ABB BALDOR RELIANCE

Customer information packet

FPM2542T-5

50HP, 3525RPM, 3PH, 60HZ, 324TS, 4044M, OPSB, F

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Specifications

Enclosure	OPSB
Frame	324TS
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	575.0 V @ 60 HZ
Agency Approvals	CSA EEV
	UL
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	46.000 A @ 575.0 V
Design Code	B
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
High Voltage Full Load Amps	46.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	F
Lifting Lugs	Standard Lifting Lugs

Part Detail

Revision	E
Type	AC
Mech. spec.	40H07
Base	
Status	PRD/A
Elec. spec.	40WGX356
Layout	40LYH007
Eff. date	07-24-2023
CD Diagram	CD0382
Poles	02
Leads	6#8
Proprietary	False
Created date	07-20-2016

Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4044M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	24.69 IN
Power Factor	87
Product Family	Fire Pump Motor
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3525 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

NP3454L												
CAT.NO.	FPM2542T-5			**CUST P/N**				**I.P.**	23			
SPEC.	40H007X356H2			**SER.NO.**				**FRAME**	324TS			
HZ	60	**HP**	50	**RPM**	3525	**HZ**		**HP**		**RPM**		
VOLTS	575			**CODE**	F	**VOLTS**				**CODE**		
AMPS	46			**DES**	B	**AMPS**				**DES**		
EFF	92.4	**SER.F.**	1.15	**PF**	87	**EFF**		**SER.F.**			**PF**	
RATING	40C AMB-CONT			**DE BRG**	6312			**GREASE**	POLYREX EM			
BLANK				**ODE BRG**	6309			**MTR. WT.**	449			
				CLASS	F	**PH**	3					
				ENCL	OPSB	**CC**	010A					
HTR-VOLTS		**HTR-AMPS**		**HTR-WATTS**								

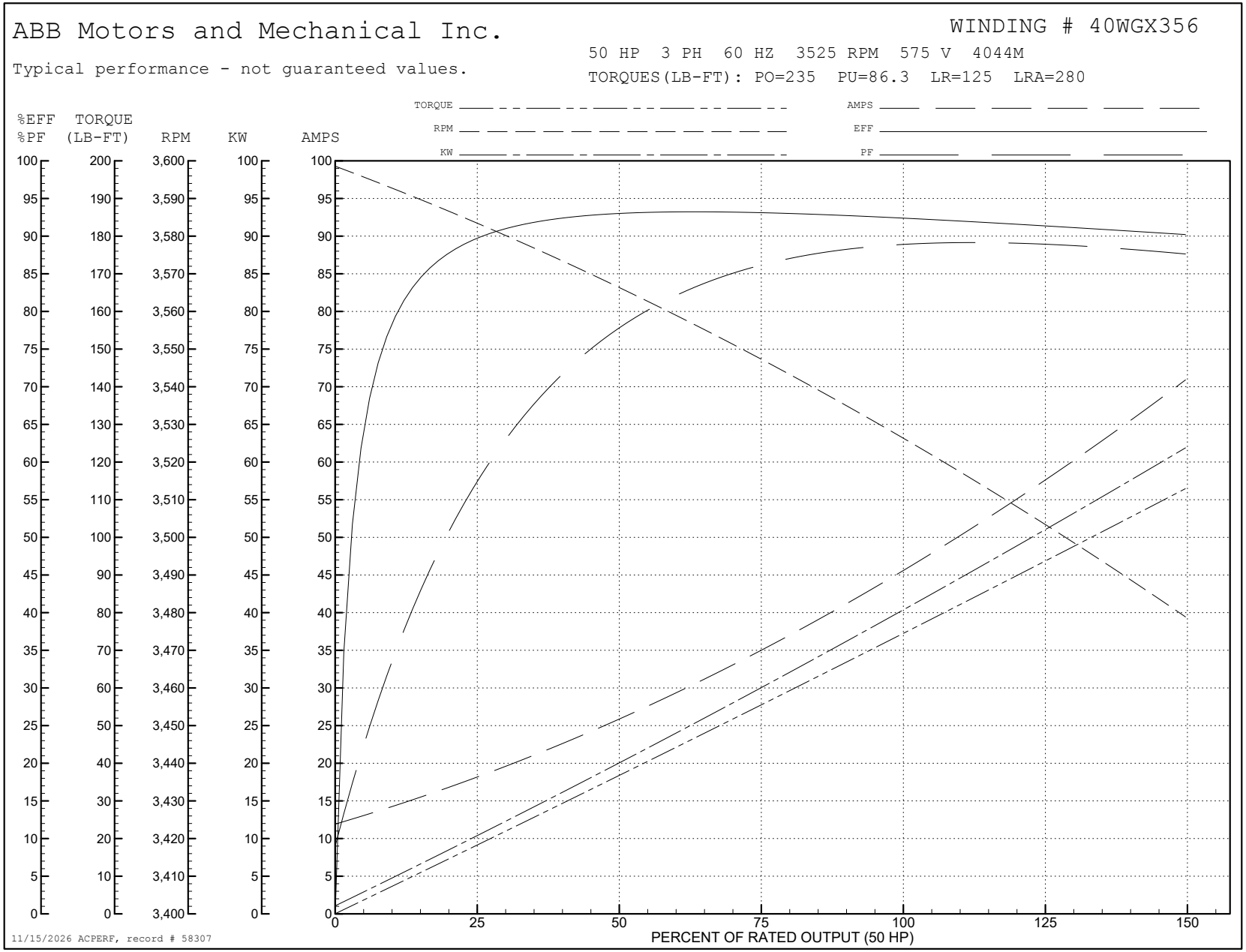
AC Induction Motor Performance Data
Record # 58307
Typical performance - not guaranteed values

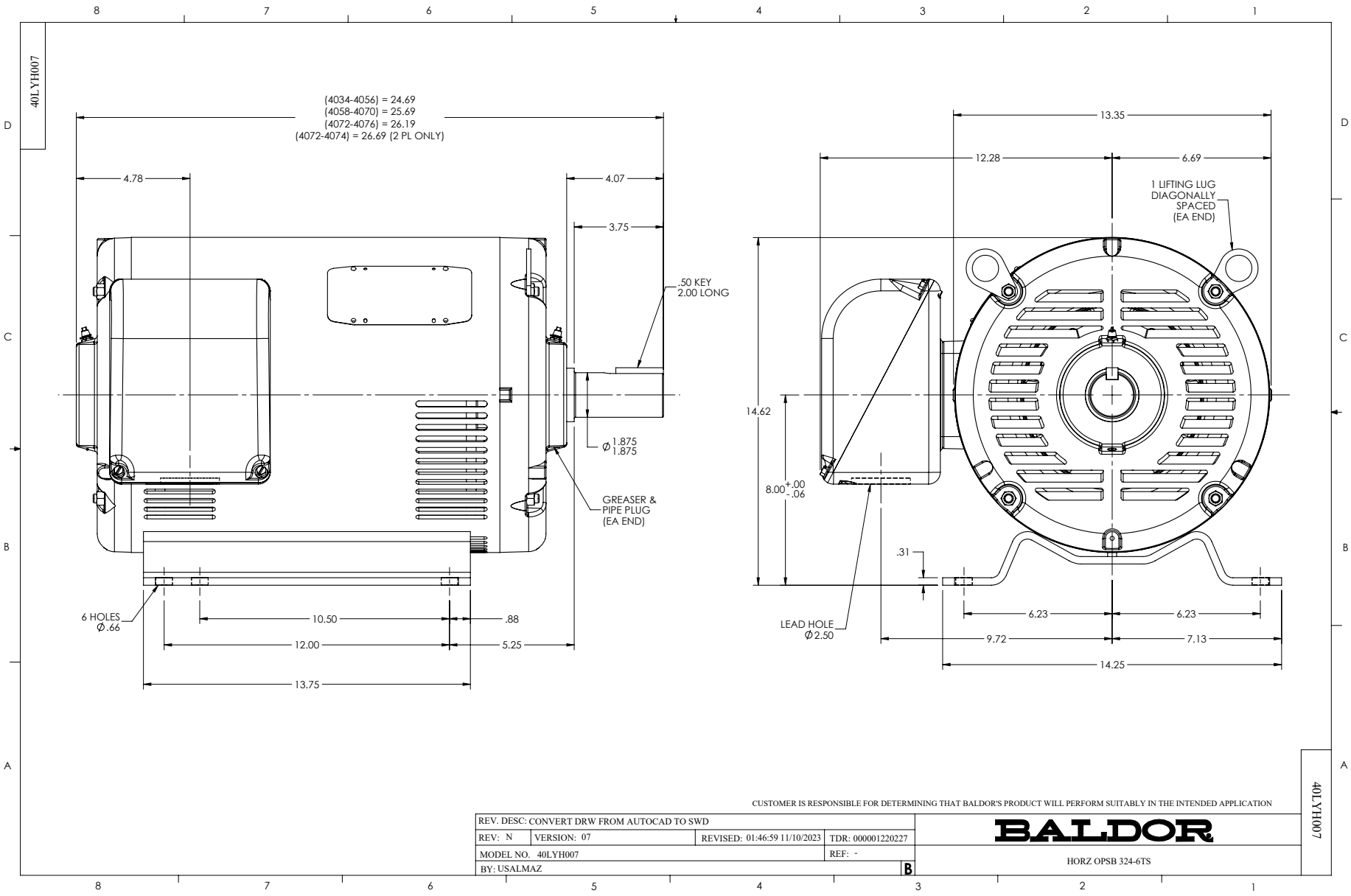
Winding: 40WGX356-R001	**Type:** 4044M	**Enclosure:** OPSB

Nameplate Data				**575 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			50	**Full Load Torque**	74.2 LB-FT
Volts			575	**Start Configuration**	direct on line
Full Load Amps			46	**Breakdown Torque**	235 LB-FT
R.P.M.			3525	**Pull-up Torque**	86.3 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	125 LB-FT
NEMA Design Code	B	**KVA Code**	F	**Starting Current**	280 A
Service Factor (S.F.)			1.15	**No-load Current**	12.7 A
NEMA Nom. Eff.	92.4	**Power Factor**	87	**Line-line Res. @ 25ºC**	0.262 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	44°C
S.F. Amps				**Temp. Rise @ S.F. Load**	53°C
				Locked-rotor Power Factor	24.2
				Rotor inertia	1.89 LB-FT2

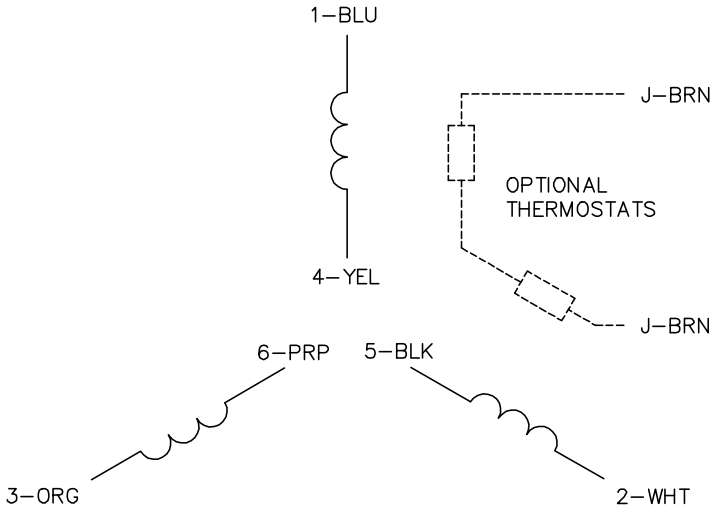
Load Characteristics 575 V, 60 Hz, 50 HP

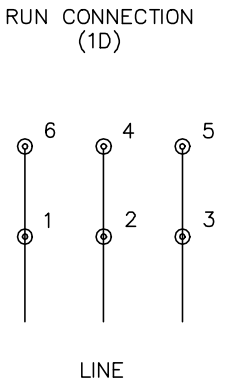
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	62	80	86	87	88	88	88
Efficiency	89.5	92.6	93.2	92.4	91.8	90	92
Speed	3583	3565	3547	3527	3504	3478	3513
Line amperes	17.3	25.5	35.4	46.3	58	70.5	53.3

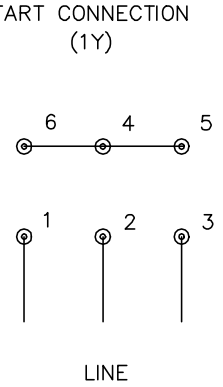

ABB Motors and Mechanical Inc.
WINDING # 40WGX356
Typical performance - not guaranteed values.
50 HP 3 PH 60 HZ 3525 RPM 575 V 4044M
TORQUES(LB-FT): PO=235 PU=86.3 LR=125 LRA=280
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF
%PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (50 HP)
11/15/2026 ACPERF, record # 58307


40LYH007
(4034-4056) = 24.69
(4058-4070) = 25.69
(4072-4076) = 26.19
(4072-4074) = 26.69 (2 PL ONLY)
4.78
4.07
3.75
.50 KEY
2.00 LONG
Ø1.875
1.875
GREASER &
PIPE PLUG
(EA END)
6 HOLES
Ø.66
10.50
.88
12.00
5.25
13.75
13.35
12.28
6.69
1 LIFTING LUG
DIAGONALLY
SPACED
(EA END)
14.62
8.00 +.00 -.06
.31
LEAD HOLE
Ø2.50
6.23
6.23
9.72
7.13
14.25
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT DRW FROM AUTOCAD TO SWD
REV: N
VERSION: 07
REVISED: 01:46:59 11/10/2023
TDR: 000001220227
MODEL NO. 40LYH007
REF: -
BY: USALMAZ
B
BALDOR
HORZ OPSB 324-6TS
40LYH007

CD0382







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.
5. FOR ACROSS–THE–LINE STARTING, USE 'RUN' CONNECTION.

CD0382

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: F	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\243	REVISED: 09:05:32 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, SV, 6 LEADS, Y START/D RUN

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