

Single Circuit Air-Cooled Scroll Condensing Units—10 to 39 Tons

- **Efficient**—Up to 10.9 EER at full load and up to 13.6 EER at part load (IPLV)
- **Quiet**—All dBA ratings are tested in accordance with ARI Standard 370
Less acoustical treatment can lower your project cost
- **Reliable**—Scroll compressors have fewer moving parts
- **Controls flexibility**—MicroTech® II controls with our Open Choices™ feature for easy integration with the BAS of your choice
- **Optional low ambient operation range down to 0°F**
- **R-407C refrigerant**

For more detail, refer to Catalog ACZ-AGZB. For the most current information, refer to www.mcquay.com.



Model ACZ-B—10 to 39 tons
R-407C



Available LONMARK certified



Modbus®

Air-Cooled Scroll Condensing Units, Single Circuit—Physical Data

ACZ 010BS through 020BS, R-407C

Physical data	ACZ model number			
	010B	013B	016B	020B
Basic data				
Nominal Tons ¹	10	13	16	20
Number of refrigerant circuits	1	1	1	1
Unit operating charge,R-407C, lb (kg) ²	22.0 (10.0)	22.0 (10.0)	24.0 (10.9)	31.0 (14.1)
Cabinet dimensions, L × W × H, in (mm)	73.6 × 46.3 × 50.8 (1869 × 1176 × 1289)	73.6 × 46.3 × 50.8 (1869 × 1176 × 1289)	73.6 × 46.3 × 50.8 (1869 × 1176 × 1289)	73.6 × 46.3 × 50.8 (1869 × 1176 × 1289)
Unit operating weight, lb (kg)	1015 (461)	1015 (461)	1090 (495)	1190 (541)
Unit shipping weight, lb (kg)	1000 (454)	1000 (454)	1065 (484)	1150 (523)
Add'l weight if copper finned coils, lb (kg) R-407C	176 (80.0)	176 (80.0)	176 (80.0)	264 (120.0)
Compressors				
Type	Scroll	Scroll	Scroll	Scroll
Nominal horsepower	4.0 / 4.0	6.0 / 6.0	7.5 / 7.5	9.0 / 9.0
Oil charge per compressor of a tandem set, oz (g)	57 (1616)	60 (1701)	140 (3969)	140 (3969)
Capacity reduction steps—percent of compressor displacement				
Standard staging	0 – 50 – 100	0 – 50 – 100	0 – 50 – 100	0 – 50 – 100
Condensers—high efficiency fin and tube type with integral subcooling				
Coil face area, ft ² (m ²)	30.3 (2.8)	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)	84 × 52 (2134 × 1321)
Fins per inch × rows deep:R-407C	16 × 2	16 × 2	16 × 2	16 × 3
Pumpdown capacity, lb (kg)	35.3 (16.0)	35.3 (16.0)	35.3 (16.0)	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)	2–26 (660)
Number of motors—hp (kW) ³	2–1.0 (0.75)	2–1.0 (0.75)	2–1.0 (0.75)	2–1.0 (0.75)
Fan and motor rpm, 60 Hz	1140	1140	1140	1140
60 Hz total unit airflow, cfm (L/s)	13,950 (6584)	13,950 (6584)	13,950 (6584)	12,000 (5664)

1. Nominal capacity based on 95°F ambient air and 50°F saturated suction temperature (SST).
2. Operating charge is for the condensing unit only. Refrigerant lines and evaporator charge must be added.
3. Except for 380V/60 and 575V/60, hp = 2.0.

Condensing Units / Condensers / Fluid Coolers

ACZ 025BS through 039BS, R-407C

Physical data	ACZ model number			
	025BS	028BS	033BS	039BS
Basic data				
Nominal tons ¹	25	28	33	39
Number of refrigerant circuits	1	1	1	1
Unit operating charge, R-407C, lb (kg) ²	34.0 (15.4)	36.0 (16.3)	47.0 (21.3)	50.0 (22.7)
Cabinet dimensions, L × W × H, in (mm)	106.2 × 46.3 × 50.8 (2697 × 1176 × 1289)	106.2 × 46.3 × 50.8 (2697 × 1176 × 1289)	106.2 × 46.3 × 58.8 (2697 × 1176 × 1493)	106.2 × 46.3 × 58.8 (2697 × 1176 × 1493)
Unit operating weight, lb (kg)	1470 (667)	1490 (676)	1760 (799)	1960 (890)
Unit shipping weight, lb (kg)	1580 (717)	1600 (726)	1890 (858)	2090 (949)
Add'l weight if copper finned coils, lb (kg) R-407C	426 (194)	426 (194)	435 (197)	435 (197)
Compressors				
Type	Scroll	Scroll	Scroll	Scroll
Nominal horsepower	12.0 / 12.0	13.0 / 13.0	15.0 / 15.0	20.0 / 20.0
Oil charge per compressor of a tandem set, oz (g)	110 (3119)	110 (3119)	110 (3119)	158 (4479)
Capacity reduction steps—percent of compressor displacement				
Standard staging	0 – 50 – 100	0 – 50 – 100	0 – 50 – 100	0 – 50 – 100
Condensers—high efficiency fin and tube type with integral subcooling				
Coil face area, ft ² (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: R-407C	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	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)	20,925 (9877)	20,925 (9877)	19,800 (9346)	19,800 (9346)

1. Nominal capacity based on 95°F ambient air and 50°F saturated suction temperature (SST).

2. Operating charge is for the condensing unit only. Refrigerant lines and evaporator charge must be added.

3. Except for 380V/60 and 575V/60, hp = 2.0.