

CENTRAL CHILLER

- 20°F - 65°F Process Fluid Temperature
- 20 - 2100 Tons Capacity
- For Outdoor Installation

TT-OACS SERIES

with Integral Air-Cooled Condenser

TT-OACS Series central chillers are designed for outdoor installation in many climates. The fully charged air-cooled refrigerant chiller and pump tank station are packaged in a single frame that minimizes field installation.



TT-OACS-25S Single Zone model shown with multiple options.



TT-OACS-80D Dual Zone model shown with multiple options

Standard Features

REFRIGERANT ZONES:

- Hermetic scroll compressors on 5-60 ton single zone units and dual zone units through 120 ton using HFC-410A refrigerant
- Rotary screw compressors on 75 - 125 ton single zone units and 150 - 210 ton dual zone units using HFC-407C refrigerant
- Liquid line solenoid valve
- Refrigerant sight glass with moisture indicator
- Thermostatic expansion valve
- Brazed plate or shell & tube evaporators
- System Capacity Control
 - Hot gas by-pass (single zone units with scroll compressors)
 - Unloading (single zone units with screw compressors)
 - Compressor staging & hot gas bypass (dual zone units with scroll compressors) - Compressor staging & unloading (dual zone units with screw compressors)
 - Digital compressor unloading (single zone units with digital scroll compressors)
 - Digital compressor unloading and compressor staging (single zone or dual zone models with tandem or multiple compressors)
- Air-cooled condenser with vertical air discharge
- Fully charged with non-ozone depleting refrigerant

PRESSURE INDICATION:

- Refrigerant low pressure (per zone)
- Refrigerant high pressure (per zone)
- Coolant pressure

COOLANT CIRCUIT:

- Large capacity process pump:
- Evaporator pump (when included)
- Reservoir
 - Polyethylene or stainless steel (wetted surfaces) construction
 - Full insulation
 - Tank lid

ELECTRICAL:

- Outdoor rated electrical cabinet
- Branch circuit fusing
- 5 kA RMS SSCR

WARRANTY:

- 1 year on parts and labor

CHILLER CONTROLS:

- CG (single zone units)
- CGD (single zone units with digital scroll compressor)
- Multizone (dual zone and large capacity single zone units)

Options

REFRIGERANT ZONES:

- Digital Scroll Compressor (not available on all models)
- Condenser coils with protective coating
- Oversized condenser
- Staged tandem scroll compressors on single zone units

COOLANT CIRCUIT:

- Larger process pumps
- Standby pumps and/or manifold
- Reservoir heater (mild or stainless steel tanks only)
- No pumps or reservoir
- Basket strainer (standard on dual zone units)
- Overhead piping kit
- Low reservoir level switch (standard on dual zone units)
- Epoxy coated mild steel reservoir

ELECTRICAL:

- Main power disconnect
- Line voltage & phase monitor
- UL labeled sub panel

WARRANTIES:

- Extended compressor warranty



For best pricing call Southgate Process Equipment @ (770) 345-0010

Specifications : Single Zone Units

MODEL TT-		OACS-5S	OACS-7.5S	OACS-10S	OACS-15S	OACS-20S	OACS-25S	OACS-30S	OACS-40S	OACS-50S	OACS-60S	OACS-75S	OACS-95S	OACS-105S	OACS-125S
COOLING CAPACITY ¹	Tons	1	7.5	10	15	20	25	30	40	50	60	73	94	105	125
	KW	17.6	26.4	35.2	52.7	87.9	87.9	105.5	140.6	175.8	211.0	256.7	330.5	358.7	432.5
COMPRESSOR ²	Type	DSC	SC	DSC	DSC	SC	SC	SC	SC	TSC	TSC	SR	SR	SR	SR
REFRIGERANT	Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R407C	R407C	R407C	R407C
CONTROL	Model	MG	MG	MG	MG	MG	MG	MG	MG	MG	MG	MZCIII	MZCIII	MZCIII	MZCIII
UNIT DIMENSIONS	Height	87	87	87	87	91	91	91	91	104	104	99	99	99	99
	Width	60	60	60	54	54	54	54	54	97	97	90	90	90	90
	Depth	75	75	75	127	200	200	200	200	126	180	240	240	300	240
TANK	Material ⁶	PE	PE	PE	PE	PE	PE	PE	PE	PE	PE	SS	SS	SS	SS
	Capacity (gal)	68	68	68	68	68	100	100	100	100	150	300	350	350	900
PROCESS PUMP	Horsepower	2	2	2	3	3	5	5	7.5	7.5	7.5	10	15	20	20
PROCESS FLOW	Rate (gpm)	12	18	24	36	48	60	72	96	120	144	180	228	252	300
EVAPORATOR PUMP	Horsepower	--	--	--	--	--	--	--	--	5	5	7.5	7.5	7.5	
FULL LOAD AMPERAGE ^{3,5}	230 volt	35.8	44.2	56.2	88.4	102.4	132.4	161.2	200.2	246.4	328.2	--	--	--	--
	460 volt	17.9	22.1	28.1	44.2	51.2	66.2	80.6	100.1	123.2	164.1	214.0	242.0	291.0	321.0
	575 volt	14.32	17.68	22.48	35.36	40.96	52.96	64.48	80.08	98.56	131.28	161.0	182.0	219.0	241.0
UNIT WEIGHT (pounds)	Shipping	980	1,103	1,230	1,755	1,940	2,375	3,300	3,800	4,650	5,250	7,350	8,295	8,950	9,250
	Operating ⁴	1,544	1,667	1,794	2,319	2,504	3,205	4,130	4,630	5,895	7,740	10,850	11,795	12,450	18,250

- Notes
1. Tons of capacity at 12,000 Btu/hr/ton @ 50°F LWT @ 115°F condensing temperature. +/- 5% as reserved by compressor manufacturer.
 2. SC = Hermetic scroll. DSC = Copeland Digital Scroll. TSC = Tandem Scroll. SR = Screw.
 3. Full Load amps are higher than run load amps and must be used for sizing disconnects and supply wiring. Amps shown are approximate for standard units. Custom configurations or options may change power requirements. Consult factory before installing.
 4. Approximate unit dimensions and weight crated for shipment. Not for construction purposes.
 5. Selection of certain options may change dimensions, weight and amps required. Confirm with factory before starting construction.
 6. Tank Materials : PE = NonRusting polyethylene. SS = Welded stainless steel.
- Since product innovation and improvement is our constant goal, all features and specifications are subject to change without notice or liability. Selection of certain optional features may change listed specifications.

Specifications : Dual Zone Units

MODEL TT-		OACS-10D	OACS-15D	OACS-20D	OACS-25D	OACS-30D	OACS-40D	OACS-50D	OACS-60D	OACS-80D	OACS-100D	OACS-120D	OACS-150D	OACS-190D	OACS-210D
COOLING CAPACITY ¹	Tons	10	15	20	25	30	40	50	60	80	100	120	146	188	204
	KW	35.2	52.7	70.3	87.9	105.5	140.6	175.8	211.0	281.3	351.6	421.9	513.4	661.1	717.4
COMPRESSOR ²	Type	DSC	SC	DSC	SC	DSC	SC	SC	SC	TSC	TSC	TSC	SR	SR	SR
REFRIGERANT	Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R407C	R407C	R407C	R407C
CONTROL	Model	MZCIII	MZCIII	MZCIII	MZCIII	MZCIII	MZCIII	MZCIII	MZCIII	MZCIII	MZCIII	MZCIII	MZCIII	MZCIII	MZCIII
UNIT DIMENSIONS	Height	87	87	87	101	101	101	101	101	97	97	97	99	99	99
	Width	54	54	54	97	97	97	97	97	88	88	97	96	96	90
	Depth	127	127	127	130	130	130	130	130	186	246	246	304	360	408
TANK	Material ⁶	PE	PE	PE	PE	PE	PE	PE	PE	PE	PE	PE	SS	SS	SS
	Capacity (gal)	100	100	100	200	200	200	200	200	400	400	400	400	900	900
PROCESS PUMP	Horsepower	3	3	3	5	5	7.5	7.5	7.5	10	15	20	25	30	30
PROCESS FLOW	Rate (gpm)	12	18	24	36	48	60	72	96	120	144	180	351	452	490
EVAPORATOR PUMP	Horsepower	1.5	2	2	3	3	3	3	5	5	7.5	7.5	10	15	15
FULL LOAD AMPERAGE ^{3,5}	230 volt	66.2	85.0	136.6	168.6	196.6	230.4	270.4	350.4	435.6	539.0	650.2	--	--	--
	460 volt	36.6	46.0	71.8	84.3	98.3	115.2	135.2	175.2	217.8	269.5	325.1	415.0	470	542.0
	575 volt	30.68	38.2	58.84	67.44	78.64	92.16	108.16	140.16	174.24	215.6	260.08	312.0	353	407.0
UNIT WEIGHT (pounds)	Shipping	1,830	2,005	2,180	3,175	3,425	4,000	4,575	5,400	6,625	7,325	8,300	9,300	11,350	13,500
	Operating ⁴	2,660	2,835	3,010	4,835	5,085	5,660	7,065	8,720	9,945	10,645	11,620	18,300	20,350	22,500

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