



Specifications

OACS-BC Outdoor Glycol Chillers 5 - 125 Horsepower Single Zone

MODEL ¹	OACS-BC-	5S-M1-1P	7.5S-M1-1P	10S-M1-1P	15S-M1-1P	20S-M1-1P	25S-M1-1P	30S-M1-1P
NUMBER OF ZONES		1	1	1	1	1	1	1
COMPRESSOR	HP	5	7.5	10	15	20	25	30
	TYPE	Single Scroll	Single Scroll	Single Scroll	Single Scroll	Single Scroll	Single Scroll	Single Scroll
CAPACITY @ 25°F (LFT)	BTH ²	30,203	45,083	59,683	92,774	117,274	149,456	197,456
REFRIGERANT ³		HFC-410A	HFC-410A	HFC-410A	HFC-410A	HFC-410A	HFC-410A	HFC-410A
CONDENSER	NUMBER OF FANS	1	1	1	2	2	3	3
	MODEL	012	014	017	025	032	041	050
EVAPORATOR	TYPE	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate
PROCESS PUMP	HP	2	2	2	3	3	5	5
	GPM	12	18	24	36	48	60	72
	PSI (water)	52	50	48	54	48	60	57
EVAPORATOR PUMP		Optional	Optional	Optional	Optional	Optional	Optional	Optional
STANDBY PUMP ⁴		A	A	A	A	A	A	A
RESERVOIR TANK	GALLONS	65	65	65	65	65	65	130
	CONSTRUCTION ⁵	PE	PE	PE	PE	PE	PE	PE
CONNECTIONS	NPT / FLANGED	1½" N	1½" N	1½" N	2" N	2" N	2" N	2" N
DIMENSIONS ⁶ (inches)	HEIGHT	86	86	86	86	86	86	86
	WIDTH	54	54	54	54	54	54	54
	LENGTH	78	78	78	122	122	186	186
CONTROL	STANDARD	M1	M1	M1	M1	M1	M1	M1
SYSTEM AMPERAGE ⁷	FLA (460v)	15.6	22.8	22.7	38.2	48.8	63.8	69.7
	RLA (460v)	13.5	18.3	21.4	31.6	41.3	48.7	60.7
FACTORY #	9266	009	109	209	309	409	509	609

MODEL ¹	OACS-BC-	40S-M1-1P	50S-M1-1P	60S-M1-2P	75-MZC-2P	95-MZC-2P	105S-MZC-2P	125S-MZC-2P
NUMBER OF ZONES		1	1	1	1	1	1	1
COMPRESSOR	HP	2@20	2@25	2@30	75	95	105	125
	TYPE	Tandem Scroll	Tandem Scroll	Tandem Scroll	Rotary Screw	Rotary Screw	Rotary Screw	Rotary Screw
CAPACITY @ 25°F (LFT)	BTH ²	263,000	323,000	417,000	438,000	564,000	612,000	738,000
REFRIGERANT ³		HFC-410A	HFC-410A	HFC-410A	HFC-407C	HFC-407C	HFC-407C	HFC-407C
CONDENSER	NUMBER OF FANS	4	4	6	8	8	10	10
	MODEL	056	074	096	118	157	167	198
EVAPORATOR	TYPE	Brazed Plate	Brazed Plate	Brazed Plate	Shell & Tube	Shell & Tube	Shell & Tube	Shell & Tube
PROCESS PUMP	HP	7.5	7.5	7.5	10	15	20	20
	GPM	96	120	144	175	226	245	312
	PSI (water)	65	63	60	60	70	65	65
EVAPORATOR PUMP	HP	Optional	Optional	5	5	7.5	7.5	7.5
	GPM	--	--	144	175	226	245	312
STANDBY PUMP ⁴		A	A	A	A	A	A	A
RESERVOIR TANK	GALLONS	130	130	350	350	350	350	900
	CONSTRUCTION ⁵	PE	PE	SS	SS	SS	SS	SS
CONNECTIONS	NPT / FLANGED	2" N	3" F	3" F	4" F	4" F	4" F	4" F
DIMENSIONS ⁶ (inches)	HEIGHT	86	86	99	99	99	99	99
	WIDTH	54	90	90	90	90	90	90
	LENGTH	186	122	186	240	240	300	300
CONTROL	STANDARD	M1	M1	M1	MZC	MZC	MZC	MZC
SYSTEM AMPERAGE ⁷	FLA (460v)	87.5	109.2	157.2	214	242	291	321
	RLA (460v)	75.6	90.2	125.1	156	191	231	242
FACTORY #	9266	6709	6809	6909	7009	7059	7109	7209

Model Designator for OACS-BC Series Central Chillers

OACS-10S-M1-1P-BC

OACS Series

Nominal Compressor Horsepower

Zones

S: Single Zone
D: Dual Zone

Number of Pumps

1: Single Process Pump
2: Process & Evaporator Pumps
3: Process, Evaporator & Standby Pumps

Controller

M1: Single Zone
MZC: Dual Zone
PLC: Single or Dual Zone

Notes 1. 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. 2. Capacity @ 25°F LFT, 95°F ambient and 115°F condensing. The minimum recommended operating temperature when no glycol is used is 48°F. 3. This is a non-ozone depleting refrigerant. 4. A = standby pump is available for this model. N/A = Standby pump is not available for this unit. 5. PE = polyethylene reservoirs. SS = stainless steel reservoir. 6. Dimensions are approximate and may change based on options and features selected. Do not use for construction. 7. FLA: full load amps with standard pumps and condenser. RLA: run load amps with standard pumps and condenser. Optional standby pumps, larger pumps or alternate condensers may change this rating. Do not use for construction.



Standard Features

REFRIGERANT ZONES:

- Hermetic scroll compressors on 5-60 HP single zone units using HFC-410A refrigerant
- Rotary screw compressors on 75 - 125 HP single 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 compressor units with scroll compressor)
 - Unloading (units with screw compressor)
 - Digital compressor unloading (units with digital scroll compressor)
 - Digital compressor unloading and compressor staging (units tandem or multiple compressors)
- Integral Air-cooled condenser with vertical air discharge
- Fully charged with non-ozone depleting refrigerant

PRESSURE INDICATION:

- Refrigerant low pressure
- Refrigerant high pressure
- 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
- UL 508A compliant enclosed panel
- Branch circuit fusing
- 5 kA RMS SSCR

CHILLER CONTROLS:

- M1 (single zone units)
- Multizone (large capacity single zone units)
- M1D (single zone units with digital scroll compressor)

SUPPORT:

- Equipment selection assistance - standard
- Facility pipe sizing & routing drawings - standard
- Quick online selection tool
(www.advantageengineering.com/BC)
- Quick online pricing available 24 - 7
(www.advantageengineering.com)
- System start up assistance and training - optional

WARRANTY:

- 1 Year covering parts and labor
- Free preventative maintenance check in the 2nd year
- 4 Years covering the control instrument



Options

REFRIGERANT ZONES • Digital scroll compressors - For energy saving capacity control (not available on all models) • Condenser coils with protective coating - For longer life in harsh environments • Greater capacity condenser - For full system capacity at ambient air temperature above 95°F • Staged tandem scroll compressors on single zone units - For superior capacity staging

COOLANT CIRCUIT • Larger process pumps • Standby pumps and/or manifold • Reservoir heater (mild or stainless steel tanks only) • No pumps or reservoir • Basket strainer • Overhead pipping kit • Low reservoir level switch • Epoxy coated mild steel reservoir construction

ELECTRICAL • Main power disconnect • Line voltage & phase monitor

WARRANTY • Extended compressor warranty



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