

BALDOR • RELIANCE

Customer information packet

EM2539T

40HP, 1770RPM, 3PH, 60HZ, 324T, 4064M, OPSB, F1

Specifications

Enclosure	OPSB
Frame	324T
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV NEMA PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	99.000 A @ 208.0 V 98.000 A @ 230.0 V 49.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part detail

Revision	AD
Type	AC
Mech. spec.	40J002
Base	
Status	PRD/A
Elec. spec.	40WGX166
Layout	40LYJ002
Eff. date	02-11-2021
CD Diagram	CD0005
Poles	04
Leads	9#8
Proprietary	False
Created date	10-22-2010

High Voltage Full Load Amps	49.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4064M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.19 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3554LUA										
CAT.NO.	EM2539T			P/N				ENCL		OPSB
SPEC.	40J002X166G1	CC	010A	FRAME		324T	SER.NO.			
HP	40	CLASS		F	HZ	60				
RPM	1770	PH	3	DES		A				
VOLTS	230/460			CODE		H	ODE BRG	6309	DE BRG	6312
AMPS	98/49			USABLE AT 208V			99			
RATING	40C AMB-CONT			NEMA-NOM-EFF		94.1	GREASE	POLYREX EM		
PF	82	SER.F.	1.15	CT30-60(2:1) VT3-60(20:1)						
USABLE AT	50HZ 40HP 190/380V 114/57A			SF 1.0						
HTR-VOLTS	HTR-AMPS	MAX. SPACE HEATER TEMP.								

Parts list

Part number	Description	Quantity
SA205150	SA 40J002X166G1	1.000 ea
RA192394	RA 40J002X166G1	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	4.000 ea
10CB3500SP	CONDUIT BOX LID, CAST	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 ea
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2200bx) 4/22	1.000 ea
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
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
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
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.030 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 ea
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 ea

HA3113A13	THRUBOLT 3/8-16 X 19.750 W/4.00 THD LENG	4.000 ea
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	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 # 31313

Typical performance - not guaranteed values

Winding: 40WGX166-R002		Type: 4064M	Enclosure: OPSB
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	40	Full Load Torque	119 LB-FT
Volts	230/460	Start Configuration	direct on line
Full Load Amps	98/49	Breakdown Torque	427 LB-FT
R.P.M.	1770	Pull-up Torque	187 LB-FT
Hz	60 Phase	Locked-rotor Torque	246 LB-FT
NEMA Design Code	A KVA Code	Starting Current	330 A
Service Factor (S.F.)	1.15	No-load Current	21.1 A
NEMA Nom. Eff.	94.1 Power Factor	Line-line Res. @ 25°C	0.16236 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	41°C
S.F. Amps		Temp. Rise @ S.F. Load	51°C
		Locked-rotor Power Factor	31.9
		Rotor inertia	5.09 LB-FT ²

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	43	65	76	82	85	85	84
Efficiency	91.1	94	94.5	94.2	93.6	92.8	93.8
Speed	1792.4	1785	1777.8	1770.2	1762.1	1752.8	1765
Line amperes	24.1	30.7	39.2	48.7	59.3	71.3	55.1

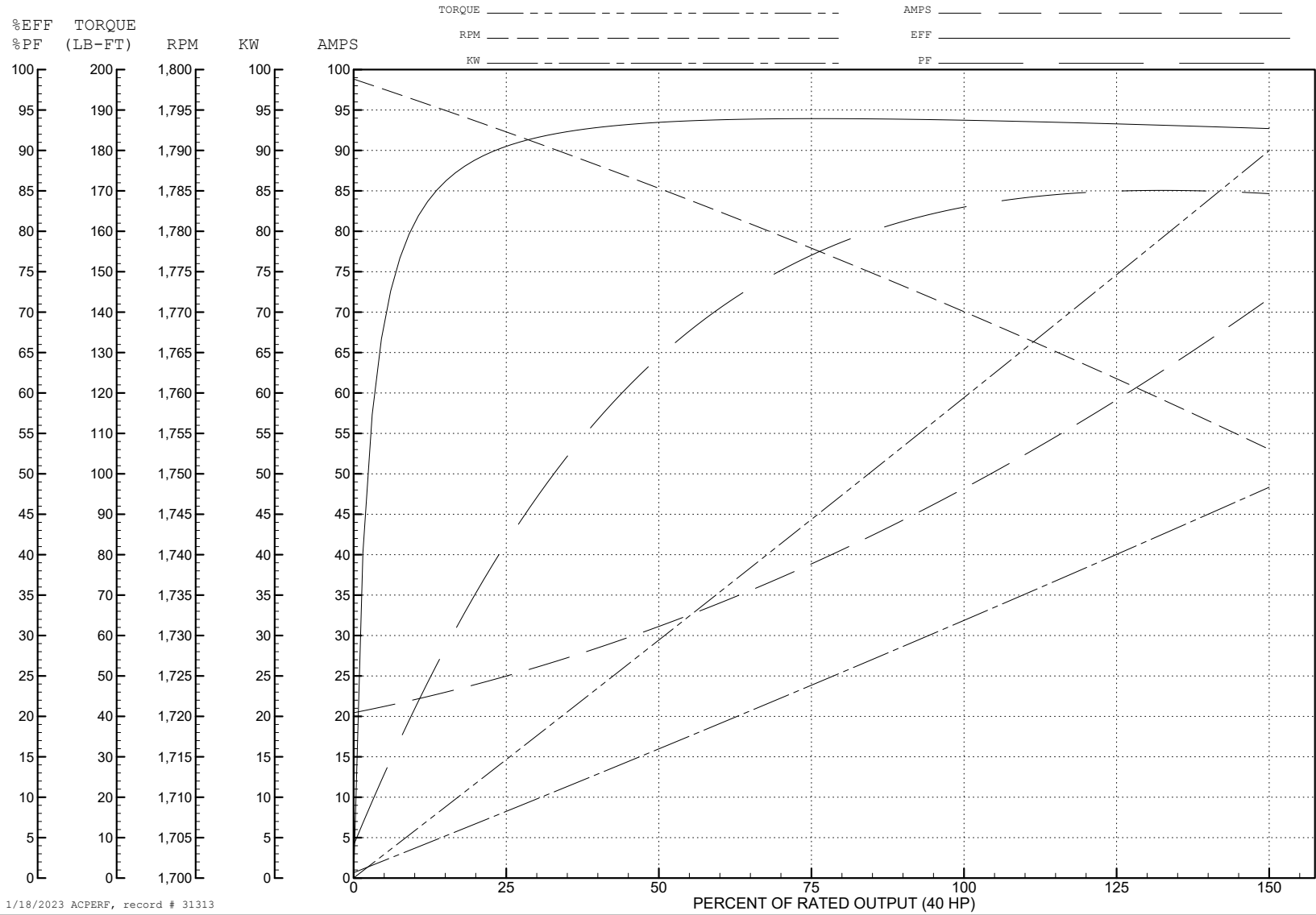
ABB Motors and Mechanical Inc.

WINDING # 40WGx166

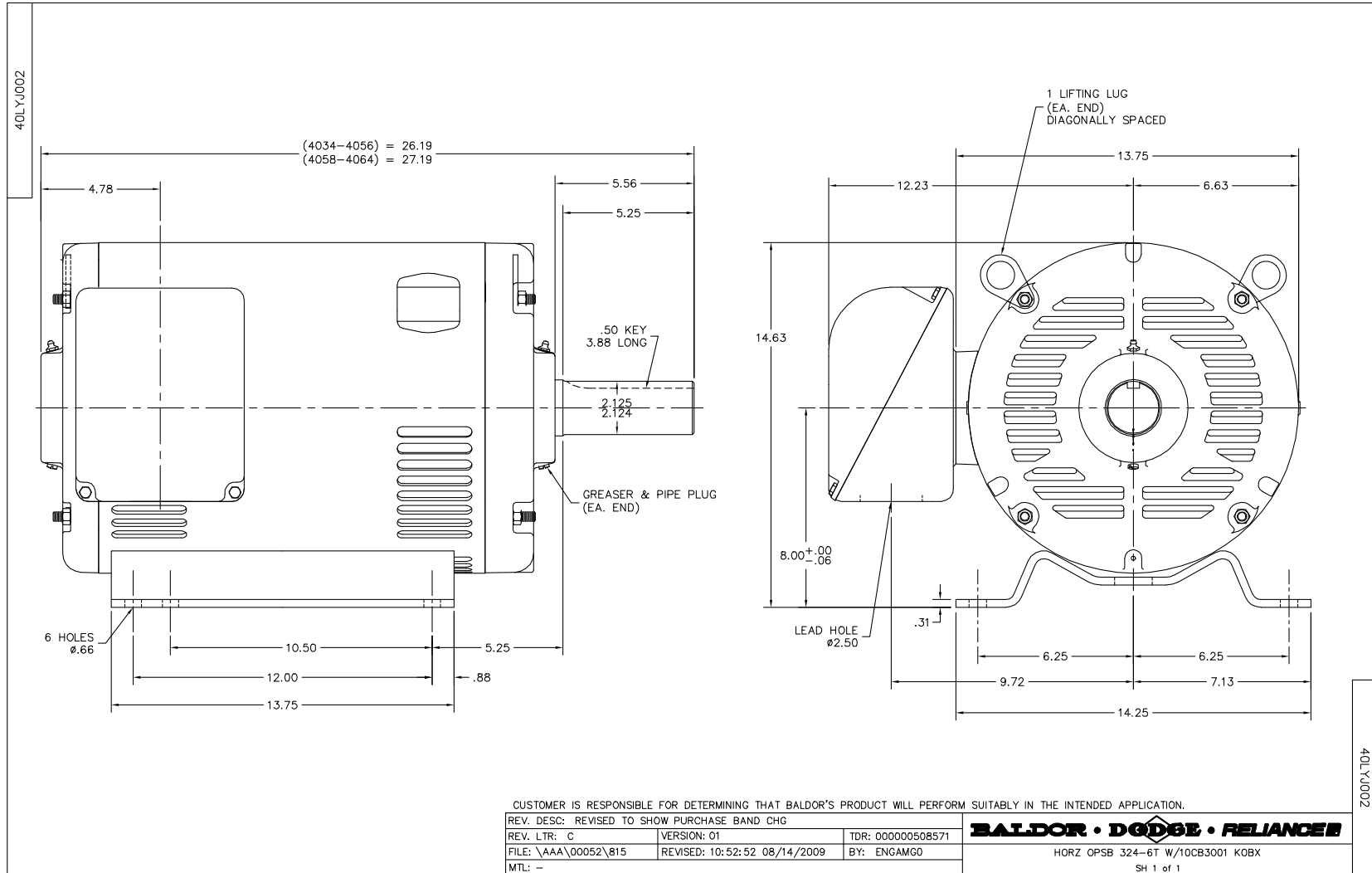
Typical performance - not guaranteed values.

40 HP 3 PH 60 HZ 1770 RPM 460 V 4064M

TORQUES (LB-FT): PO=427 PU=187 LR=246 LRA=330



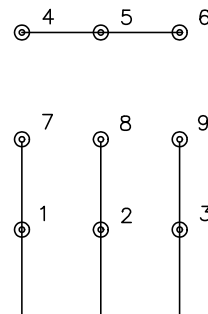
1/18/2023 ACPERF, record # 31313



CD0005

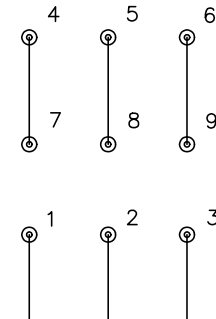


LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS