

BALDOR • RELIANCE

Customer information packet

VJPFPM2514T-5

20HP, 3450RPM, 3PH, 60HZ, 254JP, 3742M, OPSB, F

Class - None

Division - Not Applicable

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Specifications

Enclosure	OPSB
Frame	254JP
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	UL CSA EEV
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	18.500 A @ 575.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	90.2 %
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	18.5 a
Insulation Class	F
Inverter Code	Not Inverter

Part detail

Revision	L
Type	AC
Mech. spec.	37N805
Base	
Status	PRD/A
Elec. spec.	37WGR925
Layout	37LYN805
Eff. date	09-01-2022
CD Diagram	CD0006
Poles	02
Leads	3#12
Proprietary	False
Created date	07-21-2016

KVA Code	G
Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3742M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	27.66 IN
Power Factor	90
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Tapped & Key
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.250 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3450 rpm
Speed Code	Single Speed
Starting Method	Direct on line
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.	VJPFPM2514T-5	CUST P/N		I.P.	23
SPEC.	37N805R925H1	SER.NO.		FRAME	254JP
HZ	60	HP	20	RPM	3450
VOLTS	575	CODE	G	VOLTS	
AMPS	18.5	DES	B	AMPS	
EFF	90.2	SER.F.	1.15	PF	90
RATING	40C AMB-CONT	DE BRG	6309	GREASE	POLYREX EM
BLANK		ODE BRG	6206	MTR. WT.	145
		CLASS	F	PH	3
		ENCL	OPSB	CC	010A
HTR-VOLTS	N/A	HTR-AMPS	N/A	HTR-WATTS	N/A

AC Induction Motor Performance Data

Record # 58311

Typical performance - not guaranteed values

Winding: 37WGR925-R001		Type: 3742M		Enclosure: OPSB	
Nameplate Data			575 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)	20	Full Load Torque	30.3 LB-FT		
Volts	575	Start Configuration	direct on line		
Full Load Amps	18.5	Breakdown Torque	92.8 LB-FT		
R.P.M.	3450	Pull-up Torque	47.8 LB-FT		
Hz	60	Locked-rotor Torque	53.8 LB-FT		
NEMA Design Code	B	Starting Current	113 A		
Service Factor (S.F.)	1.15	No-load Current	5.07 A		
NEMA Nom. Eff.	90.2	Line-line Res. @ 25°C	0.745 Ω		
Rating - Duty	40C	Temp. Rise @ Rated Load	65°C		
S.F. Amps	AMB-CONT	Temp. Rise @ S.F. Load	82°C		
		Locked-rotor Power Factor	31.6		
		Rotor inertia	0.383 LB-FT ²		

Load Characteristics 575 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	62	81	87	89	90	90	90
Efficiency	91.8	92.8	92.3	90.6	88.5	86.2	89.3
Speed	3566	3530	3493	3451	3400	3344	3420
Line amperes	6.75	10.1	14	18.4	23.5	29.1	21.5

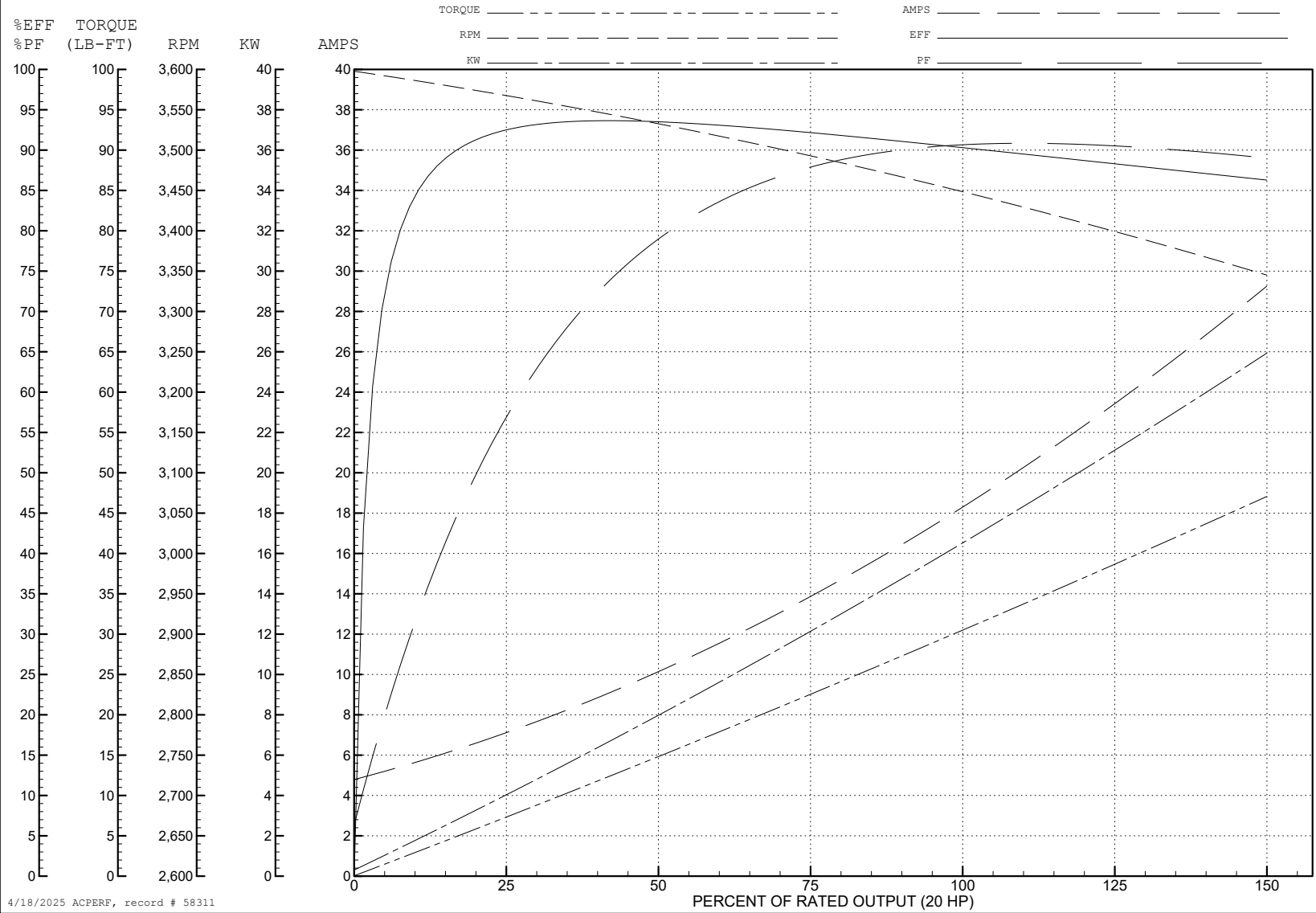
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WINDING # 37WGR925

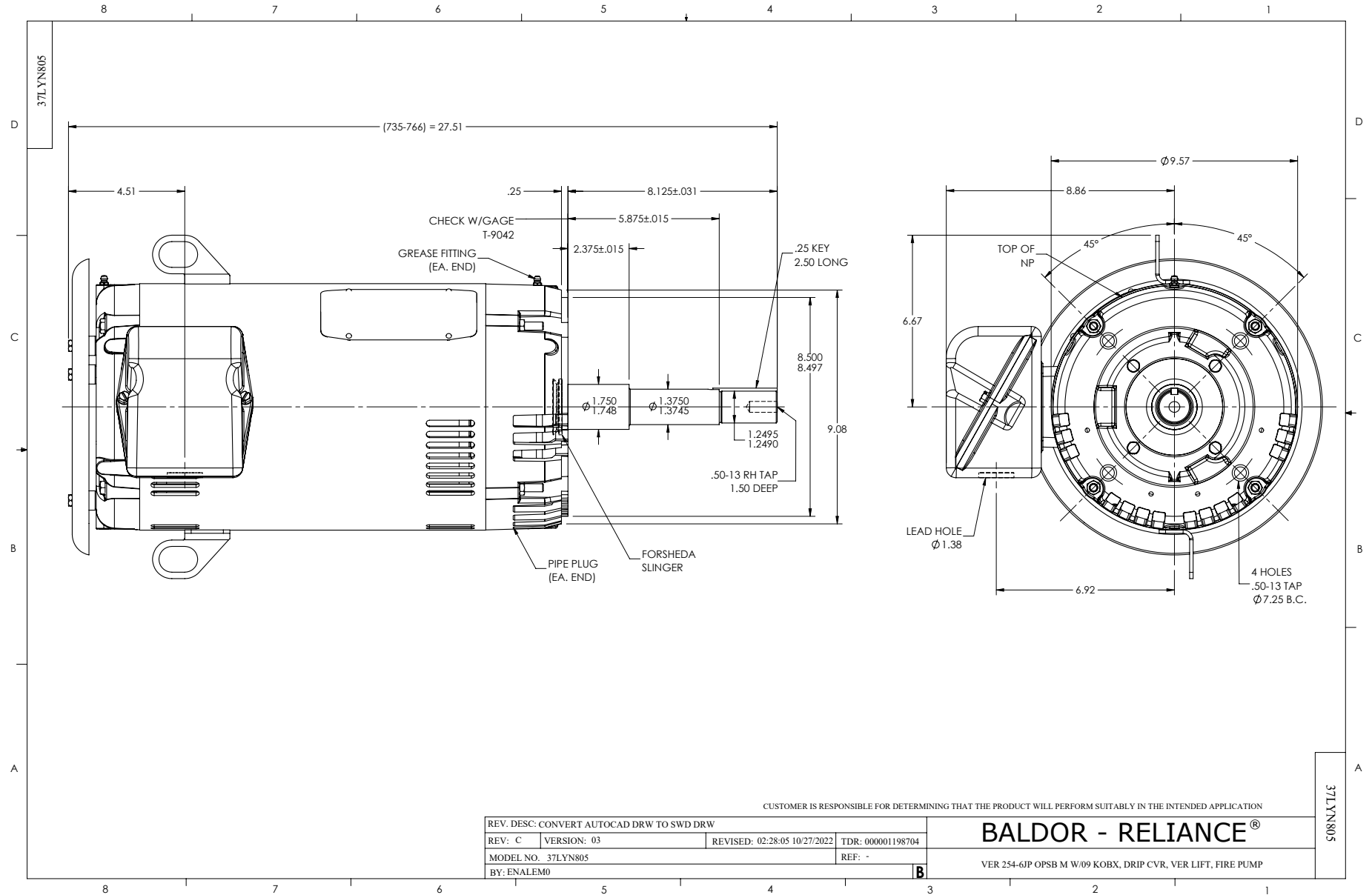
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 3450 RPM 575 V 3742M

TORQUES (LB-FT): PO=92.8 PU=47.8 LR=53.8 LRA=113



4/18/2025 ACPERF, record # 58311



CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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