Model #: AGZ055EPMVH-ER00
Serial #: STNU150400106

Year: 2015
Size: 55 Tons

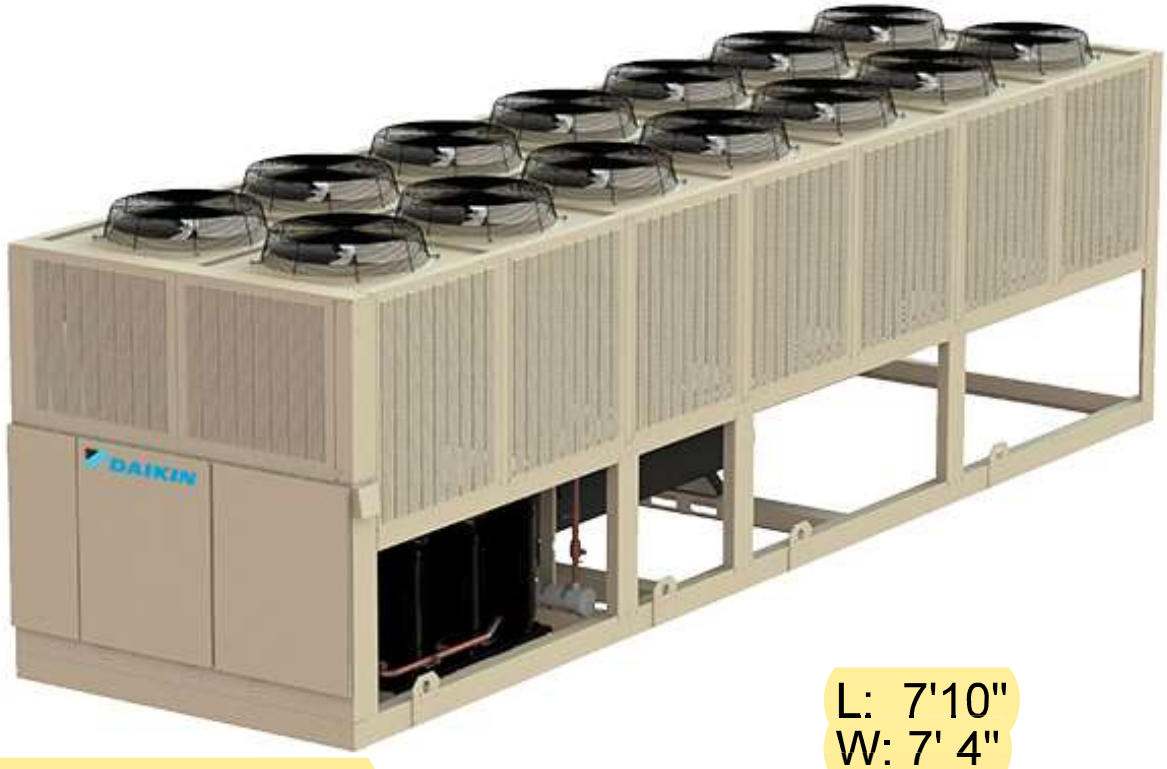
Installation, Operation, and Maintenance Manual

IOM 1206-6

Group: **Chiller**
Part Number: **IOM1206-6**
Date: **December 2015**

Trailblazer™ Air-Cooled Scroll Chillers

Model AGZ, E Vintage
30 to 240 Tons (100 to 840 kW)
HFC-410A Refrigerant
50/60 Hz



L: 7'10"
W: 7' 4"
H: 8' 4"

Shipping Weight: 3,106 lbs
Operating Weight: 3,128 lbs

People and ideas you can trust.™

General Description

Daikin Trailblazer™ air-cooled water chillers are complete, self-contained, automatic chillers designed for outdoor installation. Packaged units are completely assembled, factory wired, charged, and tested.

The electrical control center includes all equipment protection and operating controls necessary for dependable automatic operation.

A G Z 055 E P MV

NOMENCLATURE

A G Z XXX E D SM

- Air-Cooled
- Global Design
- Scroll Compressor
- Nominal Tons
- Design Vintage
- Application
  - SM = Standard Efficiency Packaged Unit
  - HM = High Efficiency Packaged Unit
- # of Compressors
  - D = Tandem per Circuit
  - T = Trio per Circuit

⚠ WARNING

Installation is to be performed by qualified personnel who are familiar with local codes and regulations.

⚠ CAUTION

Sharp edges on unit and coil surfaces are a potential hazard to personal safety. Avoid contact with them.

Additional Manual

This manual covers the installation, of dual circuit, AGZ-EH packaged, scroll compressor chillers using R-410A.

Information for units with either the pump package or remote evaporator options can be found at www.DaikinApplied.com.

Inspection

Check all items carefully against the bill of lading. Inspect all units for damage upon arrival. Report shipping damage and file a claim with the carrier. Check the unit nameplate before unloading, making certain it agrees with the power supply available. Daikin Applied is not responsible for physical damage after the unit leaves the factory.

Handling

Be careful to avoid rough handling of the unit. Do not push or pull the unit from anything other than the base. Block the pushing vehicle away from the unit to prevent damage to the sheet metal cabinet and end frame (see Figure 1).

To lift the unit, 2-1/2" (64mm) diameter lifting eyes are provided on the base of the unit. Arrange spreader bars and cables to prevent damage to the condenser coils or cabinet (see Figure 2).

⚠ CAUTION

All lifting locations must be used to prevent damage to unit.

Figure 1: Suggested Pushing Arrangment

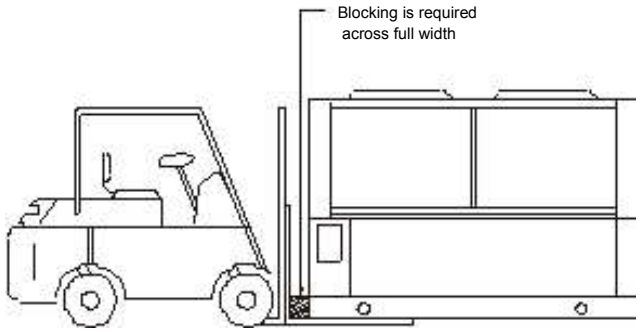
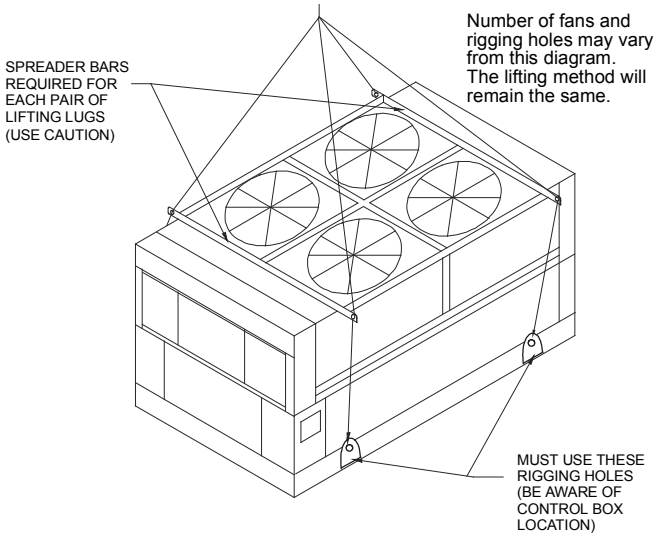


Figure 2: Required Lifting Arrangement



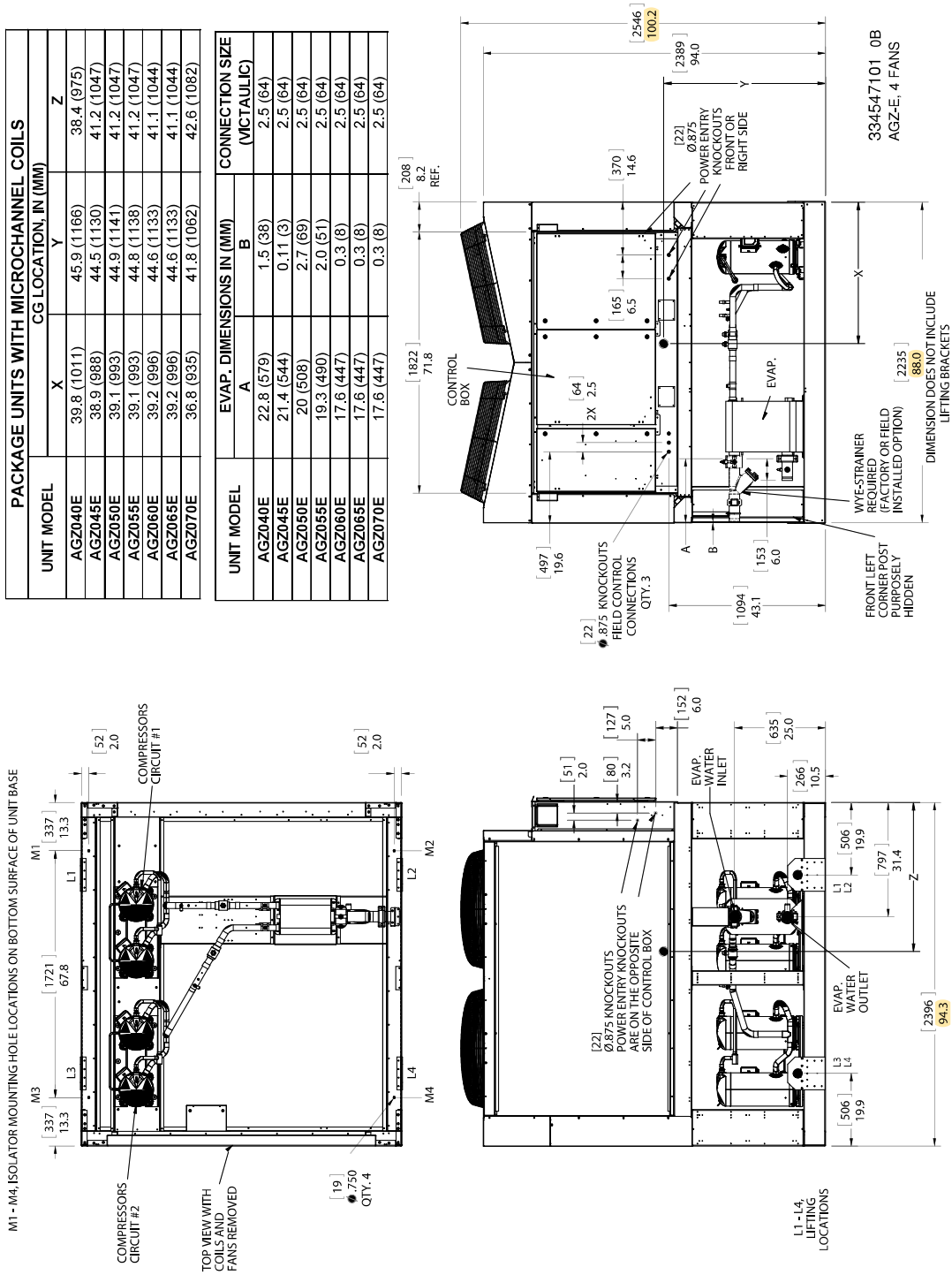
⚠ DANGER

Do not stand beneath the unit while it is being lifted or installed.

Figure 26: AGZ040E - AGZ070E

PACKAGE UNITS WITH MICROCHANNEL COILS			
UNIT MODEL	CG LOCATION, IN (MM)		
	X	Y	Z
AGZ040E	39.8 (1011)	45.9 (1166)	38.4 (975)
AGZ045E	38.9 (988)	44.5 (1130)	41.2 (1047)
AGZ050E	39.1 (993)	44.9 (1141)	41.2 (1047)
AGZ055E	39.1 (993)	44.8 (1138)	41.2 (1047)
AGZ060E	39.2 (996)	44.6 (1133)	41.1 (1044)
AGZ065E	39.2 (996)	44.6 (1133)	41.1 (1044)
AGZ070E	36.8 (935)	41.8 (1062)	42.6 (1082)

UNIT MODEL	EVAP. DIMENSIONS IN (MM)		CONNECTION SIZE (VICTAULIC)
	A	B	
AGZ040E	22.8 (579)	1.5 (38)	2.5 (64)
AGZ045E	21.4 (544)	0.11 (3)	2.5 (64)
AGZ050E	20 (508)	2.7 (69)	2.5 (64)
AGZ055E	19.3 (490)	2.0 (51)	2.5 (64)
AGZ060E	17.6 (447)	0.3 (8)	2.5 (64)
AGZ065E	17.6 (447)	0.3 (8)	2.5 (64)
AGZ070E	17.6 (447)	0.3 (8)	2.5 (64)



PACKAGE UNITS WITH MICROCHANNEL COILS											
UNIT MODEL	SHIPPING WEIGHT	OPERATING WEIGHT	LIFTING (SHIPPING) WEIGHT BY CORNER LBS (KG)				MOUNTING (OPERATING) WEIGHT LBS (KG)				
	LBS (KG)	LBS (KG)	L1	L2	L3	L4	M1	M2	M3	M4	
AGZ040E	2948 (1337)	2964 (1345)	1067 (484)	881 (400)	548 (249)	453 (206)	1022 (464)	844 (383)	601 (273)	496 (225)	
AGZ045E	3094 (1403)	3112 (1412)	1051 (477)	832 (377)	676 (307)	535 (243)	1021 (463)	809 (367)	715 (324)	567 (257)	
AGZ050E	3093 (1403)	3114 (1413)	1049 (476)	837 (380)	671 (304)	536 (243)	1020 (463)	814 (369)	712 (323)	568 (258)	
AGZ055E	3106 (1409)	3128 (1419)	1052 (477)	840 (381)	675 (306)	539 (245)	1023 (464)	817 (371)	716 (325)	572 (260)	
AGZ060E	3130 (1420)	3155 (1431)	1059 (480)	851 (386)	676 (307)	543 (246)	1031 (468)	828 (376)	718 (326)	577 (262)	
AGZ065E	3130 (1420)	3155 (1431)	1059 (480)	851 (386)	676 (307)	543 (246)	1031 (468)	828 (376)	718 (326)	577 (262)	
AGZ070E	3472 (1575)	3497 (1586)	1180 (535)	847 (384)	842 (382)	604 (274)	1157 (525)	830 (377)	880 (399)	631 (286)	

NOTE: LIFTING WEIGHTS ARE BASED ON UNIT SHIPPING WEIGHTS.
MOUNTING WEIGHTS ARE BASED ON UNIT OPERATING WEIGHT WITH EVAPORATOR WATER INCLUDED.
SHIPPING AND OPERATING WEIGHTS DO NOT INCLUDE THE WEIGHTS OF ANY OPTIONS OR ACCESSORIES.

Table 14: Electrical Data - Single Point (60/50 Hz)

Model Size	Voltage / Freq.	Single Point Field Data				
		Ratings			Lug Range	
		MCA	RFS	MFS	Power Block	Disconnect Switch
030E	208V/60	149	175	175	(1) 2-600MCM	(1) 6-350MCM
	230V/60	149	175	175	(1) 2-600MCM	(1) 6-350MCM
	380V/60	87	100	100	(1) 2-600MCM	(1) 12-1/0
	460V/60	74	80	80	(1) 14-2/0	(1) 12-1/0
	575V/60	64	70	70	(1) 14-2/0	(1) 12-1/0
	400V/50	77	90	90	(1) 14-2/0	(1) 12-1/0
035E	208V/60	163	175	175	(1) 2-600MCM	(1) 6-350MCM
	230V/60	163	175	175	(1) 2-600MCM	(1) 6-350MCM
	380V/60	96	110	110	(1) 2-600MCM	(1) 4-300MCM
	460V/60	77	90	90	(1) 14-2/0	(1) 12-1/0
	575V/60	64	70	70	(1) 14-2/0	(1) 12-1/0
	400V/50	80	90	90	(1) 14-2/0	(1) 12-1/0
040E	208V/60	168	200	200	(1) 2-600MCM	(1) 6-350MCM
	230V/60	168	200	200	(1) 2-600MCM	(1) 6-350MCM
	380V/60	107	125	125	(1) 2-600MCM	(1) 4-300MCM
	460V/60	80	90	90	(1) 14-2/0	(1) 12-1/0
	575V/60	67	80	80	(1) 14-2/0	(1) 12-1/0
	400V/50	83	100	100	(1) 14-2/0	(1) 12-1/0
045E	208V/60	228	250	250	(1) 2-600MCM	(1) 6-350MCM
	230V/60	228	250	250	(1) 2-600MCM	(1) 6-350MCM
	380V/60	117	125	125	(1) 2-600MCM	(1) 4-300MCM
	460V/60	90	100	100	(1) 2-600MCM	(1) 12-1/0
	575V/60	75	90	90	(1) 14-2/0	(1) 12-1/0
	400V/50	94	110	110	(1) 2-600MCM	(1) 4-300MCM
050E	208V/60	241	250	250	(1) 2-600MCM	(2) 3/0-500MCM
	230V/60	241	250	250	(1) 2-600MCM	(2) 3/0-500MCM
	380V/60	131	150	150	(1) 2-600MCM	(1) 4-300MCM
	460V/60	109	125	125	(1) 2-600MCM	(1) 4-300MCM
	575V/60	97	110	110	(1) 2-600MCM	(1) 4-300MCM
	400V/50	107	125	125	(1) 2-600MCM	(1) 4-300MCM
055E	208V/60	251	300	300	(1) 2-600MCM	(2) 3/0-500MCM
	230V/60	251	300	300	(1) 2-600MCM	(2) 3/0-500MCM
	380V/60	147	175	175	(1) 2-600MCM	(1) 6-350MCM
	460V/60	118	125	125	(1) 2-600MCM	(1) 4-300MCM
	575V/60	105	125	125	(1) 2-600MCM	(1) 4-300MCM
	400V/50	119	125	125	(1) 2-600MCM	(1) 4-300MCM
060E	208V/60	260	300	300	(1) 2-600MCM	(2) 3/0-500MCM
	230V/60	260	300	300	(1) 2-600MCM	(2) 3/0-500MCM
	380V/60	161	175	175	(1) 2-600MCM	(1) 6-350MCM
	460V/60	126	150	150	(1) 2-600MCM	(1) 4-300MCM
	575V/60	113	125	125	(1) 2-600MCM	(1) 4-300MCM
	400V/50	129	150	150	(1) 2-600MCM	(1) 4-300MCM

Table 15: Electrical Data - Single Point (60/50 Hz)

Model Size	Voltage / Freq.	Single Point Field Data				
		Ratings			Lug Range	
		MCA	RFS	MFS	Power Block	Disconnect Switch
065E	208V/60	268	300	300	(1) 2-600MCM	(2) 3/0-500MCM
	230V/60	268	300	300	(1) 2-600MCM	(2) 3/0-500MCM
	380V/60	161	175	175	(1) 2-600MCM	(1) 6-350MCM
	460V/60	129	150	150	(1) 2-600MCM	(1) 4-300MCM
	575V/60	113	125	125	(1) 2-600MCM	(1) 4-300MCM
	400V/50	129	150	150	(1) 2-600MCM	(1) 4-300MCM
070E	208V/60	306	350	350	(1) 2-600MCM	(2) 3/0-500MCM
	230V/60	306	350	350	(1) 2-600MCM	(2) 3/0-500MCM
	380V/60	164	200	200	(1) 2-600MCM	(1) 6-350MCM
	460V/60	138	150	150	(1) 2-600MCM	(1) 4-300MCM
	575V/60	117	125	125	(1) 2-600MCM	(1) 4-300MCM
	400V/50	138	150	150	(1) 2-600MCM	(1) 4-300MCM
075E	208V/60	338	400	400	(1) 2-600MCM	(2) 3/0-500MCM
	230V/60	338	400	400	(1) 2-600MCM	(2) 3/0-500MCM
	380V/60	173	200	200	(1) 14-2/0	(1) 6-350MCM
	460V/60	149	175	175	(1) 14-2/0	(1) 6-350MCM
	575V/60	125	150	150	(1) 14-2/0	(1) 4-300MCM
	400V/50	149	175	175	(1) 14-2/0	(1) 6-350MCM
080E	208V/60	355	400	400	(1) 2-600MCM	(2) 3/0-500MCM
	230V/60	355	400	400	(1) 2-600MCM	(2) 3/0-500MCM
	380V/60	187	225	225	(1) 2-600MCM	(1) 6-350MCM
	460V/60	153	175	175	(1) 14-2/0	(1) 6-350MCM
	575V/60	126	150	150	(1) 14-2/0	(1) 4-300MCM
	400V/50	153	175	175	(1) 14-2/0	(1) 6-350MCM
090E	208V/60	384	450	450	(1) 2-600MCM	(2) 3/0-500MCM
	230V/60	384	450	450	(1) 2-600MCM	(2) 3/0-500MCM
	380V/60	218	250	250	(1) 2-600MCM	(1) 6-350MCM
	460V/60	168	200	200	(1) 14-2/0	(1) 6-350MCM
	575V/60	147	175	175	(1) 14-2/0	(1) 6-350MCM
	400V/50	168	200	200	(1) 14-2/0	(1) 6-350MCM
100E	208V/60	442	500	500	(2) 6-500MCM	(2) 3/0-500MCM
	230V/60	442	500	500	(2) 6-500MCM	(2) 3/0-500MCM
	380V/60	268	300	300	(1) 2-600MCM	(2) 3/0-500MCM
	460V/60	203	250	250	(1) 2-600MCM	(1) 6-350MCM
	575V/60	184	225	225	(1) 2-600MCM	(1) 6-350MCM
	400V/50	203	250	250	(1) 2-600MCM	(1) 6-350MCM
110E	208V/60	490	600	600	(2) 6-500MCM	(2) 3/0-500MCM
	230V/60	490	600	600	(2) 6-500MCM	(2) 3/0-500MCM
	380V/60	294	350	350	(1) 2-600MCM	(2) 3/0-500MCM
	460V/60	227	250	250	(1) 2-600MCM	(1) 6-350MCM
	575V/60	204	250	250	(1) 2-600MCM	(1) 6-350MCM
	400V/50	227	250	250	(1) 2-600MCM	(1) 6-350MCM

NOTE: MCA = Minimum Current Ampacity, RFS = Recommended Fuse Size, MFS = Maximum Fuse Size.
For RFS, use the given values for intended standard ambient operation. If the operating ambient is intended to be above 105°F, MFS must be used.

Table 18: Electrical Data - Multiple Point (60/50 Hz)

Model Size	Voltage / Frequency	Multiple Point Field Data - Circuit #1					Multiple Point Field Data - Circuit #2				
		Ratings			Lug Range		Ratings			Lug Range	
		MCA	RFS	MFS	Power Block	Disconnect Switch	MCA	RFS	MFS	Power Block	Disconnect Switch
030E	208V/60	78	100	100	(1) 14-2/0	(1) 12-1/0	78	100	100	(1) 14-2/0	(1) 4-300MCM
	230V/60	78	100	100	(1) 14-2/0	(1) 12-1/0	78	100	100	(1) 14-2/0	(1) 4-300MCM
	380V/60	46	60	60	(1) 14-2/0	(1) 12-1/0	46	60	60	(1) 14-2/0	(1) 12-1/0
	460V/60	39	50	50	(1) 14-2/0	(1) 12-1/0	39	50	50	(1) 14-2/0	(1) 12-1/0
	575V/60	34	40	45	(1) 14-2/0	(1) 12-1/0	34	40	45	(1) 14-2/0	(1) 12-1/0
	400V/50	40	50	50	(1) 14-2/0	(1) 12-1/0	40	50	50	(1) 14-2/0	(1) 12-1/0
035E	208V/60	82	100	110	(1) 14-2/0	(1) 4-300MCM	88	110	110	(1) 14-2/0	(1) 4-300MCM
	230V/60	82	100	110	(1) 14-2/0	(1) 4-300MCM	88	110	110	(1) 14-2/0	(1) 4-300MCM
	380V/60	44	60	60	(1) 14-2/0	(1) 12-1/0	56	70	70	(1) 14-2/0	(1) 12-1/0
	460V/60	39	50	50	(1) 14-2/0	(1) 12-1/0	42	50	50	(1) 14-2/0	(1) 12-1/0
	575V/60	32	40	40	(1) 14-2/0	(1) 12-1/0	35	45	45	(1) 14-2/0	(1) 12-1/0
	400V/50	40	50	50	(1) 14-2/0	(1) 12-1/0	44	60	60	(1) 14-2/0	(1) 12-1/0
040E	208V/60	88	110	110	(1) 14-2/0	(1) 4-300MCM	88	110	110	(1) 14-2/0	(1) 4-300MCM
	230V/60	88	110	110	(1) 14-2/0	(1) 4-300MCM	88	110	110	(1) 14-2/0	(1) 4-300MCM
	380V/60	56	70	70	(1) 14-2/0	(1) 12-1/0	56	70	70	(1) 14-2/0	(1) 12-1/0
	460V/60	42	50	50	(1) 14-2/0	(1) 12-1/0	42	50	50	(1) 14-2/0	(1) 12-1/0
	575V/60	35	45	45	(1) 14-2/0	(1) 12-1/0	35	45	45	(1) 14-2/0	(1) 12-1/0
	400V/50	44	60	60	(1) 14-2/0	(1) 12-1/0	44	60	60	(1) 14-2/0	(1) 12-1/0
045E	208V/60	120	150	150	(1) 14-2/0	(1) 4-300MCM	120	150	150	(1) 14-2/0	(1) 6-350MCM
	230V/60	120	150	150	(1) 14-2/0	(1) 4-300MCM	120	150	150	(1) 14-2/0	(1) 6-350MCM
	380V/60	62	80	80	(1) 14-2/0	(1) 12-1/0	62	80	80	(1) 14-2/0	(1) 12-1/0
	460V/60	48	60	60	(1) 14-2/0	(1) 12-1/0	48	60	60	(1) 14-2/0	(1) 12-1/0
	575V/60	39	50	50	(1) 14-2/0	(1) 12-1/0	39	50	50	(1) 14-2/0	(1) 12-1/0
	400V/50	49	60	60	(1) 14-2/0	(1) 12-1/0	49	60	60	(1) 14-2/0	(1) 12-1/0
050E	208V/60	127	150	175	(1) 14-2/0	(1) 6-350MCM	127	150	175	(1) 14-2/0	(1) 6-350MCM
	230V/60	127	150	175	(1) 14-2/0	(1) 6-350MCM	127	150	175	(1) 14-2/0	(1) 6-350MCM
	380V/60	69	90	90	(1) 14-2/0	(1) 12-1/0	69	90	90	(1) 14-2/0	(1) 12-1/0
	460V/60	58	70	80	(1) 14-2/0	(1) 12-1/0	58	70	80	(1) 14-2/0	(1) 12-1/0
	575V/60	51	60	70	(1) 14-2/0	(1) 12-1/0	51	60	70	(1) 14-2/0	(1) 12-1/0
	400V/50	56	70	70	(1) 14-2/0	(1) 12-1/0	56	70	70	(1) 14-2/0	(1) 12-1/0
055E	208V/60	127	150	175	(1) 14-2/0	(1) 6-350MCM	137	175	175	(1) 14-2/0	(1) 6-350MCM
	230V/60	127	150	175	(1) 14-2/0	(1) 6-350MCM	137	175	175	(1) 14-2/0	(1) 6-350MCM
	380V/60	69	90	90	(1) 14-2/0	(1) 12-1/0	85	110	110	(1) 14-2/0	(1) 4-300MCM
	460V/60	58	70	80	(1) 14-2/0	(1) 12-1/0	66	80	90	(1) 14-2/0	(1) 12-1/0
	575V/60	51	60	70	(1) 14-2/0	(1) 12-1/0	59	70	80	(1) 14-2/0	(1) 12-1/0
	400V/50	56	70	70	(1) 14-2/0	(1) 12-1/0	68	80	90	(1) 14-2/0	(1) 12-1/0
060E	208V/60	137	175	175	(1) 14-2/0	(1) 6-350MCM	137	175	175	(1) 14-2/0	(1) 6-350MCM
	230V/60	137	175	175	(1) 14-2/0	(1) 6-350MCM	137	175	175	(1) 14-2/0	(1) 6-350MCM
	380V/60	85	110	110	(1) 14-2/0	(1) 4-300MCM	85	110	110	(1) 14-2/0	(1) 4-300MCM
	460V/60	66	80	90	(1) 14-2/0	(1) 12-1/0	66	80	90	(1) 14-2/0	(1) 12-1/0
	575V/60	59	70	80	(1) 14-2/0	(1) 12-1/0	59	70	80	(1) 14-2/0	(1) 12-1/0
	400V/50	68	80	90	(1) 14-2/0	(1) 12-1/0	68	80	90	(1) 14-2/0	(1) 12-1/0

NOTE: MCA = Minimum Current Ampacity, RFS = Recommended Fuse Size, MFS = Maximum Fuse Size.
For RFS, use the given values for intended standard ambient operation. If the operating ambient is intended to be above 105°F, MFS must be used.