

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM2542T-8**

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

Part Detail							
Revision:	G	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	40WGX311	CD Diagram:	CD0695	Mfg Plant:	
Mech. Spec:	40E213	Layout:	40LYE213	Poles:	02	Created Date:	08-12-2015
Base:	RG	Eff. Date:	11-14-2017	Leads:	6#6		

Specs			
Catalog Number:	EM2542T-8	IP Rating:	NONE
Enclosure:	OPSB	KVA Code:	G
Frame:	324TS	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Steel	Locked Bearing Indicator:	No Locked Bearing
Motor Letter Type:	Three Phase	Motor Lead Quantity/Wire Size:	6 @ 6 AWG
Output @ Frequency:	50.000 HP @ 60 HZ	Motor Lead Exit:	Ko Box
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Motor Lead Termination:	Flying Leads
Voltage @ Frequency:	200.0 V @ 60 HZ	Motor Type:	4058M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	90
	CSA	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	Standard
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End
Current @ Voltage:	129.000 A @ 200.0 V	Shaft Ground Indicator:	No Shaft Grounding
Design Code:	A	Shaft Rotation:	Reversible

<b>Drip Cover:</b>	No Drip Cover	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Duty Rating:</b>	CONT	<b>Speed Code:</b>	Single Speed
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Motor Standards:</b>	NEMA
<b>Feedback Device:</b>	NO FEEDBACK	<b>Starting Method:</b>	Part Winding
<b>Front Face Code:</b>	Standard	<b>Thermal Device - Bearing:</b>	None
<b>Front Shaft Indicator:</b>	None	<b>Thermal Device - Winding:</b>	None
<b>Heater Indicator:</b>	No Heater	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Insulation Class:</b>	F	<b>Winding Thermal 1:</b>	None
<b>Inverter Code:</b>	Inverter Ready	<b>Winding Thermal 2:</b>	None

Nameplate NP3554L										
CAT.NO.	EM2542T-8				P/N				ENCL	OPSB
SPEC.	40E213X311		CC	010A	FRAME	324TS		SER.NO.		
HP	50		CLASS	F	HZ	60				
RPM	3525		PH	3	DES	A				
VOLTS	200		CODE	G	ODE BRG	6309		DE BRG	6312	
AMPS	129		USABLE AT	208V						
RATING	40C AMB-CONT		NEMA-NOM-EFF	93		GREASE	POLYREX EM			
PF	90		SER.F.	1.15		VPWM INVERTER READY				
HTR-VOLTS			HTR-AMPS			MAX. SPACE HEATER TEMP.				

Parts List		
Part Number	Description	Quantity
SA305478	SA 40E213X311	1.000 EA
RA292699	RA 40E213X311	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
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
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
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
LC0695	CONNECTION LABEL	1.000 EA
NP3554L	SS SUPER-E UL CSA-EEV PREM CC	1.000 EA
40PA1000	PACKAGING GROUP	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2200bx) 4/22	1.000 EA

**AC Induction Motor Performance Data**

Record # 52219

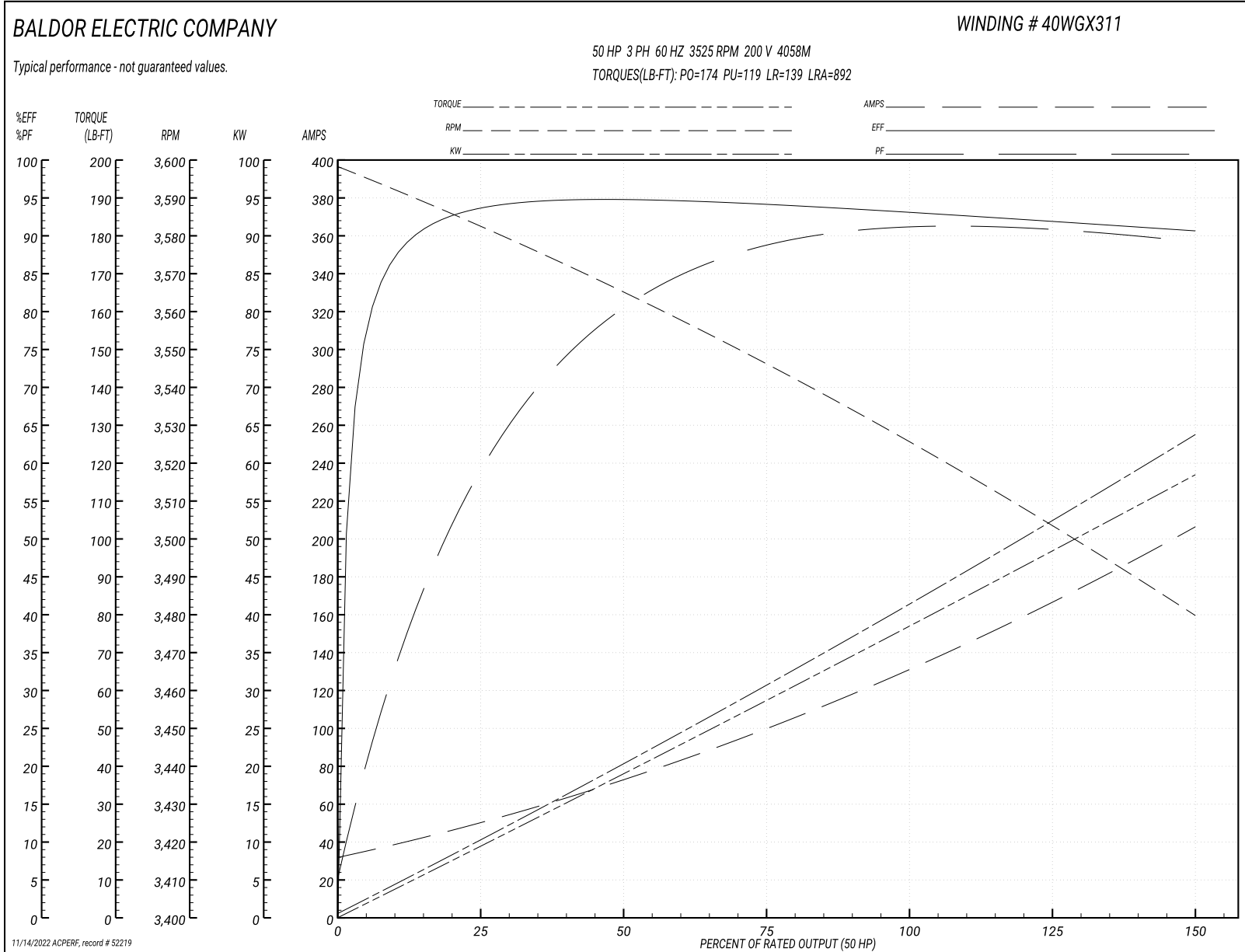
Typical performance - not guaranteed values

<b>Winding:</b> 40WGX311-R001		<b>Type:</b> 4058M		<b>Enclosure:</b> OPSB	
<b>Nameplate Data</b>			<b>200 V, 60 Hz: Single Voltage Motor</b>		
<b>Rated Output (HP)</b>	50	<b>Full Load Torque</b>	74.7 LB-FT		
<b>Volts</b>	200	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	129	<b>Breakdown Torque</b>	174 LB-FT		
<b>R.P.M.</b>	3525	<b>Pull-up Torque</b>	119 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	139 LB-FT	
<b>NEMA Design Code</b>	A <b>KVA Code</b>	G	<b>Starting Current</b>	892 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	34.3 A		
<b>NEMA Nom. Eff.</b>	93 <b>Power Factor</b>	90	<b>Line-line Res. @ 25°C</b>	0.0243 Ω	
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	46°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	57°C	
			<b>Locked-rotor Power Factor</b>	23	
			<b>Rotor inertia</b>	2.49 LB-FT <sup>2</sup>	

**Load Characteristics 200 V, 60 Hz, 50 HP**

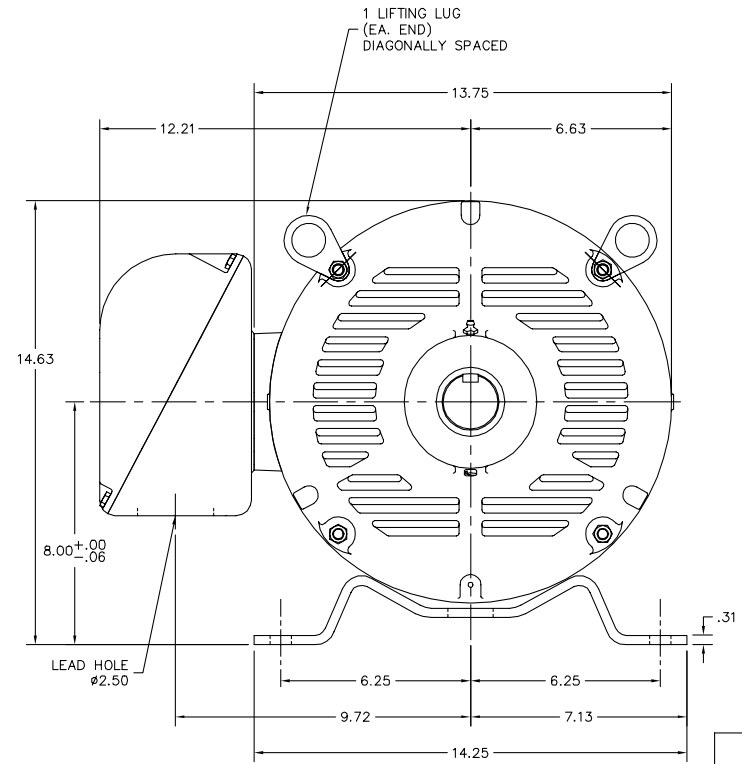
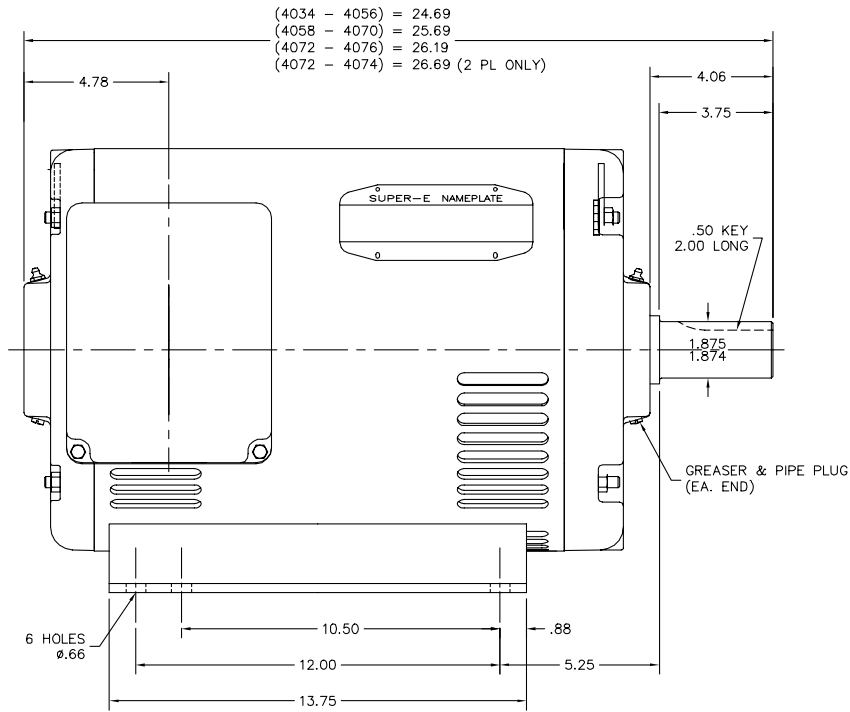
<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	63	82	88	90	90	90	90
<b>Efficiency</b>	92.5	94.5	94.2	93.4	92.2	90.5	92.7
<b>Speed</b>	3582	3566	3547	3529	3508	3479	3516
<b>Line amperes</b>	46.8	70	98.2	129	162	205	149

Performance Graph at 200V, 60Hz, 50.0HP Typical performance - Not guaranteed values





40LYE213



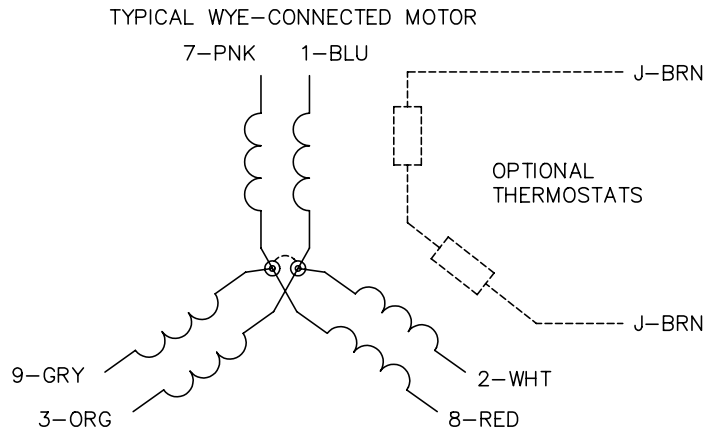
40LYE213

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

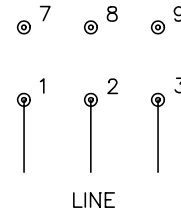
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MTL: -		

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 HORZ OPSB 324-6TS, SUPER-E  
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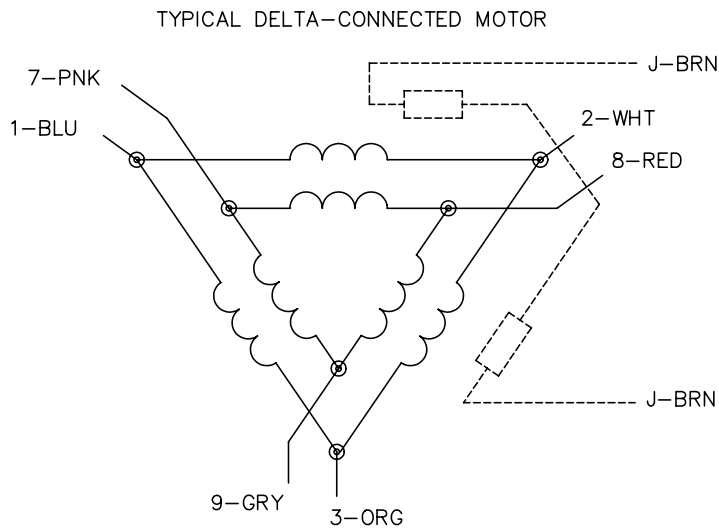
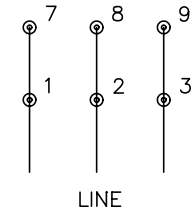
CD0695



START CONNECTION



RUN CONNECTION



NOTES:

1. MOTOR MAY BE WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

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**BALDOR ELECTRIC Co.**

3PH, SV, 6 LEADS, PART WINDING START

CD0695

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