

With New
Polyethylene
Reservoir

CENTRAL CHILLERS

TITAN[®] SERIES

- 20 - 70 Tons
- Water-Cooled
- Dual Circuit



TI-60W - shown with optional standby pump and manifold



Multizone Controller

FEATURES - AT A GLANCE:

- Multizone microprocessor controller
- Pump tank and central chiller package
- Delivered ready to run - not a kit
- 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 water cooled condensers with regulator valves. The non ferrous polyethylene pump tank 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

TITAN [®] SPECIFICATIONS		TI-20W	TI-30W	TI-40W	TI-50W	TI-60W	TI-70W
INDEPENDENT REFRIGERANT CIRCUITS							
COMPRESSOR	Quantity	2	2	4	4	4	2 ⁸
	Capacity ⁵	20.5	30	40	52	60	70
	HP each	10	15	10	13	15	35
PUMPS¹	Process HP ⁶	3	5	5	7.5	10	10
	Process GPM	60	90	120	150	180	180
	Process PSI	45	55	45	55	65	65
	Evaporator HP	2	2	2	3	3	5
	Evaporator GPM	50	72	96	120	144	168
CONNECTION SIZES (inches)	Process (to/from)	2	3	3	4	4	4
	Make-Up	1	1	1	1	1	1
	Overflow	4	4	4	4	4	4
	Condensing	2	3	3	3	3	4
CONDENSING REQUIREMENTS²	City	31	45	60	75	90	105
	Tower	61	90	120	150	180	210
FULL LOAD³	230 Volt	88	124	168	232	256	260
AMPERAGE @ 3ø /60hz⁴	460 Volt	44	62	84	116	128	130
	575 volt	35	50	67	93	103	104
REFRIGERANT TYPE	HCFC-	22	22	22	22	22	22
TANK CAPACITIES	Operating	350	350	350	350	350	350
	Holding	450	450	450	450	450	450
DIMENSIONS (inches)	Height	82	82	82	82	82	82
	Width	87	87	92	92	92	92
	Depth (base)	96	96	96	96	96	96
WEIGHTS (pounds)	Shipping ⁷	3,550	4,170	4,350	4,990	5,155	5,325
	Operating	7,925	8,530	8,710	9,350	9,515	9,683

1. Consult FYI #4-C-38 and #5-A-261 for characteristics relating to pump curves. 2. Flow (GPM) rate is based on 60°F city, 85°F tower at 20 PSI with a clean condenser. 3. Service disconnect by owner. "Full Load" amps must be used for sizing disconnects and supply wiring. 4. Consult factory for 50hz operation. 5. 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 40°F - .80; 30°F - .60; 20°F - .40. The minimum recommended operating temperature when no glycol is used is 48°F. 6. Selection of optional pumps for higher flow rates will raise the minimum recommended operating temperature when no glycol is used. 7. Approximate unit weight crated for shipment. 8. Semi-hermetic discus compressor used on this model.

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 manifolding

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 (baffle)
- Structural base
- Automatic water-level control
- Pump decking
- Spare pump ports
- Hinged tank lid

REFRIGERANT CIRCUITS:

- Hermetic scroll compressors
- Water-cooled condenser regulator valve
- manifolded with isolation valves
- removable heads
- 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

ELECTRICAL:

- Nema rated electrical cabinet
- Fused pump motor starters
- Fused compressor motor 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, probe, phase*
- SPI communications interface
- Selectable lead/lag mode
- Audible and visual alarm

SERVICE and WARRANTY... A full 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.



since 1977

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

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