

MCW and SCW Chiller R-22 Compressor Electrical Specifications

Dometic Corporation, Environmental Division - Marine Air Systems

Model ⁽¹⁾		Electrical Data ⁽²⁾						
Tons	Type	Volt/Hz/Ph	FLA Cool	FLA RC	LRA	KVA Cool	KVA RC	MCC
2	Scroll	220/50/1	7.5	10.4	56.0	1.7	2.3	18.0
2	Scroll	220/50/3	8.1	9.3	70.0	1.8	2.0	15.0
2	Scroll	230/60/1	7.2	9.8	59.0	1.7	2.3	18.5
2	Scroll	230/60/3	5.3	6.9	55.0	1.2	1.6	12.0
2	Scroll	380/50/3	3.2	4.2	30.0	1.2	1.6	7.0
2	Scroll	460/60/3	2.5	3.2	22.4	1.2	1.5	5.5
2	Recip	220/50/1	9.6	11.8	65.0	2.1	2.6	19.5
2	Recip	220/50/3	6.6	8.2	60.0	1.5	1.8	14.0
2	Recip	230/60/1	8.2	10.9	66.0	1.9	2.5	20.2
2	Recip	230/60/3	6.0	7.4	48.0	1.4	1.7	13.0
2	Recip	380/50/3	3.2	4.1	30.0	1.2	1.6	7.5
2	Recip	460/60/3	3.0	3.7	30.0	1.4	1.7	6.0
3	Scroll	220/50/1	11.1	15.2	97.0	2.4	3.3	24.0
3	Scroll	220/50/3	8.5	10.6	95.0	1.9	2.3	19.4
3	Scroll	230/60/1	12.1	15.9	100.0	2.8	3.7	25.0
3	Scroll	230/60/3	7.6	9.7	77.0	1.7	2.2	16.0
3	Scroll	380/50/3	4.4	5.5	41.0	1.7	2.1	10.0
3	Scroll	460/60/3	3.8	4.9	39.0	1.7	2.3	8.0
3	Recip	220/50/1	15.5	18.7	100.0	3.4	4.1	33.0
3	Recip	220/50/3	10.2	12.8	90.0	2.2	2.8	24.0
3	Recip	230/60/1	12.5	15.9	87.0	2.9	3.7	27.5
3	Recip	230/60/3	7.8	9.6	70.0	1.8	2.2	18.0
3	Recip	380/50/3	5.1	6.4	45.0	1.9	2.4	13.0
3	Recip	460/60/3	3.9	4.8	35.0	1.8	2.2	8.3
4	Scroll	220/50/1	15.4	21.7	150.0	3.4	4.8	40.0
4	Scroll	220/50/3	12.3	15.0	139.0	2.7	3.3	29.0
4	Scroll	230/60/1	13.7	19.5	137.0	3.2	4.5	31.0
4	Scroll	230/60/3	9.9	12.7	91.0	2.3	2.9	23.0
4	Scroll	380/50/3	7.1	8.7	58.6	2.7	3.3	14.0
4	Scroll	460/60/3	5.5	6.5	50.0	2.5	3.0	11.0
4	Recip	220/50/3	12.3	15.1	106.0	2.7	3.3	25.0
4	Recip	230/60/1	17.1	21.4	118.0	3.9	4.9	36.4
4	Recip	230/60/3	10.0	12.6	90.0	2.3	2.9	24.0
4	Recip	380/50/3	5.9	7.2	53.0	2.2	2.7	12.5
4	Recip	460/60/3	5.0	6.3	45.0	2.3	2.9	13.0
5	Scroll	220/50/1	Use 230/60/3 Compressor w/Freq Drive					
5	Scroll	220/50/3	12.5	18.4	172.0	2.8	4.0	29.0
5	Scroll	230/60/1	18.2	25.3	169.0	4.2	5.8	45.0
5	Scroll	230/60/3	13.3	16.7	128.0	3.1	3.8	29.0
5	Scroll	380/50/3	6.8	8.9	67.0	2.6	3.4	14.0
5	Scroll	460/60/3	6.7	8.4	63.0	3.1	3.9	14.0
5	Recip	230/60/1	22.8	28.1	178.0	5.2	6.5	47.0
5	Recip	230/60/3	14.0	17.0	124.0	3.2	3.9	32.0
5	Recip	460/60/3	7.0	8.5	62.0	3.2	3.9	16.0
6	Scroll	220/50/3	17.2	20.7	196.0	3.8	4.6	40.0
6	Scroll	230/60/3	14.0	18.4	156.0	3.2	4.2	29.0
6	Scroll	380/50/3	9.4	11.4	90.0	3.6	4.3	20.0
6	Scroll	460/60/3	7.0	9.2	75.0	3.2	4.2	14.0

Model ⁽¹⁾		Electrical Data ⁽²⁾						
Tons	Type	Volt/Hz/Ph	FLA Cool	FLA RC	LRA	KVA Cool	KVA RC	MCC
7.5	Scroll	220/50/3	18.4	23.3	231	4.0	5.1	47
7.5	Scroll	230/60/3	20.2	25.6	195	4.6	5.9	45
7.5	Scroll	380/50/3	10.9	13.7	100	4.1	5.2	24.2
7.5	Scroll	460/60/3	10.0	12.6	95	4.6	5.8	23
10	Scroll	220/50/3	24.0	30.9	273	5.3	6.8	64
10	Scroll	230/60/3	25.6	32.5	239	5.9	7.5	58
10	Scroll	380/50/3	13.9	17.9	110	5.3	6.8	27.5
10	Scroll	460/60/3	12.9	16.3	125	5.9	7.5	26.9
12.5	Scroll	220/50/3	33.2	42.9	315	7.3	9.4	70.9
12.5	Scroll	230/60/3	28.0	36.6	245	6.4	8.4	66
12.5	Scroll	380/50/3	19.2	24.8	179	7.3	9.4	37
12.5	Scroll	460/60/3	14.0	18.3	125	6.4	8.4	27.5
15 ⁽³⁾	Scroll	230/60/3	36.4	47.2	425	8.4	10.9	75
15 ⁽³⁾	Scroll	380/60/3	22.0	28.6	239	8.4	10.9	51
15	Scroll	460/60/3	18.2	23.6	187	8.4	10.9	37

(1) Cooling capacity is given at performance ratings of 100F (38C) condensing temperature and 35F (2C) evaporating temperature. Reverse cycle heating capacity is given at performance ratings of 130F (54C) condensing temperature and 45F (7C) evaporating temperature.

(2) Compressor electrical data are rated at Volt/Hz/Ph listed, but are nominally rated for the following operation conditions:
 230/60/1 compressors are rated for 208-230/60/1 operation
 220/50/1 compressors are rated for 220-240/50/1 operation
 230/60/3 compressors are rated for 208-230/60/3 operation
 220/50/3 compressors are rated for 200-220/50/3 operation
 380/50/3 compressors are rated for 380-420/50/3 operation

Although compressors are rated for a certain voltage at a given frequency, they can usually be run at +/-10% of the rated voltage, here are the exceptions:
 Comp; VAC; Freq; Phase; +/- Rule; VAC Range
 Scroll; 208-230; 60Hz; 1Ph; -5/+10%; 198-253
 Scroll; 220-240; 50Hz; 1Ph; -5/+10%; 209-264

For more information regarding compressor voltages, refer to notice FNR#192-B3-M on the Dometic Customer News Website.

(3) The 15-ton 230V & 380V compressors are 60hz and require use of frequency drives to run on 50hz power. Increase 230V amps by 5% for 220V operation.