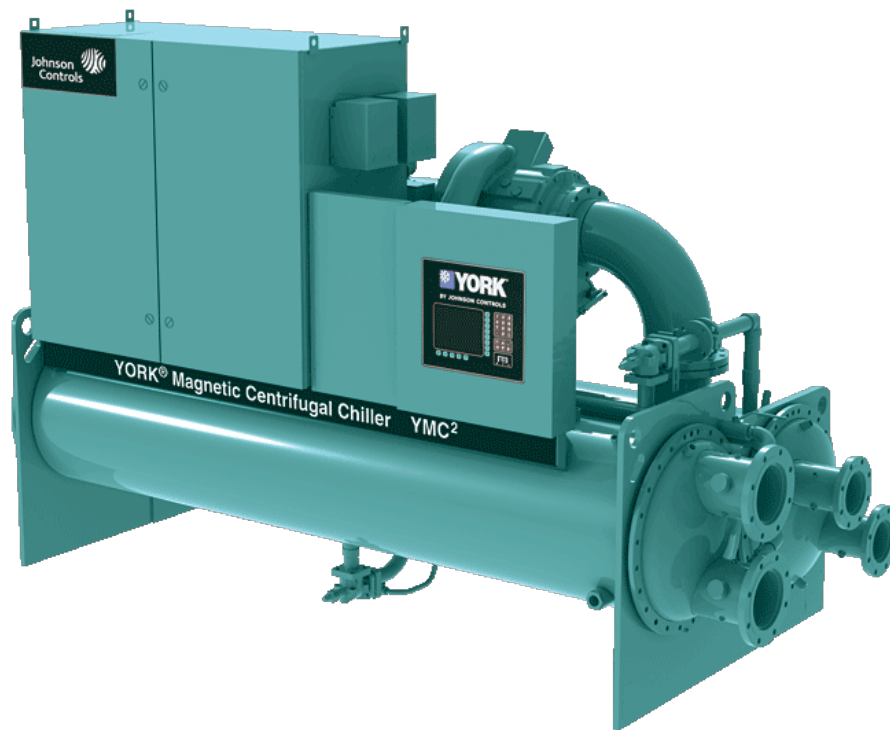


# MODEL YMC<sup>2</sup> MAGNETIC BEARING CENTRIFUGAL LIQUID CHILLERS

165-1000 Tons  
580-3520 kW  
50 & 60 Hz  
HFC-134a  
or HFC-513A

Model #: YMC2-S2110AB  
Serial #: SMK-150430

Year: 2022  
Size: 600 Tons



Shipping Weight: 28,089 lbs.  
Operating Weight: 33,304 lbs.

L: 16' 9" W: 6' 7" H: 8' 8"



 **YORK**<sup>®</sup>  
INSTALL CONFIDENCE

# Nomenclature

**YMC2 - S 2110 A B**

## SYSTEM NOMENCLATURE

Y M C 2 - S 0756 A B

**YORK**

**Magnetic Bearing**

**Centrifugal Chiller**

**S = Single Stage**

**T = Two Stage**

**Mod Level**

**A = Refrigerant R-134a**

**B = Refrigerant R-513A**

**Capacity in KW**

**M6 C -295FAC**

## COMPRESSOR NOMENCLATURE

M2 B - 197 F A A

**Motor**

**Motor Design Level**

**Impeller Tip Diameter (mm)**

**Rotation**

**F = Forward**

**R = Reverse**

**Gas Path Revision Level**

**Impeller Design Revision Level**

**ED3314-656-5S1-2GTLL**

**CB3314-471-BS1-2GTLL**

## VESSEL NOMENCLATURE

E A 25 14 271 B R 1 1 F C R

**Vessel**

**E = Evaporator**

**C = Condenser**

**Heat Exchanger Mod Level**

**Nominal Inside Diameter (Inches)**

**Nominal Length (Feet)**

**Marketing Tube Number**

**Tube Code**

**B = 3/4" Code 1**

**C = 3/4" Code 2**

**D = 3/4" Code 3**

**E = 3/4" Code 4**

**2 = 1" Code 1**

**3 = 1" Code 2**

**4 = 1" Code 3**

**5 = 1" Code 4**

**Vessel Refrigerant Pressure Code**

**R = 180 psi**

**S = 235 psi**

**T = 300 psi**

**U = 350 psi**

**V = 400 psi**

**Inlet from Front View**

**R = Right**

**L = Left**

**Waterbox Type**

**S = Compact**

**T = Marine**

**Water Connection Type**

**F = Flanges**

**G = Grooved Standard**

**A = Victaulic AGS**

**Number of Passes**

**Water Side Pressure Code**

**1 = 150 psi**

**3 = 300 psi**

**HYP0730XHC30B-46B**

## VARIABLE SPEED DRIVE NOMENCLATURE

HYP 774 X H 15 D - 40

**Model**

**Amps**

**X = Factory Installed**

**R = Field Installed**

**H = YMC<sup>2</sup> Chiller**

**40 = 380V 60Hz**

**50 = 400V 50Hz**

**46 = 460V 60Hz**

**68 = 415V 50Hz**

**D = Disconnect Switch**

**B = Circuit Breaker**

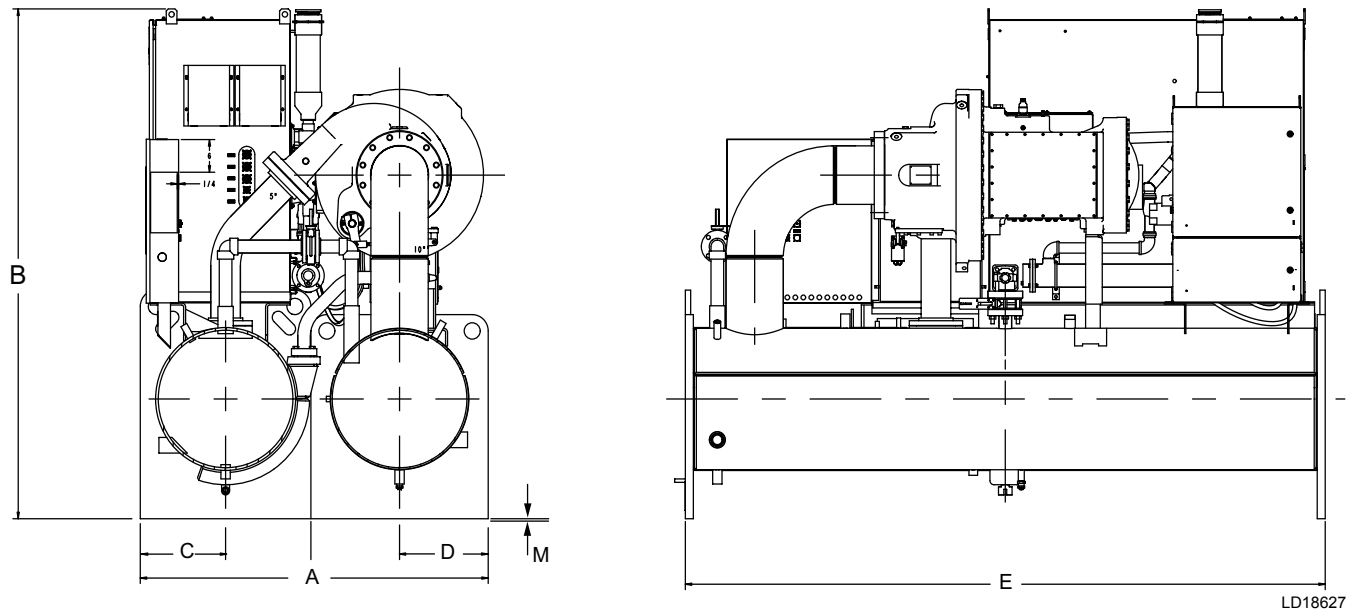
**Liquid DWP**

**15 = 150 psi**

**30 = 300 psi**

# Unit Dimensions (Cont'd)

## M6 MOTOR



LD18627

ADDITIONAL OPERATING HEIGHT CLEARANCE TO FLOOR - IN (MM)	
TYPE OF CHILLER MOUNTING	<b>M</b>
NEOPRENE PAD ISOLATORS	1 3/4" (45)
SPRING ISOLATORS 1" DEFLECTION	1" (25)
DIRECT MOUNT	3/4" (19)

EVAPORATOR CODE	CONDENSER CODE	M6 MOTOR DIMENSIONS FT - IN (MM)					
		A	B		C	D	E
			774A VSD	1278A VSD			
EC3312	CB2912	6' 2" (1880)	8' 3-1/2" (2527)	8' 3-1/2" (2527)	1' 5-1/2" (445)	1' 7-1/2" (495)	12' (3658)
<b>EC3314</b>	<b>CB3314</b>	<b>6' 7"</b> (2007)	8' 5-1/2" (2578)	<b>8' 7-1/2"</b> (2629)	1' 8" (508)	1' 7-1/2" (495)	<b>14"</b> (4267)
EC3914	CB3314	7' 4" (2235)	8' 8-1/2" (2654)	8' 8-1/2" (2654)	1' 8" (508)	2' (610)	14' (4267)
EC3914	CB3914	7' 10" (2388)	8' 11" (2718)	9' 1-1/8" (2772)	1' 11" (584)	2' (610)	14' (4267)

## Unit Dimensions (Cont'd)

### EVAPORATORS – MARINE WATER BOXES

MARINE WATER BOXES-150 AND 300PSI											
EVAPORATOR SHELL CODE	NOZZLE PIPE SIZE (IN)			EVAPORATOR NOZZLE DIMENSIONS FT - IN (MM)							
	NUMBER OF PASSES			C	1-PASS	2-PASS			3-PASS		
	1	2	3		AA	AA	BB	EE	AA	BB	EE
EA25	8	6	4	1' 3/12" (394)	3' 7" (1092)	11" (279)	3' 7" (1092)	1' 6" (457)	11" (279)	3' 7" (1092)	1' 4-1/2" (419)
EB25	8	6	4	1' 5" (432)	3' 11" (1194)	9" (229)	3' 11" (1194)	1' 6" (457)	9" (229)	3' 11" (1194)	1' 4-1/2" (419)
EB29	10	8	6	1' 5-1/2" (445)	3' 9" (1143)	10" (254)	3' 9" (1143)	1' 7" (483)	10" (254)	3' 9" (1143)	1' 7" (483)
EB33	14	10	8	1' 7-1/2" (495)	4' 1" (1245)	11" (279)	4' 1" (1245)	1' 10" (559)	11" (279)	4' 1" (1245)	1' 10" (559)
EC33	16	12	10	1' 7-1/2" (495)	4' 7" (1397)	11" (279)	4' 7" (1397)	1 11-1/2" (597)	11" (279)	4' 7" (1397)	1 11-1/2" (597)
EC39	16	12	10	2' (610)	4' 11-1/2" (1511)	10-1/2" (267)	4' 11-1/2" (1511)	2' 2-1/2" (673)	10-1/2" (267)	4' 11-1/2" (1511)	2' 2-1/2" (673)

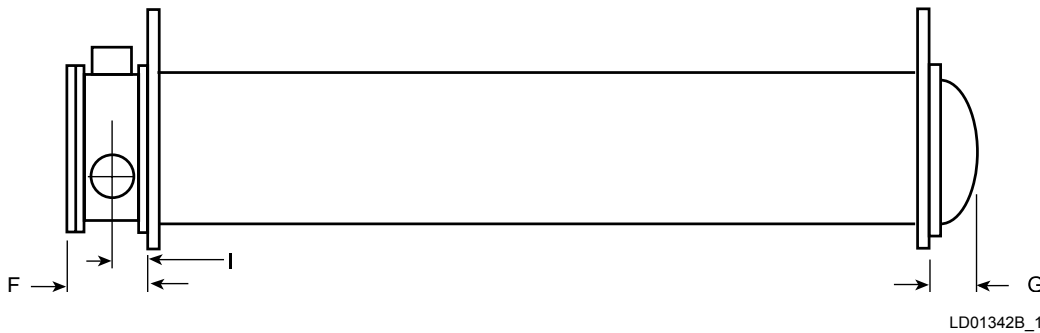
## Unit Dimensions (Cont'd)

### CONDENSERS – MARINE WATER BOXES

MARINE WATER BOXES-150 AND 300 PSI													
CONDENSER SHELL CODE	NOZZLE PIPE SIZE (IN)			CONDENSER NOZZLE DIMENSIONS FT - IN (MM)									
	NUMBER OF PASSES			C	1-PASS	2-PASS				3-PASS			
					AA	AA <sup>5</sup>	BB <sup>5</sup>	EE	EE FLANGE	AA	BB <sup>5</sup>	EE	EE FLANGE
	1	2	3										
CA21	10	6	6	1' 3-1/2" (394)	3' 8-1/2" (1130)	1' 3-1/2" (394)	3' 8-1/2" (1130)	1' 4-1/2" (419)	1' 5-1/2" (445)	1' 3-1/2" (394)	3' 8-1/2" (1130)	1' 4-1/2" (419)	1' 5-1/2" (445)
CA25	12	8	6	1' 3-1/2" (394)	4' 1/2" (1232)	1' 3-5/8" (397)	4' 1/2" (1232)	1' 6-1/2" (470)	1' 7-3/8" (492)	1' 3-5/8" (397)	4' 1/2" (1232)	1' 6-1/2" (470)	1' 7-3/8" (492)
CB21	10	6	6	1' 4" (406)	4' 3-3/8" (1305)	1' 6-3/8" (467)	4' 3-3/8" (1305)	1' 4-1/2" (419)	1' 5-1/2" (445)	1' 6-3/8" (467)	4' 3-3/8" (1305)	1' 4-1/2" (419)	1' 5-1/2" (445)
CB25	12	8	6	1' 4" (406)	4' 1" (1245)	1' 0" (305)	4' 1" (1245)	1' 6-1/2" (470)	1' 7-3/8" (492)	1' 0" (305)	4' 1" (1245)	1' 6-1/2" (470)	1' 7-3/8" (492)
CC25	12	8	6	1' 4" (406)	4' 1" (1245)	1' 0" (305)	4' 1" (1245)	1' 6-1/2" (470)	1' 7-3/8" (492)	1' 0" (305)	4' 1" (1245)	1' 6-1/2" (470)	1' 7-3/8" (492)
CB29	14	10	8	1' 5-1/2" (445)	4' 5" (1346)	1' 2" (356)	4' 5" (1346)	1' 9" (533)	1' 10-1/8" (562)	1' 2" (356)	4' 5" (1346)	1' 9" (533)	1' 10-1/8" (562)
<b>CB33</b>	16	<b>10</b>	10	1' 8" (508)	4' 8" (1422)	10" (254)	4' 8" (1422)	1' 9-1/2" (546)	1' 10-5/8" (575)	10" (254)	4' 8" (1422)	1' 9-1/2" (546)	1' 10-5/8" (575)
CB39	20	14	10	1' 11" (584)	5' 1" (1549)	11-1/2" (292)	5' 1" (1549)	2' 3-1/2" (699)	2' 4" (711)	11-1/2" (292)	5' 1" (1549)	2' 3-1/2" (699)	2' 4" (711)

# Unit Dimensions (Cont'd)

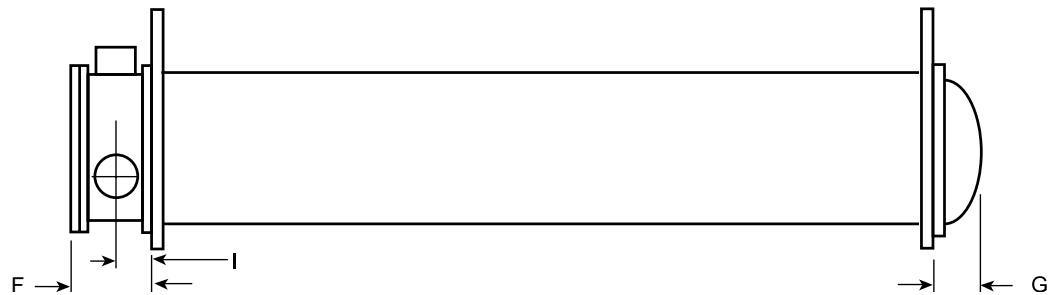
## EVAPORATORS – MARINE WATER BOXES



MARINE WATER BOXES DIMENSIONS FT - IN (MM)							
EVAPORATOR SHELL CODE	150 AND 300 PSI						
	1-PASS		2-PASS			3-PASS	
	F	I	F	I	G	F	I
<b>EA25</b>	1' 7" (483)	8-13/16" (224)	1' 4-7/8" (429)	7-3/4" (197)	6-7/16" (164)	1' 4-7/8" (429)	7-3/4" (197)
<b>EB25</b> <b>(150PSI)</b>	1' 7" (483)	8-13/16" (224)	1' 3-7/8" (403)	7-3/4" (197)	6-7/16" (164)	1' 3-7/8" (403)	7-3/4" (197)
<b>EB25</b> <b>(300PSI)</b>	1' 7" (483)	8-13/16" (224)	1' 3-7/8" (403)	7-3/4" (197)	8-3/16" (208)	1' 3-7/8" (403)	7-3/4" (197)
<b>EB29</b> <b>(150PSI)</b>	1' 10-7/8" (581)	10-5/8" (270)	1' 8-3/4" (527)	9-9/16" (243)	6-31/32" (177)	1' 8-3/4" (527)	9-9/16" (243)
<b>EB29</b> <b>(300PSI)</b>	1' 10-7/8" (581)	10-5/8" (270)	1' 8-3/4" (527)	9-9/16" (243)	9-7/32" (234)	1' 8-3/4" (527)	9-9/16" (243)
<b>EB33</b> <b>(150PSI)</b>	2' 2" (660)	1 1/8" (308)	1' 10-1/4" (565)	10-1/4" (260)	7-1/2" (191)	1' 10-1/4" (565)	10-1/4" (260)
<b>EB33</b> <b>(300PSI)</b>	2' 2" (660)	1 1/8" (308)	1' 10-1/4" (565)	10-1/4" (260)	9-1/2" (241)	1' 10-1/4" (565)	10-1/4" (260)
<b>EC33</b> <b>(150PSI)</b>	2' 5-1/8" (740)	1' 1-3/4" (350)	1' 11" (584)	11-1/2" (292)	8-5/16" (211)	2' 5/8" (625)	11-1/2" (292)
<b>EC33</b> <b>(300PSI)</b>	2' 6-1/4" (768)	1' 3-1/8" (384)	2' 1-1/4" (641)	1' 5/8" (321)	1' 3/4" (324)	2' 1-1/4" (641)	1' 3/8" (314)
<b>EC39</b> <b>(150PSI)</b>	2' 6-5/8" (778)	1' 2-3/8" (365)	2' 3/4" (629)	1' 3/8" (314)	1' 4" (406)	2' 2-5/8" (676)	1' 3/8" (314)
<b>EC39</b> <b>(300PSI)</b>	2' 8-3/4" (832)	1' 3-3/4" (400)	2' 2-1/2" (673)	1' 1-1/4" (337)	1' 3-1/2" (394)	2' 3-3/4" (705)	1' 1-3/4" (349)

# Unit Dimensions (Cont'd)

## CONDENSERS – MARINE WATER BOXES



LD01342B\_1

MARINE WATER BOXES DIMENSIONS FT - IN (MM)							
CONDENSER SHELL CODE	150 AND 300 PSI						
	1-PASS		2-PASS			3-PASS	
	F	I	F	I	G	F	I
CA21	1' 9" (533)	9-7/8" (251)	1' 4-7/8" (429)	7-13/16" (198)	5-29/32" (150)	1' 4-7/8" (429)	7-13/16" (198)
CA25	1' 11-5/8" (600)	11-1/8" (283)	1' 7-1/2" (495)	9-1/16" (230)	6-7/16" (164)	1' 7-1/2" (495)	9-1/16" (230)
CB21 (150PSI)	1' 9" (533)	9-7/8" (251)	1' 4-7/8" (429)	7-13/16" (198)	5-29/32" (150)	1' 4-7/8" (429)	7-13/16" (198)
CB21 (300PSI)	1' 11-7/16" (595)	10-29/32" (277)	1' 7-5/16" (491)	8-27/32" (225)	0'-7-9/32" (185)	1' 7-5/16" (491)	8-27/32" (225)
CB25 (150PSI)	1' 11-5/8" (600)	11-1/8" (283)	1' 7-1/2" (495)	9-1/16" (230)	6-7/16" (164)	1' 7-1/2" (495)	9-1/16" (230)
CB25 (300PSI)	2' 2-3/8" (670)	1' 1/4" (311)	1' 10-1/4" (565)	10-3/16" (259)	8-3/16" (208)	1' 10-1/4" (565)	10-3/16" (259)
CC25 (150PSI)	1' 11-5/8" (600)	11-1/8" (283)	1' 7-1/2" (495)	9-1/16" (230)	6-7/16" (164)	1' 7-1/2" (495)	9-1/16" (230)
CC25 (300PSI)	2' 2-3/8" (670)	1' 1/4" (311)	1' 10-1/4" (565)	10-3/16" (259)	8-3/16" (208)	1' 10-1/4" (565)	10-3/16" (259)
CB29 (150PSI)	2' 3/4" (629)	11-5/8" (295)	1' 9-3/8" (543)	9-3/4" (239)	0'-7-7/8" (200)	1' 9-1/2" (546)	9-3/4" (248)
CB29 (300PSI)	2' 2-1/2" (673)	1' 1/4" (311)	1' 11-1/2" (597)	10-5/8" (270)	9-7/32" (234)	1' 11-1/2" (597)	10-5/8" (270)
CB33 (150PSI)	2' 2-7/8" (683)	1' 5/8" (320)	1' 9-1/2" (546)	10" (254)	8-15/16" (227)	1' 9-5/8" (549)	10" (254)
CB33 (300PSI)	2' 4-1/4" (718)	1' 7/8" (327)	1' 11" (584)	10-1/4" (260)	9-1/2" (241)	1' 11" (584)	10-1/4" (260)
CB39 (150PSI)	2' 11-7/8" (911)	1' 5" (432)	2' 3-3/4" (705)	1' 2" (356)	10-1/2" (268)	2' 5-7/8" (759)	1' 2" (356)
CB39 (300PSI)	2' 6-1/2" (775)	1' 3-1/4" (387)	2'-0-1/2" (622)	1' 1/4" (311)	10-3/4" (249)	2' 1/2" (622)	1' 1/4" (311)

## Weights (Cont'd)

### M6 MOTOR

TABLE 17 - EVAPORATOR WEIGHTS, DRY\*

M6 MOTOR CHILLERS	EVAPORATOR		150PSI COMPACT WATER BOX WEIGHT LBS (KG)			300PSI COMPACT WATER BOX WEIGHT LBS (KG)			150PSI MARINE WATER BOX WEIGHT LBS (KG)			300PSI MARINE WATER BOX WEIGHT LBS (KG)		
	CODE	WEIGHT LBS (KG)	1-PASS	2-PASS	3-PASS	1-PASS	2-PASS	3-PASS	1-PASS	2-PASS	3-PASS	1-PASS	2-PASS	3-PASS
	EC3312	7477 (3392)	340 (154)	383 (174)	380 (172)	1062 (482)	943 (428)	878 (398)	1822 (826)	1101 (499)	1850 (839)	3214 (1458)	1998 (906)	2986 (1354)
EC3314	8389 (3805)	340 (154)	383 (174)	380 (172)	1062 (482)	943 (428)	878 (398)	1822 (826)	1101 (499)	1850 (839)	3214 (1458)	1998 (906)	2986 (1354)	
EC3914	11834 (5368)	678 (308)	712 (323)	740 (336)	1430 (649)	1310 (594)	1266 (574)	2778 (1260)	1785 (810)	2856 (1295)	4740 (2150)	2947 (1337)	4502 (2042)	

\*Weights based on maximum tube bundle allowed per shell.  
Shell weights assume max bundle size (for 3/4" tube), heaviest tube (e-179; c-203), 300#water (if available)  
Waterbox weight includes both waterboxes and covers/return

TABLE 18 - CONDENSER WEIGHTS, DRY\*

M6 MOTOR CHILLERS	CONDENSER		150PSI COMPACT WATER BOX WEIGHT LBS (KG)			300PSI COMPACT WATER BOX WEIGHT LBS (KG)			150PSI MARINE WATER BOX WEIGHT LBS (KG)			300PSI MARINE WATER BOX WEIGHT LBS (KG)		
	CODE	WEIGHT LBS (KG)	1-PASS	2-PASS	3-PASS	1-PASS	2-PASS	3-PASS	1-PASS	2-PASS	3-PASS	1-PASS	2-PASS	3-PASS
	CB2912	7473 (3390)	340 (154)	354 (161)	354 (161)	852 (386)	735 (333)	678 (308)	1408 (639)	891 (404)	1416 (642)	2360 (1070)	1468 (666)	2170 (984)
CB3314	9782 (4437)	406 (184)	419 (190)	444 (201)	1066 (484)	845 (383)	872 (396)	1918 (870)	1159 (526)	1888 (856)	3098 (1405)	1827 (829)	2816 (1277)	
CB3914	10297 (4671)	692 (314)	757 (343)	740 (336)	1630 (739)	1436 (651)	1272 (577)	2944 (1335)	1849 (839)	2964 (1344)	4924 (2234)	2998 (1360)	4410 (2000)	

\*Weights based on maximum tube bundle allowed per shell.  
Shell weights assume max bundle size (for 3/4" tube), heaviest tube (e-179; c-203), 300#water (if available)  
Waterbox weight includes both waterboxes and covers/return



# Weights (Cont'd)

## M6 MOTOR

TABLE 19 - VSD WEIGHTS

M6 MOTOR CHILLERS	VSD	WEIGHT LBS (KG)
	HYP0774XHC30B-46	2060 (935)
HYP1278XHC30B-46	3806 (1727)	

TABLE 20 - COMPRESSOR WEIGHTS

M6 MOTOR CHILLERS	COMPRESSOR	WEIGHT LBS (KG)
	M6C-295FAC	4298 (1950)
M6C-331FAC	4439 (2014)	

TABLE 21 - UNIT ASSEMBLY – PANELS, PIPING, WIRING, ETC

M6 MOTOR CHILLERS	UNIT ASSEMBLY - PANELS, PIPING, WIRING, ETC.	WEIGHT LBS (KG)
	M6C-295FAC	1300 (591)
M6C-331FAC	1300 (591)	

TABLE 22 - REFRIGERANT & WATER WEIGHT

M6 MOTOR CHILLERS	EVAPORATOR	CONDENSER	REFRIGERANT WEIGHT LBS (KG)*	WATER WEIGHT LBS (KG)**
	EC3312	CB2912	1331 (605)	2863 (1299)
EC3314	CB3314	1626 (739)	3589 (1628)	
EC3914	CB3314	1908 (867)	4232 (1920)	
	CB3914	2072 (942)	4892 (2220)	

\*Refrigerant weight based on maximum tube bundle.

\*\* Water weight is the total water in both shells and for 150psi, 2-pass, compact water boxes.