Air-Cooled Scroll Compressor Chillers—10 to 130 Tons

- **Efficient—Meets or exceeds ASHRAE Standard 90.1-2004 Up to 10.0 EER at full load and up to 14.5 EER at part load (IPLV)**
- **Quiet—All dBA ratings tested in accordance with ARI Standard 370. Less acoustical treatment can lower your project's cost.**
- **Reliable—Tandem or trio scroll compressor sets per circuit have fewer moving parts. Dual circuits start at 26 tons.**
- **Controls flexibility—MicroTech II® controls with our Protocol Selectability™ feature for easy, low cost integration with the BAS of your choice.**
- **Optional low ambient operation range down to 0°F.**
- **Remote evaporators available.**
- **Available with R-22 or R-407C refrigerant**

For more detail, refer to Catalog AGZ. For the most current information, refer to www.mcquay.com.

Model AGZ-A—10 to 34 tons

Model AGZ-B—26 to 130 tons

(Shell and tube evaporators from 75 to 130 tons)

LONMARK® 3.3

Available LONMARK certified

Features

Model AGZ 026B through AGZ 130B Two-Circuit Chiller

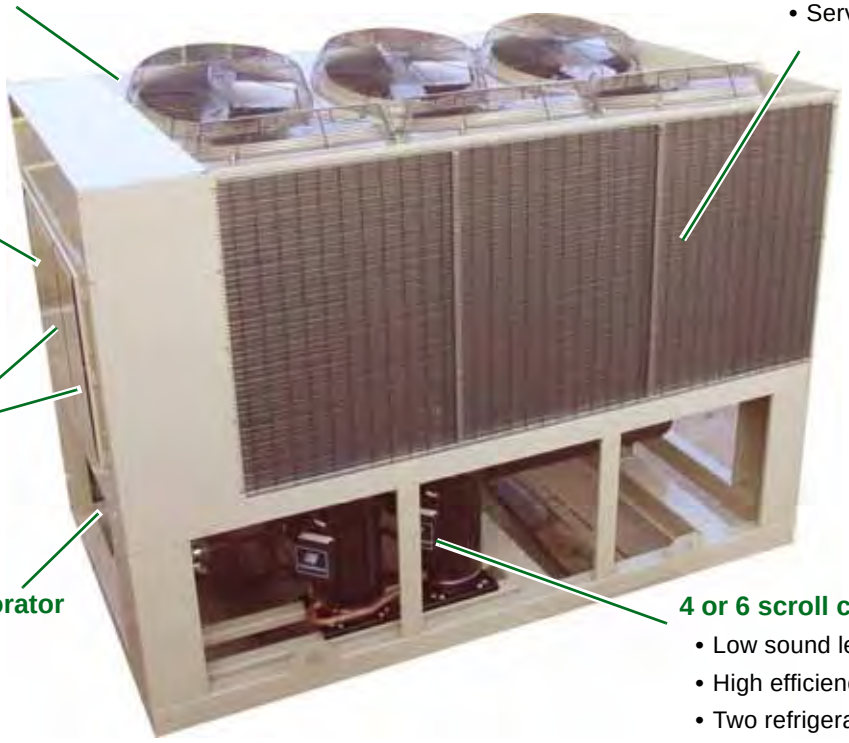
(six-fan model illustrated)

Canted fan deck
- Improved efficiency
- Reduced recirculation

W-shaped coil
- High efficiency
- Service headroom

Control panel

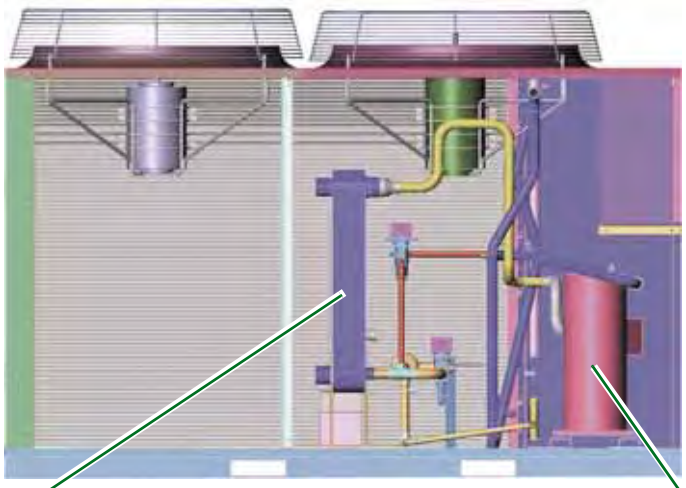
Power panels



Brazed-plate evaporator (10 to 70 tons)
- Efficient
- Compact

4 or 6 scroll compressors
- Low sound levels
- High efficiency
- Two refrigerant circuits

Model AGZ 010A through AGZ 034A Single-Circuit Chiller



Brazed-plate evaporator

Tandem scroll compressor single refrigerant circuit

AGZ Air-Cooled Scroll Compressor Packaged Chiller—Capacity and Physical Data

AGZ 010A through 017A

Physical data	AGZ model number		
	010A	013A	017A
Basic data			
Unit capacity @ ARI conditions tons (kw)*	9.8 (34.3)	13.3 (46.6)	15.9 (55.7)
Number of refrigerant circuits	1	1	1
Unit operating charge, R-22, lb (kg)	13.8 (6.2)	14.1 (6.4)	18.0 (8.2)
Cabinet dimensions, L × W × H, in (mm)	73.6 × 46.3 × 49.0 (1869 × 1176 × 1245)	73.6 × 46.3 × 49.0 (1869 × 1176 × 1245)	73.6 × 46.3 × 49.0 (1869 × 1176 × 1245)
Unit operating weight, lb (kg)	1008 (458)	1364 (619)	1387 (630)
Unit shipping weight, lb (kg)	1075 (488)	1425 (647)	1450 (658)
Add'l weight if copper finned coils, lb (kg)	220 (99.7)	220 (99.7)	220 (99.7)
Compressors			
Type	Scroll	Scroll	Scroll
Nominal tons per compressor	6.0 / 6.0	7.5 / 7.5	9.0 / 9.0
Oil charge per compressor, oz (g)	60 (1701)	140 (3969)	140 (3969)
Capacity reduction steps—percent of compressor displacement			
Standard staging	0 – 50 – 100	0 – 50 – 100	0 – 50 – 100
Condensers—high efficiency fin and tube type with integral subcooling			
Coil face area sq ft (m^2)	30.3 (2.8)	30.3 (2.8)	30.3 (2.8)
Finned height × finned length, in (mm)	84 × 52 (2134 × 1321)	84 × 52 (2134 × 1321)	84 × 52 (2134 × 1321)
Fins per inch × rows deep	16 × 2	16 × 3	16 × 3
Pumpdown capacity lb (kg)	35.3 (16.0)	50.3 (22.8)	50.3 (22.8)
Condenser fans—direct drive propeller type			
Number of fans—fan diameter, in (mm)	2—26 (660)	2—26 (660)	2—26 (660)
Number of motors—hp (kw)	2—1.0 (0.75)	2—1.0 (0.75)	2—1.0 (0.75)
Fan and motor rpm, 60 Hz	1140	1140	1140
60 Hz total unit airflow, cfm (l/s)	13950 (6584)	12000 (5664)	12000 (5664)
Direct expansion evaporator—brazed plate-to-plate			
Connection size victaulic, in (mm)	2 (51)	2 (51)	2 (51)
Water volume, gallons (L)	.94 (3.6)	1.66 (6.3)	2.00 (7.6)
Maximum refrigerant working pressure, psig (kPa)	450 (3103)	450 (3103)	450 (3103)
Maximum water pressure, psig (kPa)	450 (3103)	450 (3103)	450 (3103)

*Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

AGZ 020A through 034A

Physical data	AGZ model number			
	020A	025A	029A	034A
Basic data				
Unit capacity @ ARI conditions tons (kw)*	20.4 (71.4)	22.7 (79.5)	28.3 (98.7)	34.0 (119.0)
Number of refrigerant circuits	1	1	1	1
Unit operating charge, R-22, lb (kg)	19.6 (8.9)	20.0 (9.1)	31.8 (14.4)	32.8 (14.9)
Cabinet dimensions, L × W × H, in (mm)	106.2 × 46.3 × 49.0 (2697 × 1176) × 1245)	106.2 × 46.3 × 49.0 (2697 × 1176) × 1245)	106.2 × 46.3 × 57.0 (2697 × 1176 × 1248)	106.2 × 46.3 × 57.0 (2697 × 1176 × 1248)
Unit operating weight, lb (kg)	1569 (712)	1626 (738)	1810 (822)	2072 (941)
Unit shipping weight, lb (kg)	1650 (749)	1700 (772)	1875 (851)	2125 (965)
Add'l weight if copper finned coils, lb (kg)	350 (159)	350 (159)	435 (197)	435 (197)
Compressors				
Type	Scroll	Scroll	Scroll	Scroll
Nominal tons per compressor	10.0 / 13.0	13.0 / 13.0	15.0 / 15.0	20.0 / 20.0
Oil charge per compressor, oz (g)	140 (3969)	140 (3969)	140 (3969)	296 (8392)
Capacity reduction steps—percent of compressor displacement				
Standard staging	0—45—100	0—50—100	0—50—100	0—50—100
Condensers—high efficiency fin and tube type with integral subcooling				
Coil face area sq ft (m^2)	49.0 (4.6)	49.0 (4.6)	58.3 (5.4)	58.3 (5.4)
Finned height × finned length, in (mm)	84 × 84 (2134 × 2134)	84 × 84 (2134 × 2134)	100 × 84 (2545 × 2134)	100 × 84 (2545 × 2134)
Fins per inch × rows deep	16 × 2	16 × 2	16 × 3	16 × 3
Pumpdown capacity lb (kg)	53.1 (24.0)	53.1 (24.0)	90.7 (41.1)	92.8 (42.0)
Condenser fans—direct drive propeller type				
Number of fans—fan diameter, in (mm)	3—26 (660)	3—26 (660)	3—26 (660)	3—26 (660)
Number of motors—hp (kw)	3—1.0 (0.75)	3—1.0 (0.75)	3—1.0 (0.75)	3—1.0 (0.75)
Fan and motor rpm, 60 Hz	1140	1140	1140	1140
60 Hz total unit airflow, cfm (l/s)	20925 (9877)	20925 (9877)	19800 (9346)	19800 (9346)
Direct expansion evaporator—brazed plate-to-plate				
Connection size victaulic, in (mm)	2 (51)	2 (51)	2 (51)	2 (51)
Water volume, gallons (L)	2.16 (8.2)	3.05 (11.5)	4.00 (15.1)	5.55 (21.0)
Maximum refrigerant working pressure, psig (kPa)	450 (3103)	450 (3103)	450 (3103)	450 (3103)
Maximum water pressure, psig (kPa)	450 (3103)	450 (3103)	450 (3103)	450 (3103)

***** Nominal capacity based on 95°F ambient air temperature and 54°F/44°F water range.

AGZ 026BS through 035BS

Physical data	AGZ model number					
	026B		030B		035B	
Basic data	**Circuit 1**	**Circuit 2**	**Circuit 1**	**Circuit. 2**	**Circuit 1**	**Circuit 2**
Unit capacity @ ARI tons (kW)[1]	27.2 (95.4)		30.2 (106.3)		33.2 (117.2)	
Number of refrigerant circuits	2		2		2	
Unit operating charge, R-22, lb (kg)	22 (10)	22 (10)	22 (10)	27 (12)	27 (12)	27 (12)
Cabinet dimensions, L × W × H, in (mm)	94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)		94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)		94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)	
Unit operating weight, lb (kg)	3990 (1811)		4040 (1834)		4080 (1852)	
Unit shipping weight, lb (kg)	39501793)		3990 (1811)		4030 (1830)	
Add'l weight if copper finned coils, lb (kg)	284 (129)		284 (129)		284 (129)	
Compressors						
Type	Tandem scrolls		Tandem scrolls		Tandem scrolls	
Nominal tonnage of each compressor	7.5	7.5	7.5	9.0	9.0	9.0
Number of compressors per circuit	2	2	2	2	2	2
Oil charge per compressor, oz (g)	140 (496)	140 (496)	140 (496)	140 (496)	140 (496)	140 (496)
Capacity reduction steps—percent of compressor displacement						
Staging, 4 stages, circuit #1 in lead	0-25-50-75-100		0-23-50-73-100		0-25-50-75-100	
Staging, 4 stages, circuit #2 in lead	0-25-50-75-100		0-27-50-77-100		0-25-50-75-100	
Condensers—high efficiency fin and tube type with integral subcooling						
Coil face area, sq ft (m^2)	26.3 (2.4)	26.3 (2.4)	26.3 (2.4)	26.3 (2.4)	26.3 (2.4)	26.3 (2.4)
Finned height × finned length, in	50 × 75.6 (1270 × 1920)	50 × 75.6 (1270 × 1920)	50 × 75.6 (1270 × 1920)	50 × 75.6 (1270 × 1920)	50 × 75.6 (1270 × 1920)	50 × 75.6 (1270 × 1920)
Fins per inch × rows deep	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3
Pumpdown capacity, 90% full lb (kg)	49 (22)	49 (22)	49 (22)	49 (22)	49 (22)	49 (22)
Maximum relief valve pressure setting, psig (kPa)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)
Condenser fans—direct drive propeller type						
Number of fans—fan diameter, in. (mm)	4—30 (762)		4—30 (762)		4—30 (762)	
Number of motors—hp (kW)[2]	4—1.5		4—1.5		4—1.5	
Fan and motor rpm, 60 Hz	1140		1140		1140	
60 Hz fan tip speed, fpm (m/sec)	8950 (4224)		8950 (4224)		8950 (4224)	
60 Hz total unit airflow, cfm (m^3/sec)	24,316 (11,478)		24,316 (11,478)		24,316 (11,478)	
Evaporator—brazed plate-to-plate						
Number of evaporators	1		1		1	
Number of refrigerant circuits	2		2		2	
Water volume, gallons, (L)	3.9 (14.7)		5.0 (18.9)		4.3 (16.4)	
Maximum water pressure, psig (kPa)	363 (2503)		363 (2503)		363 (2503)	
Max. refrig. working pressure, psig (kPa)	450 (3102)		450 (3102)		450 (3102)	
Water inlet/outlet victaulic conn. in (mm)	3 (76)		3 (76)		3 (76)	
Drain—NPT int, in (mm)	Field		Field		Field	
Vent—NPT int, in (mm)	Field		Field		Field	

1. Nominal capacity based on 95°F ambient air and 54°F/44°F water range.
2. Except for 380V/60 and 575V/60, hp = 2.0

AGZ 040BS through 055BS

Physical data	AGZ model number							
	040B		045B		050B		055B	
Basic data	**Circuit 1**	**Circuit 2**	**Circuit 1**	**Circuit 2**	**Circuit 1**	**Circuit 2**	**Circuit 1**	**Circuit 2**
Unit capacity @ ARI conditions tons (kW)[1]	38.5 (135.5)		42.5 (149.6)		47.0 (165.4)		52.2 (183.7)	
Number of refrigerant circuits	2		2		2		2	
Unit operating charge, R-22, lb (kg)	31 (14)	31 (14)	38 (17)	38 (17)	38 (17)	38 (17)	46 (21)	46 (21)
Cabinet dimensions, L × W × H, in (mm)	94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)		94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)		94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)		94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)	
Unit operating weight, lb (kg)	4130 (1875)		4270 (1939)		4400 (1998)		4540 (2061)	
Unit shipping weight, lb (kg)	4070 (1848)		4210 (1911)		4330 (1966)		4460 (2025)	
Add'l weight if copper finned coils, lb (kg)	288 (130)		288 (130)		476 (130)		476 (130)	
Compressors								
Type	Tandem scrolls		Tandem scrolls		Tandem scrolls		Tandem scrolls	
Nominal tonnage of each compressor	10.0	10.0	10.0	13.0	13.0	13.0	15.0	15.0
Number of compressors per circuit	2	2	2	2	2	2	2	2
Oil charge per compressor, oz	140 (496)	140 (496)	140 (496)	140 (496)	140 (496)	140 (496)	140 (496)	140 (496)
Capacity Reduction Steps—percent of compressor displacement								
Staging, 4 stages, circuit #1 in lead	0-25-50-75-100		0-22-50-46-100		0-25-50-75-100		0-25-50-75-100	
Staging, 4 stages, circuit #2 in lead	0-25-50-75-100		0-28-50-85-100		0-25-50-75-100		0-25-50-75-100	
Condensers—high efficiency fin and tube type with integral subcooling								
Coil face area, sq ft (m^2)	44.1 (4.1)	44.1 (4.1)	44.1 (4.1)	44.1 (4.1)	44.1 (4.1)	44.1 (4.1)	44.1 (4.1)	44.1 (4.1)
Finned height × finned length, in (mm)	42×75.6 (1067 × 1920)	42×75.6 (1067 × 1920)	42×75. (1067 × 1920)	42×75. (1067 × 1920)	42×75. (1067 × 1920)	42×75. (1067 × 1920)	42×75. (1067 × 1920)	42×75. (1067 × 1920)
Fins per inch × rows deep	16 × 2	16 × 2	16 × 2	16 × 2	16 × 3	16 × 3	16 × 3	16 × 3
Pumpdown capacity, 90% full lb (kg)	60 (27)	60 (27)	60(27)	60(27)	82 (37)	82 (37)	82 (37)	82 (37)
Maximum relief valve press setting, psig (kPa)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)
Condenser fans—direct drive propeller type								
Number of fans—fan diameter, in (mm)	4—30 (762)		4—30 (762)		4—30 (762)		4—30 (762)	
Number of motors—hp (kW)[2] [(2)]	4—1.5		4—1.5		4—1.5		4—1.5	
Fan and motor rpm, 60 Hz	1140		1140		1140		1140	
60 Hz fan tip speed, FPM (m/sec)	8950 (4224)		8950 (4224)		8950 (4224)		8950 (4224)	
60 Hz total unit airflow, cfm (m^3/sec)	39,600 (18,692)		39,600 (18,692)		39,600 (18,692)		39,600 (18,692)	
Evaporator—brazed plate-to-plate								
Number of evaporators	1		1		1		1	
Number of refrigerant circuits	2		2		2		2	
Water volume, gallons, (L)	5.0 (18.9)		5.7 (21.4)		6.3 (23.9)		7.2 (27.3)	
Maximum water pressure, psig (kPa)	363 (2503)		363 (2503)		363 (2503)		363 (2503)	
Max. refrig. working pressure, psig (kPa)	450 (3102)		450 (3102)		450 (3102)		450 (3102)	
Water inlet / outlet victaulic conn, in (mm)	3 (76)		3 (76)		3 (76)		3 (76)	
Drain—NPT int, in (mm)	Field		Field		Field		Field	
Vent—NPT int, in (mm)	Field		Field		Field		Field	

1. Nominal capacity based on 95°F ambient air and 54°F/44°F water range.
2. Except for 380V/60 and 575V/60, hp = 2.0

AGZ 060BS through 070BS

Physical data	AGZ model number					
	060B		065B		070B	
Basic data	**Circuit 1**	**Circuit 2**	**Circuit 1**	**Circuit 2**	**Circuit 1**	**Circuit 2**
Unit capacity @ ARI conditions tons (kW)[1]	57.1 (201.0)		61.4 (215.5)		65.5 (230.0)	
Number of refrigerant circuits	2		2		2	
Unit operating charge, R-22, lb	46	46	52	59	59	59
Unit operating charge, R-22, (kg)	(21)	(21)	(24)	(27)	(27)	(27)
Cabinet dimensions, L × W × H, in (mm)	94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)		94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)		94.4 × 88.0 × 100.4 (2398 × 2235 × 2550)	
Unit operating weight, lb (kg)	4600		4860		4990	
Unit Shipping Weight, lb (kg)	4520		4760		4890	
Add'l weight if copper finned Coils, lb (kg)	**476 (216)**		568 (258)		568 (258)	
Compressors						
Type	Tandem scrolls		Tandem scrolls		Tandem scrolls	
Nominal tonnage of each compressor	15.0	15.0	15.0	15 / 20	15 / 20	15 / 20
Number of compressors per circuit	2	2	2	2	2	2
Oil charge per compressor, oz	140	140	140	140 /148	140 /148	140 /148
Oil charge per compressor, (g)	(496)	(496)	(496)	496/ 525	496/ 525	496/ 525
Capacity reduction steps—percent of compressor displacement						
Staging, 4 stages, circuit #1 in lead	0-25-50-75-100		0-23-46-77-100		0-25-50-75-100	
Staging, 4 stages, circuit #2 in lead	0-25-50-75-100		0-31-46-69-100		0-25-50-75-100	
Condensers—high efficiency fin and tube type with integral subcooling						
Coil face area, sq ft (m^2)	44.1 (4.1)	44.1 (4.1)	52.6 (4.9)	52.6 (4.9)	52.6 (4.9)	52.6 (4.9)
Finned height × finned length, in (mm)	42×75.6 (1067 × 1920)	42×75.6 (1067 × 1920)	50×75.6 (1270 × 1920)	50×75.6 (1270 × 1920)	50×75.6 (1270 × 1920)	50×75.6 (1270 × 1920)
Fins per inch × rows deep	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3
Pumpdown capacity, 90% full, lb (kg)	82 (37)	82 (37)	98 (44)	98 (44)	98 (44)	98 (44)
Maximum relief valve press. setting, psig (kPa)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)
Condenser fans—direct drive propeller type						
Number of fans—fan diameter, in (mm)	4—30 (762)		4—30 (762)		4—30 (762)	
Number of motors—hp (kW)[2]	4—1.5		4—2.0		4—2.0	
Fan and motor rpm, 60 Hz	1140		1140		1140	
60 Hz fan tip speed, fpm (m/sec)	8950 (4224)		8950 (4224)		8950 (4224)	
60 Hz total unit airflow, cfm (m^3/sec)	37,228 (17,572		43,452 (20,510)		43,452 (20,510)	
Evaporator—brazed plate-to-plate						
Number of evaporators	1		1		1	
Number of refrigerant circuits	2		2		2	
Water volume, gallons, (L)	8.1 (30.7)		9.2 (34.9)		9.2 (34.9)	
Maximum water pressure, psig (kPa)	363 (2503)		363 (2503)		363 (2503)	
Max. refrigerant working pressure, psig (kPa)	450 (3102)		450 (3102)		450 (3102)	
Water inlet/outlet victaulic connections, in (mm)	3 (76)		3 (76)		3 (76)	
Drain—NPT int, in (mm)	Field		Field		Field	
Vent—NPT int, in (mm)	Field		Field		Field	

1. Nominal capacity based on 95°F ambient air and 54°F/44°F water range.
2. Except for 380V/60 and 575V/60, hp = 2.0

AGZ 075BS through 090BS

Physical data	AGZ model number					
	075B		085B		090B	
Basic data	**Circuit 1**	**Circuit 2**	**circUit 1**	**Circuit 2**	**Circuit 1**	**Circuit 2**
Unit capacity @ ARI conditions tons (kW)*	73.7 (259.4)		79.6 (280.2)		85.5 (301.0)	
Number of refrigerant circuits	2		2		2	
Unit operating charge, R-22, lb (kg)	59 (27)	59 (27)	59 (27)	69 (31)	69 (31)	69 (31)
Cabinet dimensions, L × W × H, in (mm)	134.9 × 88.0 × 100.4 (3426 × 2235 × 2550)		134.9 × 88.0 × 100.4 (3426 × 2235 × 2550)		134.9 × 88.0 × 100.4 (3426 × 2235 × 2550)	
Unit operating weight, lb (kg)	6530 (2958)		6690 (3031)		6850 (3103)	
Unit shipping weight, lb (kg)	6320 (2863)		6480 (2935)		6640 (3008)	
Add'l weight if copper finned coils, lb (kg)	870 (395)		870 (395)		870 (395)	
Compressors						
Type	Tandem scrolls		Tandem scrolls		Tandem scrolls	
Nominal tonnage of each compressor	20.0	20.0	20.0	25.0	25.0	25.0
Number of compressors per circuit	2	2	2	2	2	2
Oil charge per compressor, oz (g)	148 (525)	148 (525)	148 (525)	200 (709)	200 (709)	200 (709)
Capacity reduction steps—percent of compressor displacement						
Staging, 4 stages, circuit #1 in lead	0-25-50-75-100		0-22-50-72-100		0-25-50-75-100	
Staging, 4 stages, circuit #2 in lead	0-25-50-75-100		0-28-50-78-100		0-25-50-75-100	
Condensers—high efficiency fin and tube type with integral subcooling						
Coil face area, sq ft	78.8	78.8	78.8	78.8	78.8	78.8
Coil face area, (m^2)	7.3	7.3	7.3	7.3	7.3	7.3
Finned height × finned length, in (mm)	50 ×113.4 (1270 × 2880)	50 ×113.4 (1270 × 2880)	50 ×113.4 (1270 × 2880)	50 ×113.4 (1270 × 2880)	50 ×113.4 (1270 × 2880)	50 ×113.4 (1270 × 2880)
Fins per inch × rows deep	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3
Pumpdown capacity, 90% full, lb (kg)	147 (67)	147 (67)	147 (67)	147 (67)	147 (67)	147 (67)
Max. relief valve pressure setting, psig (kpa)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)
Condenser fans—direct drive propeller type						
Number of fans—fan diameter, in (mm)	6—30 (762)		6—30 (762)		6—30 (762)	
Number of motors—hp (kw)	6—2.0		6—2.0		6—2.0	
Fan and motor rpm, 60 Hz	1140		1140		1140	
60 Hz fan tip speed, fpm (m/sec)	8950 (4224)		8950 (4224)		8950 (4224)	
60 Hz total unit airflow, cfm (m^3/sec)	65,178 (30,765)		65,178 (30,765)		65,178 (30,765)	
Evaporator—shell and tube						
Number of evaporators	1		1		1	
Number of refrigerant circuits	2		2		2	
Diameter, in—length, ft (mm)	14.0 × 5.2 (356 × 1585)		14.0 × 5.2 (356 × 1585)		14.0 × 5.2	
Water volume, gallons, (l)	25 (95)		25 (95)		25 (95)	
Maximum water pressure, psig (kpa)	152 (1047)		152 (1047)		152 (1047)	
Max. refrigerant working pressure, psig (kpa)	300 (2066)		300 (2066)		300 (2066)	
Water inlet/outlet victaulic connections, in (mm)	5 (127)		5 (127)		5 (127)	
Drain—NPT int, in (mm)	0.5 (12.7)		0.5 (12.7)		0.5 (12.7)	
Vent—NPT int, in (mm)	0.5 (12.7)		0.5 (12.7)		0.5 (12.7)	

*Nominal capacity based on 95°F ambient air and 54°F/44°F water range

AGZ 100BS through 130BS

Physical data	AGZ model number							
	100B		110B		120B		130B	
Basic data	**Circuit 1**	**Circuit 2**	**circUit 1**	**Circuit 2**	**Circuit 1**	**Circuit 2**	**Circuit 1**	**Circuit 2**
Unit capacity @ ARI conditions tons (k W)*	97.6 (342.6)		107.5 (378.4)		119.8 (421.7)		129.4 (455.5)	
Number of refrigerant circuits	2		2		2		2	
Unit operating charge, R-22, lb (kg)	76 (35)	86 (39)	86 (39)	86 (39)	86 (39)	104 (47)	104 (47)	104 (47)
Cabinet dimensions, L × W × H, in (mm)	173.1 × 88.0 × 100.4 (4397 × 2235 × 2550)		173.1 × 88.0 × 100.4 (4397 × 2235 × 2550)		173.1 × 88.0 × 100.4 (4397 × 2235 × 2550)		173.1 × 88.0 × 100.4 (4397 × 2235 × 2550)	
Unit operating weight, lb (kg)	7870 (3565)		8150 (3692)		8720 (3950)		9050 (4100)	
Unit shipping weight, lb (kg)	7580 (3434)		7860 (3561)		8380 (3796)		8710 (3946)	
Add'l weight if copper finned coils, lb (kg)	1155 (524)		1155 (524)		1155 (524)		1155 (524)	
Compressors								
Type	Trio scrolls		Trio scrolls		Trio scrolls		Trio scrolls	
Nominal tonnage of each compressor	15.0	20.0	20.0	20.0	20.0	25.0	25.0	25.0
Number of compressors per circuit	3	3	3	3	3	3	3	3
Oil charge per compressor, oz (g)	140 (496)	148 (525)	148 (525)	148 (525)	148 (525)	200 (709)	200 (709)	200 (709)
Capacity reduction steps—percent of compressor displacement								
Staging, 6 stages, circuit #1 in lead	0-14-33-48-67-81-100		0-17-33-50-67-83-100		0-15-33-48-67-81-100		0-17-33-50-67-83-100	
Staging, 6 stages, circuit #2 in lead	0-19-33-52-67-86-100		0-17-33-50-67-83-100		0-19-33-52-67-86-100		0-17-33-50-67-83-100	
Condensers—high efficiency fin and tube type with integral subcooling								
Coil face area, sq ft (m^2)	105.3 (9.8)	105.3 (9.8)	105.3 (9.8)	105.3 (9.8)	105.3 (9.8)	105.3 (9.8)	105.3 (9.8)	105.3 (9.8)
Finned height × finned length, in (mm)	50 ×151.6 1270 × 3851	50 ×151.6 1270 × 3851	50 ×151.6 1270 × 3851	50 ×151.6 1270 × 3851	50 ×151.6 1270 × 3851	50 ×151.6 1270 × 3851	50 ×151.6 1270 × 3851	50 ×151.6 1270 × 3851
Fins per inch × rows deep	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3
Pumpdown capacity, 90% full lb (kg)	196 (89)	196 (89)	196 (89)	196 (89)	196 (89)	196 (89)	196 (89)	196 (89)
Max. relief valve pressure setting, psig (kPa)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)	450 (3103)
Condenser fans—direct drive propeller type								
Number of fans—fan diameter, in (mm)	8—30 (762)		8—30 (762)		8—30 (762)		8—30 (762)	
Number of motors—hp (kW)	8—2.0		8—2.0		8—2.0		8—2.0	
Fan and motor rpm, 60 Hz	1140		1140		1140		1140	
60 hz Fan tip speed, fpm (m/sec)	8950 (4224)		8950 (4224)		8950 (4224)		8950 (4224)	
60 hz Total unit airflow, cfm (m^3/sec)	86,904 (41,020)		86,904 (41,020)		86,904 (41,020)		86,904 (41,020)	
Evaporator—shell and tube								
Number of evaporators	1		1		1		1	
Number of refrigerant circuits	2		2		2		2	
Diameter, In—length, ft	12.8 × 7.9		12.8 × 7.9		14.0 × 8.0		14.0 × 8.0	
Diameter, (mm)—length, (mm)	324 × 2408		324 × 2408		356 × 2438		356 × 2438	
Water volume, gallons, (L)	34 (127)		34 (127)		40 (150)		40 (150)	
Maximum water pressure, psig (kPa)	152 (1047)		152 (1047)		152 (1047)		152 (1047)	
Max. refrigerant working pressure, psig (kPa)	300 (2066)		300 (2066)		300 (2066)		300 (2066)	
Water inlet/outlet victaulic connections, in (mm)	5 (127)		5 (127)		5 (127)		5 (127)	
Drain—NPT int, in (mm)	0.5 (12.7)		0.5 (12.7)		0.5 (12.7)		0.5 (12.7)	
Vent—NPT int, in (mm)	0.5 (12.7)		0.5 (12.7)		0.5 (12.7)		0.5 (12.7)	

*Nominal capacity based on 95°F ambient air and 54°F/44°F water range