

BALDOR • RELIANCE

Customer information packet

EM2539T-5

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	575.0 V @ 60 HZ
Agency Approvals	CSA EEV UR NEMA_PREMIUM NEMA PREMIUM
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	40.000 A @ 575.0 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
High Voltage Full Load Amps	40.0 a
Insulation Class	F
Inverter Code	Inverter Ready

Part detail

Revision	Y
Type	AC
Mech. spec.	40J002
Base	
Status	PRD/A
Elec. spec.	40WGX786
Layout	40LYJ002
Eff. date	06-27-2024
CD Diagram	CD0006
Poles	04
Leads	3#8
Proprietary	False
Created date	11-19-2010

KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 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	81
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

NP3554L

CAT.NO.	EM2539T-5	P/N				ENCL	OPSB
SPEC.	40J002X786G1	CC	010A	FRAME	324T	SER.NO.	
HP	40	CLASS	F	HZ	60		
RPM	1770	PH	3	DES	A		
VOLTS	575	CODE	H	ODE BRG	6309	DE BRG	6312
AMPS	40						
RATING	40C AMB-CONT	NEMA-NOM-EFF	94.1	GREASE	POLYREX EM		
PF	81	SER.F.	1.15	VPWM INVERTER READY			
HTR-VOLTS	HTR-AMPS	MAX. SPACE HEATER TEMP.					

Parts list

Part number	Description	Quantity
SA211182	SA 40J002X786G1	1.000 ea
RA198405	RA 40J002X786G1	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 W/SERRATIONS	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
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *** NLA IN 5 GALLON	0.030 ga
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
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

LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0006	CONNECTION LABEL	1.000 ea
NP3554L	SS SUPER-E,CURUS-EEV,NEMA PREM,CC,300 SR	1.000 ea
40PA1000	PACKAGING GROUP	1.000 ea

AC Induction Motor Performance Data

Record # 32859

Typical performance - not guaranteed values

Winding: 40WGX786-R001		Type: 4064M	Enclosure: OPSB	
Nameplate Data			575 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	40	Full Load Torque	119 LB-FT	
Volts	575	Start Configuration	direct on line	
Full Load Amps	40	Breakdown Torque	438 LB-FT	
R.P.M.	1770	Pull-up Torque	192 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque	253 LB-FT
NEMA Design Code	A KVA Code	H	Starting Current	272 A
Service Factor (S.F.)	1.15	No-load Current	17.9 A	
NEMA Nom. Eff.	94.1 Power Factor	81	Line-line Res. @ 25°C	0.224 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	41°C
S.F. Amps			Temp. Rise @ S.F. Load	50°C
			Locked-rotor Power Factor	32
			Rotor inertia	5.09 LB-FT ²

Load Characteristics 575 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	41	63	75	81	84	84	83
Efficiency	90.1	93.2	94	93.8	93.3	92.9	93.5
Speed	1793	1785	1778	1771	1763	1754	1766
Line amperes	20.3	25.5	32.1	39.6	48	57.4	44.6

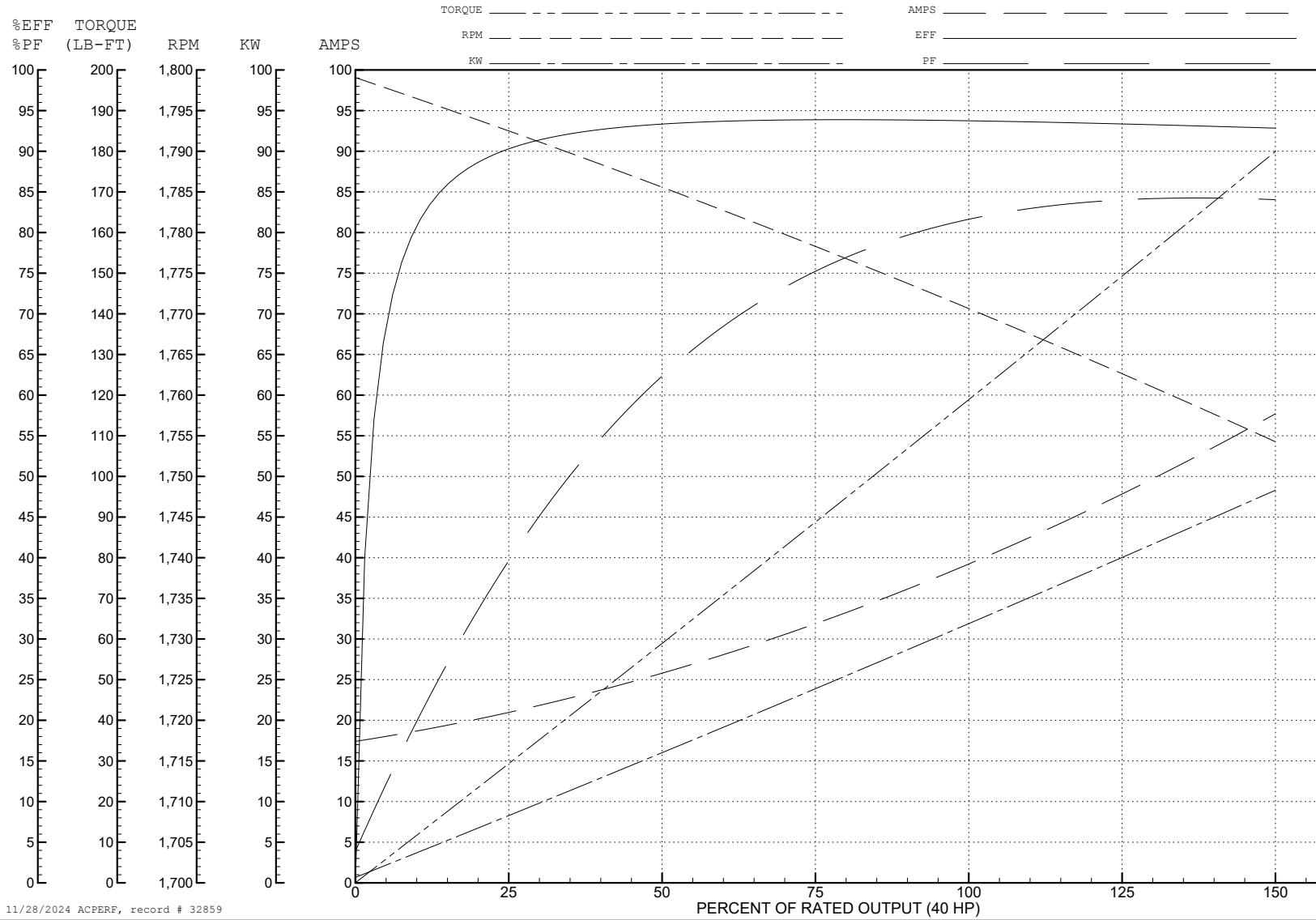
ABB Motors and Mechanical Inc.

WINDING # 40WGX786

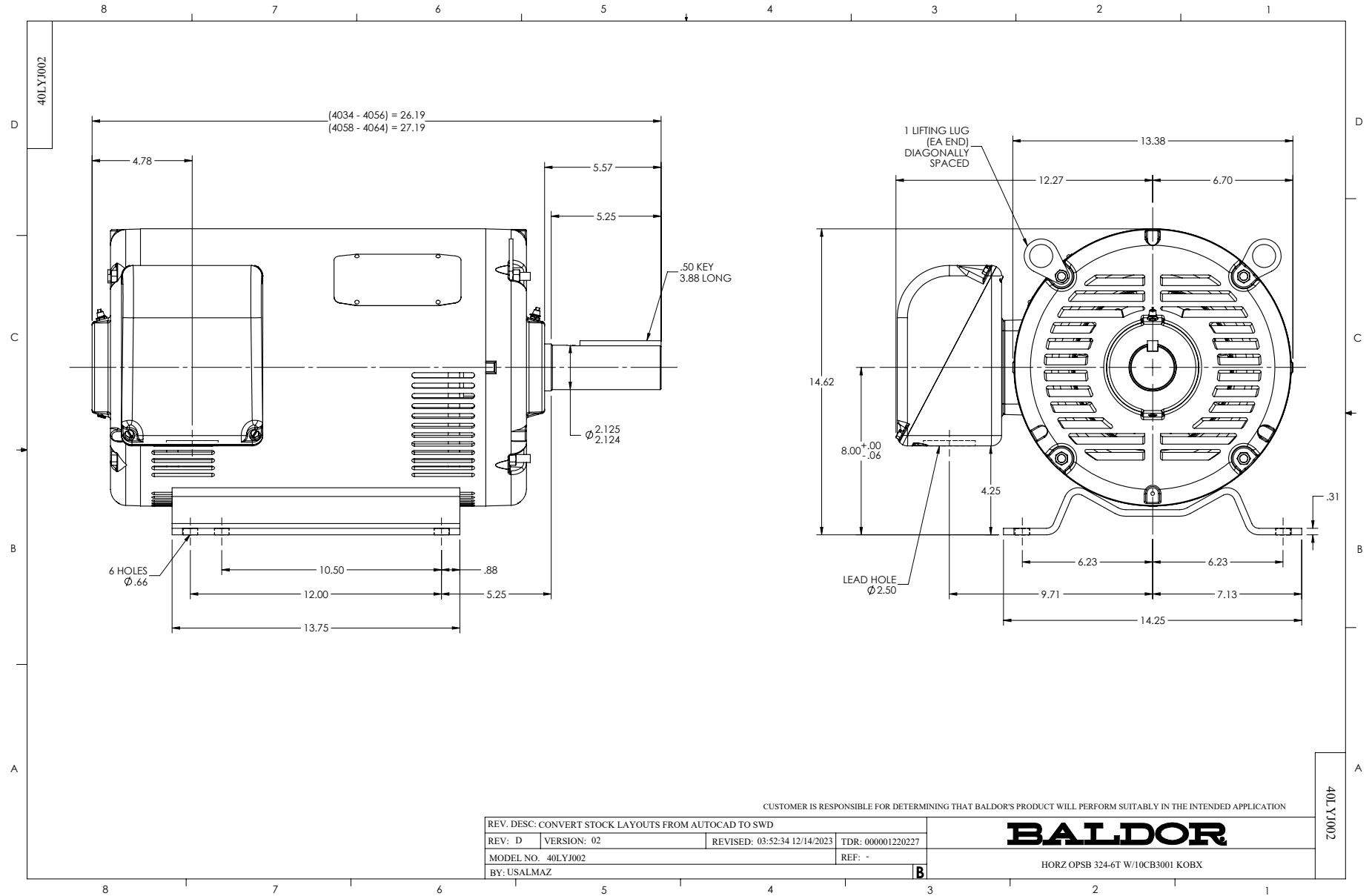
Typical performance - not guaranteed values.

40 HP 3 PH 60 HZ 1770 RPM 575 V 4064M

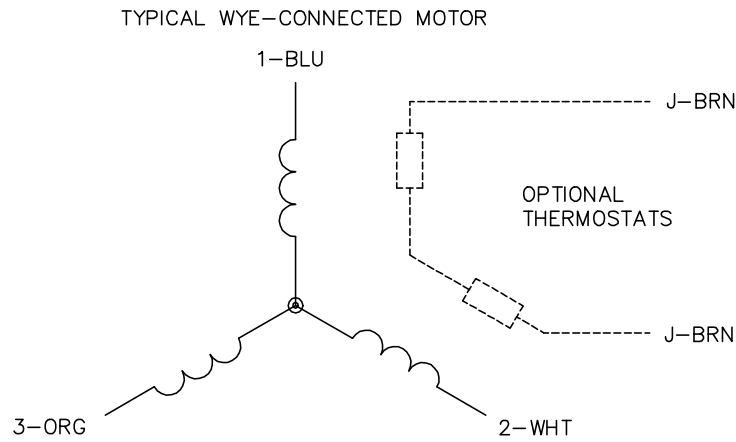
TORQUES (LB-FT): PO=438 PU=192 LR=253 LRA=272



11/28/2024 ACPERF, record # 32859



CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER 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 BE NUMBERED AS SHOWN.

CD0006

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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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