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# Customer information packet

## FPM2539TS-5

40HP, 1770RPM, 3PH, 60HZ, 324TS, 4052M, ODP, F1

## Specifications

Enclosure	ODP
Frame	324TS
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 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	39.000 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
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	39.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	G
Lifting Lugs	Standard Lifting Lugs

## Part detail

Revision	E
Type	AC
Mech. spec.	40H07
Base	
Status	PRD/A
Elec. spec.	40WGX355
Layout	40LYH007
Eff. date	07-24-2023
CD Diagram	CD0382
Poles	04
Leads	6#10
Proprietary	False
Created date	07-20-2016

<b>Locked Bearing Indicator</b>	No Locked Bearing
<b>Motor Lead Exit</b>	Ko Box
<b>Motor Lead Quantity/Wire Size</b>	6 @ 10 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	4052M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	24.69 IN
<b>Power Factor</b>	83
<b>Product Family</b>	Fire Pump Motor
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	Standard
<b>Pulley Shaft Indicator</b>	Standard
<b>Rodent Screen</b>	None
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	1.875 IN
<b>Shaft Extension Location</b>	Pulley End
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	1770 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Wye Start - Delta Run
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

**NP3454L**

<b>CAT.NO.</b>	FPM2539TS-5	<b>CUST P/N</b>		<b>I.P.</b>	23
<b>SPEC.</b>	40H007X355H2	<b>SER.NO.</b>		<b>FRAME</b>	324TS
<b>HZ</b>	60	<b>HP</b>	40	<b>RPM</b>	1770
<b>VOLTS</b>	575	<b>CODE</b>	G	<b>VOLTS</b>	
<b>AMPS</b>	39	<b>DES</b>	B	<b>AMPS</b>	
<b>EFF</b>	93	<b>SER.F.</b>	1.15	<b>PF</b>	83
<b>RATING</b>	40C AMB-CONT	<b>DE BRG</b>	6312	<b>GREASE</b>	POLYREX EM
<b>BLANK</b>		<b>ODE BRG</b>	6309	<b>MTR. WT.</b>	3850
		<b>CLASS</b>	F	<b>PH</b>	3
		<b>ENCL</b>	ODP	<b>CC</b>	010A
<b>HTR-VOLTS</b>		<b>HTR-AMPS</b>		<b>HTR-WATTS</b>	

**AC Induction Motor Performance Data**

Record # 58302

Typical performance - not guaranteed values

<b>Winding: 40WGX355-R001</b>		<b>Type: 4052M</b>		<b>Enclosure: OPSB</b>	
<b>Nameplate Data</b>			<b>575 V, 60 Hz: Single Voltage Motor</b>		
<b>Rated Output (HP)</b>	40	<b>Full Load Torque</b>	119 LB-FT		
<b>Volts</b>	575	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	39	<b>Breakdown Torque</b>	322 LB-FT		
<b>R.P.M.</b>	1770	<b>Pull-up Torque</b>	157 LB-FT		
<b>Hz</b>	60	<b>Phase</b>	3	<b>Locked-rotor Torque</b>	195 LB-FT
<b>NEMA Design Code</b>	B	<b>KVA Code</b>	G	<b>Starting Current</b>	228 A
<b>Service Factor (S.F.)</b>			1.15	<b>No-load Current</b>	14.7 A
<b>NEMA Nom. Eff.</b>	93	<b>Power Factor</b>	83	<b>Line-line Res. @ 25°C</b>	0.303 Ω
<b>Rating - Duty</b>	40C AMB-CONT			<b>Temp. Rise @ Rated Load</b>	42°C
<b>S.F. Amps</b>				<b>Temp. Rise @ S.F. Load</b>	50°C
				<b>Locked-rotor Power Factor</b>	32
				<b>Rotor inertia</b>	4.13 LB-FT <sup>2</sup>

**Load Characteristics 575 V, 60 Hz, 40 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	48	70	80	83	84	84	84
<b>Efficiency</b>	89	92.8	93.3	93.3	93	92.2	93.1
<b>Speed</b>	1793	1787	1780	1772	1764	1755	1767
<b>Line amperes</b>	18	23.4	30.5	38.8	47.8	57.7	44.2

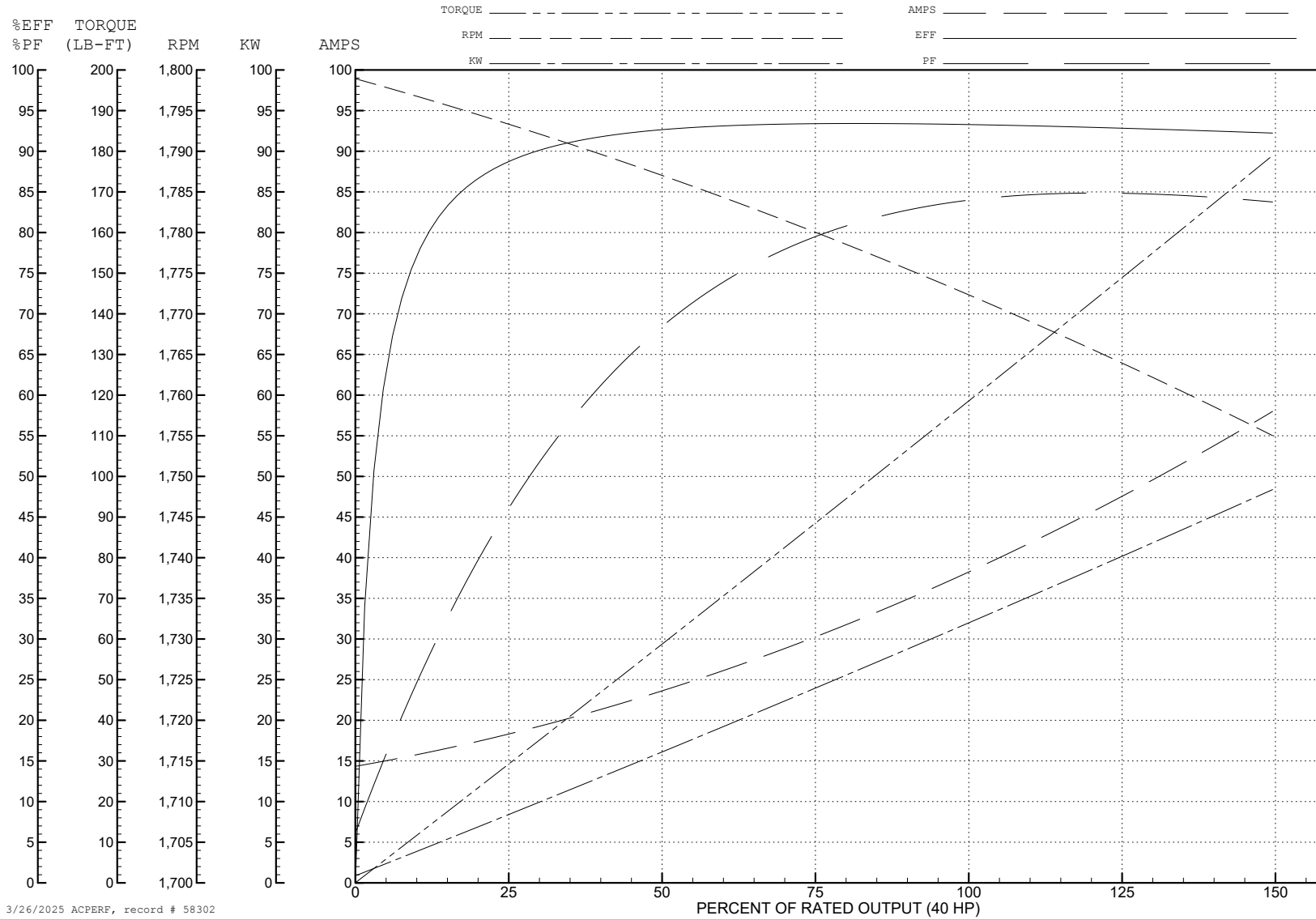
ABB Motors and Mechanical Inc.

WINDING # 40WGX355

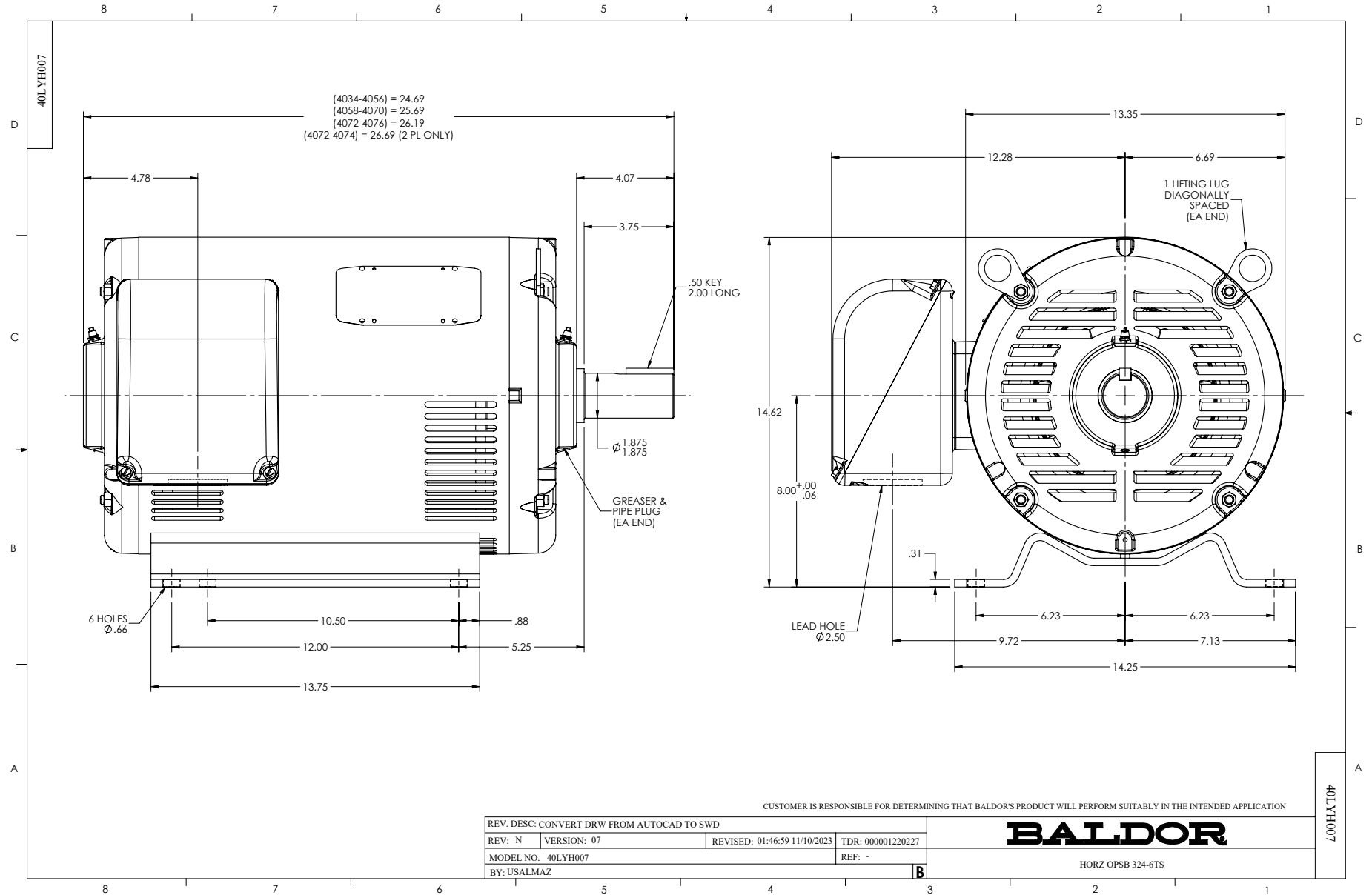
Typical performance - not guaranteed values.

40 HP 3 PH 60 HZ 1770 RPM 575 V 4052M

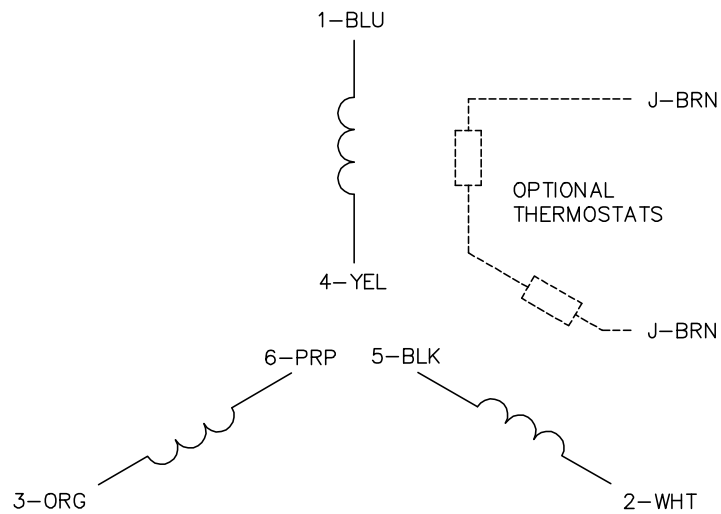
TORQUES (LB-FT): PO=322 PU=157 LR=195 LRA=228



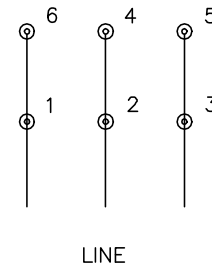
3/26/2025 ACPERF, record # 58302



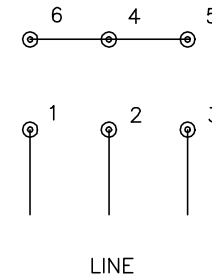
CD0382



RUN CONNECTION (1D)



START CONNECTION (1Y)



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: ENBRIRO
MTL: -	© □	

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

SH 1 of 1