

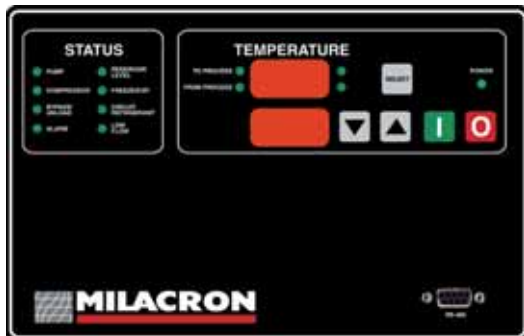
CENTRAL CHILLERS

**Air-Cooled & Water-Cooled
20 - 40 Tons**

**Industrial Duty
Package Chillers
for Smaller
Processes**

**Complete Package
including
single zone chiller and
pump tank station!**

CM-TIS-20W shown.
Air-cooled unit with 20 tons capacity
and microprocessor controller.



Microprocessor controller for CM-TIS models

FEATURES - AT A GLANCE:

- Microprocessor controller
- Complete pump tank and central chiller package
- Refrigerant and coolant pressure gauges
- Dual pump circuit
- Automatic reservoir tank make-up

CM-TIS SERIES 20-40TONS AIR & WATER-COOLED

MILACRON CM-TIS Series single zone central chillers are perfect for applications where central chilling and central water distribution is required for smaller applications.

PROCESS TEMPERATURES: 20°F to 65°F

AVAILABLE CAPACITIES: 20 to 40 tons

AVAILABLE PROCESS PUMP HP: 3 to 40

AVAILABLE PROCESS PUMP GPM: 60 to 300

STANDARD DIMENSIONS: 72" x 84" x 68" (HxWxD)



STANDARD FEATURES

RESERVOIR CONSTRUCTION: Seamless, rotationally molded, non-rusting polyethylene • Insulation • Drain valve • Overflow port • Hot/cold section partition (baffle) • Structural base • Automatic water-level control • Hinged tank lid

REFRIGERANT CIRCUITS: Hermetic scroll compressors on 20-30 ton models • Semi-hermetic disc compressor on 40 ton models • Water-cooled models have a tube/shell condenser with regulator valve and removable heads for service • Air-cooled models have a fin/tube remote condenser for outdoor installation • Liquid receiver on air-cooled models • Oil separator on air-cooled models • Liquid line solenoid valve • Refrigerant sight glass with moisture indicator • Thermostatic expansion valve • Braze plate evaporator • Hot gas by-pass capacity control system

COOLANT CIRCUIT: Pump platform decking • Spare pump ports • Large capacity process pump with suction service valve and discharge service valve • Evaporator pump with suction service valve, discharge service valve and discharge basket strainer

LIMIT DEVICES: Refrigerant circuit using high pressure limit and low pressure limit • Coolant circuit using pump motor overload, coolant freeze-stat and evaporator flow limit • Instrument control circuit fuse

PRESSURE GAUGES: Refrigerant high pressure • Refrigerant low pressure • Coolant pressure

ELECTRICAL: NEMA rated electrical cabinet • Fused pump motor starter • Fused compressor motor starter • Fused transformer • Power entry terminal block

CONTROL INSTRUMENT: Continuous to process and setpoint temperature display • Selectable from process temperature display • Temperature display in Fahrenheit or Celsius • Status indicators for power on, compressor, bypass/unload, alarm, reservoir level, freeze-stat, refrigerant circuit and low flow • Digital setpoint selection • Soft key operators for stop, start, select • RS-485 SPI communication with display indication

OPTIONS

UNIT CONSTRUCTION:

- Special paint color
- Stainless steel reservoir
- Epoxy coated mild steel reservoir

REFRIGERANT CIRCUIT:

- Cylinder unloading (40 ton models only)
- Compressor hour meter

COOLANT CIRCUIT:

- Larger process pumps
- Standby pumps and manifold

INSTRUMENTATION:

- Remote display panel
- PLC with touch screen interface

WARRANTIES:

- Extended compressor warranty

ELECTRICAL:

- UL listed electrical panel
- Power disconnects

SPECIFICATIONS

SPECIFICATIONS	CM-TIS-20A	CM-TIS-25A	CM-TIS-30A	CM-TIS-40A	
COMPRESSOR	Quantity	2	2	1	
	Capacity ^a	18	26	30	39
	HP each	(2)10	(2)13	(2)15	40
PUMPS¹	Process HP	3	5	5	5
	Process GPM	60	75	90	100
	Process PSI	55	60	55	50
	Evaporator HP	1	1	1 1/2	2
	Evaporator GPM	47	58	68	100
CONNECTION SIZES (inches)	Process (to/from)	1	3	3	4
	Make-Up	1	1	1	1
	Overflow	4	4	4	4
AMPERAGE <small>RUN²/FULL LOAD³@30/60hz⁴</small>	230 Volt	77/94	101/119	102/116	147/185
	460 Volt	39/47	50/60	51/58	74/93
	575 volt	31/38	40/48	41/47	57/74
REFRIGERANT⁵	Type HCFC	22	22	22	22
RESERVOIR (gallons)	Operating	300	300	300	300
	Holding	450	450	450	450
DIMENSIONS (inches)	Height	72	72	72	72
	Width	84	84	84	84
	Depth (base)	68	68	68	68
WEIGHTS (pounds)	Shipping ¹⁰	3,035	3,235	3,335	3,635
	Operating	5,960	6,160	6,260	6,560
REMOTE AIR-COOLED CONDENSER					
CONNECTIONS⁸	Liquid	1-3/8	1-5/8	1-5/8	2-1/8
	Hot Gas	2-1/8	2-1/8	2-5/8	2-5/8
AIR FLOW⁷	Fan Quantity	2	2	3	3
AMPERAGE⁸ <small>FULL LOAD @ 30/60hz⁴</small>	230 volt	12.4	12.4	18.6	18.6
	460 Volt	6.2	6.2	9.3	9.3
	575 Volt	4.96	4.96	7.44	7.44
DIMENSIONS (inches)	Height	49	49	49	49
	Width	46	46	46	46
	Depth	97	97	144	144
WEIGHT (pounds)	Shipping ¹⁰	690	890	970	1,310

Notes: 1. Consult pump curve for pump performance. 2. Run load amps shown. No allowance for inrush. Service disconnect by owner. Actual running amps at design conditions. 3. Full Load amps are higher than run load amps and must be used for sizing disconnects and supply wiring. 4. Consult factory for 50hz operation. 5. Field charging required. 6. Field installation and piping connection of condenser by owner. 7. Vertical air discharge from condenser. 8. Full load amperage shown for single condenser unit. 9. Tons capacity at 12,000 BTU/ton @ 50°F LWT @ 115°F condensing temperature. Capacities may be +/- 5% as reserved by the compressor manufacturer. Capacity multipliers are 50°F - 1.00; 40°F - .80; 30°F - .60; 20°F - .40. The minimum recommended operating temperature when no glycol is used is 48°F. 10. Unit weight crated for shipment.

SPECIFICATIONS	CM-TIS-20W	CM-TIS-25W	CM-TIS-30W	CM-TIS-40W	
COMPRESSOR	Quantity	1	2	2	1
	Capacity ^a	19.5	26	30	41.9
	HP each	(2)10	(2)13	(2)15	40
PUMPS¹	Process HP	3	5	5	5
	Process GPM	60	75	90	100
	Process PSI	55	60	55	50
	Evaporator HP	1	1	1 1/2	2
	Evaporator GPM	47	58	68	100
CONNECTION SIZES (inches)	Process (to/from)	2	3	3	4
	Make-Up	1	1	1	1
	Overflow	4	4	4	4
CONDENSING WATER REQUIREMENTS²	City	30	38	45	60
	Tower	60	75	90	120
AMPERAGE <small>RUN²/FULL LOAD³@30/60hz⁵</small>	230 Volt	63/80	87/105	102/116	126/164
	460 Volt	32/40	44/53	51/58	63/82
	575 volt	26/33	35/43	41/47	51/67
REFRIGERANT	Type HCFC	22	22	22	22
TANK CAPACITIES	Operating	300	300	300	300
	Holding	450	450	450	450
DIMENSIONS (inches)	Height	72	72	72	72
	Width	84	84	84	84
	Depth (base)	68	68	68	68
WEIGHTS (pounds)	Shipping ⁷	3,035	3,235	3,335	3,635
	Operating	5,960	6,160	6,260	6,560

Notes: 1. Consult pump curve for pump performance. 2. Flow (GPM) rate is based on 60°F city, 85°F tower at 20 PSI with a clean condenser. 3. Run load amps shown. No allowance for inrush. Service disconnect by owner. Actual running amps at design conditions. 4. Full Load amps are higher than run load amps and must be used for sizing disconnects and supply wiring. 5. Consult factory for 50hz operation. 6. Tons capacity at 12,000 BTU/ton @ 50°F LWT @ 105°F condensing temperature. Capacities may be +/- 5% as reserved by the compressor manufacturer. Capacity multipliers are 50°F - 1.00; 40°F - .80; 30°F - .60; 20°F - .40. The minimum recommended operating temperature when no glycol is used is 48°F. 7. Unit weight crated for shipment.



MILACRON PROCESS SUPPORT BUSINESS

4165 Halfacre Road Batavia, Ohio 45103 Phone: 513-536-2584 Fax: 513-536-2321

web site: www.Milacron.com email: sales@Milacron.com Printed October 2006

SINCE PRODUCT INNOVATION AND IMPROVEMENT IS OUR CONSTANT GOAL, ALL FEATURES AND SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY.