

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM2542T**

**50HP,3525RPM,3PH,60HZ,324TS,4058M,OPSB,F**

Part Detail							
Revision:	S	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	40WG803	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	40E213	Layout:	40LYE213	Poles:	02	Created Date:	10-22-2010
Base:	RG	Eff. Date:	10-22-2021	Leads:	9#8		

Specs			
Catalog Number:	EM2542T	Insulation Class:	F
Enclosure:	OPSB	Inverter Code:	Inverter Ready
Frame:	324TS	IP Rating:	NONE
Frame Material:	Steel	KVA Code:	G
Motor Letter Type:	Three Phase	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	50.000 HP @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 8 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
Agency Approvals:	CSA	Motor Type:	4058M
	CSA EEV	Mounting Arrangement:	F1
	UR	Power Factor:	90
Auxillary Box:	No Auxillary Box	Product Family:	General Purpose
Auxillary Box Lead Termination:	None	Pulley End Bearing Type:	Ball
Base Indicator:	Rigid	Pulley Face Code:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Pulley Shaft Indicator:	Standard
Blower:	None	Rodent Screen:	None
Current @ Voltage:	56.000 A @ 460.0 V	Shaft Extension Location:	Pulley End

	124.000 A @ 208.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	112.000 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
<b>Design Code:</b>	A	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Drip Cover:</b>	No Drip Cover	<b>Speed Code:</b>	Single Speed
<b>Duty Rating:</b>	CONT	<b>Motor Standards:</b>	NEMA
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Starting Method:</b>	Direct on line
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Bearing:</b>	None
<b>Front Face Code:</b>	Standard	<b>Thermal Device - Winding:</b>	None
<b>Front Shaft Indicator:</b>	None	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Heater Indicator:</b>	No Heater	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	None

<b>Nameplate NP3554LUA</b>											
CAT.NO.	EM2542T			P/N				ENCL	OPSB		
SPEC.	40E213W803G1		CC	010A		FRAME	324TS		SER.NO.		
HP	50		CLASS	F		HZ	60				
RPM	3525		PH	3		DES	A				
VOLTS	230/460			CODE	G		ODE BRG	6309		DE BRG	6312
AMPS	112/56		USABLE AT 208V	124							
RATING	40C AMB-CONT			NEMA-NOM-EFF	93		GREASE	POLYREX EM			
PF	90		SER.F.	1.15		CT30-60(2:1) VT3-60(20:1)					
USABLE AT	50HZ 50HP 190/380V 138/69A				SF	1.0					
HTR-VOLTS			HTR-AMPS			MAX. SPACE HEATER TEMP.					

Parts List		
Part Number	Description	Quantity
SA205050	SA 40E213W803G1	1.000 EA
RA192297	RA 40E213W803G1	1.000 EA
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 EA
HA6017	CAST ADAPTER, 40,42 KOBX	1.000 EA
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	2.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 EA
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 EA
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 EA
10CB3001	CONDUIT BOX CAST W/2.500 LEAD HOLE	1.000 EA
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
40EP3200A02	STD FREP OPEN 309 BRG	1.000 EA
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 EA
40EP3201A01	PU ENDPLATE, MACH - OPEN - FOR 312 BRG	1.000 EA
XY3816A12	3/8-16 FINISHED NUT	8.000 EA
10CB3500SP	CONDUIT BOX LID, CAST	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 EA
HW2501H18	KEY, 1/2 SQ X 2.000	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2200bx) 4/22	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 LB

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HA3159A08	THRUBOLT- .38-16 X 20.00 LONG STUD	4.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.070 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
40AD2002B01	LEXAN BAFFLE 40 FR OPEN	1.000 EA
40AD2002B01	LEXAN BAFFLE 40 FR OPEN	1.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0181	CONNECTION LABEL	1.000 EA
NP3554LUA	SS SUPER-E VPWM INV READY UL CSA-EEV PRE	1.000 EA
40PA1000	PACKAGING GROUP	1.000 EA

<b>Accessories</b>		
<b>Part Number</b>	<b>Description</b>	<b>Multiplier</b>
40-1401	C FACE KIT 40/324-6UC TC 6312 BRG	A8

**AC Induction Motor Performance Data**

Record # 52622

Typical performance - not guaranteed values

Winding: 40WGW803-R005			Type: 4058M	Enclosure: OPSB		
<b>Nameplate Data</b>				<b>460 V, 60 Hz: High Voltage Connection</b>		
Rated Output (HP)	50		Full Load Torque	74.7 LB-FT		
Volts	230/460		Start Configuration	direct on line		
Full Load Amps	112/56		Breakdown Torque	168 LB-FT		
R.P.M.	3525		Pull-up Torque	115 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	135 LB-FT		
NEMA Design Code	A	KVA Code	G	Starting Current	376 A	
Service Factor (S.F.)	1.15		No-load Current	14.2 A		
NEMA Nom. Eff.	93	Power Factor	90	Line-line Res. @ 25°C	0.1415 Ω	
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	47°C		
S.F. Amps			Temp. Rise @ S.F. Load	60°C		
			Locked-rotor Power Factor	23.2		
			Rotor inertia	2.49 LB-FT <sup>2</sup>		

**Load Characteristics 460 V, 60 Hz, 50 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	66	83	88	90	90	90	90
Efficiency	92.9	94.4	94.1	93.3	92.2	90.5	92.6
Speed	3581.7	3565.2	3545.9	3526.6	3505.2	3475.1	3514
Line amperes	20	30.4	42.8	56.3	70.7	89.9	64.9



Performance Graph at 460V, 60Hz, 50.0HP Typical performance - Not guaranteed values

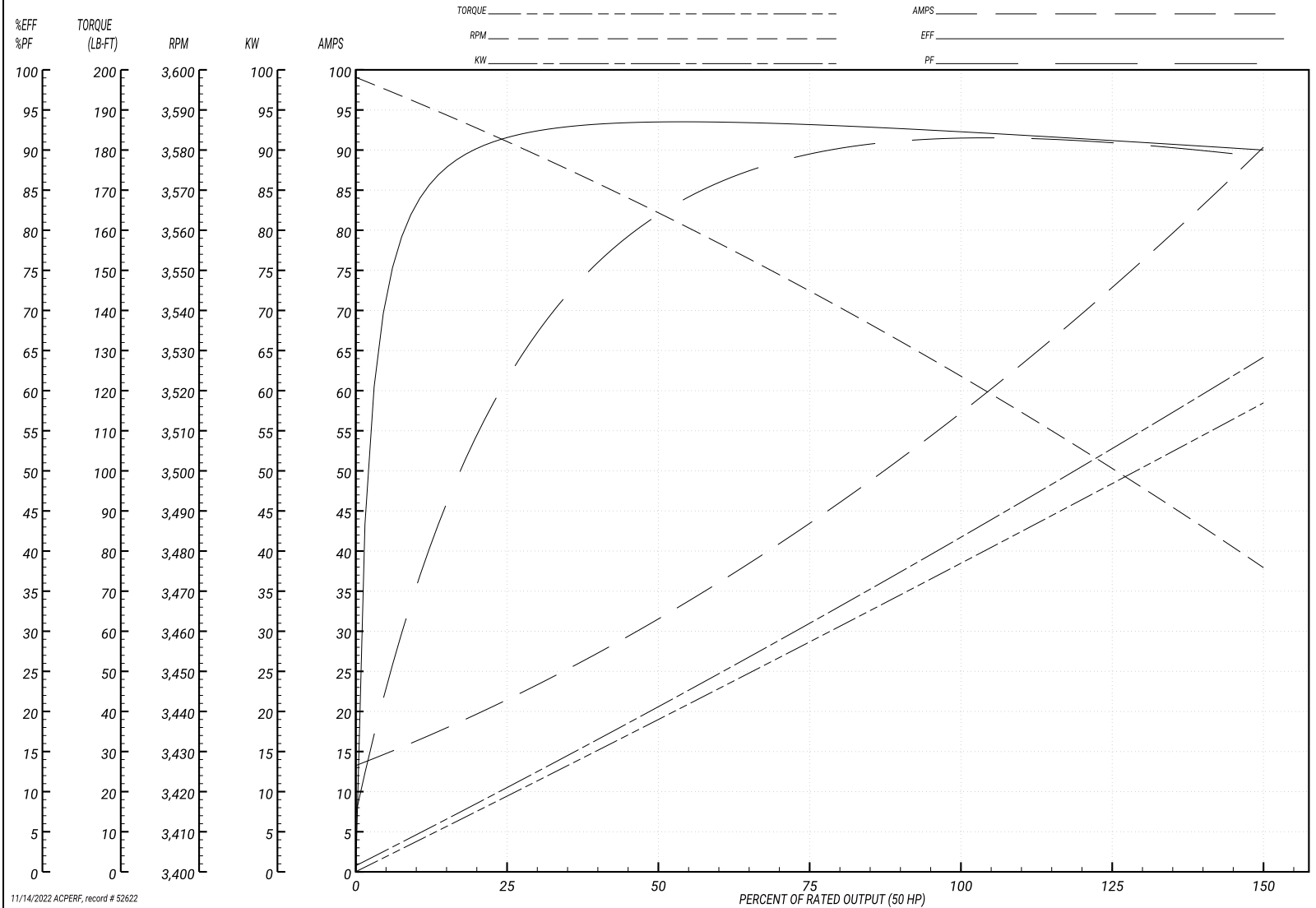
**BALDOR ELECTRIC COMPANY**

WINDING # 40WGW803

Typical performance - not guaranteed values.

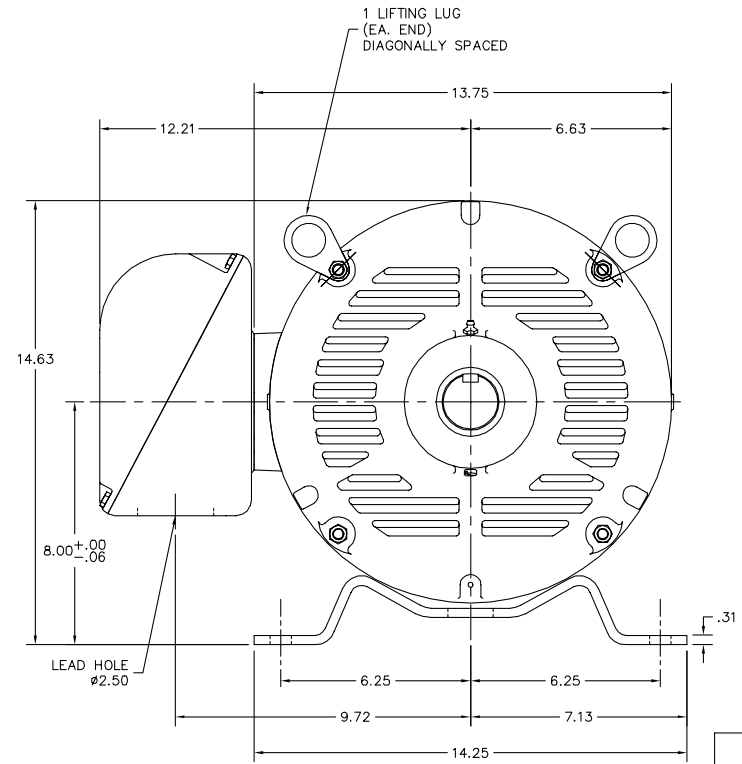
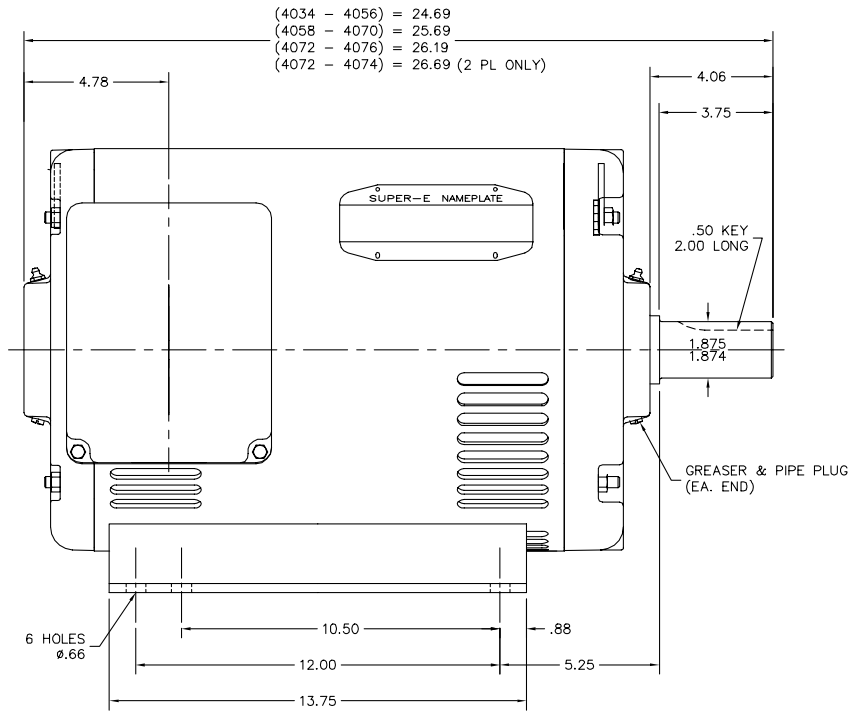
50 HP 3 PH 60 HZ 3525 RPM 460 V 4058M

TORQUES(LB-FT): PO=168 PU=115 LR=135 LRA=376



11/14/2022 ACPERF, record # 52622

40LYE213



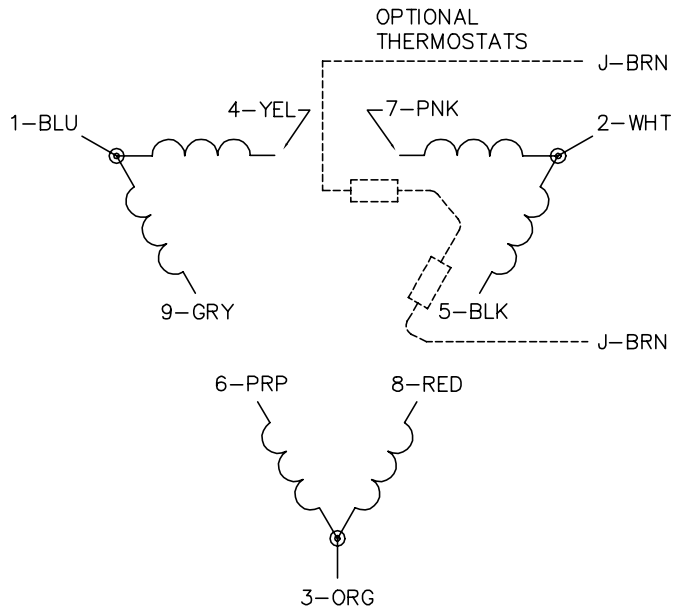
40LYE213

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

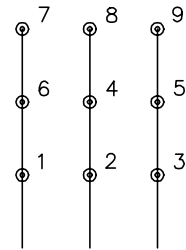
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 HORZ OPSB 324-6TS, SUPER-E  
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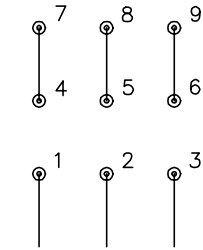
CD0180



LOW VOLTAGE  
(2D)



HIGH VOLTAGE  
(1D)



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0180

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**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

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