ABB BALDOR RELIANCE

Customer information packet

EJMM2538T

40HP, 3510RPM, 3PH, 60HZ, 286JM, 3956M, OPSB, F
Class -
Division - Not Applicable

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
11/12/2026 2:11:57 AM

Specifications

Enclosure	OPSB
Frame	286JM
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	CSA EEV
	UR
	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	45.000 A @ 460.0 V
	90.000 A @ 230.0 V
	99.000 A @ 208.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
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	W
Type	AC
Mech. spec.	39E312
Base	
Status	PRD/A
Elec. spec.	39WGX287
Layout	39LYE312
Eff. date	06-26-2024
CD Diagram	CD0180
Poles	02
Leads	9#8
Proprietary	False
Created date	06-22-2009

High Voltage Full Load Amps	45.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	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	3956M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	26.56 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	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3510 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

NP2138LUA												
CAT.NO.	EJMM2538T			**P/N**				**ENCLOSURE**	OPSB			
SPEC.	39E312X287	**CC**	010A	**FRAME**	286JM	**S/N**						
HP	40		**CLASS**	F	**HZ**	60						
RPM	3510		**PH**	3	**DES**	A						
VOLT	230/460			**KVA-CODE**	H	**ODE BRG**	6208	**DE BRG**	6312			
AMP	90/45											
RATING	40C AMB-CONT			**GREASE**	POLYREX EM							
NEMA-NOM-EFF	92.4	**PF**	90	**SER.F.**	1.15							
	50HZ 40HP 190/380V 110/55A					SF1.0						
HTR-VOLTS		**HTR-AMPS**										

AC Induction Motor Performance Data
Record # 13126
Typical performance - not guaranteed values

Winding: 39WGX287-R001	**Type:** 3956M	**Enclosure:** OPSB

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			40	**Full Load Torque**	60.7 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			90/45	**Breakdown Torque**	252 LB-FT
R.P.M.			3510	**Pull-up Torque**	80.9 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	115 LB-FT
NEMA Design Code	A	**KVA Code**	H	**Starting Current**	326 A
Service Factor (S.F.)			1.15	**No-load Current**	11.3 A
NEMA Nom. Eff.	92.4	**Power Factor**	90	**Line-line Res. @ 25ºC**	0.211 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	60°C
S.F. Amps				**Temp. Rise @ S.F. Load**	77°C
				Locked-rotor Power Factor	28
				Rotor inertia	1.43 LB-FT2

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	65	82	88	90	91	92	91
Efficiency	92.7	94.1	93.8	92.7	91.4	89.9	91.9
Speed	3578	3555	3531	3503	3474	3441	3486
Line amperes	16.1	24.4	34.1	45.3	56.6	68.6	52.08

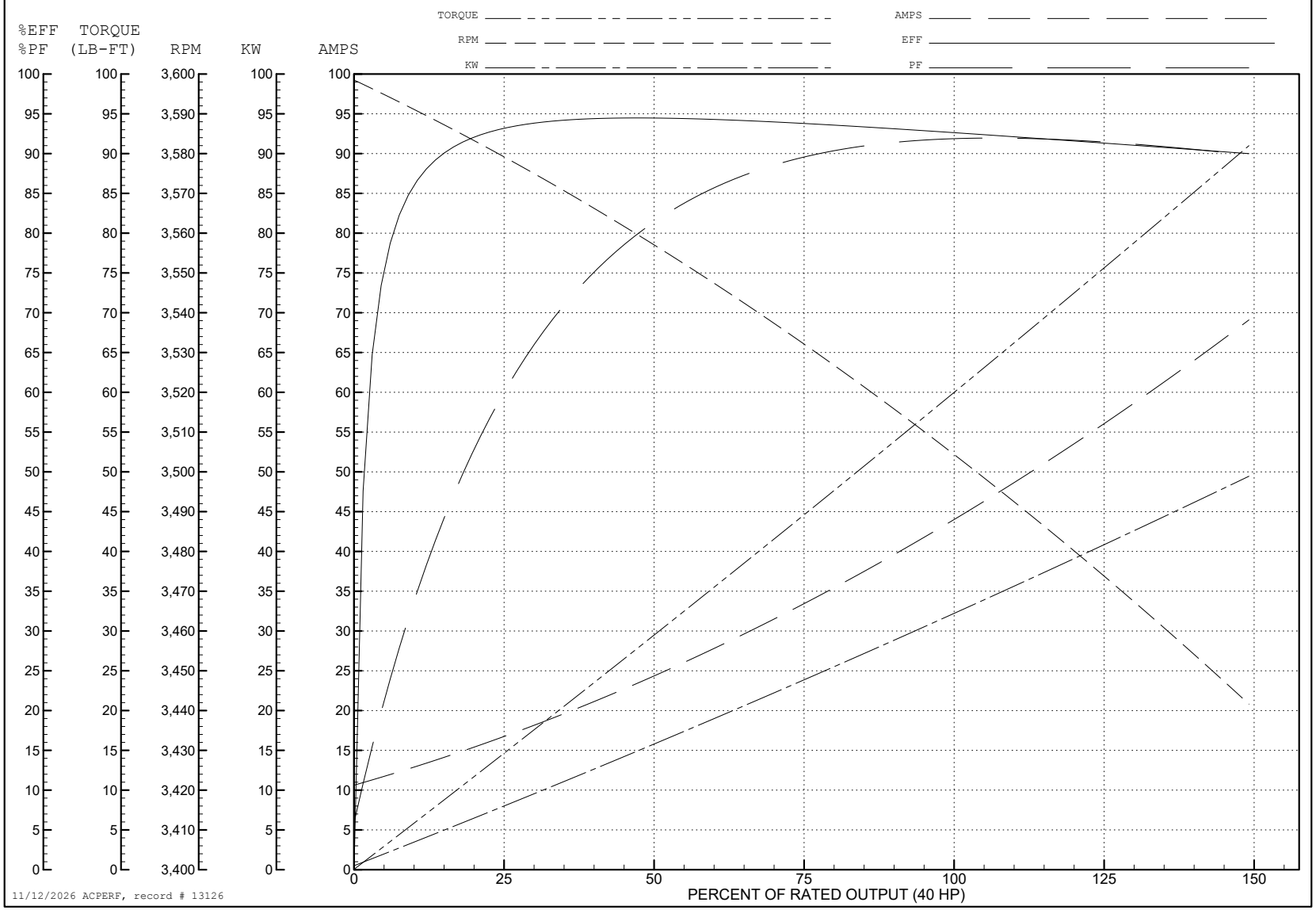
ABB Motors and Mechanical Inc.

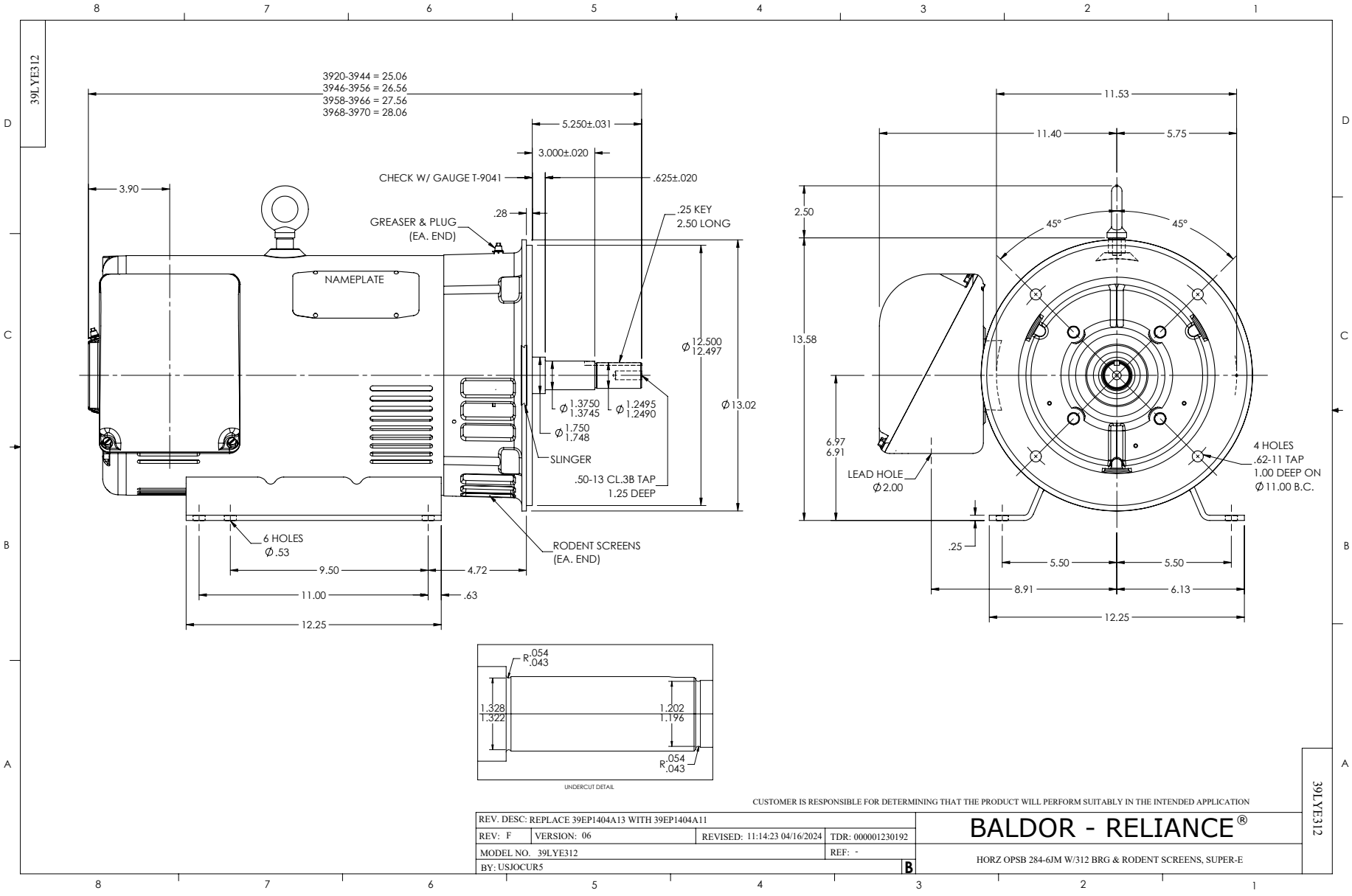
WINDING # 39WGX287

40 HP 3 PH 60 HZ 3510 RPM 460 V 3956M

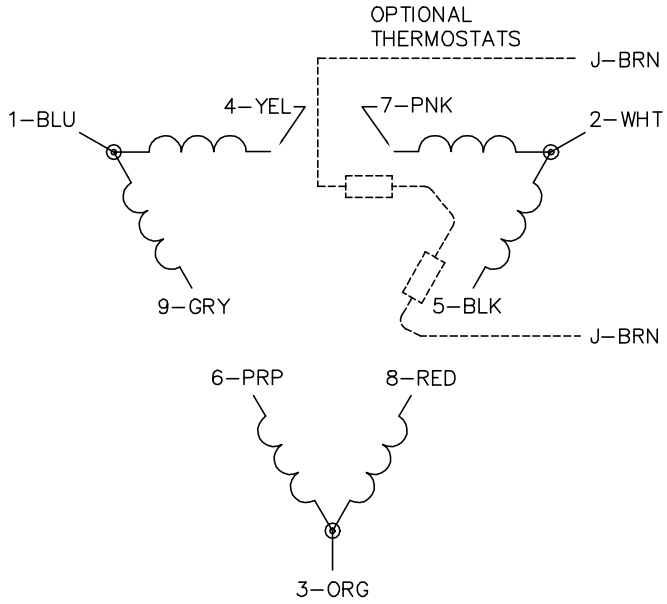
Typical performance - not guaranteed values.

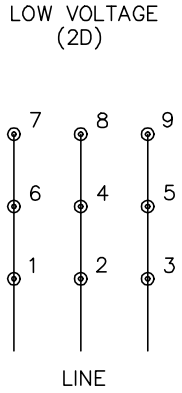
TORQUES(LB-FT): PO=252 PU=80.9 LR=115 LRA=326

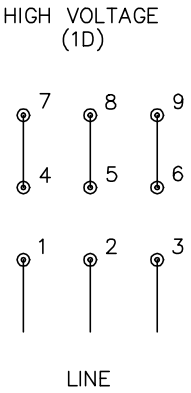



39LYE312
3920-3944 = 25.06
3946-3956 = 26.56
3958-3966 = 27.56
3968-3970 = 28.06
5.250±.031
3.000±.020
CHECK W/ GAUGE T-9041
.625±.020
3.90
.28
GREASER & PLUG (EA. END)
.25 KEY 2.50 LONG
NAMEPLATE
Ø 12.500 12.497
Ø 13.02
Ø 1.3750 1.3745
Ø 1.2495 1.2490
Ø 1.750 1.748
SLINGER
.50-13 CL.3B TAP 1.25 DEEP
6 HOLES Ø.53
RODENT SCREENS (EA. END)
9.50
4.72
11.00
.63
12.25
11.53
11.40
5.75
2.50
45°
45°
13.58
6.97
6.91
LEAD HOLE Ø2.00
4 HOLES .62-11 TAP 1.00 DEEP ON Ø11.00 B.C.
.25
5.50
5.50
8.91
6.13
12.25
R.054 .043
1.328 1.322
1.202 1.196
R.054 .043
UNDERCUT DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: REPLACE 39EP1404A13 WITH 39EP1404A11
REV: F
VERSION: 06
REVISED: 11:14:23 04/16/2024
TDR: 000001230192
MODEL NO. 39LYE312
REF: -
BY: USJOCUR5
B
BALDOR - RELIANCE®
HORZ OPSB 284-6JM W/312 BRG & RODENT SCREENS, SUPER-E
39LYE312

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		
REV. LTR: D	VERSION: 01	TDR: 000001099922
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