL	MTW-1	MTW-1.5	MTW-2
TONNAGE	1	1.5	2
		208/1/60	
FLA	7.8	12.0	12.2
MCA	9.8	15.0	15.3
MFS	15A	25A	25A
277/1/60			
FLA	6.3	10.1	11.8
MCA	7.9	12.6	14.8
MFS	15A	20A	25A

WITH REHEAT AND HUMIDIFIER (PAD-TYPE)

MODEL	MTW-1	MTW-1.5	MTW-2
TONNAGE	1	1.5	2
		208/1/60	
FLA	27.0	31.2	31.6
MCA	33.3	38.5	39
MFS	40A	50A	50A
277/1/60			
FLA	20.7	24.5	26.2
MCA	25.5	30.2	32.4
MFS	30A	35A	45A

CONSULT FACTORY FOR THE ELECTRICAL DATA USING CYLINDER TYPE HUMIDIFIER.

★ MTG CAPACITIES: MULTIPLY WATER COOLED CAPACITY BY 0.853 TO OBTAIN CAPACITIES FOR GLYCOL/WATER SOLUTION @ 30%.

CONSULT FACTORY FOR GLYCOL PRESSURE DROP, FLUID COOLER, AND PUMP SELECTIONS.



MTW w/ OPTIONAL OFF-WHITE ENAMEL PAINT, PAD-TYPE HUMIDIFIER AND ELECTRICAL REHEAT.

MINI-TEMPTM CHILLED WATER

Table #5	TECHNICAL DATA			
	MTC: CHILLED WATER			
MODEL	MTC-1	MTC-1.5	MTC-2	
NOMINAL TONNAGE	1	1.5	2	
COOLING CAPACITY				
80°F DB, 67°F WB (26.	7°C DB, 19.4°C	WB), 50% RH E	Entering Air	
Total-Btu/hr (kW)	15,230 (4.5)	21,978 (6.4)	25,300 (7.4)	
Sensible-Btu/hr (kW)	14,980 (4.4)	18,490 (5.4)	21,800 (6.4)	
75°F DB, 62.5°F WB (2	3.9°C DB, 16.9°	C WB), 50% RH	I Entering Air	
Total-Btu/hr (kW)	13,600 (4.0)	18,300 (5.4)	22,700 (6.6)	
Sensible-Btu/hr (kW)	12,800 (3.8)	15,800 (4.6)	18,400 (5.4)	
72°F DB, 60°F WB (22.)	2°C DB, 15.5°C	WB), 50% RH B	Entering Air	
Total-Btu/hr (kW)	11,600 (3.4)	15,800 (4.6)	22,500 (6.6)	
Sensible-Btu/hr (kW)	11,600 (3.4)	14,700 (4.3)	18,000 (5.3)	
EVAPORATOR SECTION				
AIR FLOW DATA				
CFM (L/s)	600 (283)	700 (330)	850 (401)	
Fan Motor HP	0.25	0.25	0.25	
			•	
EVAPORATOR COIL- Cop	per Tubing, Al	uminum Fins		
Face Area- Ft ² (m ²)	1.75 (0.16)	1.75 (0.16)	1.75 (0.16)	
Rows/FPI	3	4	4	
CHILLED WATER SECTIO	N			
45°F(7.2°C) Entering wate	r 150 PSIG Woi	rking Pressure		
GPM (L/s)	3.5 (0.22)	4 (0.25)	5 (0.31)	
Pressure Drop Ft. of H ₂ O (kPA)	4.0 (0.25)	7.0 (0.44)	8.0 (0.50)	
REHEAT (Optional) - Elec	tric - 1 Stage			
kW /Electric	5	5	5	
Btu/hr	13,640	13,640	13,640	
HUMIDIFIER DATA (Option	nal) -			
Pad type - 140° (60°C), 0.2	5 GPM Water S	Suppy		
Lbs/hr (kg/hr)	3.0 (1.3)	3.0 (1.3)	3.0 (1.3)	
PIPING DATA		1	1	
Condensate Drain	1 1/8"	1 1/8"	1 1/8"	
Water Supply	5/8"	5/8"	5/8"	
Water Return	5/8"	5/8"	5/8"	
Humidifier Supply	1/4"	1/4"	1/4"	
Weight				
Lbs (kG)	200 (90.7)	220 (99.8)	250 (113.4)	

BOLD FACE DATA IN METRIC UNITS

Table #6	ELECTRICAL DATA				
	MTC:	CHILLED W	ATER		
COOL ONLY AND / OR H	(WITHOUT UMIDIFIER	REHEAT			
MODEL	MTC-1	MTC-1.5	MTC-2		
TONNAGE	1	1.5	2		
		208/1/60			
FLA	1.6	1.6	1.6		
MCA	2.0	2.0	2.0		
MFS	15A	15A	15A		
		277/1/60	•		
FLA	1.7	1.7	1.7		
MCA	2.1	2.1	2.1		
MFS	15A	15A	15A		
WITH REHEAT AND HUMIDIFIER (PAD-TYPE)					
MODEL	MTC-1	MTC-1.5	MTC-2		
TONNAGE	1	1.5	2		
		208/1/60			
FLA	21.2	21.2	21.2		
MCA	26.5	26.5	26.5		
MFS	30A	30A	30A		
277/1/60					
FLA	16.1	16.1	16.1		
MCA	20.1	20.1	20.1		

CONSULT FACTORY FOR THE ELECTRICAL DATA USING CYLINDER TYPE HUMIDIFIER.

25A

MFS 25A 25A



MTC w/ STANDARD FEATURES.

DIMENSIONAL DATA

AIR COOLED, WATER/GLYCOL COOLED, CHILLED WATER SYSTEM



INSTALLATION

Mounting Flexibility / Installation

The Mini-Temp models are suspended above subceiling from the building structure.

These can be mounted flush with the ceiling tiles replacing a standard 2 x 4 ft ceiling tile.



INSTALLATION









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VERTICAL DISCHARGE

MECHANICAL SPECIFICATIONS

Furnish a Mini-Temp computer room process cooling system by Compu-Aire. Unit shall be selfcontained, factory assembled, wired, and tested, and designed specifically where spot cooling is required. Unit configuration shall be horizontal for ceiling mounting and designed to fit 2 feet x 4 feet opening of a ceiling system. Electrical power shall be ______ volts, _____ phase, and _____ hertz. Unit shall have a minimum capacity of ______ BTU/hr total, and ______ BTU/hr sensible at air entering the coil at ______ °F DB ambient air temperature maximum ______ °F ambient air temperature minimum.

FAN shall be double width, double inlet centrifugal type with direct motor.

FILTER shall be disposable type one inch thick and accessible through a hinged return air grill.

UNIT CABINET AND FRAME: Frame shall be 16 gauge furniture grade steel. Cabinet shall be galvanized steel. All panels shall be insulated with 1-inch thick, 1-lb. Density insulation.

COMPRESSORIZED MODEL: Refrigeration system shall be completely pre-piped with type L copper tubing. Unit shall be complete with refrigerant metering device and pressure fittings for charging and evacuation. Compressor shall be protected with a MANUAL RESET HIGH PRESSURE SWITCH and an AUTOMATIC RESET LOW PRESSURE SWITCH.

WATER OVERFLOW SENSOR: A very sensitive moisture overflow sensor shall be provided to turn unit off in the event the drain gets clogged.

ELECTRICAL CONTROL COMPONENTS: Electrical components shall be enclosed in a U.L. approved enclosure within the unit and installed in such a manner that the unit could be serviced in place where mounted. Control panel shall be wired in accordance with U.L. standards. A heat, cool thermostat with fan switch shall be provided for field installation.

COOLING COIL shall be high efficiency type copper tube, aluminum fins mechanically bonded.

AIR COOLED SYSTEM (MTA MODELS ONLY) AIR COOLED CONDENSER COIL shall be copper tube aluminum fins mechanically bonded. Coil shall be high efficiency type, factory installed and piped in the tube.

CONDENSER/AIR FAN PACKAGE. Condenser fan shall be double width and double inlet centrifugal type. Blower shall be provided with one speed direct drive motor with a pressure switch to cycle the fan down to 35°F ambient operation. Fan housing shall be designed for direct mounting to the condenser coil section. Electrical connection shall be factory provided for field hook-up.

WATER COOLED SYSTEM (MTW MODELS ONLY)

Condenser shall be co-axial type for counter flow performance. Water cooled condenser shall be built into the main unit completely piped with an adjustable water regulating valve. Maximum operating water side pressure shall be 150 psig.*

CHILLED WATER SYSTEM (MTC MODELS ONLY)

Chilled water coil shall be pre-piped with a two way valve and ready for field hook up. Maximum operating water side pressure shall be 150 psig.*

THERMOSTAT (T-STAT) CONTROL

T-stat provides an economical control solution for single stage cooling.

OPTIONAL EQUIPMENT

• ELECTRIC REHEAT COIL shall be open wire and shall be installed at the down stream side of the evaporator coil. Heater operation shall be protected by the use of primary protection.

• HUMIDIFIER shall be evaporative pad type complete with all controls.

• HUMIDIFIER shall be steam generating with disposable cylinder.

• **CONDENSATE PUMP** shall be provided where required for remote mounting. 115v/60hz/1 phase electrical power shall be provided from a different source other than the unit.

For Additional Optional Specifications Consult Factory

A COMPANY IS MEASURED – BY THE COMPANY IT KEEPS –

Minority Business Enterprise

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MEA # 177-85

LISTED SPECIAL PURPOSE AIR CONDITIONERS 4415



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TAB 1

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