ABB BALDOR RELIANCE

Customer information packet

FPM2543TS

50//40HP, 1770//1470RPM, 3PH, 60//50HZ, 326T

8/24/2026 1:58:19 AM

Specifications

Enclosure	ODP
Frame	326TS
Frame Material	Steel
Frequency	50.00 Hz
	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	50.000 HP @ 60 HZ
	40.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	190.0 V @ 50 HZ
	460.0 V @ 60 HZ
	380.0 V @ 50 HZ
Agency Approvals	CSA EEV
	UL
	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	60.000 A @ 460.0 V
	58.000 A @ 380.0 V
	120.000 A @ 230.0 V
	116.000 A @ 190.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %

Part Detail

Revision	H
Type	AC
Mech. spec.	40H07
Base	
Status	PRD/A
Elec. spec.	40WGX317
Layout	40LYH007
Eff. date	07-24-2023
CD Diagram	CD0104
Poles	04
Leads	12#8
Proprietary	False
Created date	09-16-2015

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	58.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	F
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	25.69 IN
Power Factor	83
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	1470 rpm
	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

NP3454L															
CAT.NO.	FPM2543TS			**CUST P/N**					**I.P.**	23					
SPEC.	40H007X317H2			**SER.NO.**					**FRAME**	326TS					
HZ	60	**HP**	50	**RPM**	1770	**HZ**	50	**HP**	40	**RPM**	1470				
VOLTS	230/460			**CODE**	F	**VOLTS**	190/380			**CODE**	F				
AMPS	120/60			**DES**	B	**AMPS**	116/58			**DES**	B				
EFF	93	**SER.F.**	1.15	**PF**	83	**EFF**	92.4	**SER.F.**	1.15	**PF**	83				
RATING	40C AMB-CONT			**DE BRG**	6312	**GREASE**	POLYREX EM								
BLANK				**ODE BRG**	6309	**MTR. WT.**	385								
				CLASS	F	**PH**	3								
				ENCL	ODP	**CC**	010A								
HTR-VOLTS		**HTR-AMPS**		**HTR-WATTS**											

AC Induction Motor Performance Data
Record # 54093
Typical performance - not guaranteed values

Winding: 40WGX317-R001	**Type:** 4064M	**Enclosure:** OPSB

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			50//40	**Full Load Torque**	149 LB-FT
Volts			230/460//190/380	**Start Configuration**	direct on line
Full Load Amps			120/60//116/58	**Breakdown Torque**	374 LB-FT
R.P.M.			1770//1470	**Pull-up Torque**	190 LB-FT
Hz	60//50	**Phase**	3	**Locked-rotor Torque**	236 LB-FT
NEMA Design Code	B	**KVA Code**	F	**Starting Current**	342 A
Service Factor (S.F.)			1.15	**No-load Current**	22.8 A
NEMA Nom. Eff.	93	**Power Factor**	83	**Line-line Res. @ 25ºC**	0.16058 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	55°C
S.F. Amps				**Temp. Rise @ S.F. Load**	68°C

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	48	70	80	83	85	85	84
Efficiency	90.5	93.6	94	93.6	92.9	91.7	93.2
Speed	1794.3	1786.4	1778.8	1770.7	1762.3	1751.3	1766
Line amperes	26.6	35.8	47.1	60.1	74.7	90.7	68.9

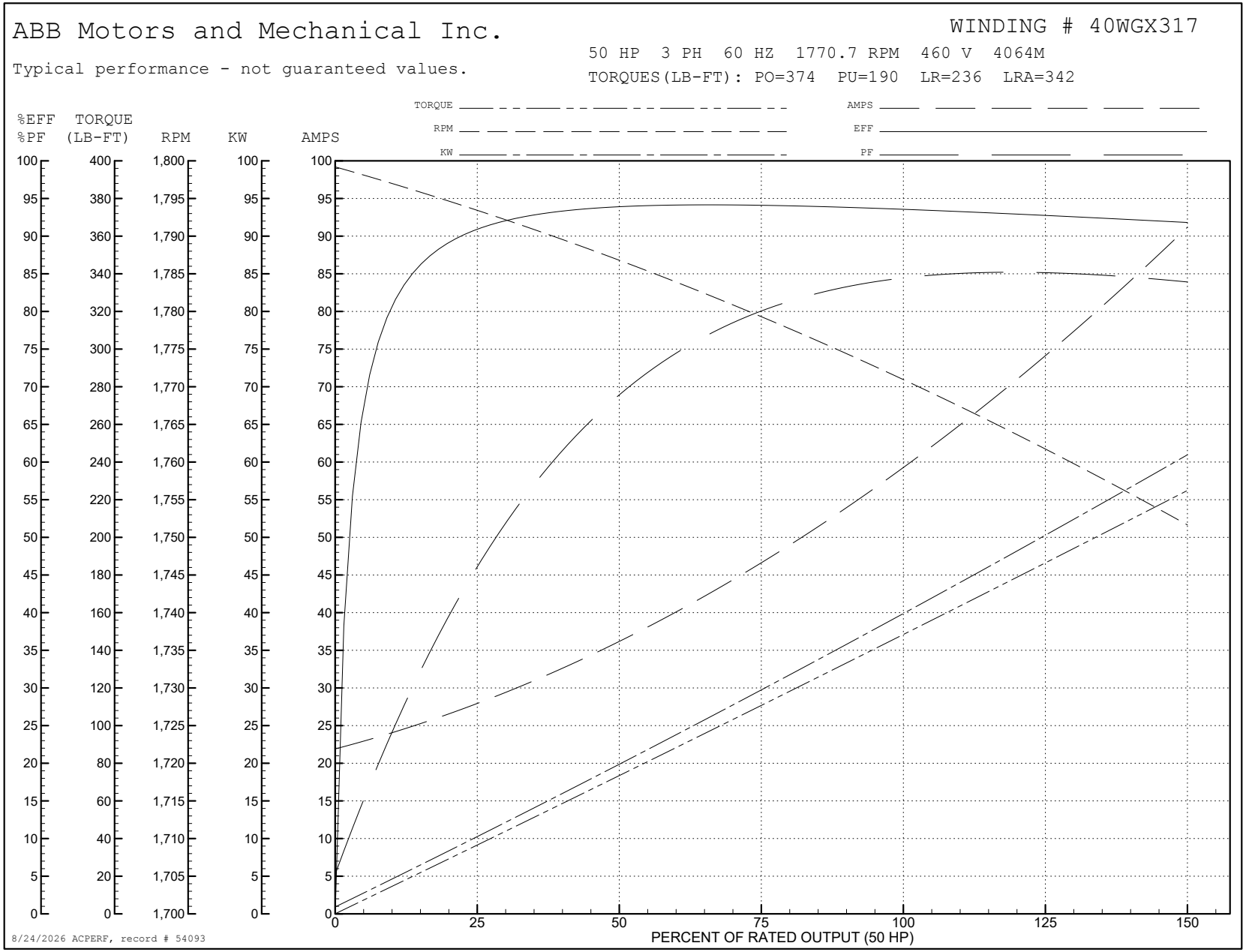


ABB Motors and Mechanical Inc.
WINDING # 40WGX317
Typical performance - not guaranteed values.
50 HP 3 PH 60 HZ 1770.7 RPM 460 V 4064M
TORQUES(LB-FT): PO=374 PU=190 LR=236 LRA=342
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (50 HP)
8/24/2026 ACPERF, record # 54093

AC Induction Motor Performance Data
Record # 54094
Typical performance - not guaranteed values

Winding: 40WGX317-R001	**Type:** 4064M	**Enclosure:** OPSB

Nameplate Data			
Rated Output (HP)			50//40
Volts			230/460//190/380
Full Load Amps			120/60//116/58
R.P.M.			1770//1470
Hz	60//50	**Phase**	3
NEMA Design Code	B	**KVA Code**	F
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	93	**Power Factor**	83
Rating - Duty			40C AMB-CONT
S.F. Amps			

380 V, 50 Hz: High Voltage Connection	
Full Load Torque	143 LB-FT
Start Configuration	direct on line
Breakdown Torque	363 LB-FT
Pull-up Torque	194 LB-FT
Locked-rotor Torque	241 LB-FT
Starting Current	325 A
No-load Current	22 A
Line-line Res. @ 25ºC	0.155 Ω
Temp. Rise @ Rated Load	53°C
Temp. Rise @ S.F. Load	67°C
Locked-rotor Power Factor	34.2
Rotor inertia	5.09 LB-FT2

Load Characteristics 380 V, 50 Hz, 40 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	49	71	80	84	85	85	85
Efficiency	89.6	93.2	93.5	92.7	91.9	90.6	92.2
Speed	1494	1487	1479	1471	1463	1452	1466
Line amperes	25.7	34.7	45.6	58.3	72.6	88.3	66.9

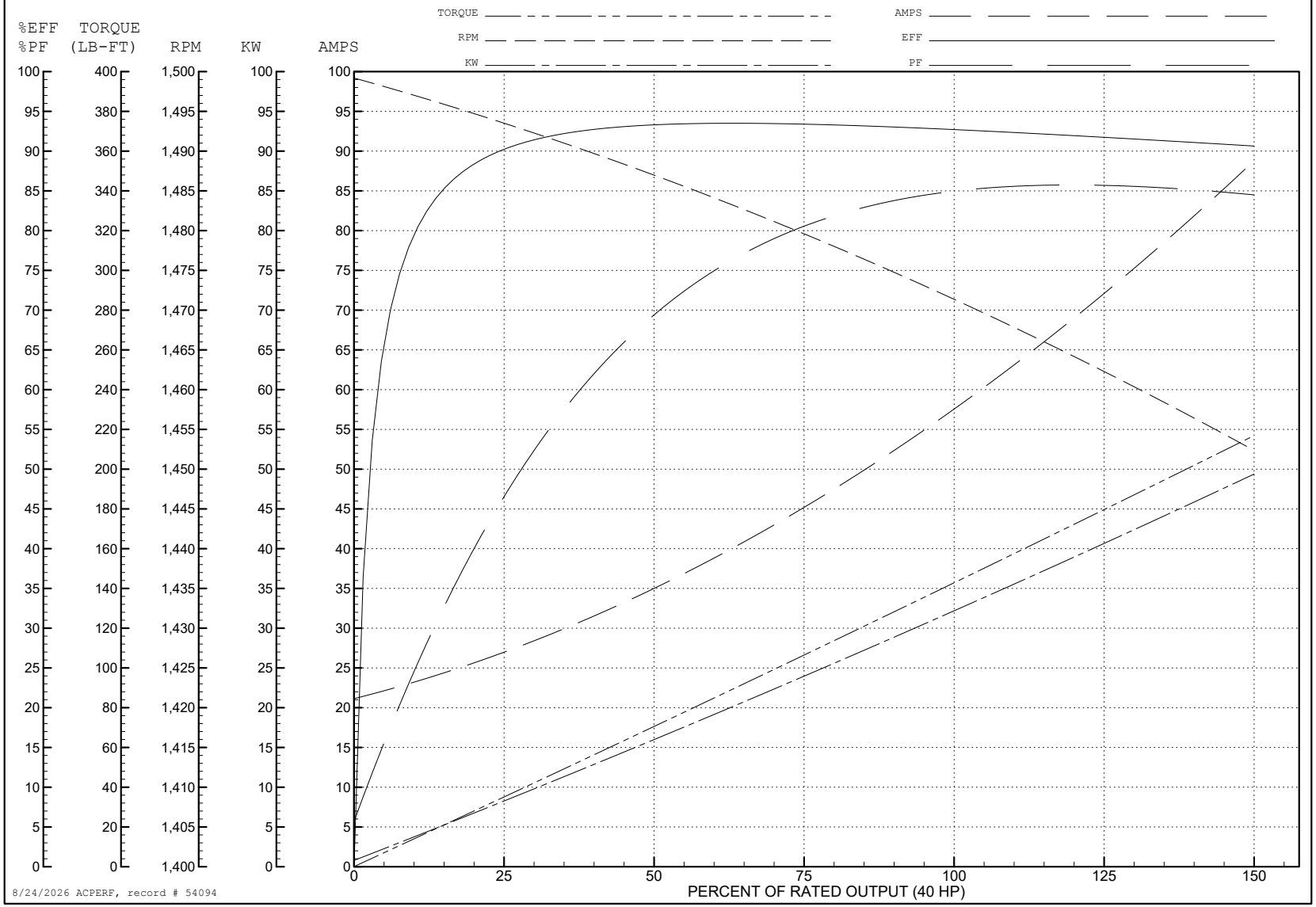
ABB Motors and Mechanical Inc.

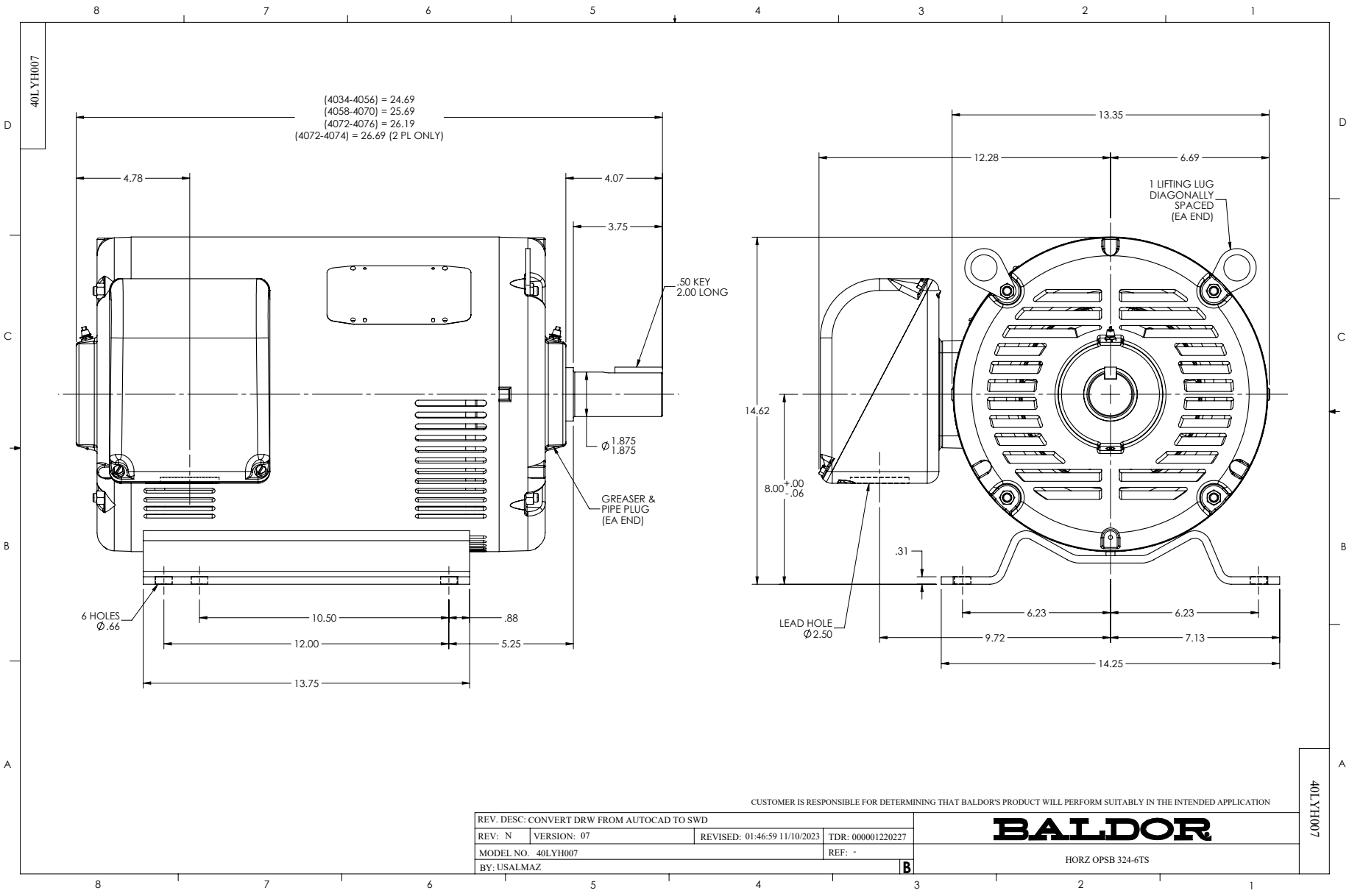
WINDING # 40WGX317

40 HP 3 PH 50 HZ 1471 RPM 380 V 4064M

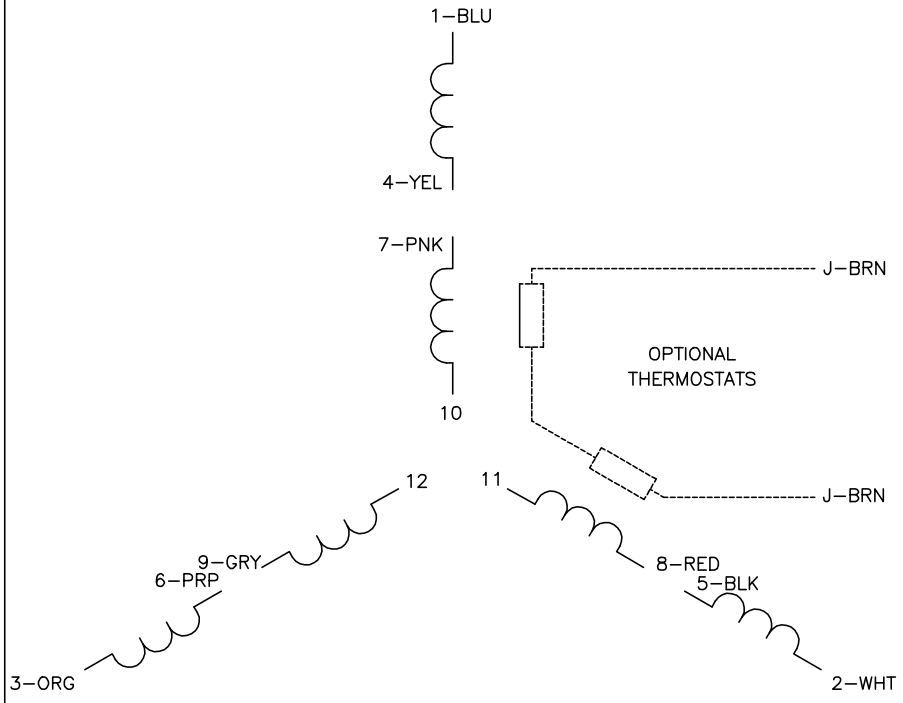
Typical performance - not guaranteed values.

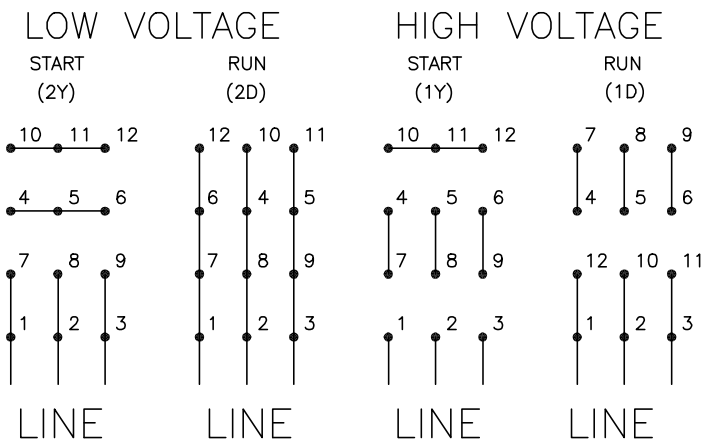
TORQUES(LB-FT): PO=363 PU=194 LR=241 LRA=325




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

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

SH 1 of 1