ABB BALDOR RELIANCE

Customer information packet

EM2539T-12

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

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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	CURUSEEV
	NEMA PREMIUM
	NEMA PREMIUM (OLD LOGO)
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	47.000 A @ 460.0 V
	94.000 A @ 230.0 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	47.0 a
Insulation Class	F

Part Detail

Revision	U
Type	AC
Mech. spec.	40E212
Base	
Status	PRD/A
Elec. spec.	40WGX189
Layout	40LYE212
Eff. date	06-27-2024
CD Diagram	CD0104
Poles	04
Leads	12#8
Proprietary	False
Created date	08-03-2010

Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	12 @ 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	Wye Start - Delta Run
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-12			**P/N**						**ENCL**	OPSB	
SPEC.	40E212X189	**CC**	010A	**FRAME**	324T		**SER.NO.**					
HP	40	**CLASS**	F	**HZ**	60							
RPM	1770	**PH**	3	**DES**	A							
VOLTS	230/460	**CODE**	G	**ODE BRG**	6309	**DE BRG**	6312					
AMPS	94/47											
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.**										

AC Induction Motor Performance Data
Record # 32039
Typical performance - not guaranteed values

Winding: 40WGX189-R001	**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			94/47	**Breakdown Torque**	421 LB-FT
R.P.M.			1770	**Pull-up Torque**	179 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	235 LB-FT
NEMA Design Code	A	**KVA Code**	G	**Starting Current**	316 A
Service Factor (S.F.)			1.15	**No-load Current**	19.3 A
NEMA Nom. Eff.	94.1	**Power Factor**	82	**Line-line Res. @ 25ºC**	0.155 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-FT2

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	45	68	79	84	86	86	85
Efficiency	92.7	94.6	94.8	94.4	93.6	92.9	93.9
Speed	1792	1785	1777	1770	1761	1751	1765
Line amperes	22.3	29	37.7	47.4	58.2	70.4	53.9

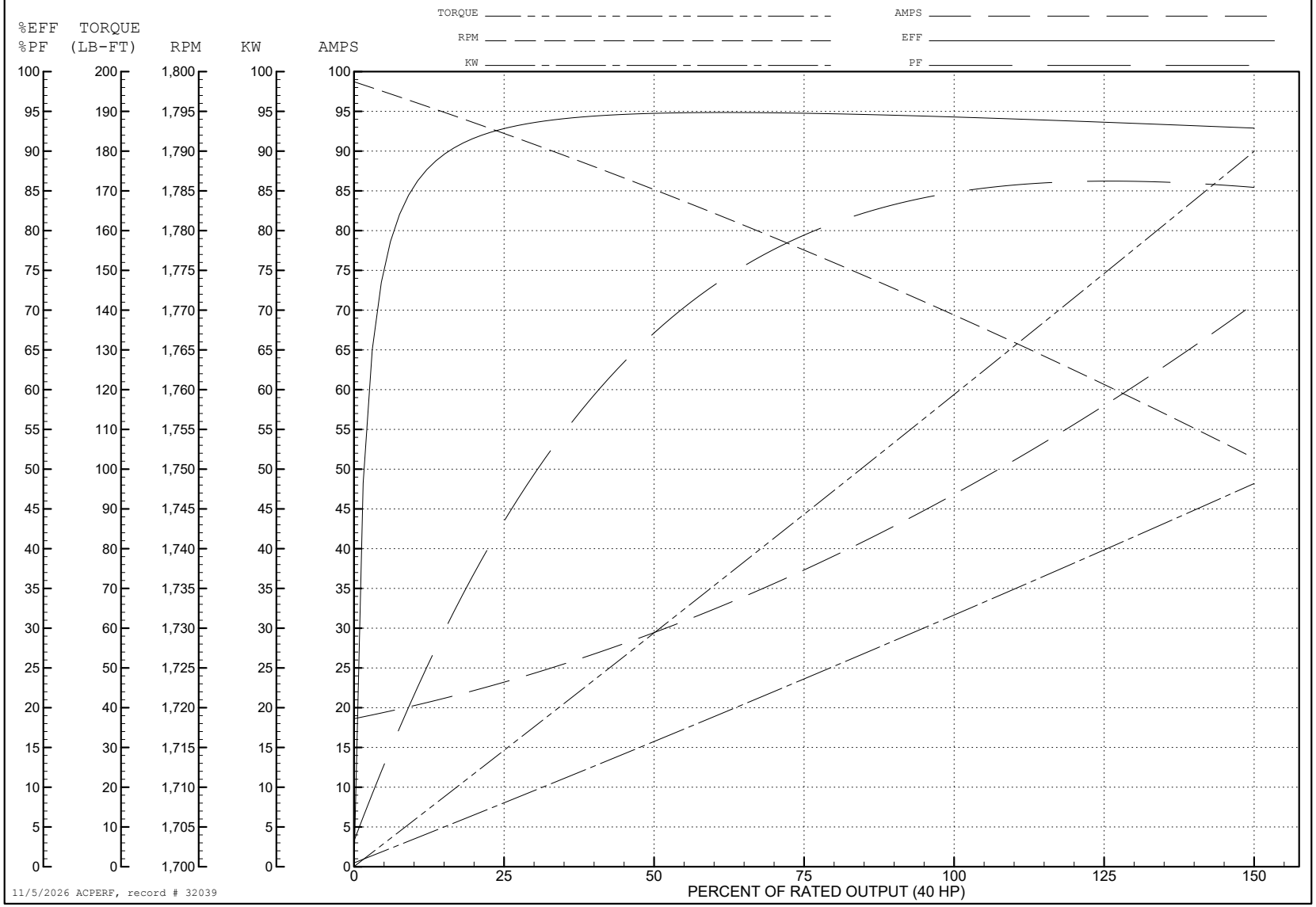
ABB Motors and Mechanical Inc.

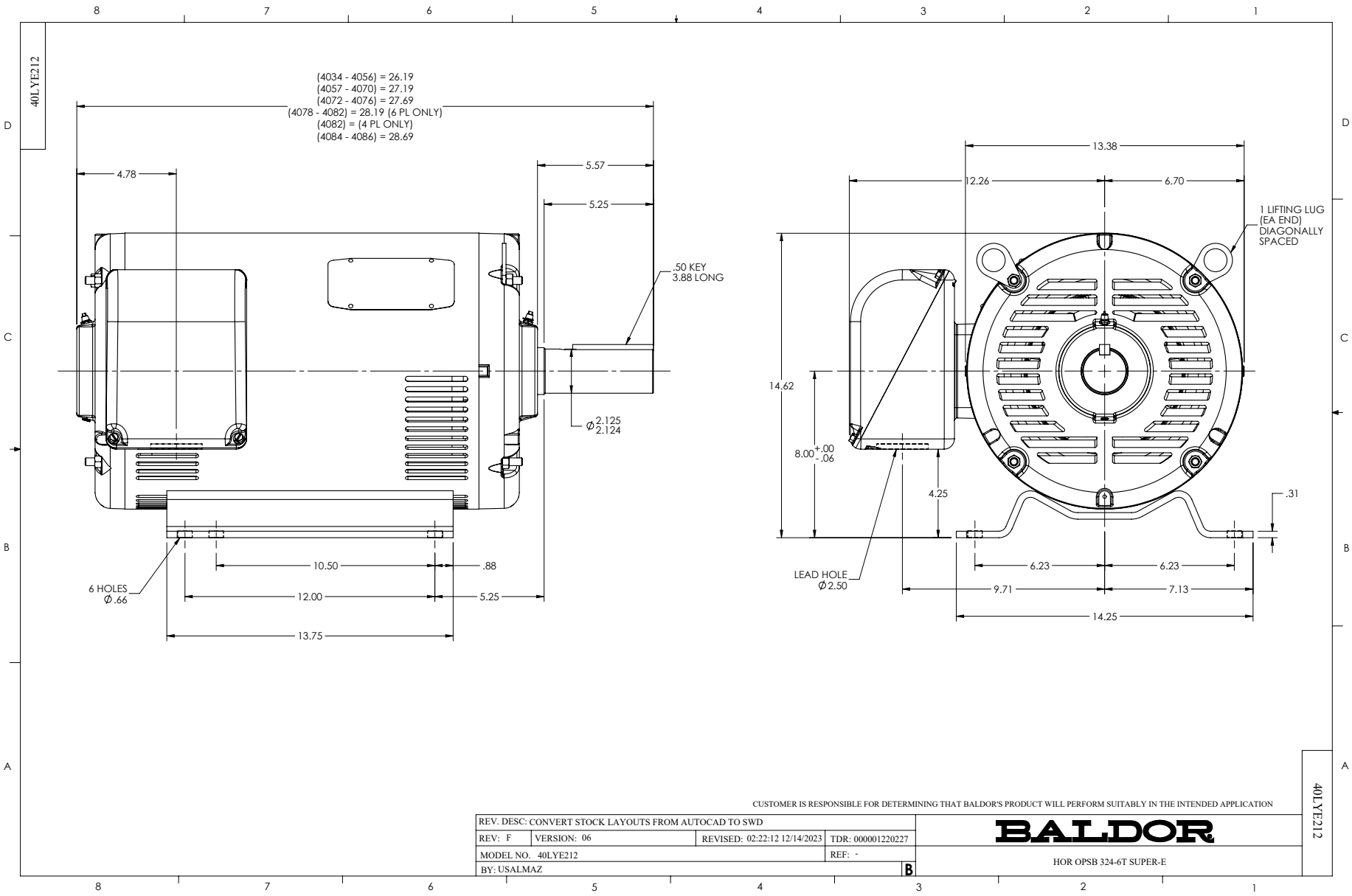
WINDING # 40WGX189

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

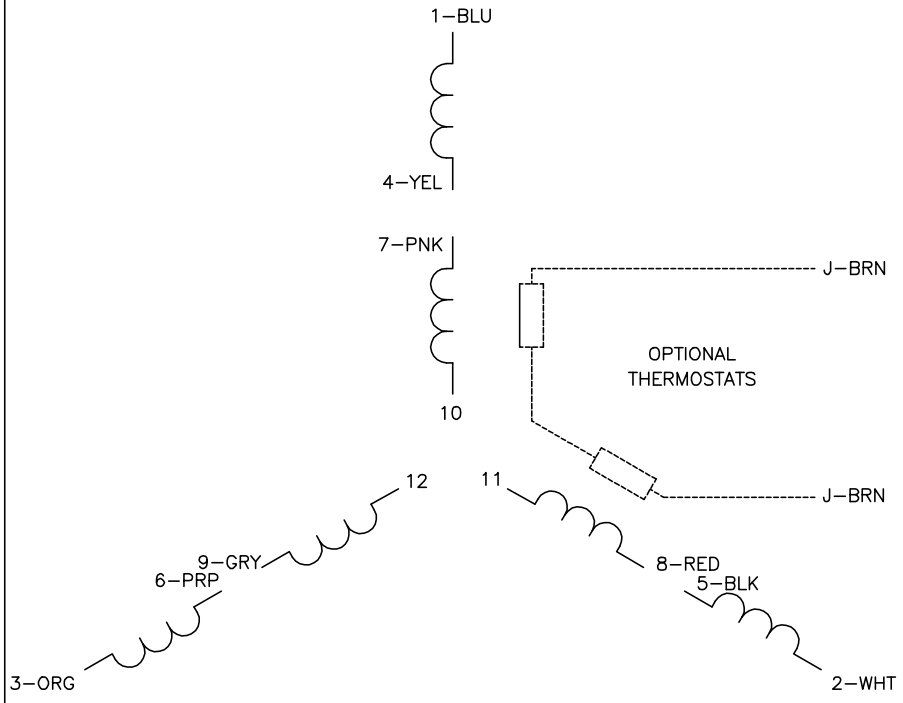
Typical performance - not guaranteed values.

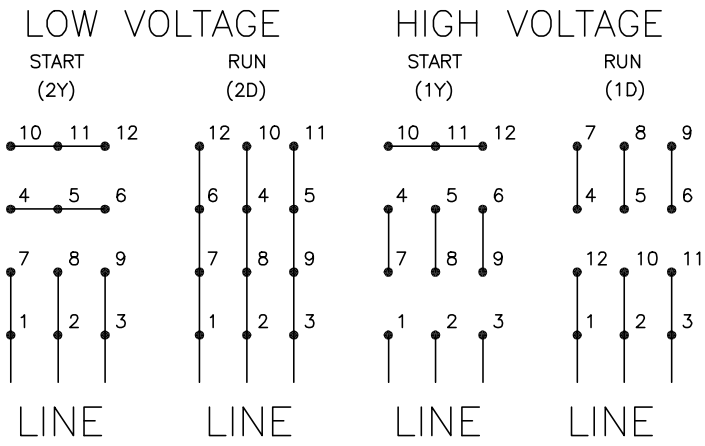
TORQUES(LB-FT): PO=421 PU=179 LR=235 LRA=316




40LYE212
(4034 - 4056) = 26.19
(4057 - 4070) = 27.19
(4072 - 4076) = 27.69
(4078 - 4082) = 28.19 (6 PL ONLY)
(4082) = (4 PL ONLY)
(4084 - 4086) = 28.69
4.78
5.57
5.25
.50 KEY
3.88 LONG
Ø2.125
2.124
6 HOLES
Ø.66
10.50
.88
12.00
5.25
13.75
13.38
12.26
6.70
1 LIFTING LUG
(EA END)
DIAGONALLY
SPACED
14.62
8.00 +.00 -.06
4.25
.31
LEAD HOLE
Ø2.50
6.23
6.23
9.71
7.13
14.25
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT STOCK LAYOUTS FROM AUTOCAD TO SWD
REV: F
VERSION: 06
REVISED: 02:22:12 12/14/2023
TDR: 000001220227
MODEL NO. 40LYE212
REF: -
BY: USALMAZ
B
BALDOR
HOR OPSB 324-6T SUPER-E
40LYE212

CD0104





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.

CD0104

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00008\377	REVISED: 09:02:55 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, DV, 12 LEADS, Y START/D RUN

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