

BALDOR® • RELIANCE 

Product Information Packet

EM2542T-G

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

Part Detail							
Revision:	P	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	40WGW803	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	40E295	Layout:	40LYE295	Poles:	02	Created Date:	12-09-2011
Base:	RG	Eff. Date:	04-29-2019	Leads:	9#8		

Specs			
Catalog Number:	EM2542T-G	Insulation Class:	H
Enclosure:	OPSB	Inverter Code:	Inverter Ready
Frame:	324TS	KVA Code:	G
Frame Material:	Steel	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	Shaft Ground Indicator:	Shaft Grounding

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

Nameplate NP3554LUA											
CAT.NO.	EM2542T-G			P/N				ENCL	OPSB		
SPEC.	40E295W803G1		CC	010A		FRAME	324TS		SER.NO.		
HP	50		CLASS	H		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							
USABLE AT	50HZ 50HP 190/380V 138/69A				SF1.0						
HTR-VOLTS			HTR-AMPS			MAX. SPACE HEATER TEMP.					

Parts List		
Part Number	Description	Quantity
SA235553	SA 40E295W803G1	1.000 EA
RA222514	RA 40E295W803G1	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
40EP3201A04	PUEP, MACH - OPEN - FOR 312 BRG W/RET. R	1.000 EA
XY3816A12	3/8-16 FINISHED NUT	8.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	8.000 EA
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
10CB3500SP	CONDUIT BOX LID, CAST	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 EA
HW2501H24	KEY, 1/2 SQ X 2.750	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	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,	0.030 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

AC Induction Motor Performance Data

Record # 53039 - Typical performance - not guaranteed values

Winding: 40WGW803-R006	Type: 4058M	Enclosure: OPSB
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
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 ²

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

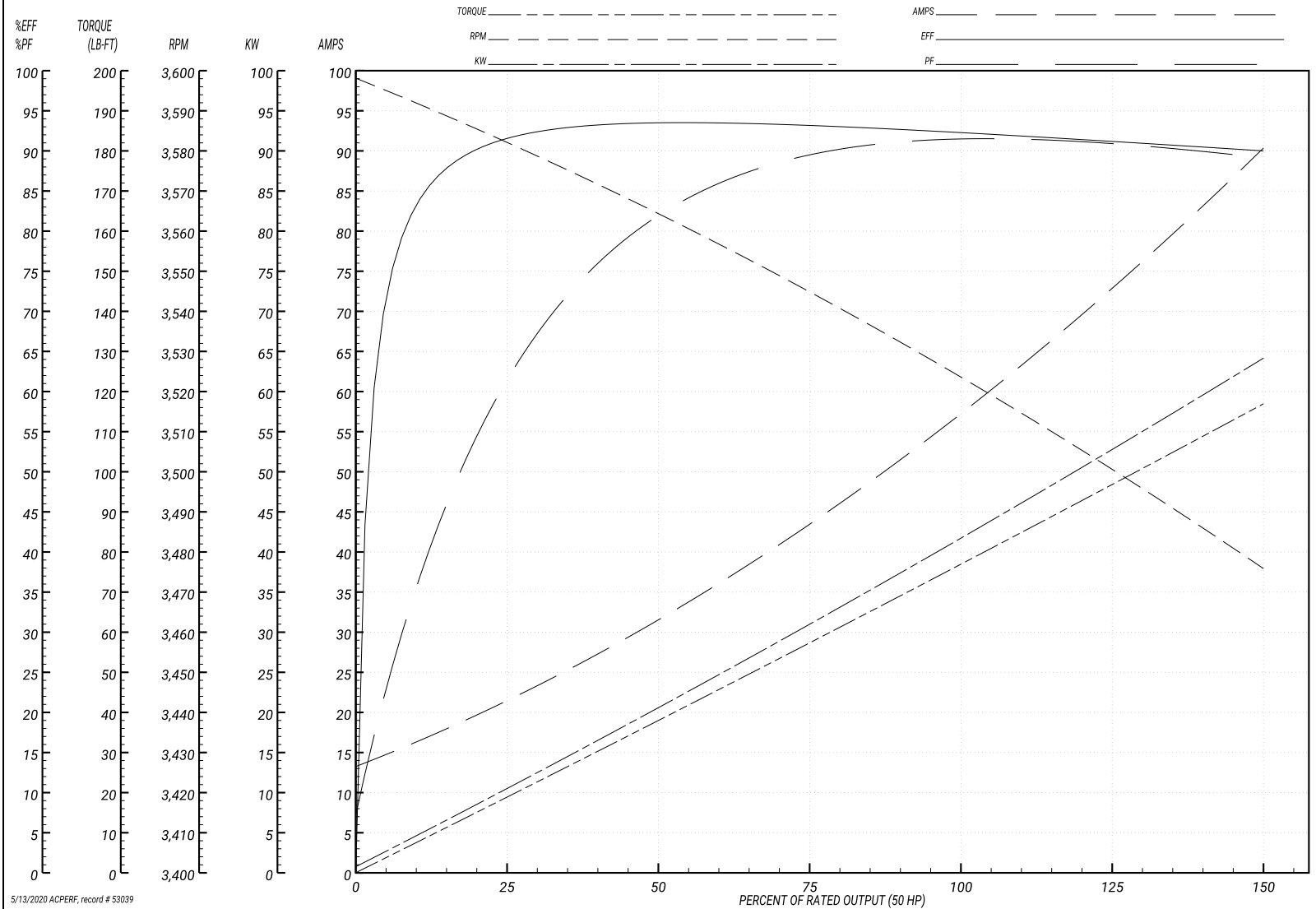
ABB Motors and Mechanical Inc.

WINDING # 40WGW803

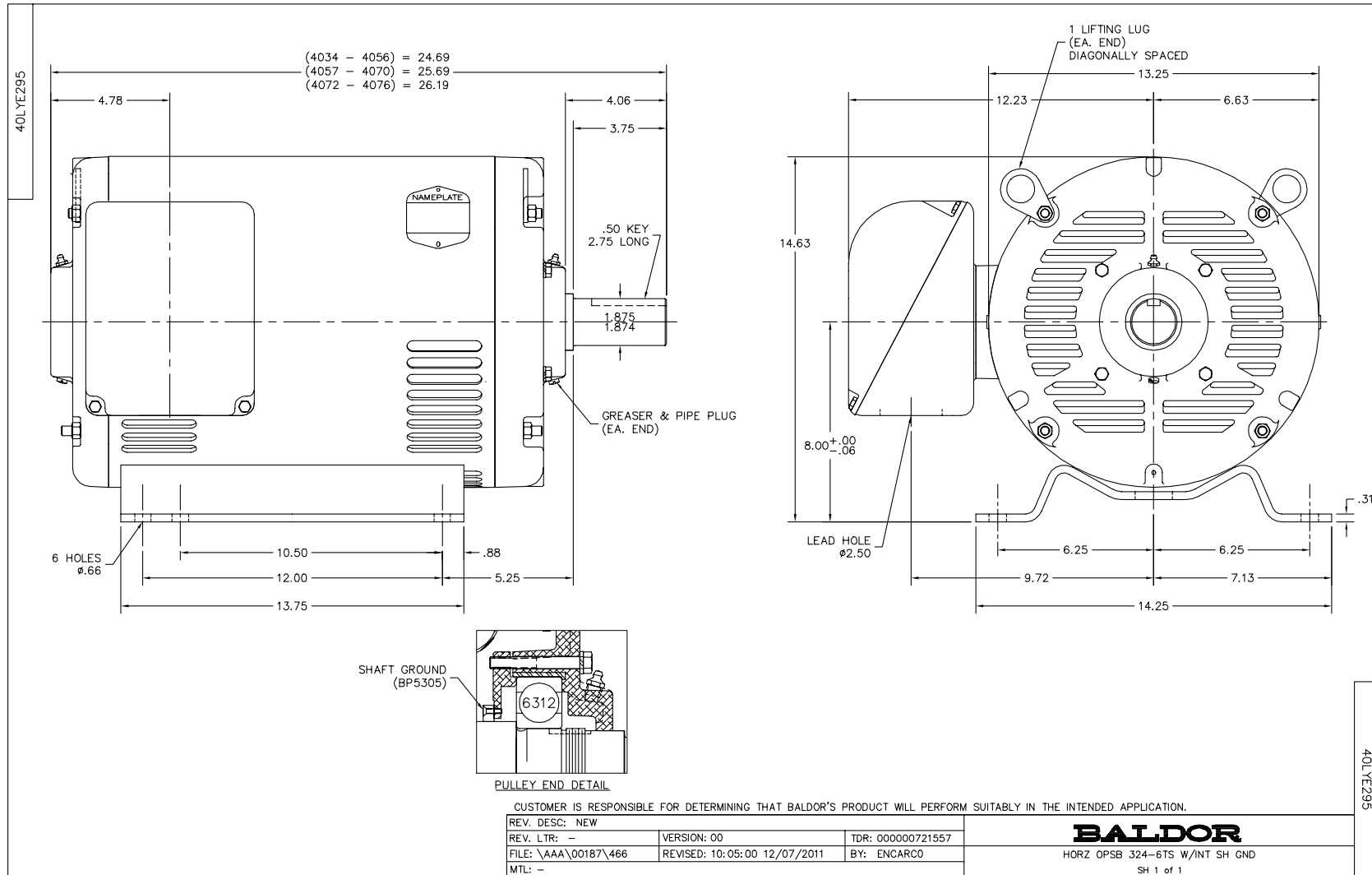
Typical performance - not guaranteed values.

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

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



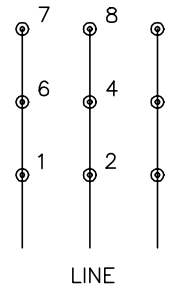
5/13/2020 ACPERF, record # 53039



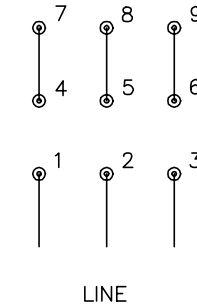
CD0180



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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