BALDOR • RELIANCE

Customer information packet

FPM2531TS

25//20HP, 1760//1460RPM, 3PH, 60//50HZ, 284T
Class -
Division - Not Applicable

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Specifications

Enclosure	ODP
Frame	284TS
Frame Material	Steel
Frequency	50.00 Hz
	60.00 Hz
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 50 HZ
	25.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	380.0 V @ 50 HZ
	230.0 V @ 60 HZ
	190.0 V @ 50 HZ
	460.0 V @ 60 HZ
Agency Approvals	CSA
	CSA EEV
	UL
	UR
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	58.000 A @ 230.0 V
	58.000 A @ 190.0 V
	29.000 A @ 460.0 V
	29.000 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT

Part detail

Revision	T
Type	AC
Mech. spec.	39R082
Base	
Status	PRD/A
Elec. spec.	39WGX929
Layout	39LYR082
Eff. date	11-14-2023
CD Diagram	CD0104
Poles	04
Leads	12#10
Proprietary	False
Created date	09-15-2015

Efficiency @ 100% Load	92.4 %
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	29.0 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 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3956M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	23.56 IN
Power Factor	87
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	1460 rpm
	1760 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.	FPM2531TS			**CUST P/N**				**I.P.**	23			
SPEC.	39R082X929H2			**SER.NO.**				**FRAME**	284TS			
HZ	60	**HP**	25	**RPM**	1760	**HZ**	50	**HP**	20	**RPM**	1460	
VOLTS	230/460			**CODE**	F	**VOLTS**	190/380			**CODE**	F	
AMPS	58/29			**DES**	B	**AMPS**	58/29			**DES**	B	
EFF	92.4	**SER.F.**	1.15	**PF**	87	**EFF**	91	**SER.F.**	1.15	**PF**	87	
RATING	40C AMB-CONT			**DE BRG**	6311			**GREASE**	POLYREX EM			
BLANK				**ODE BRG**	6208			**MTR. WT.**	276			
				CLASS	F	**PH**	3					
				ENCL	ODP	**CC**	010A					
HTR-VOLTS		**HTR-AMPS**		**HTR-WATTS**								

AC Induction Motor Performance Data
Record # 54768
Typical performance - not guaranteed values

Winding: 39WGX929-R001	**Type:** 3956M	**Enclosure:** OPSB

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			25//20	**Full Load Torque**	75.1 LB-FT
Volts			230/460//190/380	**Start Configuration**	direct on line
Full Load Amps			58/29	**Breakdown Torque**	202 LB-FT
R.P.M.			1760//1460	**Pull-up Torque**	99.1 LB-FT
Hz	60//50	**Phase**	3	**Locked-rotor Torque**	120 LB-FT
NEMA Design Code	B	**KVA Code**	F	**Starting Current**	172 A
Service Factor (S.F.)			1.15	**No-load Current**	8.92 A
NEMA Nom. Eff.	92.4	**Power Factor**	87	**Line-line Res. @ 25ºC**	0.4172 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	52°C
S.F. Amps				**Temp. Rise @ S.F. Load**	66°C
				Locked-rotor Power Factor	32.1

Load Characteristics 460 V, 60 Hz, 25 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	57	77	85	87	88	87	88
Efficiency	91.8	93.7	93.4	92.5	91.1	89.4	91.7
Speed	1790.4	1780.8	1771.1	1759.6	1746.7	1731.2	1752
Line amperes	11.3	16	22.5	29.2	36.4	45.1	33.5

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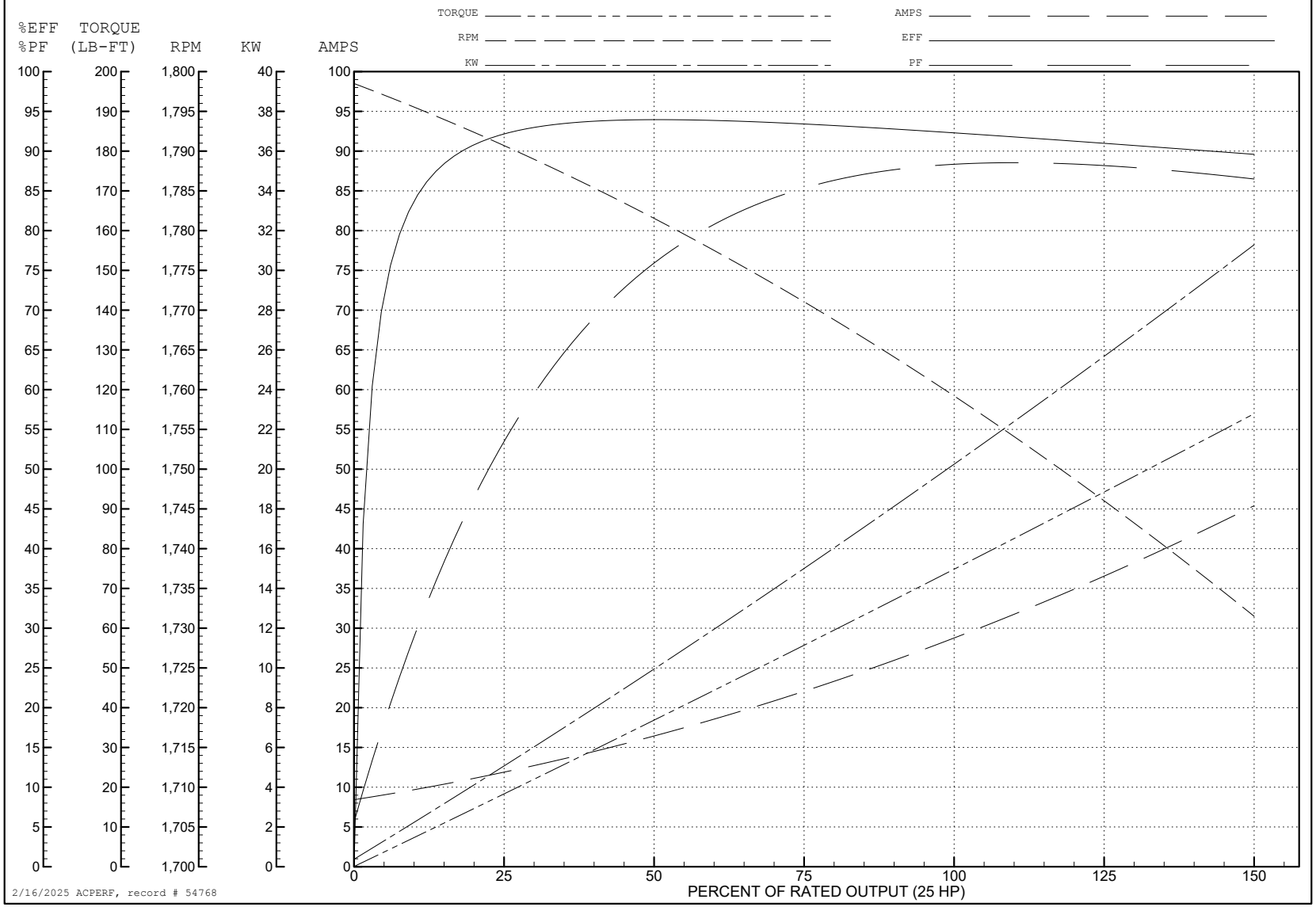
WINDING # 39WGX929

Typical performance - not guaranteed values.

25 HP 3 PH 60 HZ 1759.6 RPM 460 V 3956M

TORQUES(LB-FT): PO=202 PU=99.1 LR=120 LRA=172



AC Induction Motor Performance Data
Record # 54786
Typical performance - not guaranteed values

Winding: 39WGX929-R001	**Type:** 3956M	**Enclosure:** OPSB

Nameplate Data				**380 V, 50 Hz: High Voltage Connection**	
Rated Output (HP)			25//20	**Full Load Torque**	72.4 LB-FT
Volts			230/460//190/380	**Start Configuration**	direct on line
Full Load Amps			58/29	**Breakdown Torque**	194 LB-FT
R.P.M.			1760//1460	**Pull-up Torque**	102 LB-FT
Hz	60//50	**Phase**	3	**Locked-rotor Torque**	123 LB-FT
NEMA Design Code	B	**KVA Code**	F	**Starting Current**	167 A
Service Factor (S.F.)			1.15	**No-load Current**	8.77 A
NEMA Nom. Eff.	92.4	**Power Factor**	87	**Line-line Res. @ 25ºC**	0.392 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	51°C
S.F. Amps				**Temp. Rise @ S.F. Load**	65°C
				Locked-rotor Power Factor	35.4
				Rotor inertia	2.45 LB-FT2

Load Characteristics 380 V, 50 Hz, 20 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	57	77	85	87	88	87	88
Efficiency	90.9	93.1	92.7	91.6	90.2	88.2	90.8
Speed	1491	1482	1472	1461	1449	1434	1454
Line amperes	11.1	15.6	21.9	28.5	35.6	44.2	32.8

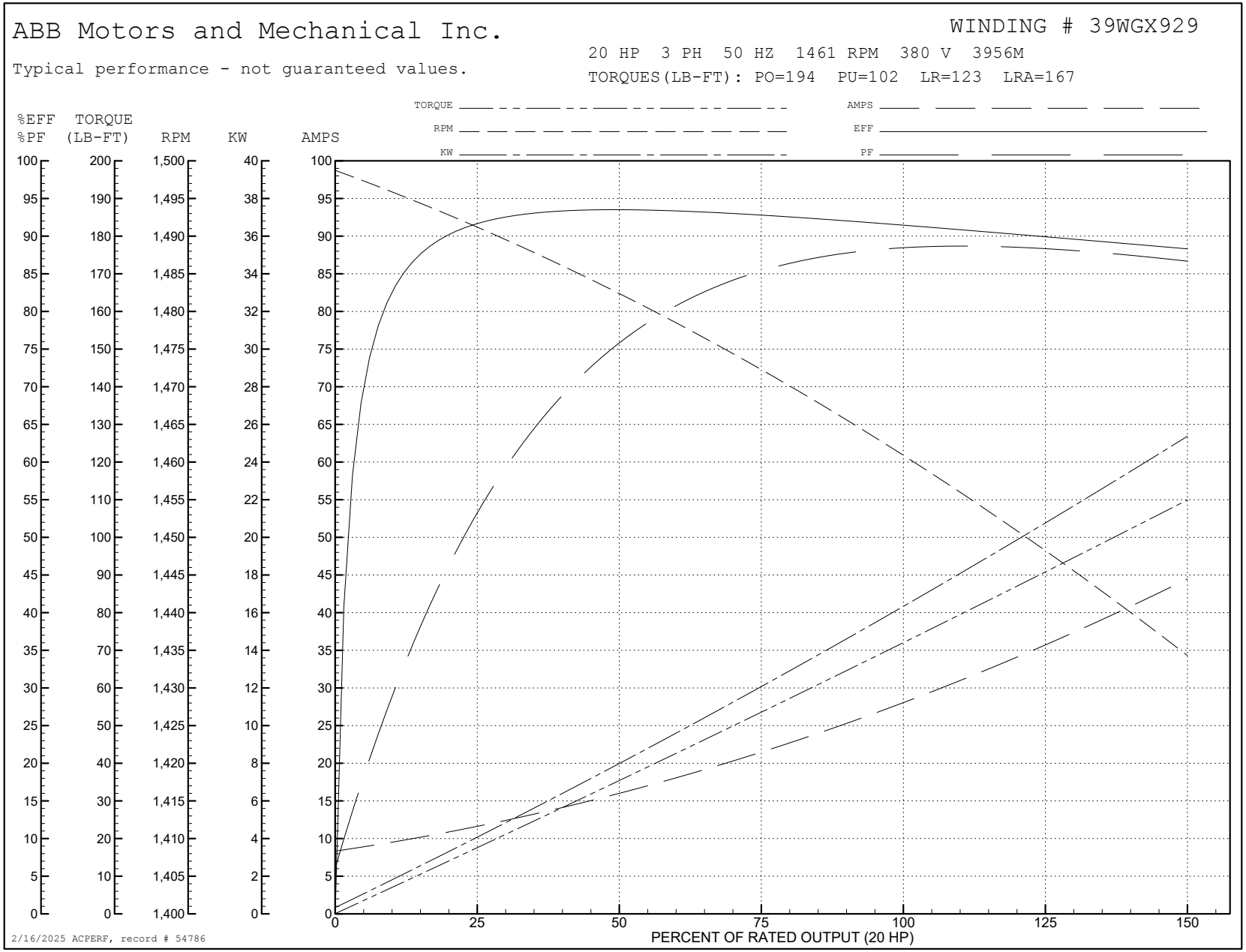
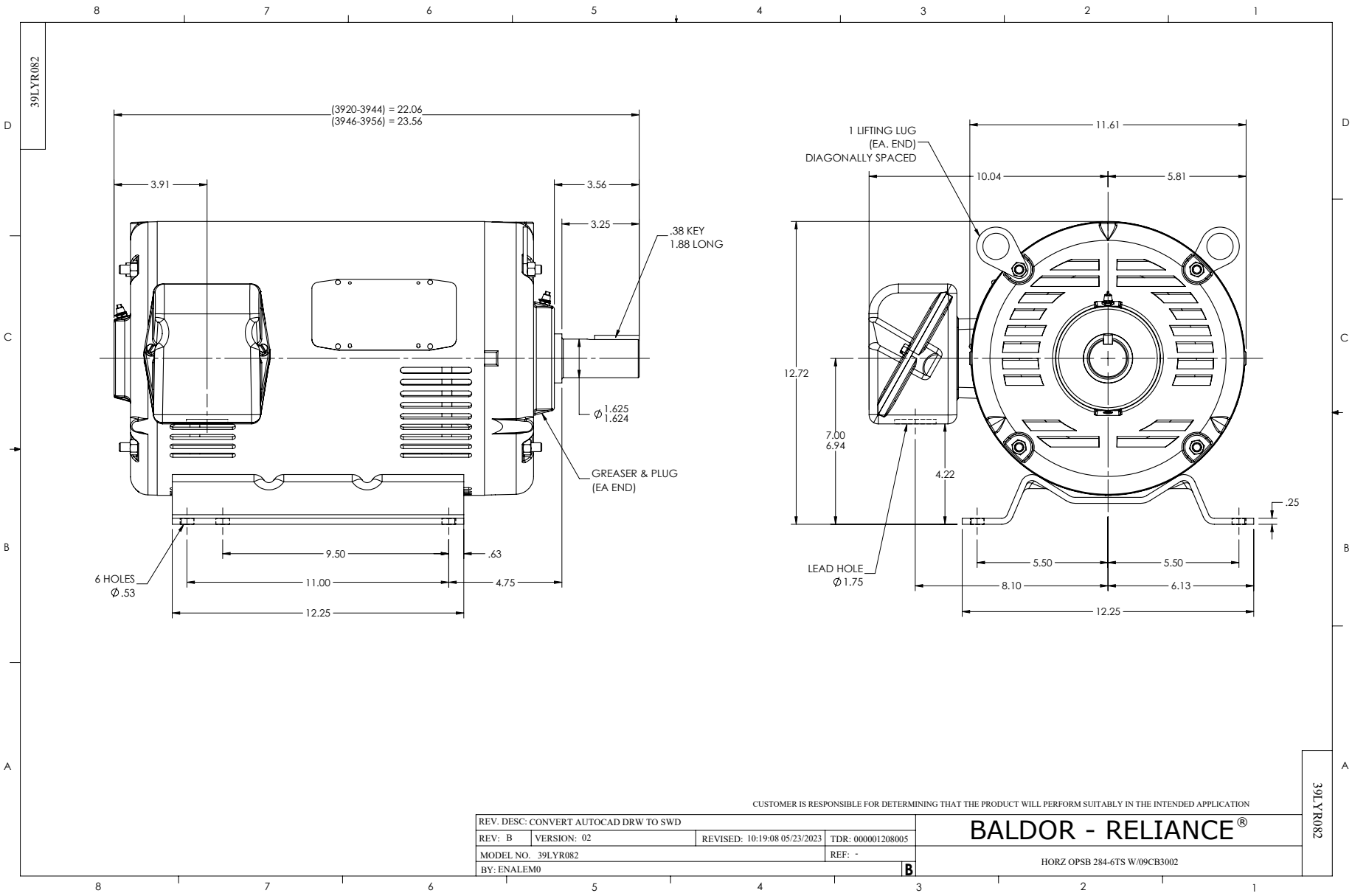
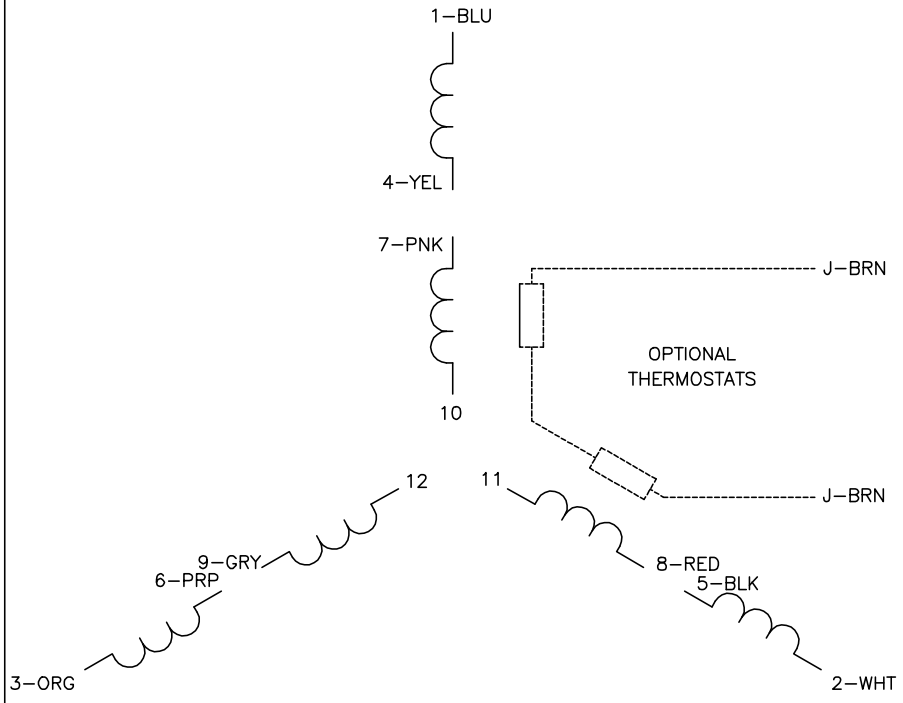
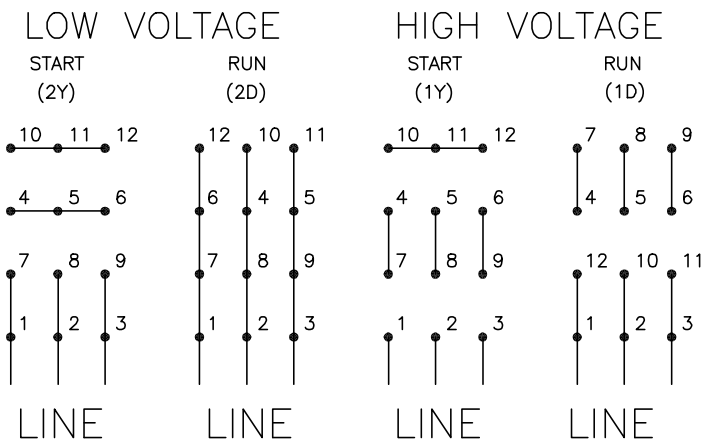


ABB Motors and Mechanical Inc.
WINDING # 39WGX929
20 HP 3 PH 50 HZ 1461 RPM 380 V 3956M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=194 PU=102 LR=123 LRA=167
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF
%PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (20 HP)
2/16/2025 ACPERF, record # 54786


39LYR082
(3920-3944) = 22.06
(3946-3956) = 23.56
3.91
3.56
3.25
.38 KEY
1.88 LONG
Ø 1.625
1.624
GREASER & PLUG
(EA END)
6 HOLES
Ø .53
9.50
.63
11.00
4.75
12.25
1 LIFTING LUG
(EA. END)
DIAGONALLY SPACED
11.61
10.04
5.81
12.72
7.00
6.94
4.22
.25
LEAD HOLE
Ø 1.75
5.50
5.50
8.10
6.13
12.25
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT AUTOCAD DRW TO SWD
REV: B
VERSION: 02
REVISED: 10:19:08 05/23/2023
TDR: 000001208005
MODEL NO. 39LYR082
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
HORZ OPSB 284-6TS W/09CB3002
39LYR082

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