

ABB BALDOR RELIANCE III

Customer information packet

M1710T

10/5HP, 1760/875RPM, 3PH, 60HZ, 254T, 0940M

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	254T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	5.000 HP @ 60 HZ 10.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	UR CSA
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	13.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
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	11.3 a
Insulation Class	F
Inverter Code	Not Inverter

Part Detail

Revision	AK
Type	AC
Mech. spec.	09C101
Base	
Status	PRD/A
Elec. spec.	09WGZ144
Layout	09LYC101
Eff. date	10-07-2024
CD Diagram	CD0011
Poles	04/08
Leads	6#12
Proprietary	False
Created date	11-18-2005

KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0940M
Mounting Arrangement	F1
Number of Poles	4
	8
Overall Length	23.28 IN
Product Family	General Purpose
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	Shaft Slinger
Speed	1760 rpm
	875 rpm
Speed Code	2S-1W-CT
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

NP1256L											
CAT.NO.	M1710T										
SPEC.	09C101Z144										
HP	10/5										
VOLTS	460										
AMP	13/11.3										
RPM	1760/875										
FRAME	254T		HZ	60				PH	3		
SER.F.	1.15	CODE	H	DES	B	CLASS	F				
NEMA-NOM-EFF		PF									
RATING	40C AMB-CONT										
CC											
DE	6309		ODE	6208							
ENCL	TEFC	SN									

Parts List

Part number	Description	Quantity
SA135810	SA 09C101Z144	1.000 ea
RA125536	RA 09C101Z144	1.000 ea
HW1002A63	WASHER, 5/8 HI-COLLAR SPRCKWASHER	1.000 ea
09GS1000	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 ea
09CB3003	CB W/1.75" DIA LD HL - 37, 39, 307 & 309	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
09EP1101A136	PU ENDPLATE, MACH	1.000 ea
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 ea
HW4500A05	1669B ALEM/UNIV860 GR FTG X	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
09EP1100A208	ENDPLATE, MACH	1.000 ea
HA3400A33	STUD- 3/8-16 X 4.96 HEX	4.000 ea
HW4600B44	V-RING SLINGER 1.500 X 1.810 X .28 VITON	1.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 ea
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
09FH4000SP	309 FH - BLACK PRIMER	1.000 ea
09CB3501SP	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 ea
09GS1013SP	GS FOR 09CB3501, 12CB1500 & 12CB1503 LID	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LD7020D06	LEAD SET, 12AWG, 6 LEAD, 20" LONG LEADS	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea

HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4066A01	PUSH IN T-DRAIN FITTING (BLACK)	1.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.070 ga
HA4066A01	PUSH IN T-DRAIN FITTING (BLACK)	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.080 lb
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
09FN3001A01SP	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0032	CONNECTION LABEL	1.000 ea
NP1256L	ALUM UL CC INDUSTRIAL MOTOR A60	1.000 ea
09PA1000	PACKAGING GROUP COMBINED PRINT	1.000 ea
PE-0000003	ZRTG PE ASSEMBLY	1.000 ea
FE-0000013	ZRTG FE ASSEMBLY	1.000 ea

Accessories

Part number	Description	Multiplier
09-1309	C FACE KIT	A8

AC Induction Motor Performance Data

Record # 36440

Typical performance - not guaranteed values

Winding: 09WGZ144-R002			Type: 0940M		Enclosure: TEFC		
Nameplate Data				460 V, 60 Hz: High Speed Connection			
Rated Output (HP)		10/5		Full Load Torque		29.3 LB-FT	
Volts		460		Start Configuration		direct on line	
Full Load Amps		13/11.3		Breakdown Torque		113 LB-FT	
R.P.M.		1760/875		Pull-up Torque		33 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		67.5 LB-FT	
NEMA Design Code		B	KVA Code	H		Starting Current	80.8 A
Service Factor (S.F.)		1.15		No-load Current		5.72 A	
NEMA Nom. Eff.		0	Power Factor	0		Line-line Res. @ 25°C	1.57 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		45°C	
S.F. Amps				Temp. Rise @ S.F. Load		54°C	

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	66	77	82	84	85	83
Efficiency	78.8	86.2	87.9	87.9	87.1	85.7	87.4
Speed	1793	1787	1781	1774	1766	1756	1769
Line amperes	6.46	8.15	10.5	12.9	16	19.3	14.8

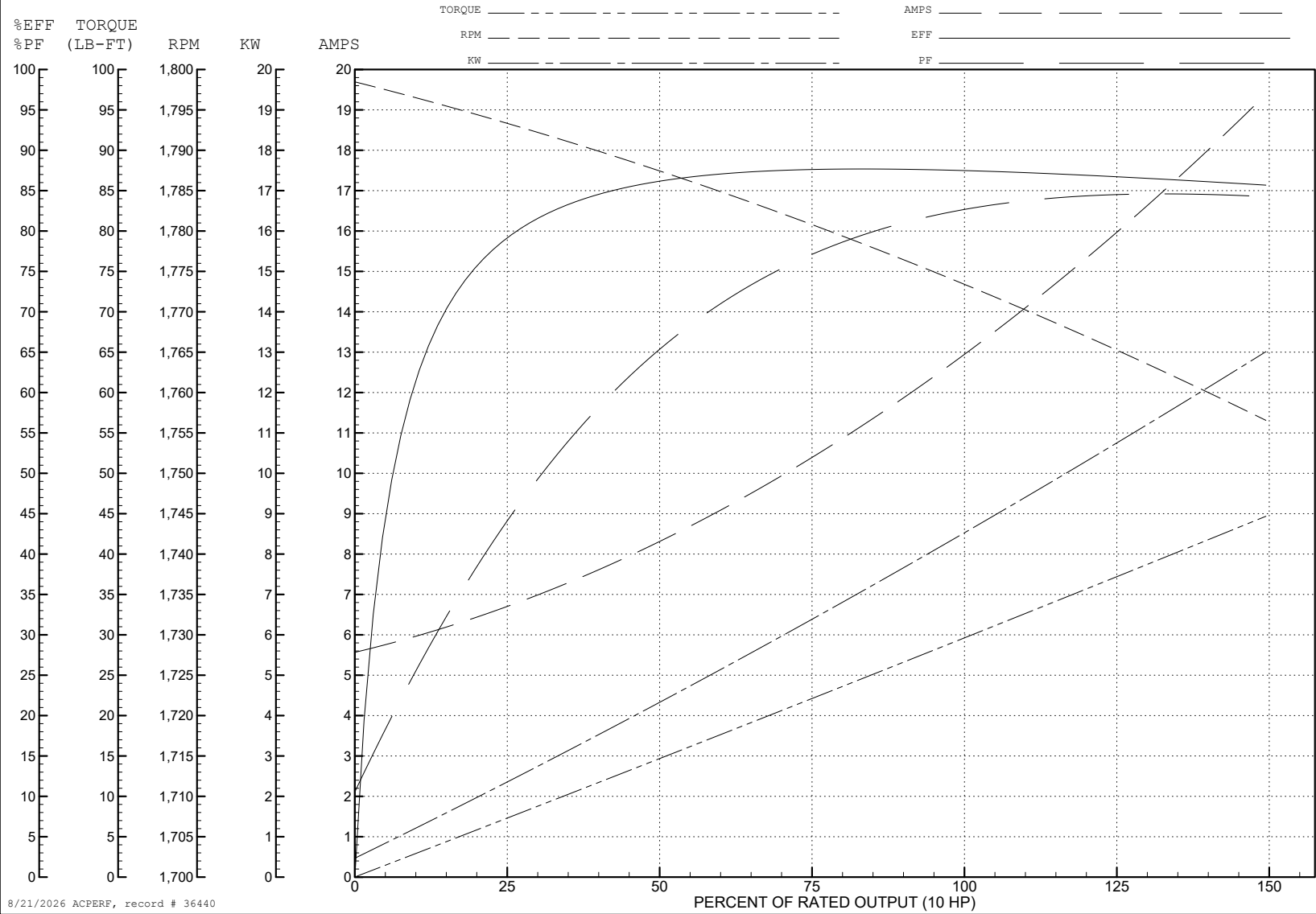
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WINDING # 09WGZ144

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 1774 RPM 460 V 0940M

TORQUES (LB-FT): PO=113 PU=33 LR=67.5 LRA=80.8



AC Induction Motor Performance Data

Record # 36441

Typical performance - not guaranteed values

Winding: 09WGZ144-R002			Type: 0940M		Enclosure: TEFC			
Nameplate Data			460 V, 60 Hz: Low Speed Connection					
Rated Output (HP)		10/5	Full Load Torque		29.7 LB-FT			
Volts		460	Start Configuration		direct on line			
Full Load Amps		13/11.3	Breakdown Torque		96.3 LB-FT			
R.P.M.		1760/875	Pull-up Torque		33.3 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		58.7 LB-FT		
NEMA Design Code		B	KVA Code	H	Starting Current		40.9 A	
Service Factor (S.F.)		1.15		No-load Current		8.67 A		
NEMA Nom. Eff.		0	Power Factor		0	Line-line Res. @ 25°C		2.06 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		55°C		
S.F. Amps				Temp. Rise @ S.F. Load		64°C		

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	20	32	43	50	56	60	54
Efficiency	64.6	76.7	80.8	82.1	82	80.8	82
Speed	896	892	888	883	878	870	880
Line amperes	8.82	9.37	10.2	11.3	12.7	14.6	12.1

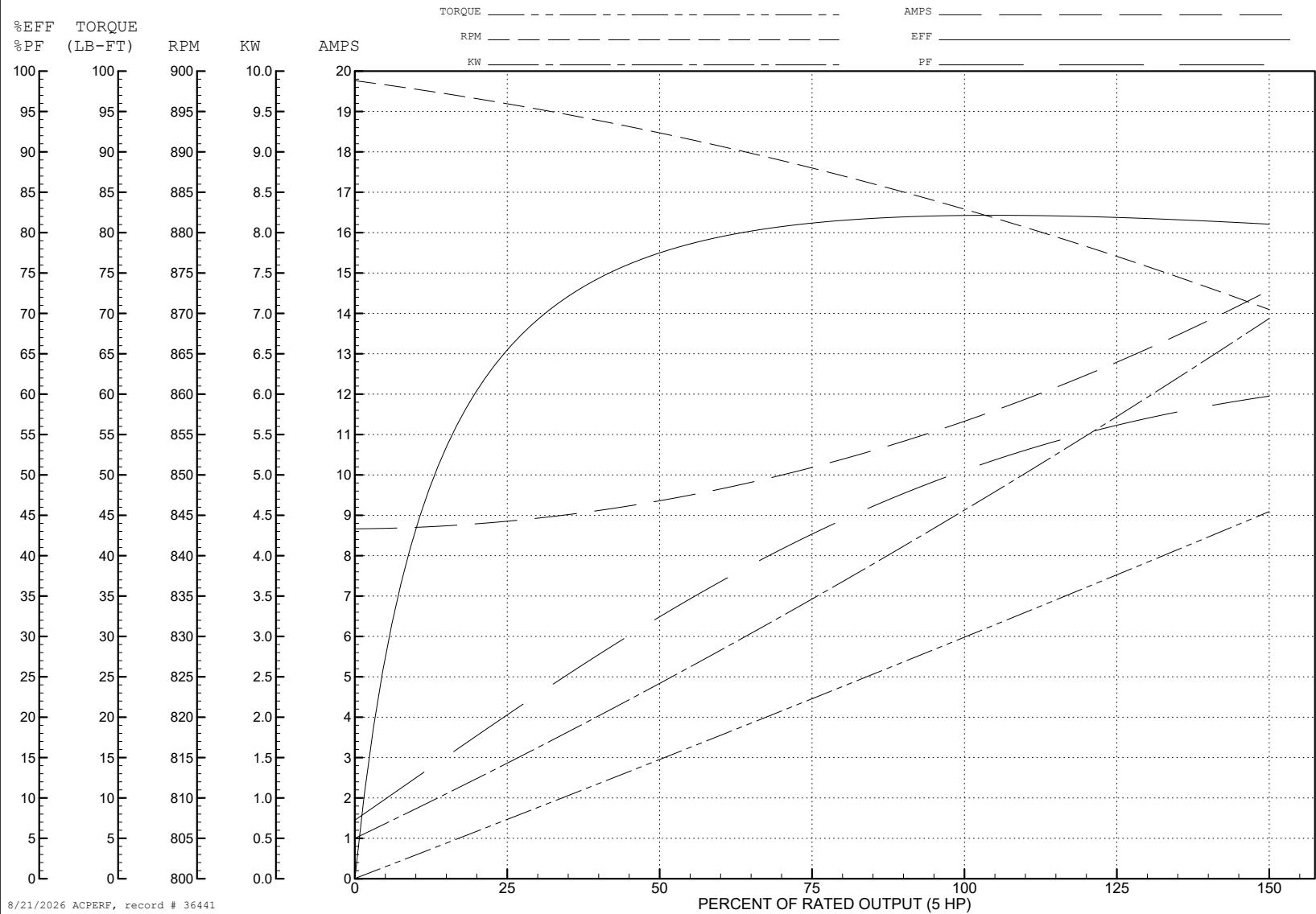
ABB Motors and Mechanical Inc.

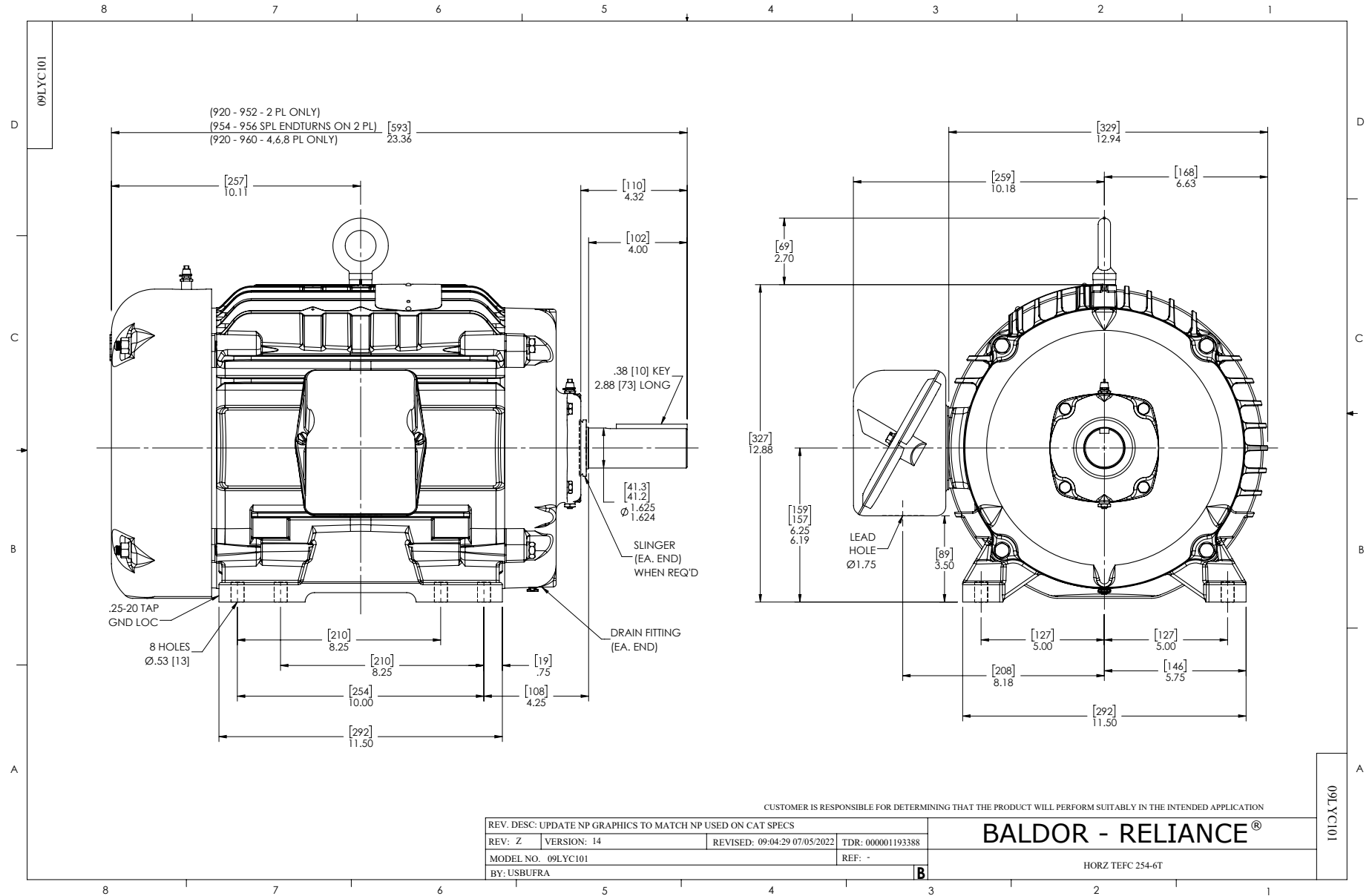
WINDING # 09WGZ144

Typical performance - not guaranteed values.

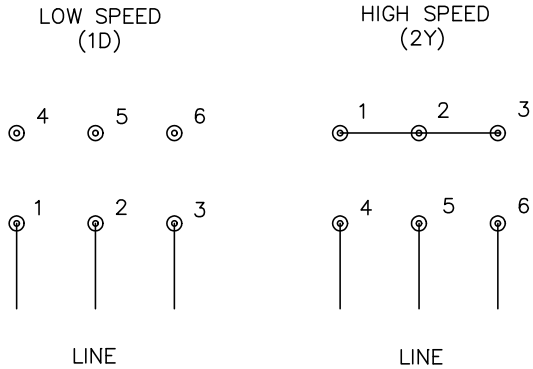
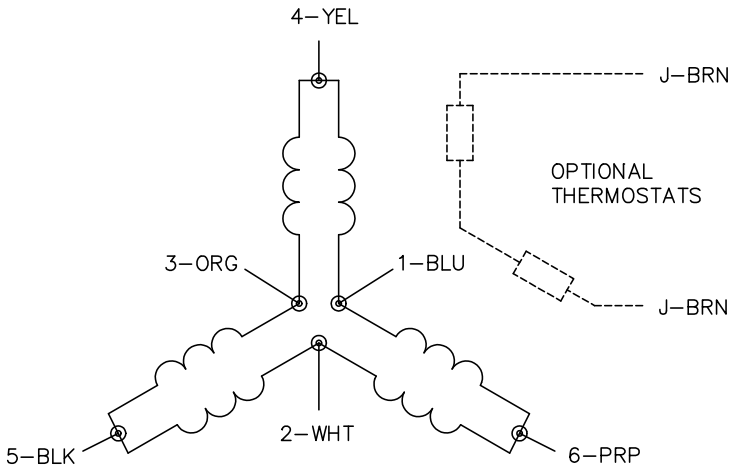
5 HP 3 PH 60 HZ 883 RPM 460 V 0940M

TORQUES (LB-FT): PO=96.3 PU=33.3 LR=58.7 LRA=40.9





CD0011



- 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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: F	BY: JLP	REVISED: 01/21/99 5:04	TDR: 0171435
110000		FILE: DWG\142.wg	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, SV, 6 LEADS, 2-SPEED 1-WINDING CONSTANT TORQUE

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