ABB BALDOR RELIANCE

Customer information packet

EM7059T-I

15//20HP, 2930//3530RPM, 3PH, 50//60HZ, 256T
Class - CLI GP C,D
Division - Division I

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Specifications

Enclosure	XPFC
Frame	256T
Frame Material	Iron
Frequency	50.00 Hz
	60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	15.000 HP @ 50 HZ
	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 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
	UL
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	48.000 A @ 208.0 V
	44.000 A @ 230.0 V
	40.000 A @ 190.0 V
	22.000 A @ 460.0 V
	20.000 A @ 380.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	AD
Type	AC
Mech. spec.	09F369
Base	
Status	PRD/A
Elec. spec.	09WGZ651
Layout	09LYF369
Eff. date	02-21-2024
CD Diagram	CD0180
Poles	02
Leads	9#10
Proprietary	False
Created date	09-09-2010

Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	20.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	X0950M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	25.50 IN
Power Factor	91
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
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	Shaft Slinger

Speed	2930 rpm
	3530 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP0977XPSLEV											
NO.						**CC**	010A				
SER.						**TEMP CODE**	T3C				
SPEC.	09F369Z651G1										
CAT.NO.	EM7059T-I										
HP	20//15 NEMA MG-1 PT.5,IP55										
VOLTS	230/460//190/380										
AMPS	44/22//40/20										
RPM	3530//2930				**MOTOR WEIGHT**		409				
HERTZ	60//50	**PH**	3	**CL**	F	**DE BRG**	6309				
SER.F.	1.15	**DES**	A	**CODE**	H	**ODE BRG**	6208				
FRAME	256T	**GREASE**	POLYREX EM								
RATING	40C AMB-CONT										
				NEMA-NOM-EFF			91	**PF**	91		
	55C AMB @ 1.0 SF 60C RISE										

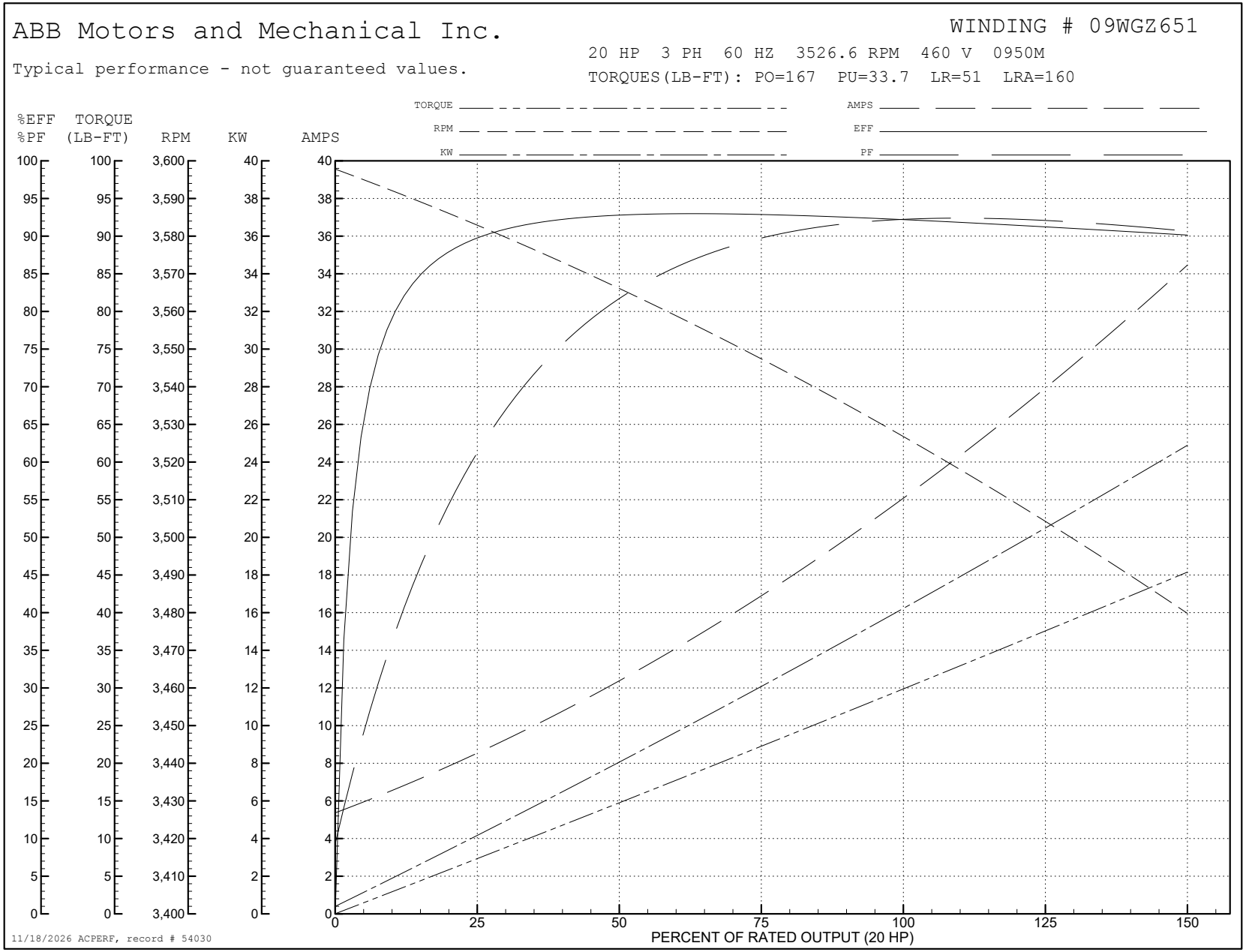
AC Induction Motor Performance Data
Record # 54030
Typical performance - not guaranteed values

Winding: 09WGZ651-R015	**Type:** 0950M	**Enclosure:** XPFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			20//15	**Full Load Torque**	30 LB-FT
Volts			230/460//190/380	**Start Configuration**	direct on line
Full Load Amps			44/22//40/20	**Breakdown Torque**	167 LB-FT
R.P.M.			3530//2930	**Pull-up Torque**	33.7 LB-FT
Hz	60//50	**Phase**	3	**Locked-rotor Torque**	51 LB-FT
NEMA Design Code	A	**KVA Code**	H	**Starting Current**	160 A
Service Factor (S.F.)			1.15	**No-load Current**	5.75 A
NEMA Nom. Eff.	91	**Power Factor**	91	**Line-line Res. @ 25ºC**	0.43337 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	58°C
S.F. Amps				**Temp. Rise @ S.F. Load**	72°C

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	65	83	89	91	91	91	91
Efficiency	89.4	92.7	92.9	92.4	91.4	90.1	91.8
Speed	3580.7	3566.7	3547.3	3526.6	3504.5	3479.4	3513
Line amperes	8.04	12.2	17.1	22.4	28.2	34.2	25.9


ABB Motors and Mechanical Inc.
WINDING # 09WGZ651
Typical performance - not guaranteed values.
20 HP 3 PH 60 HZ 3526.6 RPM 460 V 0950M
TORQUES(LB-FT): PO=167 PU=33.7 LR=51 LRA=160
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
KW
AMPS
11/18/2026 ACPERF, record # 54030
PERCENT OF RATED OUTPUT (20 HP)

AC Induction Motor Performance Data
Record # 54031
Typical performance - not guaranteed values

Winding: 09WGZ651-R015	**Type:** 0950M	**Enclosure:** XPFC

Nameplate Data			
Rated Output (HP)			20//15
Volts			230/460//190/380
Full Load Amps			44/22//40/20
R.P.M.			3530//2930
Hz	60//50	**Phase**	3
NEMA Design Code	A	**KVA Code**	H
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	91	**Power Factor**	91
Rating - Duty			40C AMB-CONT
S.F. Amps			

380 V, 50 Hz: High Voltage Connection	
Full Load Torque	27 LB-FT
Start Configuration	direct on line
Breakdown Torque	160 LB-FT
Pull-up Torque	35.6 LB-FT
Locked-rotor Torque	53.9 LB-FT
Starting Current	156 A
No-load Current	5.7 A
Line-line Res. @ 25ºC	0.41 Ω
Temp. Rise @ Rated Load	51°C
Temp. Rise @ S.F. Load	64°C
Locked-rotor Power Factor	31.3
Rotor inertia	1.28 LB-FT2

Load Characteristics 380 V, 50 Hz, 15 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	63	82	88	91	91	92	91
Efficiency	86.8	91.6	91.6	91.2	90.3	89.1	90.6
Speed	2982	2969	2952	2933	2914	2891	2922
Line amperes	7.7	11.5	15.8	20.6	25.9	31.3	23.8

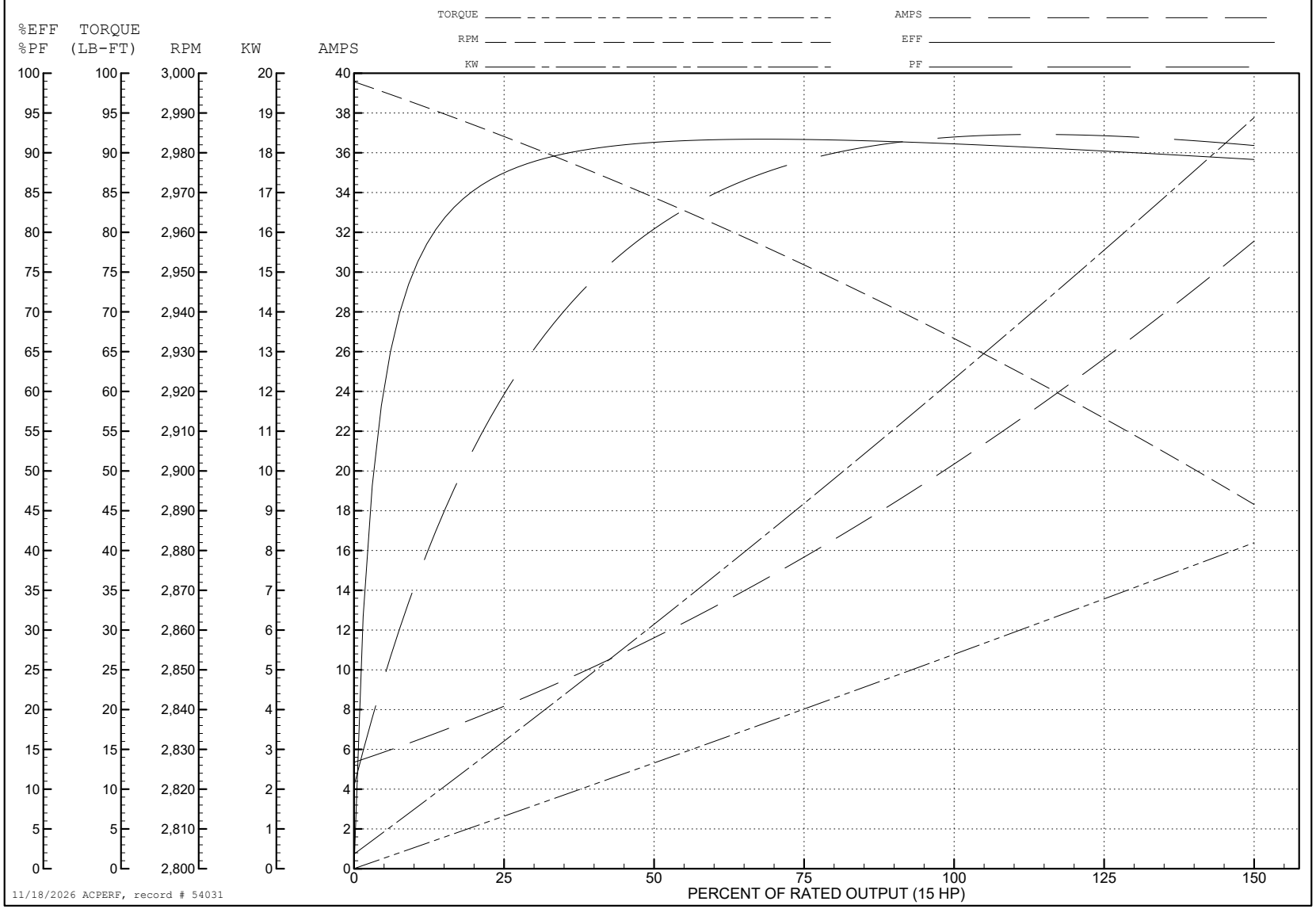
ABB Motors and Mechanical Inc.

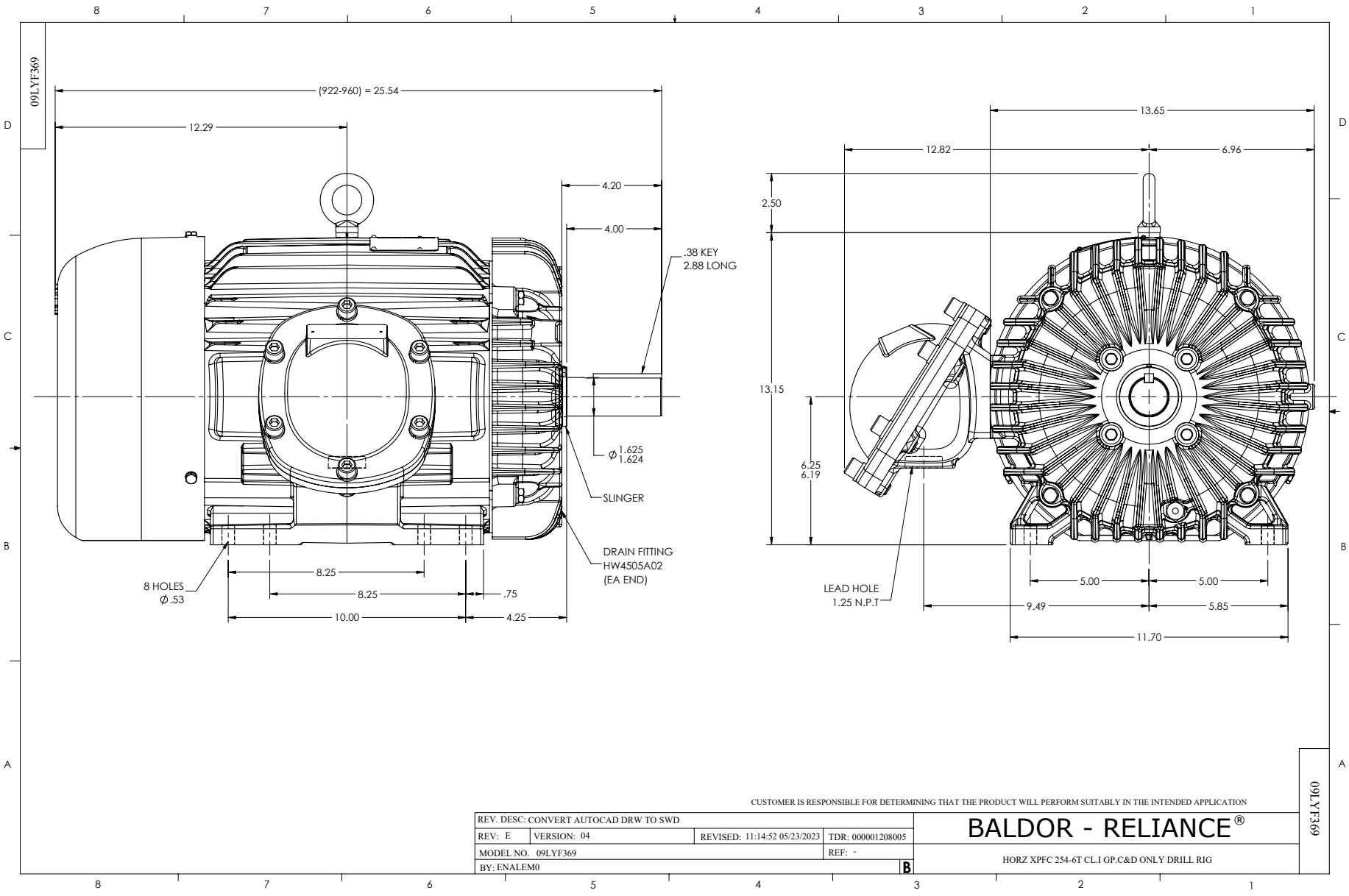
WINDING # 09WGZ651

15 HP 3 PH 50 HZ 2933 RPM 380 V 0950M

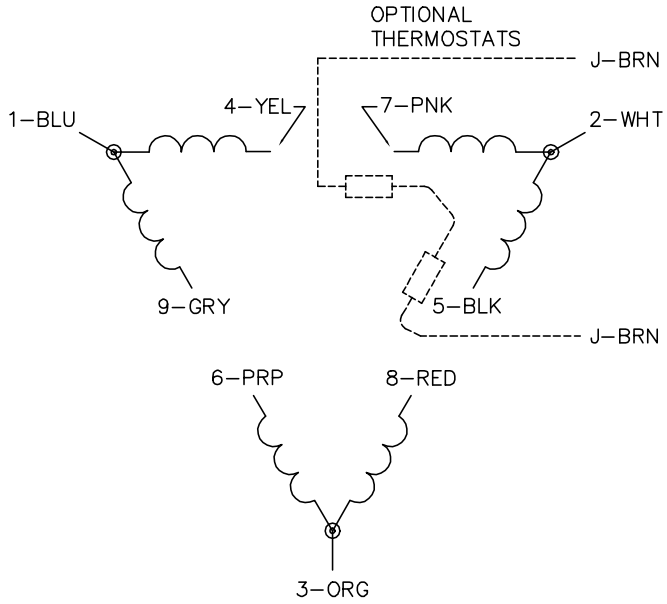
Typical performance - not guaranteed values.

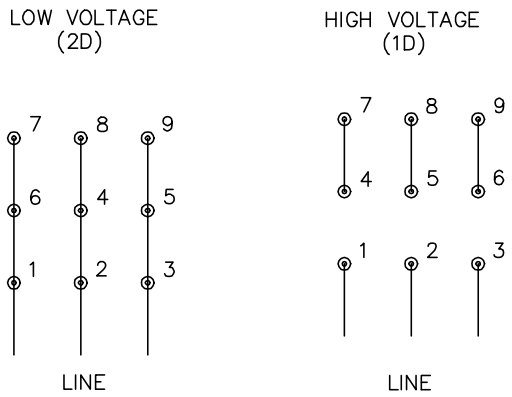
TORQUES(LB-FT): PO=160 PU=35.6 LR=53.9 LRA=156




09LYF369
(922-960) = 25.54
12.29
4.20
4.00
.38 KEY
2.88 LONG
Ø 1.625
1.624
SLINGER
DRAIN FITTING
HW4505A02
(EA END)
8 HOLES
Ø .53
8.25
8.25
.75
10.00
4.25
13.65
12.82
6.96
2.50
13.15
6.25
6.19
LEAD HOLE
1.25 N.P.T
5.00
5.00
9.49
5.85
11.70
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT AUTOCAD DRW TO SWD
REV: E
VERSION: 04
REVISED: 11:14:52 05/23/2023
TDR: 000001208005
MODEL NO. 09LYF369
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
HORZ XPFC 254-6T CL.I GP.C&D ONLY DRILL RIG
09LYF369

CD0180





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.

CD0180

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10:25:29 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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