



Specifications

OACS-BC Outdoor Glycol Chillers 20 - 210 Horsepower Dual Zone

MODEL ¹	OACS-BC-	20D-MZC-2P	30D-MZC-2P	40D-MZC-2P	50D-MZC-2P	60D-MZC-2P	80D-MZC-2P	100D-MZC-2P
NUMBER OF ZONES		2	2	2	2	2	2	2
COMPRESSOR	HP	2@10	2@15	2@20	25	2@30	2@40	2@50
	TYPE	Scroll	Scroll	Scroll	Scroll	Scroll	Tandem Scroll	Tandem Scroll
CAPACITY @ 25°F (LFT)	BTH ²	119,336	185,548	234,548	298,912	394,912	526,000	654,000
REFRIGERANT ³		HFC-410A	HFC-410A	HFC-410A	HFC-410A	HFC-410A	HFC-410A	HFC-410A
CONDENSER	NUMBER of FANS	2	4	4	6	6	8	8
	MODEL	(2)017	(2)025	(2)032	(2)041	(2)050	(2)064	(2)079
EVAPORATOR	TYPE	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate	Brazed Plate
PROCESS PUMP	HP	3	5	7.5	7.5	7.5	10	15
	GPM	48	72	96	120	144	192	240
	PSI (water)	48	57	65	63	60	60	70
EVAPORATOR PUMP	HP	2	2	3	3	5	5	7.5
	GPM	48	72	96	120	144	192	240
STANDBY PUMP ⁴		A	A	A	A	A	A	A
RESERVOIR TANK	GALLONS	130	130	130	130	350	350	350
	CONSTRUCTION ⁵	PE	PE	PE	PE	SS	SS	SS
CONNECTIONS	NPT / FLANGED	2" N	2" N	2" N	3" N	3" N	4" F	4" F
DIMENSIONS ⁶ (inches)	HEIGHT	99	99	99	99	99	99	99
	WIDTH	96	96	96	96	96	96	96
	LENGTH	78	132	132	186	186	240	240
CONTROL	STANDARD	MZC	MZC	MZC	MZC	MZC	MZC	MZC
SYSTEM AMPERAGE ⁷	FLA (460v)	57.0	93.0	116.2	140.6	161.4	193.2	253.2
	RLA (460v)	47.2	82.6	101.2	110.4	143.4	169.4	215.2
FACTORY #	9266	8009	8109	8209	8309	8409	8509	8609

MODEL ¹	OACS -	120D-MZC-2P	150D-MZC-2P	190D-MZC-2P	210D-MZC-2P
NUMBER OF ZONES		2	2	2	2
COMPRESSOR	HP	2@60	2@75	2@90	2@110
	TYPE	Tandem Scroll	Rotary Screw	Rotary Screw	Rotary Screw
CAPACITY @ 25°F (LFT)	BTH ²	834,000	876,000	1,128,000	1,224,000
REFRIGERANT ³		HFC-410A	HFC-407C	HFC-407C	HFC-407C
CONDENSER	NUMBER of FANS	10	14	14	14
	MODEL	(2)095	(2)115	(2)135	(2)135
EVAPORATOR	TYPE	Brazed Plate	Shell & Tube	Shell & Tube	Shell & Tube
PROCESS PUMP	HP	20	25	30	30
	GPM	288	350	451	490
	PSI (water)	69	60	60	60
EVAPORATOR PUMP	HP	7.5	10	15	15
	GPM	288	350	451	490
STANDBY PUMP ⁴		A	A	A	A
RESERVOIR TANK	GALLONS	350	900	900	900
	CONSTRUCTION ⁵	SS	SS	SS	SS
CONNECTIONS	NPT / FLANGED	4" F	6" F	6" F	6" F
DIMENSIONS ⁶ (inches)	HEIGHT	99	99	99	99
	WIDTH	96	96	96	96
	LENGTH	296	360	408	408
CONTROL	STANDARD	MZC	MZC	MZC	MZC
SYSTEM AMPERAGE ⁷	FLA (460v)	327.6	415	470	542
	RLA (460v)	263.4	299	368	408
FACTORY #	9266	8709	8809	8909	9009

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.

Model Designator for OACS-BC Series Central Chillers

OACS-20D-MZC-2P-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



Standard Features

REFRIGERANT ZONES:

- Hermetic scroll compressors on 5-60 HP single zone units and dual zone units through 120 HP using HFC-410A refrigerant
- Rotary screw compressors on 150 - 210 HP 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
 - Compressor staging & hot gas bypass (units with fixed displacement scroll compressors)
 - Compressor staging & unloading (units with screw compressors)
 - Digital compressor unloading and compressor staging (units with digital scroll compressors)
 - Fixed displacement scroll compressor
- Integral 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
- Basket strainer

ELECTRICAL:

- Outdoor rated electrical cabinet
- UL 508A compliant enclosed panel
- Branch circuit fusing
- 5 kA RMS SSCR

CHILLER CONTROL:

- Multizone MZC III controller

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 (standard on dual zone units) • Overhead pipping kit • Low reservoir level switch (standard on dual zone units) • Epoxy coated mild steel reservoir construction

ELECTRICAL • Main power disconnect • Line voltage & phase monitor

WARRANTY • Extended compressor warranty



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