

NEW
POLYETHYLENE
RESERVIOR!

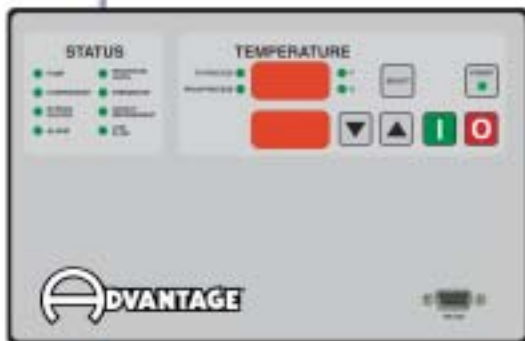
CENTRAL CHILLERS

TITAN SERIES

- 20-40 Tons
- Single Zone
- Water-Cooled
- Air-Cooled



TIS-40W shown



Microprocessor Controller

ADVANTAGE TITAN single zone central chillers are perfect for applications where central chilling and central water distribution is required for smaller applications.

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

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)

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
- 1 year parts and labor warranty



SPECIFICATIONS

SPECIFICATIONS	TIS-20A	TIS-25A	TIS-30A	TIS-40A
COMPRESSOR				
Quantity	2	2	2	1
Capacity*	18	26	30	39
HP each	(2)10	(2)13	(2)15	40
PUMPS				
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				
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
REFRIGERANT RESERVOIR (gallons)				
Type HCFC	22	22	22	22
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 CONNECTIONS*				
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 FLOW*				
Fan Quantity	2	2	3	3
AMPERAGE*				
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	TIS-20W	TIS-25W	TIS-30W	TIS-40W
COMPRESSOR				
Quantity	1	2	2	1
Capacity*	19.5	26	30	41.9
HP each	(2)10	(2)13	(2)15	40
PUMPS				
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	2	2 1/2	3	3
CONDENSING WATER REQUIREMENTS*				
City	30	38	45	60
Tower	60	75	90	120
AMPERAGE				
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 RESERVOIR (gallons)				
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 ¹⁰	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.

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

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
- Brazed plate evaporator
- Hot gas by-pass capacity control system

COOLANT CIRCUIT:

- Pump platform decking
- Spare pump ports
- Large capacity process pump:
 - suction service valve
 - discharge service valve
- Evaporator pump:
 - suction service valve
 - discharge service valve
 - discharge basket strainer

LIMIT DEVICES:

- Refrigerant circuit:
 - high pressure limit
 - low pressure limit

- Coolant circuit:
 - pump motor overload
 - coolant freeze stat
 - evaporator flow limit
 - Instrument control circuit fuse

PRESSURE GAUGES:

- Refrigerant high pressure
- Refrigerant low pressure
- Coolant pressure

WARRANTY:

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

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

THE TITAN WARRANTY... your chiller is supported by a comprehensive factory warranty. Refer to bulletin ADV-205 for complete warranty details. The Advantage service department is staffed with experienced technicians, and supported by a network of independent service contractors. With **ADVANTAGE**, service is only a phone call away.



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

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