ABB BALDOR RELIANCE

Customer information packet

EJMM2542T-G

58M 2P OPSB HOR 324JM SE

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Specifications

Enclosure	OPSB
Frame	324JM
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	50.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	UR
	NEMA PREMIUM
	CSA EEV
	CSA
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	112.000 A @ 230.0 V
	124.000 A @ 208.0 V
	56.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	56.0 a

Part Detail

Revision	K
Type	AC
Mech. spec.	40E285
Base	
Status	PRD/A
Elec. spec.	40WGW803
Layout	40LYE285
Eff. date	12-11-2025
CD Diagram	CD0180
Poles	02
Leads	9#8
Proprietary	False
Created date	04-03-2019

Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	IP23
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4058M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	27.44 IN
Power Factor	90
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Tapped & Key
Rodent Screen	Included
Service Factor	1.15
Shaft Diameter	1.250 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3525 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3554LUA												
CAT.NO.	EJMM2542T-G			**P/N**						**ENCL**	OPSB	
SPEC.	40E285W803G1	**CC**	010A		**FRAME**	324JM		**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											
RATING	40C AMB-CONT			**NEMA-NOM-EFF**	93		**GREASE**	POLYREX EM				
PF	90	**SER.F.**	1.15		**CT30-60(2:1) VT3-60(20:1)**							
USABLE AT	50HZ 50HP 190/380V 138/69A			SF1.0								
HTR-VOLTS	**HTR-AMPS**		**MAX. SPACE HEATER TEMP.**									

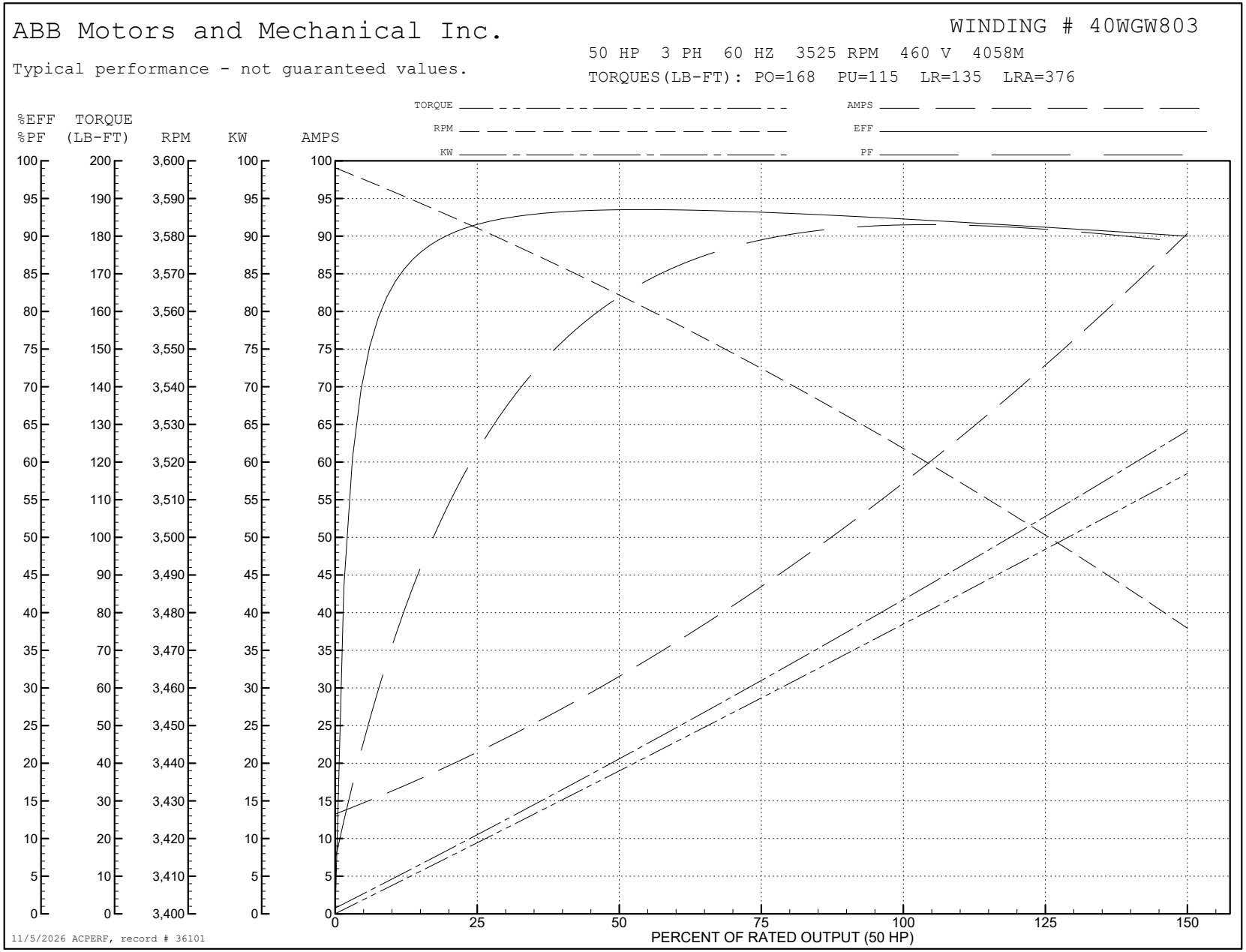
AC Induction Motor Performance Data
Record # 36101
Typical performance - not guaranteed values

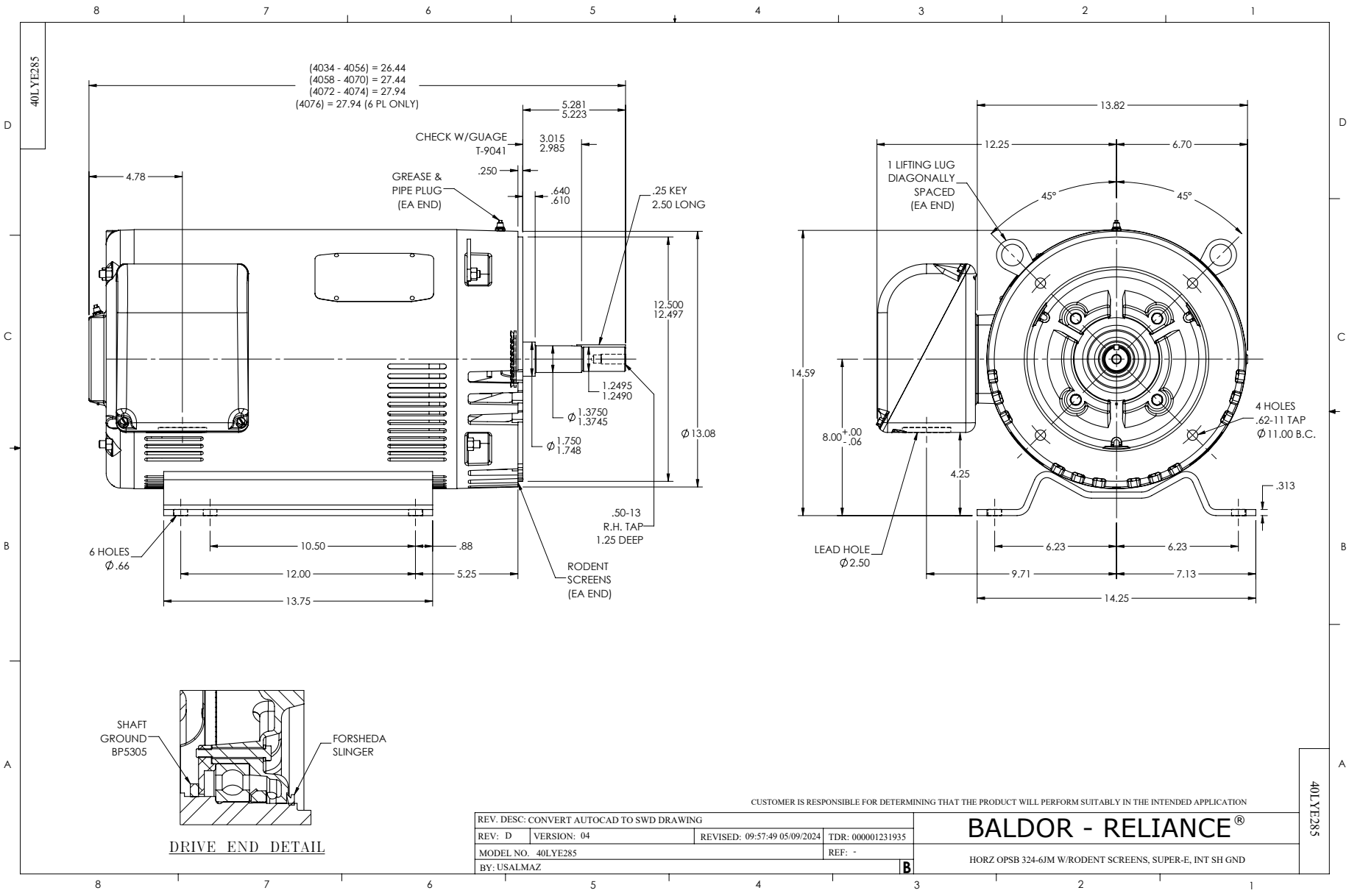
Winding: 40WGW803-R004	**Type:** 4058M	**Enclosure:** OPSB

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. @ 25ºC**	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-FT2

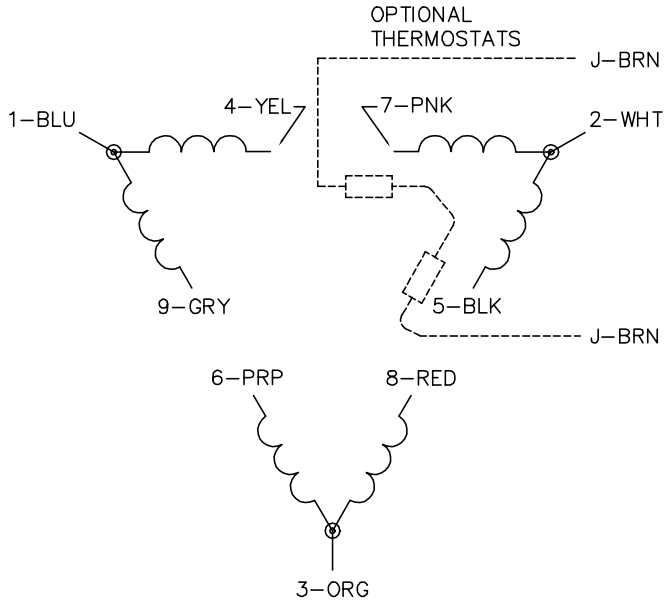
Load Characteristics 460 V, 60 Hz, 50 HP

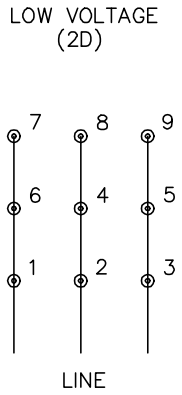
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	66	83	88	90	90	90	90
Efficiency	92.9	94.4	94.1	93.3	92.2	90.5	92.6
Speed	3581.7	3565.2	3545.9	3526.6	3505.2	3475.1	3514
Line amperes	20	30.4	42.8	56.3	70.7	89.9	64.9

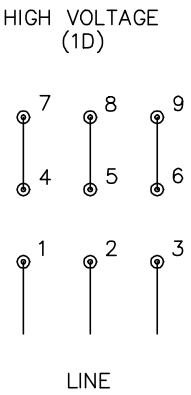

ABB Motors and Mechanical Inc.
WINDING # 40WGW803
Typical performance - not guaranteed values.
50 HP 3 PH 60 HZ 3525 RPM 460 V 4058M
TORQUES(LB-FT): PO=168 PU=115 LR=135 LRA=376
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF
%PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (50 HP)
11/5/2026 ACPERF, record # 36101


40LYE285
(4034 - 4056) = 26.44
(4058 - 4070) = 27.44
(4072 - 4074) = 27.94
(4076) = 27.94 (6 PL ONLY)
5.281
5.223
CHECK W/GUAGE
T-9041
3.015
2.985
.250
.640
.610
4.78
GREASE &
PIPE PLUG
(EA END)
.25 KEY
2.50 LONG
12.500
12.497
1.2495
1.2490
Ø 1.3750
1.3745
Ø 1.750
1.748
Ø 13.08
.50-13
R.H. TAP
1.25 DEEP
6 HOLES
Ø.66
10.50
.88
12.00
5.25
13.75
RODENT
SCREENS
(EA END)
13.82
12.25
6.70
1 LIFTING LUG
DIAGONALLY
SPACED
(EA END)
45°
45°
14.59
8.00 +.00 -.06
4 HOLES
.62-11 TAP
Ø11.00 B.C.
4.25
.313
LEAD HOLE
Ø2.50
6.23
6.23
9.71
7.13
14.25
SHAFT
GROUND
BP5305
FORSHEDA
SLINGER
DRIVE END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT AUTOCAD TO SWD DRAWING
REV: D
VERSION: 04
REVISED: 09:57:49 05/09/2024
TDR: 000001231935
MODEL NO. 40LYE285
REF: -
BY: USALMAZ
B
BALDOR - RELIANCE®
HORZ OPSB 324-6JM W/RODENT SCREENS, SUPER-E, INT SH GND
40LYE285

CD0180







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

REV. DESC: ADD CLASS CONN00000007		
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FILE: \AAA\00005\148	REVISED: 10:25:29 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1