

ABB BALDOR RELIANCE III

Customer information packet

VDRX251544T

15HP, 1765//1470RPM, 3PH, 60/50HZ, 254TC, XPF

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	254TC
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	10.000 HP @ 50 HZ 15.000 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 EEV UL
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	38.000 A @ 208.0 V 36.200 A @ 230.0 V 30.400 A @ 190.0 V 18.100 A @ 460.0 V 15.200 A @ 380.0 V
Design Code	A
Drip Cover	No Drip Cover

Part Detail

Revision	N
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	09WGWZ910
Layout	09LYF525
Eff. date	04-09-2025
CD Diagram	CD0005
Poles	04
Leads	9#12
Proprietary	False
Created date	06-06-2019

Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	15.2 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0944M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	26.00 IN
Power Factor	83
Product Family	Hazardous Location Motor
Pulley Face Code	C-Face
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1765 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

NP1401XPSLEV												
NO.							CC	010A				
S/N							TEMP CODE		T3C			
SPEC.	09-0000-1464						INV.TYPE		PWM			
CAT.NO.	VDRX251544T						C HP FR	60	C HP TO	90		
HP	15//10						CT HZ FROM		6	CT HZ TO		60
VOLTS	230/460//190/380						VT HZ FROM		6	VT HZ TO		60
AMPS	36.2/18.1//30.4/15.2						MAG CUR	15/7.5				
RPM	1765//1470						MX RPM	2700				
HZ	60//50	PH	3	CL	F	NOM.EFF.		92.4				
SER.F.	1.00	DES	A	SL HZ	1.2	WK2	1.93					
FRAME	254TC	RATING		40C AMB-CONT								
	55C AMB @ 1.00 SF, 60C RISE											
	1.15SF ON SINEWAVE						NEMA MG-1 PT.5,IP55					

Parts List

Part number	Description	Quantity
SA370409	SA 09-0000-1464	1.000 ea
RA360059	RA 09-0000-1464	1.000 ea
NP1401XPSLEV	SS XP INV UL CSA-EEV CC CL-I GP-C&D	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1081Z	ALUM XP CAUTION LABEL (ZK PLANT ONLY-	1.000 ea
HW3201A01	1/2-13 EYEBOLT	1.000 ea
HW1002A63	WASHER, 5/8 HI-COLLAR SPRLCKWASHER	1.000 ea
HA1025A03	FELT WSH 2.1875 OD X 1.170 ID X .25 #321	8.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	3.000 ea
10XN2520K14	1/4-20 X .88 HEX GRD 5 (20001)	3.000 ea
37FN3002B02	EXFN, PLASTIC, 7.50 OD, 1.503 ID	1.000 ea
LD7020D09	LEAD SET, 12AWG, 9 LEAD, 20" LONG LEADS	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.080 lb
09EP1700A65PP15	FR ENDPLATE, MACH, XPFC W/DRN HW4505A02	1.000 ea
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HA2065A03	ALUM SLINGER 208 BRGS DRILL RIG MOTOR	1.000 ea
80XN1032J07	10-32 X 7/16 SET SCREW, HEX SOC, CUP PT	2.000 ea
80XN1032J07	10-32 X 7/16 SET SCREW, HEX SOC, CUP PT	1.000 ea
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 ea
HA4017A03	.125 X 1.75 GREASE EXT (F/S)	1.000 ea
HA4017A08	.125 X 3.50 LGTH GREASER EXTEN.	1.000 ea
HW4019A01	PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW4505A02	BREATHING/DRAIN-EXP PROOF-.250-18 PTF AIS	1.000 ea
HW3023E06	.125 X .625 SPIRAL SPRING PIN	1.000 ea

09FH1004A08P	FAN COVER, MACH W/EPOXY PRIMER	1.000 ea
09EP1708A19P	PUEP, MACH W/METAL SLINGER & HW4505A02 W	1.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HA2066A01	ALUM SLINGER 309 BRG DRILL RIG MOTOR	1.000 ea
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	4.000 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
HW4505A02	BREATHHER/DRAIN-EXP PROOF-.250-18 PTF AIS	1.000 ea
HW3023E06	.125 X .625 SPIRAL SPRING PIN	1.000 ea
09CB1003A01P	KOBX, MACH 1.25 NPT GROUP C MTRS PRIMED	1.000 ea
10XN3118K24	5/16-18 X 1.50" HEX HD, GRADE 5	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 ea
10XN3118K12	5/16-18 X .75 GRADE 5, ZINC PLATED	1.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	1.000 ea
09CB1502A01P	CONDUIT BOX LID MACH. GROUP C MTRS W/EP	1.000 ea
84XN5013J24	1/2-13 X 1-1/2 HEX SOCKET HD CAP SCREW	6.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	6.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0005E01	SPL CONN.DIA./WARN.LABEL(LC0005/LB1119)	1.000 ea
MG1025G29	WILKOFASST, 789.229, DARK CHARCOAL GRAY	0.070 ga
PK6014	STEEL STRAP FOR 309-312 BASELESS MOTORS	4.000 ea
40PA1017	PACKAGING GROUP, 09 VERT LARGE FLANGE	1.000 ea
19XW3118A08	.31-18 X .50 HEX WASHER HEAD TAPTITE II	4.000 ea
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 ea
MJ5000A09	EFI KIT #1578 (400 ML CARTRIDGE OF EFI	0.200 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt

AC Induction Motor Performance Data

Record # 51149

Typical performance - not guaranteed values

Winding: 09WGZ910-R044			Type: 0944M		Enclosure: XPFC			
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		15		Full Load Torque		44.5 LB-FT		
Volts		230/460		Start Configuration		direct on line		
Full Load Amps		36.2/18.1		Breakdown Torque		153 LB-FT		
R.P.M.		1765		Pull-up Torque		69.5 LB-FT		
Hz		60	Phase	3	Locked-rotor Torque		86.5 LB-FT	
NEMA Design Code		A	KVA Code		H	Starting Current		127 A
Service Factor (S.F.)		1		No-load Current		7.56 A		
NEMA Nom. Eff.		92.4	Power Factor		83	Line-line Res. @ 25°C		0.59555 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		54°C		
				Locked-rotor Power Factor		33		
				Rotor inertia		1.92 LB-FT2		

Load Characteristics 460 V, 60 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	45	69	79	83	85	87
Efficiency	88.2	92.2	92.7	92.4	91.5	90.4
Speed	1791.3	1783.1	1774	1765.2	1754.6	1743.1
Line amperes	8.62	11	14.5	18.1	22.6	26.9

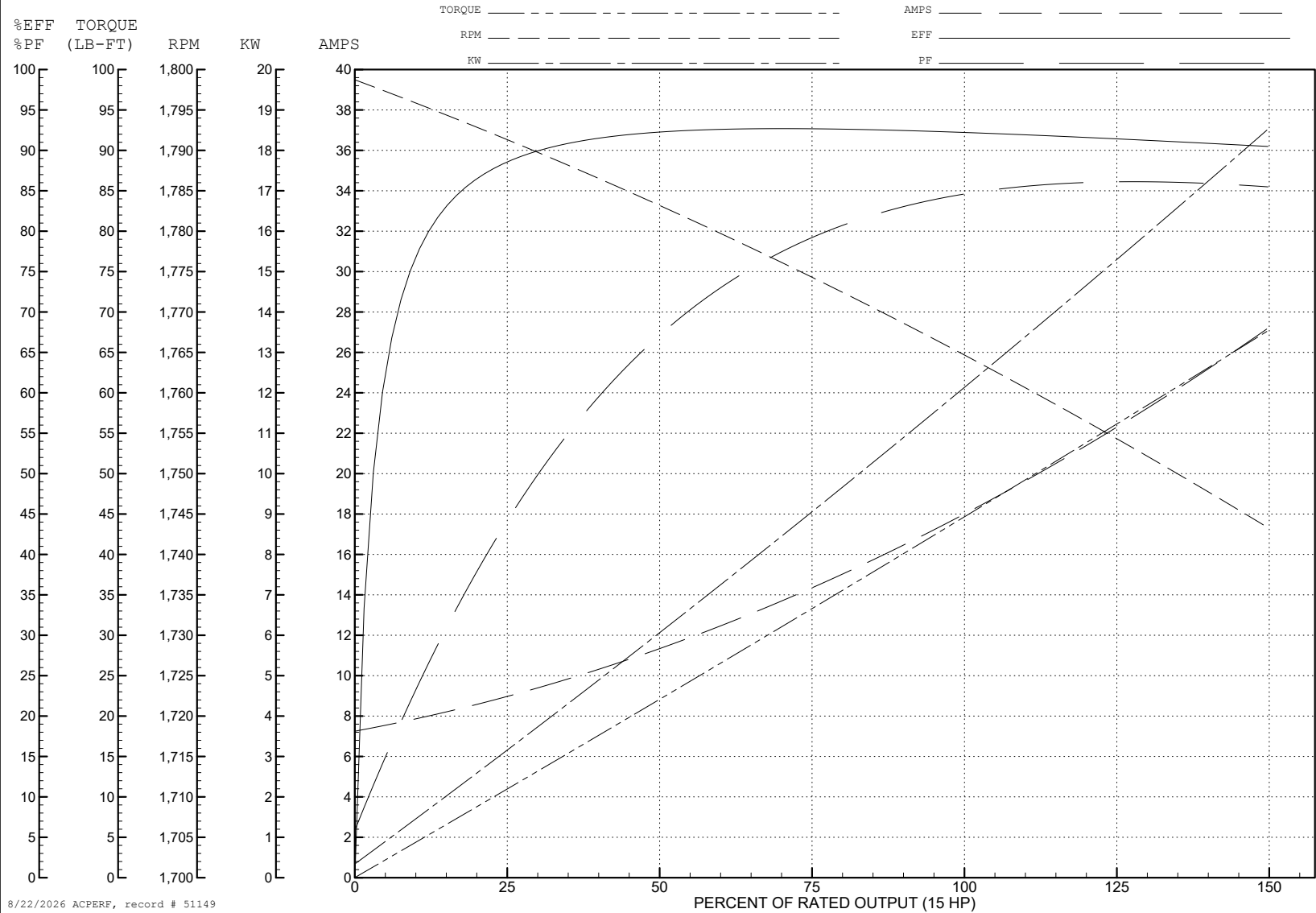
ABB Motors and Mechanical Inc.

WINDING # 09WGZ910

Typical performance - not guaranteed values.

15 HP 3 PH 60 HZ 1765 RPM 460 V 0944M

TORQUES (LB-FT): PO=153 PU=69.5 LR=86.5 LRA=127



AC Induction Motor Performance Data

Record # 75708

Typical performance - not guaranteed values

Winding: 09WGZ910-R063			Type: 0944M		Enclosure: XPFC			
Nameplate Data				380 V, 50 Hz: High Voltage Connection				
Rated Output (HP)		15//10		Full Load Torque		35.63 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		36.2/18.1//30.4/15.2		Breakdown Torque		147 LB-FT		
R.P.M.		1765//1470		Pull-up Torque		71.45 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		88.92 LB-FT	
NEMA Design Code		A	KVA Code		H	Starting Current		123 A
Service Factor (S.F.)		1		No-load Current		7.42 A		
NEMA Nom. Eff.		92.4	Power Factor		83	Line-line Res. @ 25°C		0.553 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		41°C		
				Locked-rotor Power Factor		36.5		
				Rotor inertia		1.92 lb-ft²		

Load Characteristics 380 V, 50 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	40	63	74	81	83	86
Efficiency	86.7	91.4	92.1	92	91.2	90.3
Speed	1493	1486	1479	1472	1463	1454
Line amperes	8.14	9.82	12.46	15.18	18.67	21.93

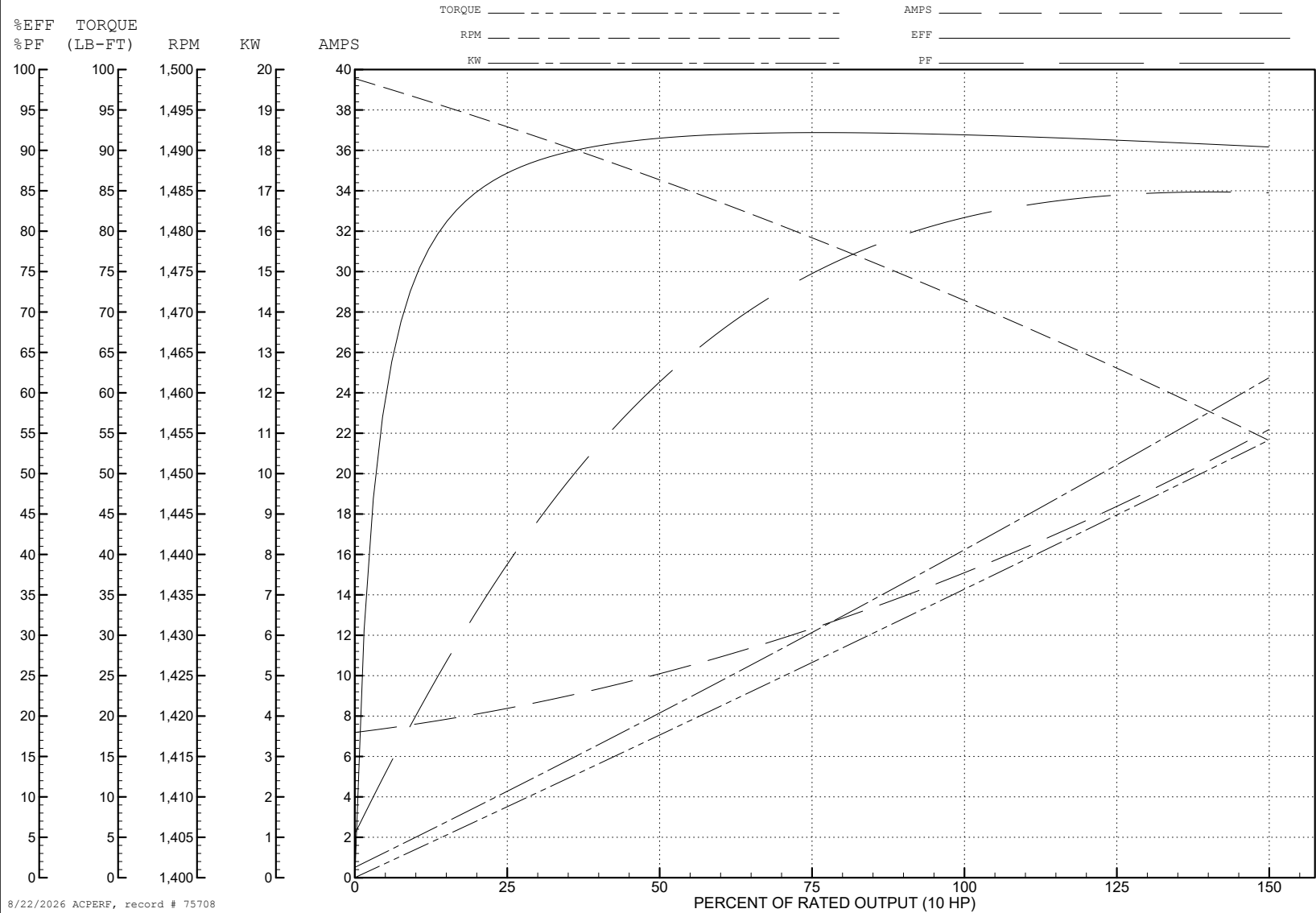
ABB Motors and Mechanical Inc.

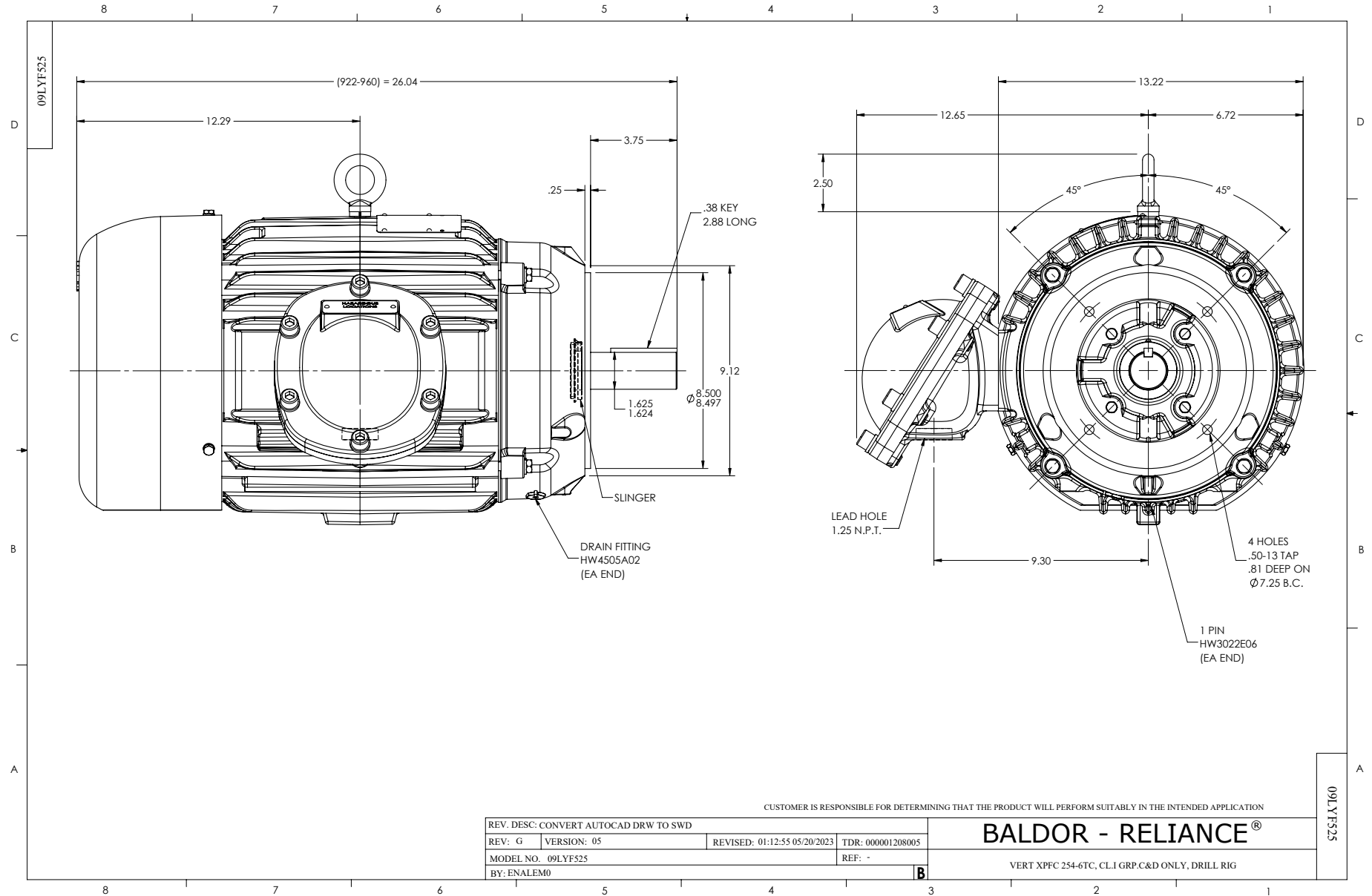
WINDING # 09WGZ910

Typical performance - not guaranteed values.

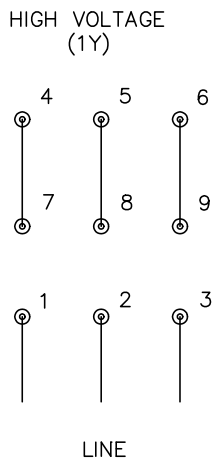
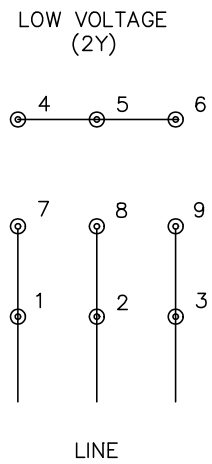
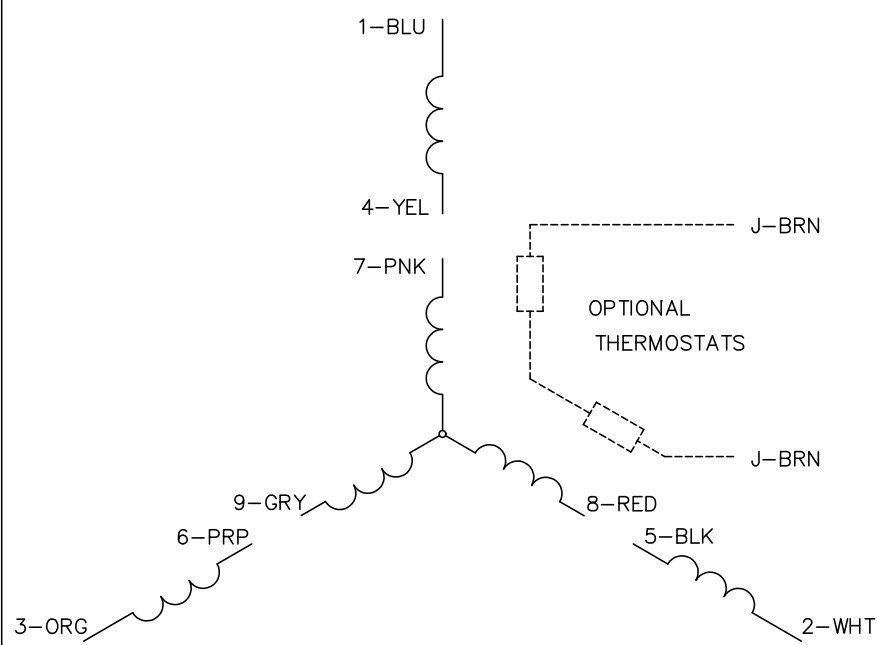
10 HP 3 PH 50 HZ 1472 RPM 380 V 0944M

TORQUES (LB-FT): PO=147 PU=71.45 LR=88.92 LRA=123





CD0005



- 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: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
900000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005