

Rooftop Water Source Heat Pumps—3 to 35 Tons

- Flexible downflow and horizontal discharge arrangements
- Standard or geothermal application flexibility
- Heavy duty cabinet construction and full perimeter roof curb for long life
- Multiple access panels for easy maintenance
- Sloped stainless steel drain pan for superior IAQ
- Multiple refrigerant circuits on units 8-ton (28kW) and larger for staged operation
- Economizer, hot gas bypass and reheat, and fan motor size options to meet application requirements
- Performance rated in accordance with ISO 13256-1

For more detail, refer to Catalog 1110. For the most current information, refer to mcquay.com.



Models RWH/RGH,
horizontal discharge



Models RWD/RGD,
downflow discharge

Capacity and Performance Data RWD and RGD Downflow Discharge Units

Unit size	Airflow cfm (L/S)	Water flow gpm (L/S)	Voltage	Water loop*				Ground loop**				Dimensions, in (mm)		
				Cooling		Heating		Cooling		Heating		L	W	H
				Btu/hr (Watts)	EER	Btu/hr (Watts)	COP	Btu/hr (Watts)	EER	Btu/hr (Watts)	COP			
036	1200 (566)	8.6 (0.54)	208-230/60/3	34,500 (10,104)	14.1	42,900 (12,565)	4.4	38,500 (11,276)	14.9	24,100 (7,058)	3.5	54.0 (1372)	42.0 (1067)	36.0 (914)
			460/60/3											
			380/415/50/3											
048	1800 (850)	13.0 (0.82)	208-230/60/3	49,600 (14,526)	13.0	59,600 (17,455)	4.5	52,000 (15,230)	14.9	35,000 (10,251)	3.5	54.0 (1372)	42.0 (1067)	36.0 (914)
			460/60/3											
			380/415/50/3											
060	2000 (944)	15.5 (0.98)	208-230/60/3	60,000 (17,748)	12.8	73,000 (21,380)	4.6	60,200 (17,631)	14.1	47,000 (13,756)	3.2	54.0 (1372)	42.0 (1067)	36.0 (914)
			460/60/3											
			380/415/50/3											
072	2300 (1086)	18.0 (1.14)	208-230/60/3	75,200 (22,024)	12.8	83,300 (24,397)	4.6	75,300 (22,346)	15.9	55,400 (16,225)	3.7	54.0 (1372)	42.0 (1067)	36.0 (914)
			460/60/3											
			380/415/50/3											
096	3200 (1510)	24.0 (1.52)	208-230/60/3	95,000 (27,823)	12.5	173,000 (33,095)	4.2	96,000 (28,116)	13.5	71,400 (20,911)	3.2	85.0 (2159)	54.0 (1372)	36.0 (914)
			460/60/3											
			380/415/50/3											
120	4000 (1888)	31.0 (1.96)	208-230/60/3	119,000 (34,852)	12.0	140,000 (41,003)	4.2	120,000 (35,145)	13.4	93,100 (27,267)	3.2	85.0 (2159)	54.0 (1372)	36.0 (914)
			460/60/3											
			380/415/50/3											
150	5000 (2360)	36.0 (2.27)	208-230/60/3	150,700 (44,136)	12.5	185,000 (54,182)	4.3	154,000 (45,103)	13.6	120,500 (35,291)	3.2	101.0 (2565)	79.0 (2007)	40.0 (1016)
			460/60/3											
			380/415/50/3											
180	6000 (2832)	42.0 (2.65)	208-230/60/3	171,900 (50,345)	13.9	208,000 (60,918)	4.6	178,200 (52,190)	15.7	133,600 (39,128)	3.5	101.0 (2565)	79.0 (2007)	40.0 (1016)
			460/60/3											
			380/415/50/3											
240	8000 (3776)	58.0 (3.66)	208-230/60/3	229,800 (67,303)	12.5	287,100 (84,085)	4.3	236,900 (69,382)	14.5	180,600 (52,893)	3.4	101.0 (2565)	79.0 (2007)	40.0 (1016)
			460/60/3											
			380/415/50/3											
300	10,000 (4720)	68.0 (4.29)	208-230/60/3	276,400 (80,951)	13.6	343,100 (100,486)	4.6	285,000 (83,469)	14.8	230,000 (67,361)	3.6	118.0 (2997)	84.0 (2134)	56.0 (1422)
			460/60/3											
			380/415/50/3											
360	12,000 (5663)	93.0 (5.87)	208-230/60/3	376,500 (110,267)	12.4	459,100 (134,459)	4.2	383,100 (112,200)	14.0	304,100 (89,063)	3.2	118.0 (2997)	84.0 (2134)	66.0 (1676)
			460/60/3											
			380/415/50/3											
420	14,000 (6607)	108.0 (6.81)	208-230/60/3	426,700 (124,970)	12.1	550,000 (161,081)	4.2	440,000 (128,865)	13.4	369,000 (108,071)	3.2	118.0 (2997)	84.0 (2134)	82.5 (2096)
			460/60/3											
			380/415/50/3											

Notes:

EER = Energy Efficiency Ratio; COP = Coefficient of Performance.

* Cooling capacity is based on 80.6°F (27°C) db, 66.2°F (19°C) wb entering air temperature and 86°F (30°C) entering, 95°F (35°C) leaving water temperature. Heating capacity based on 68°F (20°C) db entering air temperature and 68°F (20°C) entering water temperature. Net capacities include fan motor heat; 50 cycle units are de-rated, 60 cycle units.

** Cooling capacity is based on 80.6°F (27°C) db, 66.2°F (19°C) wb entering air temperature and 77°F (25°C) entering, 87°F (31°C) leaving water temperature. Heating capacity based on 68°F (20°C) db entering air temperature and 32°F (0°C) entering water temperature. Net capacities include fan motor heat; 50 cycle units are de-rated, 60 cycle units.

Roof Curb Dimensions—RWD and RGD Downflow Discharge Units

Unit size	Length, in (mm)	Width, in (mm)	Height, in (mm)
036	46.5 (1181)	34.5 (876)	14.0 (356)
048	46.5 (1181)	34.5 (876)	14.0 (356)
060	46.5 (1181)	34.5 (876)	14.0 (356)
072	46.5 (1181)	34.5 (876)	14.0 (356)
096	72.5 (1842)	45.5 (1156)	14.0 (356)
120	72.5 (1842)	45.5 (1156)	14.0 (356)
150	89.75 (2280)	61.5 (1562)	14.0 (356)
180	89.75 (2280)	61.5 (1562)	14.0 (356)
240	89.75 (2280)	61.5 (1562)	14.0 (356)
300	105.0 (2667)	75.25 (1911)	16.0 (406)
360	105.0 (2667)	75.25 (1911)	16.0 (406)
420	105.0 (2667)	75.25 (1911)	16.0 (406)

Capacity and Performance Data RWH and RGH Horizontal Discharge Units

Unit size	Airflow cfm (L/S)	Water flow gpm (L/S)	Voltage	Water loop*				Ground loop**				Dimensions, in (mm)		
				Cooling		Heating		Cooling		Heating		L	W	H
				Btu/hr (Watts)	EER	Btu/hr (Watts)	COP	Btu/hr (Watts)	EER	Btu/hr (Watts)	COP			
036	1200 (566)	8.6 (0.54)	208-230/60/3	34,500 (10,104)	14.1	42,900 (12,565)	4.4	38,500 (11,276)	14.9	24,100 (7,058)	3.5	54.0 (1372)	48.0 (1219)	39.0 (991)
			460/60/3											
			380/415/50/3											
048	1800 (850)	13.0 (0.82)	208-230/60/3	49,600 (14,526)	13.0	59,600 (17,455)	4.5	52,000 (15,230)	14.9	35,000 (10,251)	3.5	54.0 (1372)	48.0 (1219)	39.0 (991)
			460/60/3											
			380/415/50/3											
060	2000 (944)	15.5 (0.98)	208-230/60/3	60,000 (17,748)	12.8	73,000 (21,380)	4.6	60,200 (17,631)	14.1	47,000 (13,756)	3.2	54.0 (1372)	48.0 (1219)	39.0 (991)
			460/60/3											
			380/415/50/3											
072	2300 (1086)	18.0 (1.14)	208-230/60/3	75,200 (22,024)	12.8	83,300 (24,397)	4.6	75,300 (22,346)	15.9	55,400 (16,225)	3.7	54.0 (1372)	48.0 (1219)	39.0 (991)
			460/60/3											
			380/415/50/3											
096	3200 (1510)	24.0 (1.52)	208-230/60/3	95,000 (27,823)	12.5	173,000 (33,095)	4.2	96,000 (28,116)	13.5	71,400 (20,911)	3.2	80.0 (2032)	54.0 (1372)	39.0 (991)
			460/60/3											
			380/415/50/3											
120	4000 (1888)	31.0 (1.96)	208-230/60/3	119,000 (34,852)	12.0	140,000 (41,003)	4.2	120,000 (35,145)	13.4	93,100 (27,267)	3.2	80.0 (2032)	54.0 (1372)	39.0 (991)
			460/60/3											
			380/415/50/3											
150	5000 (2360)	36.0 (2.27)	208-230/60/3	150,700 (44,136)	12.5	185,000 (54,182)	4.3	154,000 (45,103)	13.6	120,500 (35,291)	3.2	82.0 (2083)	79.0 (2007)	43.0 (1092)
			460/60/3											
			380/415/50/3											
180	6000 (2832)	42.0 (2.65)	208-230/60/3	171,900 (50,345)	13.9	208,000 (60,918)	4.6	178,200 (52,190)	15.7	133,600 (39,128)	3.5	82.0 (2083)	79.0 (2007)	43.0 (1092)
			460/60/3											
			380/415/50/3											
240	8000 (3776)	58.0 (3.66)	208-230/60/3	229,800 (67,303)	12.5	287,100 (84,085)	4.3	236,900 (69,382)	14.5	180,600 (52,893)	3.4	82.0 (2083)	79.0 (2007)	43.0 (1092)
			460/60/3											
			380/415/50/3											
300	10,000 (4720)	68.0 (4.29)	208-230/60/3	276,400 (80,951)	13.6	343,100 (100,486)	4.6	285,000 (83,469)	14.8	230,000 (67,361)	3.6	94.0 (2388)	84.0 (2137)	61.0 (1549)
			460/60/3											
			380/415/50/3											
360	12,000 (5663)	93.0 (5.87)	208-230/60/3	376,500 (110,267)	12.4	459,100 (134,459)	4.2	383,100 (112,200)	14.0	304,100 (89,063)	3.2	94.0 (2388)	84.0 (2137)	76.5 (1943)
			460/60/3											
			380/415/50/3											
420	14,000 (6607)	108.0 (6.81)	208-230/60/3	426,700 (124,970)	12.1	550,000 (161,081)	4.2	440,000 (128,865)	13.4	369,000 (108,071)	3.2	94.0 (2388)	84.0 (2137)	87.5 (2222)
			460/60/3											
			380/415/50/3											

Notes:

EER = Energy Efficiency Ratio; COP = Coefficient of Performance.

* Cooling capacity is based on 80.6°F (27°C) db, 66.2°F (19°C) wb entering air temperature and 86°F (30°C) entering, 95°F (35°C) leaving water temperature. Heating capacity based on 68°F (20°C) db entering air temperature and 68°F (20°C) entering water temperature. Net capacities include fan motor heat; 50 cycle units are de-rated, 60 cycle units.

** Cooling capacity is based on 80.6°F (27°C) db, 66.2°F (19°C) wb entering air temperature and 77°F (25°C) entering, 87°F (31°C) leaving water temperature. Heating capacity based on 68°F (20°C) db entering air temperature and 32°F (0°C) entering water temperature. Net capacities include fan motor heat; 50 cycle units are de-rated, 60 cycle units.

Roof Curb Dimensions—RWH and RGH Horizontal Discharge Units

Unit size	Length, in (mm)	Width, in (mm)	Height, in (mm)
036	48.25 (1226)	45.25 (1149)	14.0 (356)
048	48.25 (1226)	45.25 (1149)	14.0 (356)
060	48.25 (1226)	45.25 (1149)	14.0 (356)
072	48.25 (1226)	45.25 (1149)	14.0 (356)
096	80.25 (2038)	45.25 (1149)	14.0 (356)
120	80.25 (2038)	45.25 (1149)	14.0 (356)
150	82.25 (2089)	68.25 (1734)	14.0 (356)
180	82.25 (2089)	68.25 (1734)	14.0 (356)
240	82.25 (2089)	68.25 (1734)	14.0 (356)
300	144.25 (3664)	71.25 (1822)	14.0 (356)
360	144.25 (3664)	71.25 (1822)	14.0 (356)
420	144.25 (3664)	71.25 (1822)	14.0 (356)