

**BALDOR • RELIANCE**

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# Customer information packet

## FPM2538T

40//30HP, 3500//2910RPM, 3PH, 60//50HZ, 286T

Class -

Division - Not Applicable

## Specifications

Enclosure	ODP
Frame	286TS
Frame Material	Steel
Frequency	50.00 Hz 60.00 Hz
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	30.000 HP @ 50 HZ 40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3000 RPM @ 50 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 380.0 V @ 50 HZ 230.0 V @ 60 HZ 190.0 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	90.000 A @ 230.0 V 84.000 A @ 190.0 V 45.000 A @ 460.0 V 42.000 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated

## Part detail

Revision	G
Type	AC
Mech. spec.	39L35
Base	
Status	PRD/A
Elec. spec.	39WGX928
Layout	39LYL035
Eff. date	11-14-2023
CD Diagram	CD0104
Poles	02
Leads	12#10
Proprietary	False
Created date	03-13-2017

Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	42.0 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	3954M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	23.56 IN
Power Factor	91
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	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	2910 rpm 3500 rpm
Speed Code	Single Speed
Starting Method	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>	FPM2538T	<b>CUST P/N</b>		<b>I.P.</b>	23
<b>SPEC.</b>	39L035X928H2	<b>SER.NO.</b>		<b>FRAME</b>	286TS
<b>HZ</b>	60	<b>HP</b>	40	<b>RPM</b>	3500
				<b>HZ</b>	50
				<b>HP</b>	30
				<b>RPM</b>	2910
<b>VOLTS</b>	230/460	<b>CODE</b>	G	<b>VOLTS</b>	190/380
				<b>CODE</b>	G
<b>AMPS</b>	90/45	<b>DES</b>	B	<b>AMPS</b>	84/42
				<b>DES</b>	B
<b>EFF</b>	91.7	<b>SER.F.</b>	1.15	<b>PF</b>	91
				<b>EFF</b>	91
				<b>SER.F.</b>	1.15
				<b>PF</b>	91
<b>RATING</b>	40C AMB-CONT	<b>DE BRG</b>	6311	<b>GREASE</b>	POLYREX EM
<b>BLANK</b>		<b>ODE BRG</b>	6208	<b>MTR. WT.</b>	282
		<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 # 54883

Typical performance - not guaranteed values

<b>Winding: 39WGX928-R001</b>		<b>Type: 3954M</b>		<b>Enclosure: OPSB</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	40//30		<b>Full Load Torque</b>	60.6 LB-FT	
<b>Volts</b>	230/460//190/380		<b>Start Configuration</b>	direct on line	
<b>Full Load Amps</b>	90/45//84/42		<b>Breakdown Torque</b>	191 LB-FT	
<b>R.P.M.</b>	3500//2910		<b>Pull-up Torque</b>	71.3 LB-FT	
<b>Hz</b>	60//50	<b>Phase</b>	3	<b>Locked-rotor Torque</b>	90.5 LB-FT
<b>NEMA Design Code</b>	<b>B KVA Code</b>		G	<b>Starting Current</b>	285 A
<b>Service Factor (S.F.)</b>			1.15	<b>No-load Current</b>	10.5 A
<b>NEMA Nom. Eff.</b>	91.7	<b>Power Factor</b>	91	<b>Line-line Res. @ 25°C</b>	0.23 Ω
<b>Rating - Duty</b>	40C AMB-CONT			<b>Temp. Rise @ Rated Load</b>	63°C
<b>S.F. Amps</b>				<b>Temp. Rise @ S.F. Load</b>	79°C
				<b>Locked-rotor Power Factor</b>	27.2
				<b>Rotor inertia</b>	1.38 LB-FT <sup>2</sup>

**Load Characteristics 460 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>	68	85	90	91	91	90	91
<b>Efficiency</b>	93.2	94	93.4	91.9	90.3	88.5	91
<b>Speed</b>	3580	3557	3532	3503	3471	3436	3484
<b>Line amperes</b>	15.3	23.9	34	45.3	57.7	70.7	52.7

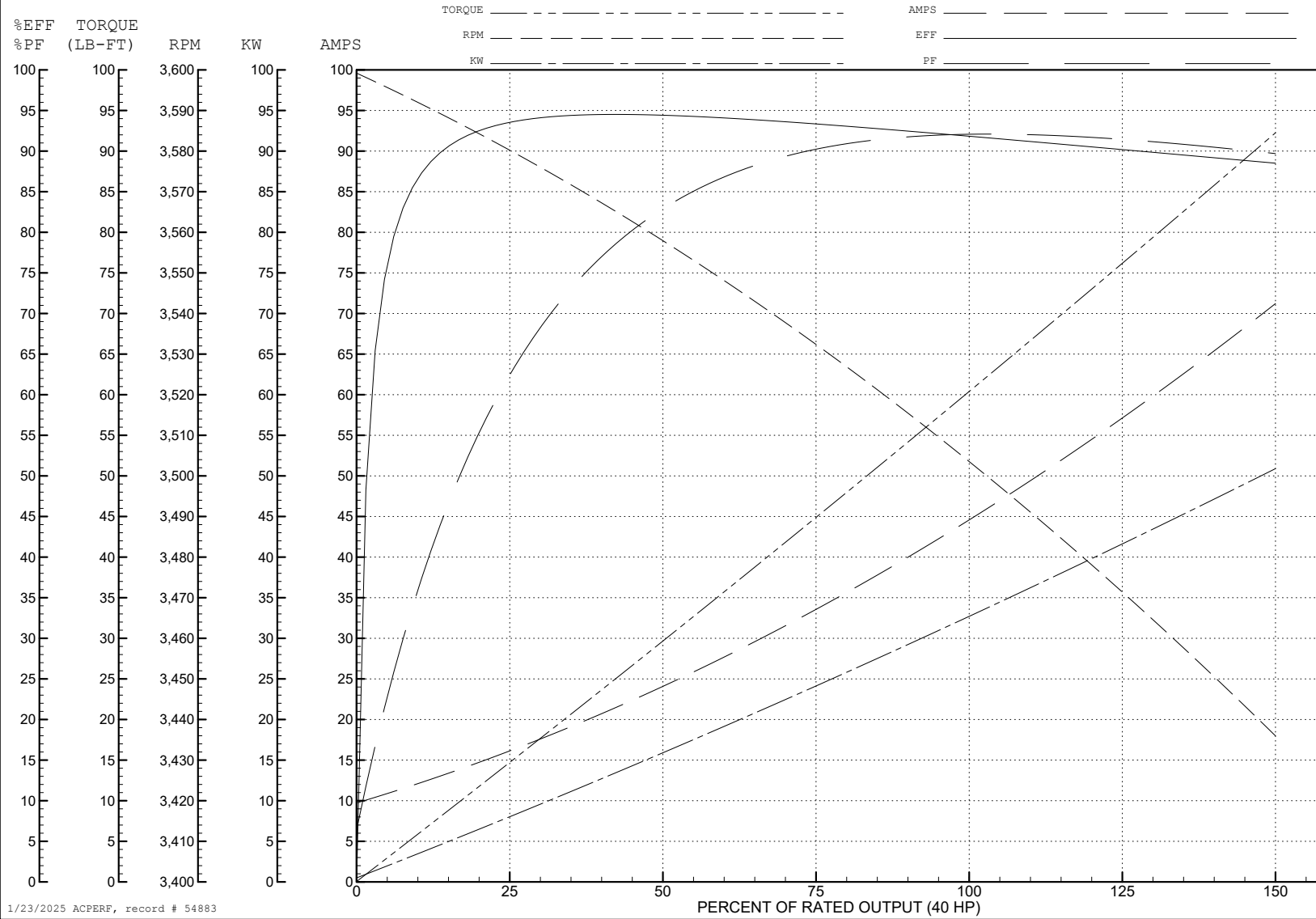
ABB Motors and Mechanical Inc.

WINDING # 39WGX928

40 HP 3 PH 60 HZ 3503 RPM 460 V 3954M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=191 PU=71.3 LR=90.5 LRA=285



1/23/2025 ACPERF, record # 54883

**AC Induction Motor Performance Data**

Record # 54884

Typical performance - not guaranteed values

<b>Winding:</b> 39WGX928-R001		<b>Type:</b> 3954M		<b>Enclosure:</b> OPSB	
<b>Nameplate Data</b>			<b>380 V, 50 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	40//30	<b>Full Load Torque</b>	54.6 LB-FT		
<b>Volts</b>	230/460//190/380	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	90/45//84/42	<b>Breakdown Torque</b>	184 LB-FT		
<b>R.P.M.</b>	3500//2910	<b>Pull-up Torque</b>	75.2 LB-FT		
<b>Hz</b>	60//50 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	95.4 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	G	<b>Starting Current</b>	278 A	
<b>Service Factor (S.F.)</b>		1.15	<b>No-load Current</b>	10.2 A	
<b>NEMA Nom. Eff.</b>	91.7 <b>Power Factor</b>	91	<b>Line-line Res. @ 25°C</b>	0.23 Ω	
<b>Rating - Duty</b>		40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	55°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	70°C	
			<b>Locked-rotor Power Factor</b>	30.6	
			<b>Rotor inertia</b>	1.38 LB-FT <sup>2</sup>	

**Load Characteristics 380 V, 50 Hz, 30 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>	66	84	89	91	91	91	91
<b>Efficiency</b>	93.5	94	93.1	91.6	89.9	87.9	90.6
<b>Speed</b>	2982	2961	2939	2913	2885	2855	2896
<b>Line amperes</b>	14.4	22	31.1	41.3	52.5	64.1	48



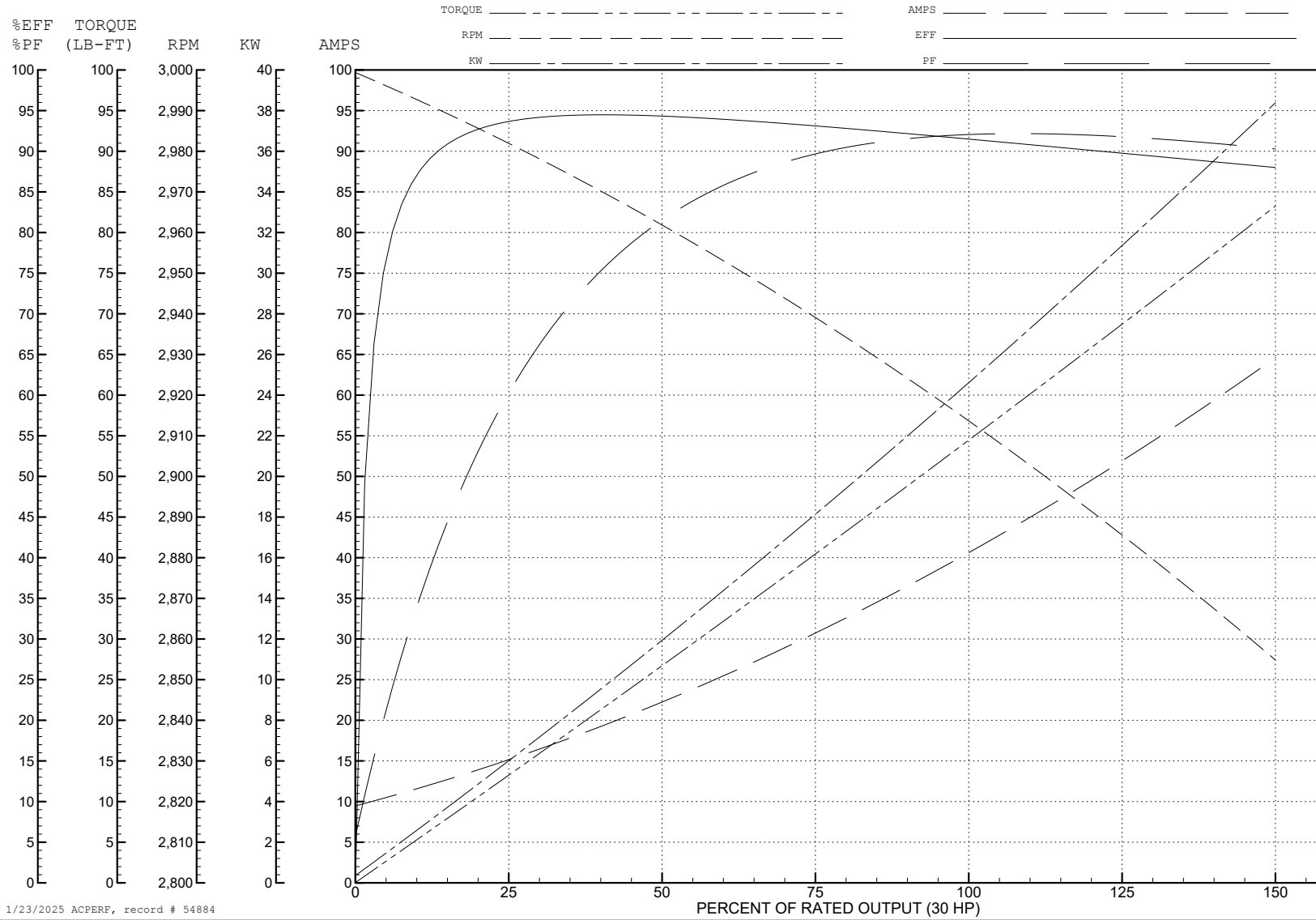
ABB Motors and Mechanical Inc.

WINDING # 39WGX928

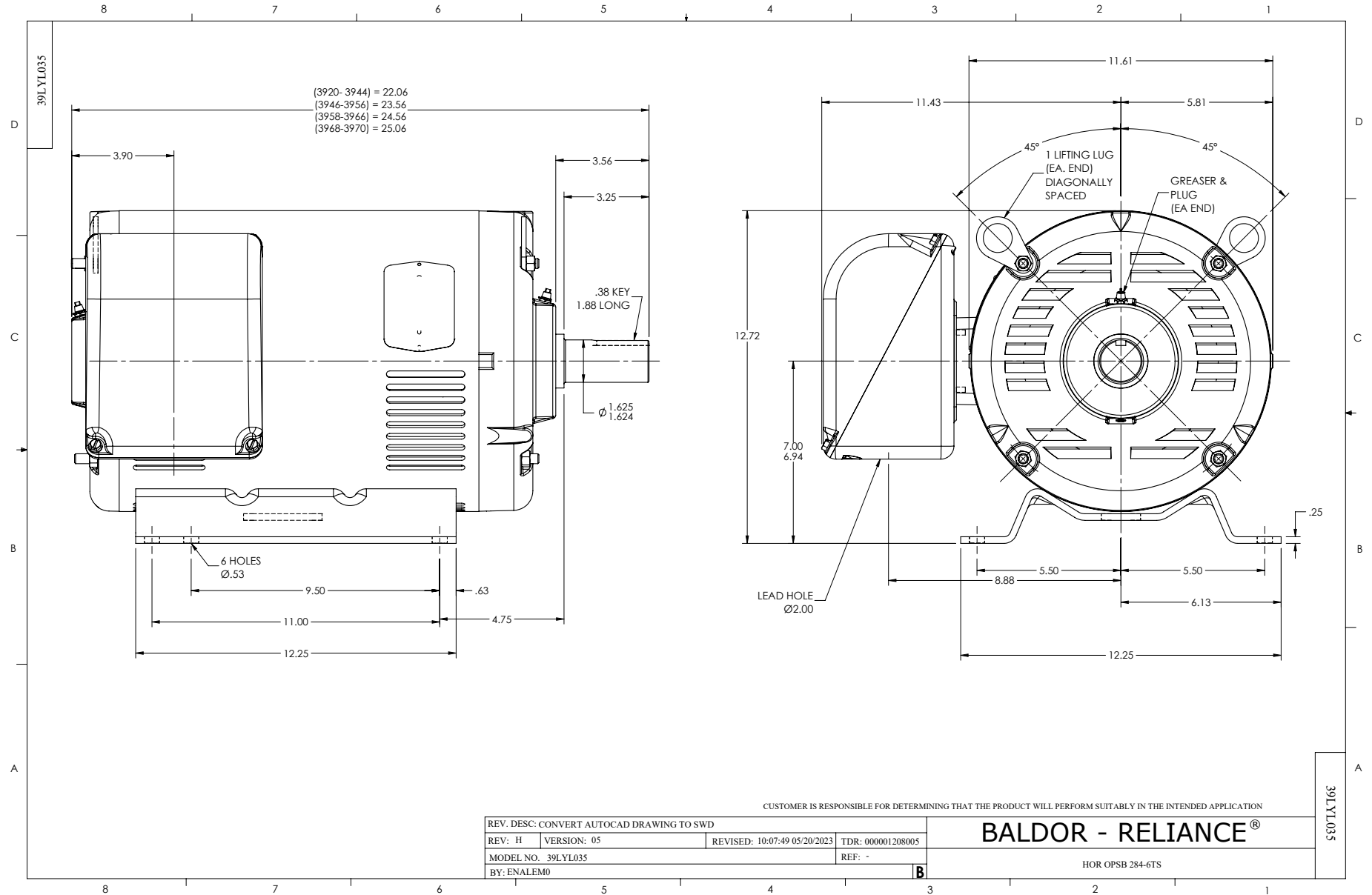
30 HP 3 PH 50 HZ 2913 RPM 380 V 3954M

Typical performance - not guaranteed values.

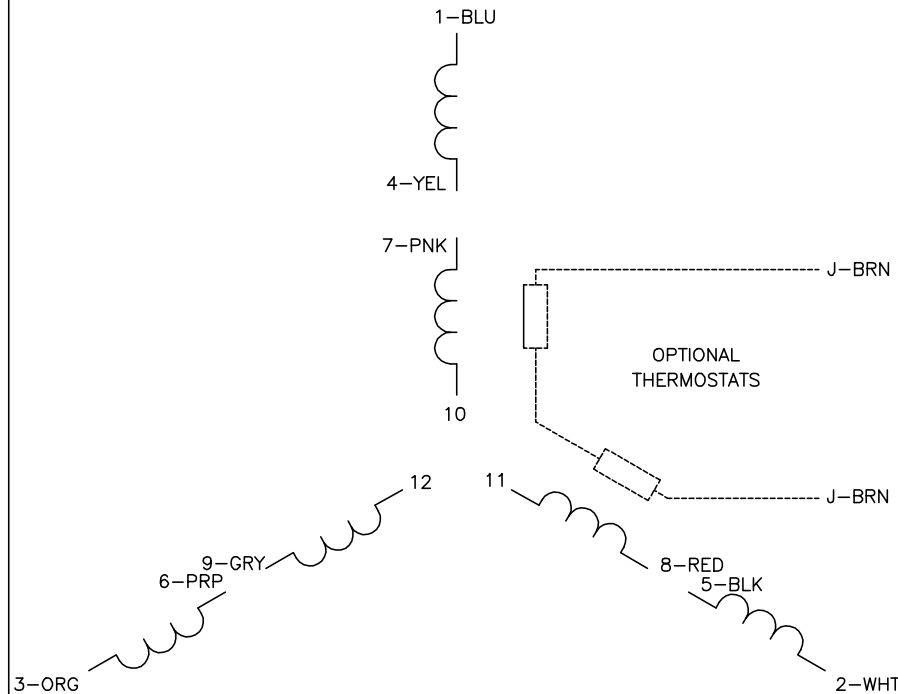
TORQUES (LB-FT): PO=184 PU=75.2 LR=95.4 LRA=278



1/23/2025 ACPERF, record # 54884

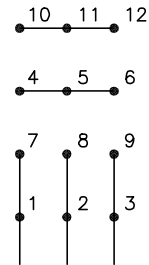


CD0104



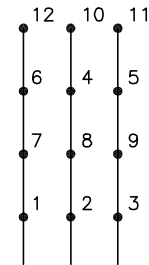
LOW VOLTAGE

START (2Y)



LINE

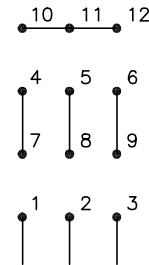
RUN (2D)



LINE

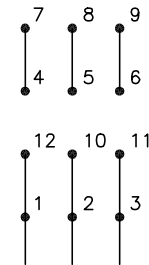
HIGH VOLTAGE

START (1Y)



LINE

RUN (1D)



LINE

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

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FILE: \AAA\00008\377	REVISED: 09:02:55 02/19/2019	BY: ENBRIRO
MTL: -	© □	

**BALDOR - RELIANCE®**

3PH, DV, 12 LEADS, Y START/D RUN

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