BALDOR • RELIANCE

Customer information packet

FPM2539TS

40//30HP, 1770//1470RPM, 3PH, 60//50HZ, 324T

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2/16/2025 10:40:30 PM

Specifications

Enclosure	ODP
Frame	324TS
Frame Material	Steel
Frequency	50.00 Hz
	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	30.000 HP @ 50 HZ
	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 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
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	98.000 A @ 230.0 V
	90.000 A @ 190.0 V
	49.000 A @ 460.0 V
	45.000 A @ 380.0 V
	104.000 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated

Part detail

Revision	G
Type	AC
Mech. spec.	40H07
Base	
Status	PRD/A
Elec. spec.	40WGW486
Layout	40LYH007
Eff. date	07-24-2023
CD Diagram	CD0104
Poles	04
Leads	12#10
Proprietary	False
Created date	09-17-2015

Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	45.0 a
Insulation Class	F
Inverter Code	Not Inverter
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 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4052M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	24.69 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.	FPM2539TS			**CUST P/N**				**I.P.**	23			
SPEC.	40H007W486H2			**SER.NO.**				**FRAME**	324TS			
HZ	60	**HP**	40	**RPM**	1770	**HZ**	50	**HP**	30	**RPM**	1470	
VOLTS	230/460			**CODE**	G	**VOLTS**	190/380			**CODE**	G	
AMPS	98/49			**DES**	B	**AMPS**	90/45			**DES**	B	
EFF	93	**SER.F.**	1.15	**PF**	83	**EFF**	92.4	**SER.F.**	1.15	**PF**	82	
RATING	40C AMB-CONT			**DE BRG**	6312			**GREASE**	POLYREX EM			
BLANK				**ODE BRG**	6309			**MTR. WT.**	400			
				CLASS	F	**PH**	3					
				ENCL	ODP	**CC**	010A					
HTR-VOLTS		**HTR-AMPS**		**HTR-WATTS**								

AC Induction Motor Performance Data
Record # 52878
Typical performance - not guaranteed values

Winding: 40WGW486-R005	**Type:** 4052M	**Enclosure:** OPSB

Nameplate Data			
Rated Output (HP)			40//30
Volts			230/460//190/380
Full Load Amps			98/49//90/45
R.P.M.			1770//1470
Hz	60//50	**Phase**	3
NEMA Design Code	B	**KVA Code**	G
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	93	**Power Factor**	83
Rating - Duty			40C AMB-CONT
S.F. Amps			

460 V, 60 Hz: High Voltage Connection	
Full Load Torque	119 LB-FT
Start Configuration	direct on line
Breakdown Torque	324 LB-FT
Pull-up Torque	158 LB-FT
Locked-rotor Torque	196 LB-FT
Starting Current	286 A
No-load Current	18.4 A
Line-line Res. @ 25ºC	0.19 Ω
Temp. Rise @ Rated Load	41°C
Temp. Rise @ S.F. Load	54°C
Locked-rotor Power Factor	32
Rotor inertia	4.13 LB-FT2

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	47	69	79	83	84	85	84
Efficiency	89	92.8	93.4	93.3	92.9	92.1	93.1
Speed	1793	1787	1780	1772	1764	1755	1767
Line amperes	22.6	29.3	38.2	48.5	59.7	72	55.2

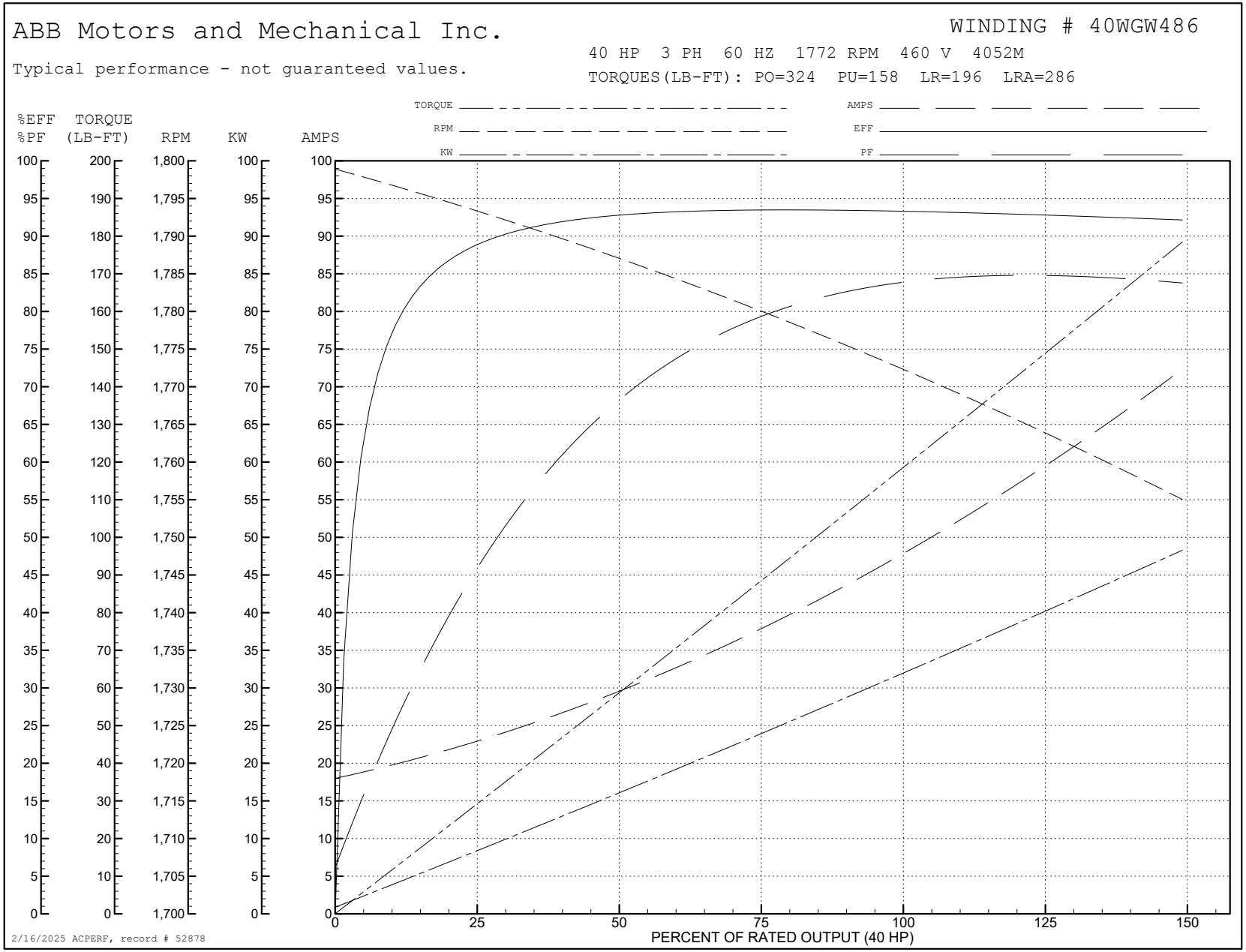


ABB Motors and Mechanical Inc.
WINDING # 40WGW486
40 HP 3 PH 60 HZ 1772 RPM 460 V 4052M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=324 PU=158 LR=196 LRA=286
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF
%PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (40 HP)
2/16/2025 ACPERF, record # 52878

AC Induction Motor Performance Data
Record # 52879
Typical performance - not guaranteed values

Winding: 40WGW486-R005	**Type:** 4052M	**Enclosure:** OPSB

Nameplate Data			
Rated Output (HP)			40//30
Volts			230/460//190/380
Full Load Amps			98/49//90/45
R.P.M.			1770//1470
Hz	60//50	**Phase**	3
NEMA Design Code	B	**KVA Code**	G
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	107 LB-FT
Start Configuration	direct on line
Breakdown Torque	314 LB-FT
Pull-up Torque	162 LB-FT
Locked-rotor Torque	201 LB-FT
Starting Current	272 A
No-load Current	18.1 A
Line-line Res. @ 25ºC	0.185 Ω
Temp. Rise @ Rated Load	36°C
Temp. Rise @ S.F. Load	43°C
Locked-rotor Power Factor	35.1
Rotor inertia	4.13 LB-FT2

Load Characteristics 380 V, 50 Hz, 30 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	45	68	78	82	84	85	83
Efficiency	87.8	92	92.8	92.5	92.1	91.5	92.3
Speed	1494	1488	1482	1475	1467	1460	1470
Line amperes	21.8	27.7	35.5	44.7	54.6	65.4	50.6

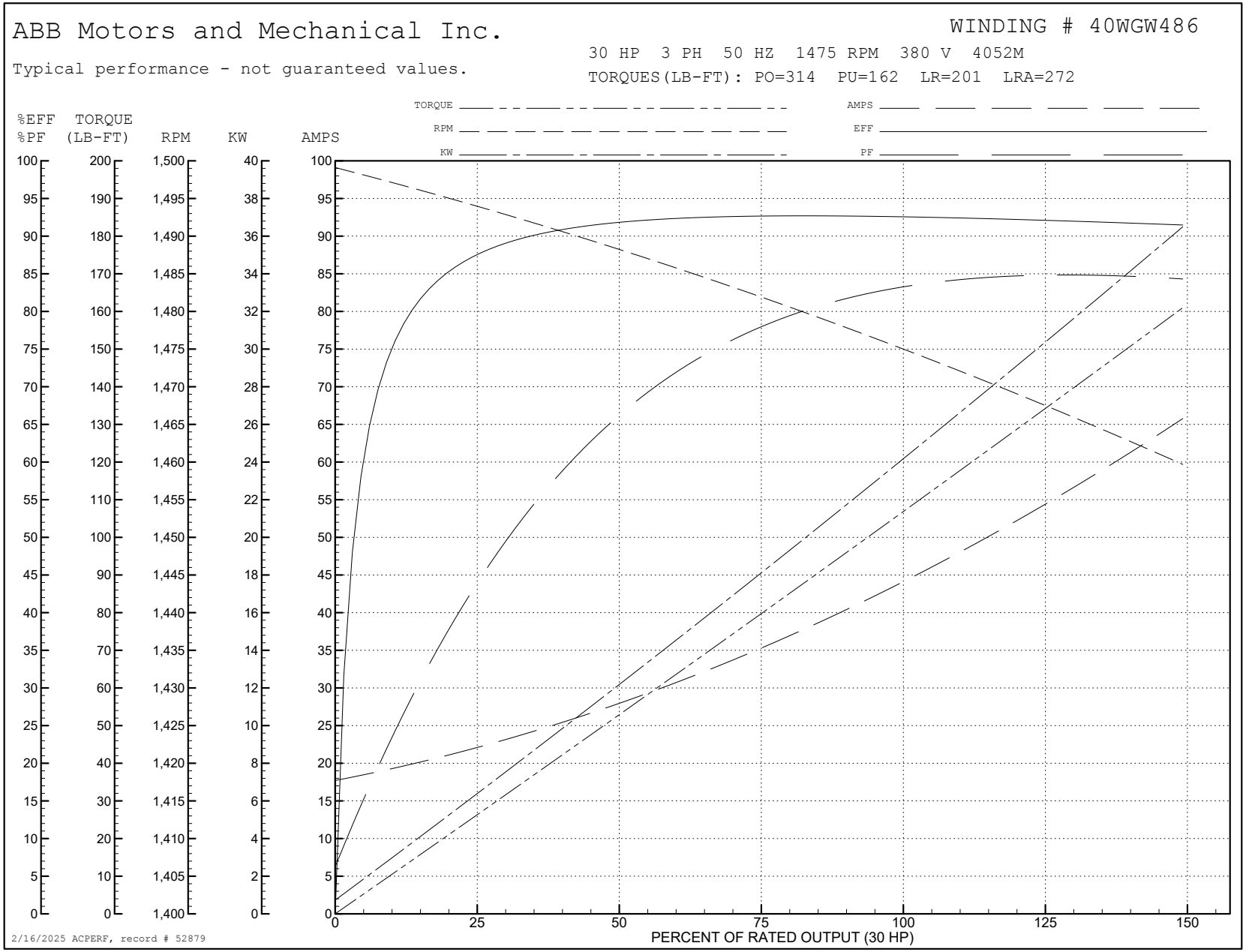
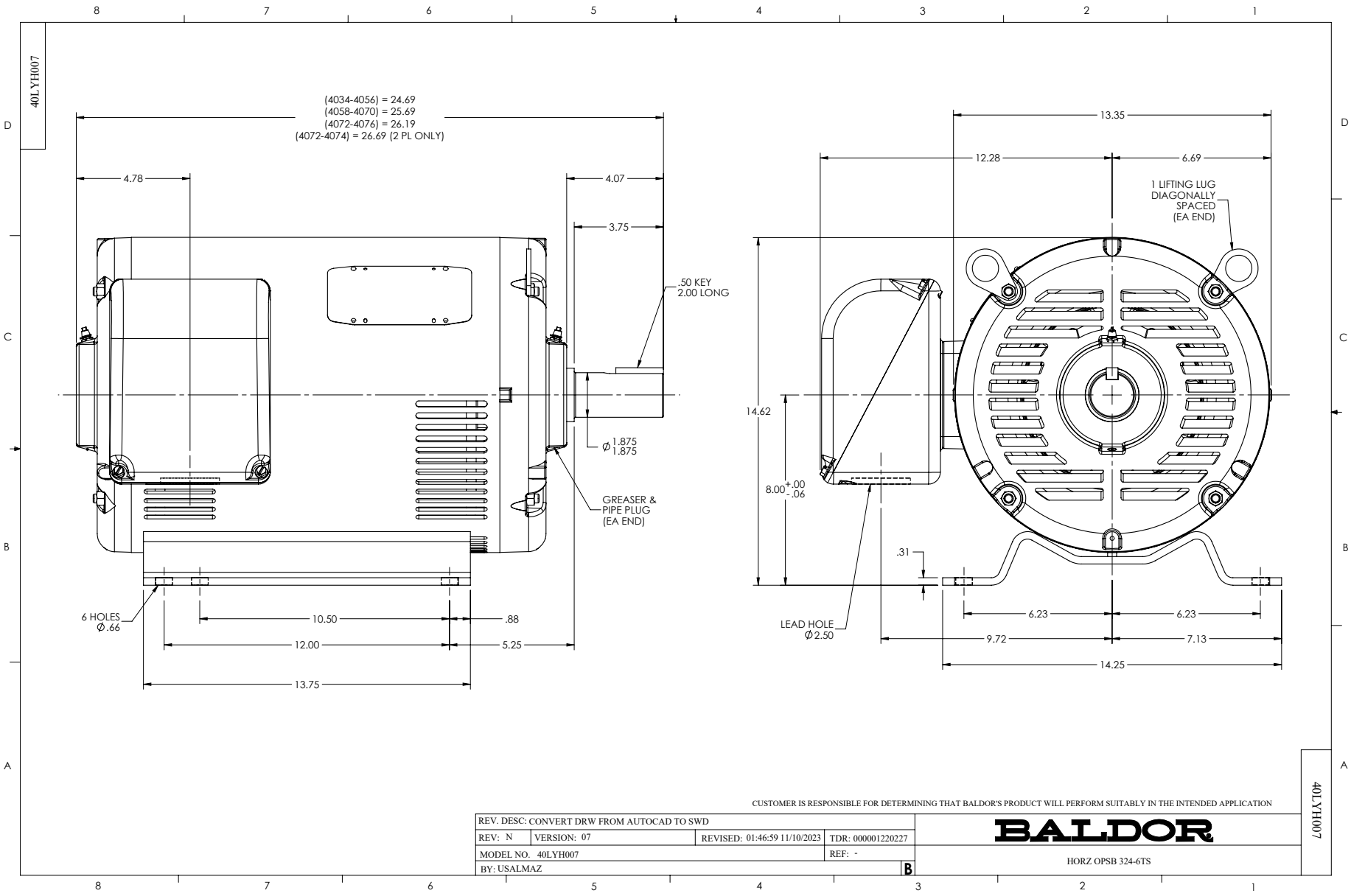
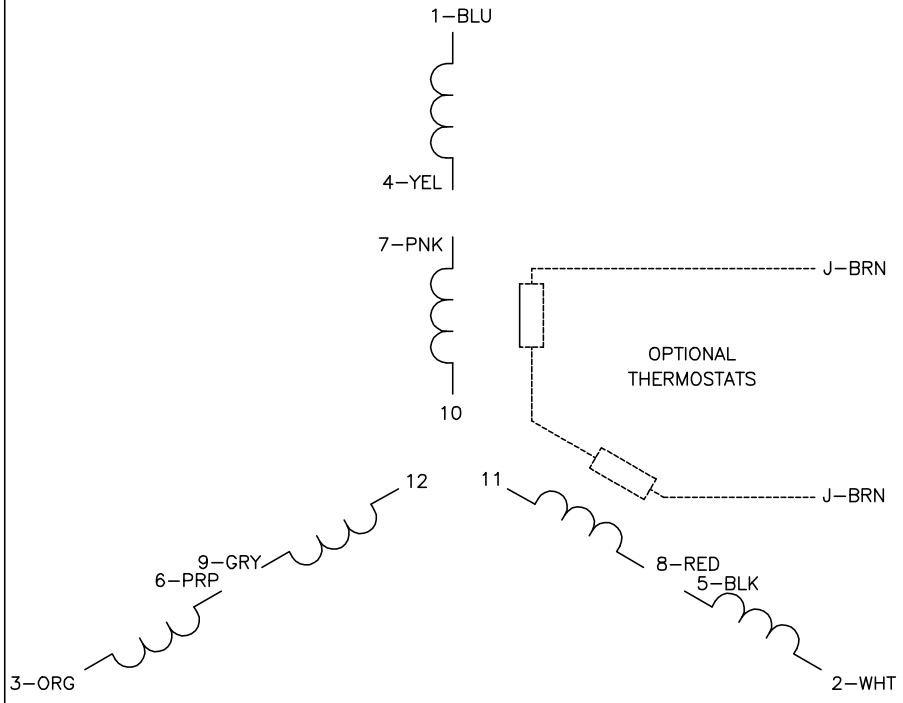
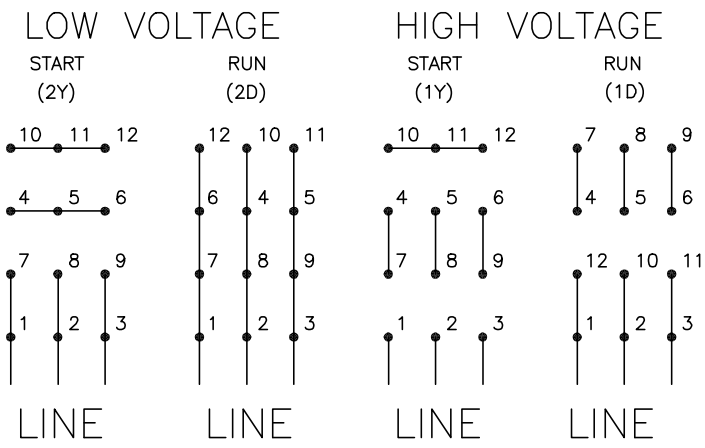


ABB Motors and Mechanical Inc.
WINDING # 40WGW486
Typical performance - not guaranteed values.
30 HP 3 PH 50 HZ 1475 RPM 380 V 4052M
TORQUES(LB-FT): PO=314 PU=162 LR=201 LRA=272
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF
%PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (30 HP)
2/16/2025 ACPERF, record # 52879


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