

NEW  
POLYETHYLENE  
RESERVOIR!

# CENTRAL CHILLERS

## TITAN® SERIES

- 20 - 70 Tons
- Air-Cooled
- Dual Circuit



TI-60A : shown with remote air-cooled condenser and standby pump and manifold



Multizone Controller

### FEATURES - AT A GLANCE:

- Multizone microprocessor controller
- Central chiller and pump tank package
- Scroll compressors - reliable and efficient
- Refrigerant and coolant pressure gauges
- Dual pump circuit, optional standby pump and manifold available
- 1 year parts and labor warranty

**TITAN®** combines a multizone refrigerant chiller with a large capacity polyethylene pump tank station. The **TITAN®** is engineered specifically for the industrial process environment.

#### PROCESS TEMPERATURES:

- 20°F to 65°F

#### AVAILABLE CAPACITIES:

- 20 to 180 tons (20-70 tons listed here)

#### AVAILABLE PROCESS PUMP HP:

- 3 to 40

#### AVAILABLE PROCESS PUMP GPM:

- 60 to 600

#### STANDARD DIMENSIONS:

- 82" x 92" x 96" (HxWxD)

The **TITAN®** refrigerant circuits include scroll compressors, brazed plate evaporators, capacity control system, and remote air-cooled condensers. The non ferrous polyethylene reservoir and pump station includes process and evaporator pumps, suction and discharge service valves, flow safety switches and evaporator protecting basket strainers. An optional standby pump with manifold is available.

**CUSTOM DESIGNS...** if one of our standard models does not fit your application, then we can design a custom unit that will.



# SPECIFICATIONS

<b>TITAN<sup>®</sup> SPECIFICATIONS</b>		<b>TI-20A</b>	<b>TI-30A</b>	<b>TI-40A</b>	<b>TI-50A</b>	<b>TI-60A</b>	<b>TI-70A</b>
<b>COMPRESSOR</b>	Quantity	2	2	4	4	4	2
	Capacity <sup>8</sup>	20.5	30	40	50	60	68.3
	HP each	10	15	10	13	15	35 <sup>10</sup>
<b>PUMPS<sup>1</sup></b>	Process HP	3	5	5	7.5	10	10
	Process GPM	60	90	120	150	180	210
	Process PSI	45	55	45	55	65	60
	Evaporator HP	2	2	2	3	3	5
	Evaporator GPM	50	72	96	120	144	164
<b>CONNECTION SIZES (inches)</b>	Process (to/from)	2	3	3	4	4	4
	Make-Up	1	1	1	1	1	1
	Overflow	4	4	4	4	4	4
<b>FULL LOAD<sup>2</sup></b>	230 Volt	88	124	168	232	256	260
	460 Volt	44	62	84	116	128	130
	575 Volt	35	50	67	93	103	104
<b>AMPERAGE @ 3ø/60hz<sup>3</sup></b>							
<b>REFRIGERANT<sup>4</sup></b>	Type HCFC-	22	22	22	22	22	22
	Operating	350	350	350	350	350	350
<b>TANK CAPACITIES (gallons)</b>	Holding	450	450	450	450	450	450
	Height	82	82	82	82	82	82
<b>DIMENSIONS (inches)</b>	Width	87	87	92	92	92	92
	Depth (base)	96	96	96	96	96	96
	Shipping <sup>9</sup>	3,550	4,170	4,350	4,990	5,155	5,325
<b>WEIGHTS (pounds)</b>	Operating	7,925	8,530	8,710	9,350	9,515	9,683
<b>REMOTE AIR-COOLED CONDENSER</b>		<b>FCB-12<sup>11</sup></b>	<b>RC6-0678</b>	<b>RC6-0798</b>	<b>RC6-0894</b>	<b>RC6-1196</b>	<b>RC6-1340</b>
<b>CONNECTIONS<sup>5</sup></b>	Liquid / Hot Gas	2@7/8	2@1 3/8	2@1 5/8	2@1 5/8	2@1 5/8	2@2 1/8
<b>AIR FLOW<sup>6</sup></b>	Fan Quantity	2	4	4	4	6	6
<b>FULL LOAD</b>	230 volt	10.4	28.0	28.0	28.0	42.0	42.0
<b>AMPERAGE<sup>7</sup></b>	460 Volt	5.2	14.0	14.0	14.0	21.0	21.0
<b>@ 3ø/60hz<sup>4</sup></b>	575 Volt	4.2	11.2	11.2	11.2	16.8	16.8
<b>DIMENSIONS (inches)</b>	Height	40 1/2	50	50	50	50	50
	Width	43.0	88	88	88	88	88
	Depth	69 3/4	125	125	125	169	169
<b>WEIGHT (pounds)</b>	Shipping <sup>9</sup>	470	1,495	1,495	1,695	1,845	2,420

Notes: 1. Consult FYI #4-C-38 and 5-A-261 for characteristics relating to pump curves. 2. Full Load amps are higher than run load amps and must be used for sizing disconnects and supply wiring. 3. Consult factory for 50hz operation. 4. Field charging required. 5. Field installation and piping connection of condenser by owner. 6. Vertical air discharge from condenser. 7. Full load amperage shown for single condenser unit. Some models use multiple condenser units. 8. Tons capacity at 12,000 BTU/ton @ 50°F LWT @ 115°F condensing temperature. Capacities may be +/- 5% as reserved by the compressor manufacturer. Capacities 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. 9. Unit weight crated for shipment. 10. Discus compressors. 11. Two supplied.

# OPTIONS

## TANK CONSTRUCTION:

- Epoxy coated mild steel
- Stainless steel wetted surfaces
- Special paint

## REFRIGERANT CIRCUIT:

- Compressor CCPR valve
- Discus compressor
- Compressor hour meter

## COOLANT CIRCUIT:

- Larger process pumps
- Standby pumps and manifold

## ELECTRICAL:

- UL listed electrical panel
- Disconnects

## INSTRUMENTATION:

- Remote display kit
- PLC instrument with color touch screen

## WARRANTIES:

- Extended compressor warranty

# STANDARD FEATURES

## TANK CONSTRUCTION:

- Seamless, rotationally molded, non-rusting polyethylene
- Tank insulation
- Drain valve
- Overflow port
- Hot/cold section partition
- Structural steel base
- Automatic water-level control
- Pump decking
- Spare pump ports

## REFRIGERANT CIRCUITS:

- Hermetic scroll compressors
- Air-cooled condenser
  - remote, outdoor condenser
  - variable speed fan
  - pressure staging
- Liquid line solenoid valve

- Refrigerant sight glass with moisture indicator
- Thermostatic expansion valve
- Brazed plate evaporator
- Hot gas by-pass capacity control system

## COOLANT CIRCUIT:

- Large capacity process pump:
  - suction service valve
  - discharge service valve
- Evaporator pump:
  - suction service valve
  - discharge service valve
  - discharge basket strainers

## SAFETY DEVICES (per zone):

- Refrigerant circuit:
- high pressure safety

- low pressure safety
  - evaporator flow safety
- Coolant circuit:
  - pump motor overload relay
  - coolant freezestat
- Instrument control circuit fuse

## PRESSURE GAUGES (per zone):

- Refrigerant high pressure
- Refrigerant low pressure
- Coolant pressure gauge

## ELECTRICAL:

- Nema rated electrical cabinet
- Fused pump motor starters
- Fused compressor starters
- Fused transformer
- Power entry terminal block

## WARRANTY:

- 1 year on parts and labor
- 2nd year complementary preventative maintenance visit

## CHILLER CONTROL INSTRUMENT:

- Microprocessor based multizone controller
- Intelligent zone boards
- Each compressor staged individually
- Large temperature display in °F or °C for *to process* and *from process*
- Large setup display
- Refrigerant circuit indicators per zone: *probe, low flow, high pressure, low pressure, compressor, freezestat, capacity*
- Water circuit indicators: *temperature deviation, low pressure, tank level, flow, probe, phase*
- SPI communications interface
- Selectable lead/lag mode
- Audible and visual alarm

## SERVICE and WARRANTY...

One year parts and labor warranty with a second year free service 'check-up'. Backed by the **ADVANTAGE** nationwide service network, service is only a phone call away. Refer to bulletin ADV-205 for complete warranty details.



ADVANTAGE PRODUCTS: TEMPERATURE CONTROLLERS • PORTABLE CHILLERS • CENTRAL CHILLERS • PUMP TANK STATIONS • TOWER SYSTEMS • FILTERS

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