ABB BALDOR RELIANCE

Customer information packet

VPECP84115T-4

50HP, 1770RPM, 3PH, 60HZ, 326VP, 1272M, TEFC, V
Class - CLI GP A,B,C,D
Division - Division II

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Specifications

Enclosure	TEFC
Frame	326LP
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	50.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	UR
	NEMA PREMIUM
	CSA EEV
	CCSA US
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	1
Current @ Voltage	57.000 A @ 460.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3
Heater Indicator	No Heater

Part Detail

Revision	M
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	12WGX731
Layout	12LY-000-261
Eff. date	11-03-2025
CD Diagram	CD0006
Poles	04
Leads	3#8
Proprietary	False
Created date	07-09-2019

High Voltage Full Load Amps	57.0 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	IP56
KVA Code	G
Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Ring Terminals
Motor Standards	NEMA
Motor Type	1272M
Mounting Arrangement	V1
Number of Poles	4
Overall Length	38.56 IN
Power Factor	87
Product Family	Chem Process S/P 32-8 IEEE 841
Pulley Face Code	P-Base
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1770 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

NP4332

CAT.NO.	VPECP84115T-4			**P/N**					**ENCLOSURE**	TEFC				
SPEC.	12-0000-0804			**CC**	010A	**FRAME**	326VP		**S/N**					
HP	50			**CLASS**	F	**HZ**	60	**ODE BRG**	SPL	**DE BRG**	6312			
RPM	1770	**RPM MAX**	2700	**PH**	3	**DES**	B	**D.E. BRG.**	60BC03X30X					
VOLT	460			**KVA-CODE**	G			**O.D.E. BRG.**	BA2B459309					
AMP	57			**MOTOR WEIGHT**	700	**GREASE**	POLYREX EM							
RATING	40C AMB-CONT			**MAX. KVAR**	9.4	**BLANK**								
NEMA-NOM-EFF	94.5	**# OF ROTOR BARS**	40	**SER.F.**	1.15	**IP**	56							
G.MIN.EFF	93.6	**# OF STATOR SLOTS**	48	**PF**	87	**INV.TYPE**	PWM							
TEMP CODE	T3	**INVERTER-TEMP-CODE**	200											
TEMP =	200	**C HP FR**	60	**C HP TO**	90									
CT HZ FROM	1	**CT HZ TO**	60											
HTR-VOLTS		**HTR-AMPS**		**HTR-WATTS**		**MAX. SPACE HEATER TEMP.**		**VT HZ FROM**	O	**VT HZ TO**	60			

AC Induction Motor Performance Data
Record # 47222
Typical performance - not guaranteed values

Winding: 12WGX731-R055	**Type:** 1272M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			50	**Full Load Torque**	148 LB-FT
Volts			460	**Start Configuration**	direct on line
Full Load Amps			57	**Breakdown Torque**	446 LB-FT
R.P.M.			1770	**Pull-up Torque**	183 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	254 LB-FT
NEMA Design Code	B	**KVA Code**	G	**Starting Current**	355 A
Service Factor (S.F.)			1.15	**No-load Current**	18.3 A
NEMA Nom. Eff.	94.5	**Power Factor**	87	**Line-line Res. @ 25ºC**	0.118 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	61°C
S.F. Amps				**Temp. Rise @ S.F. Load**	75°C
				Locked-rotor Power Factor	24.4
				Rotor inertia	9.59 LB-FT2

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	58	78	85	87	87	87	88
Efficiency	92.1	94.7	94.9	94.5	93.9	92.9	94.1
Speed	1791	1785	1779	1772	1765	1756	1768
Line amperes	22.3	31.9	43.5	56.9	71.3	87.1	65.5

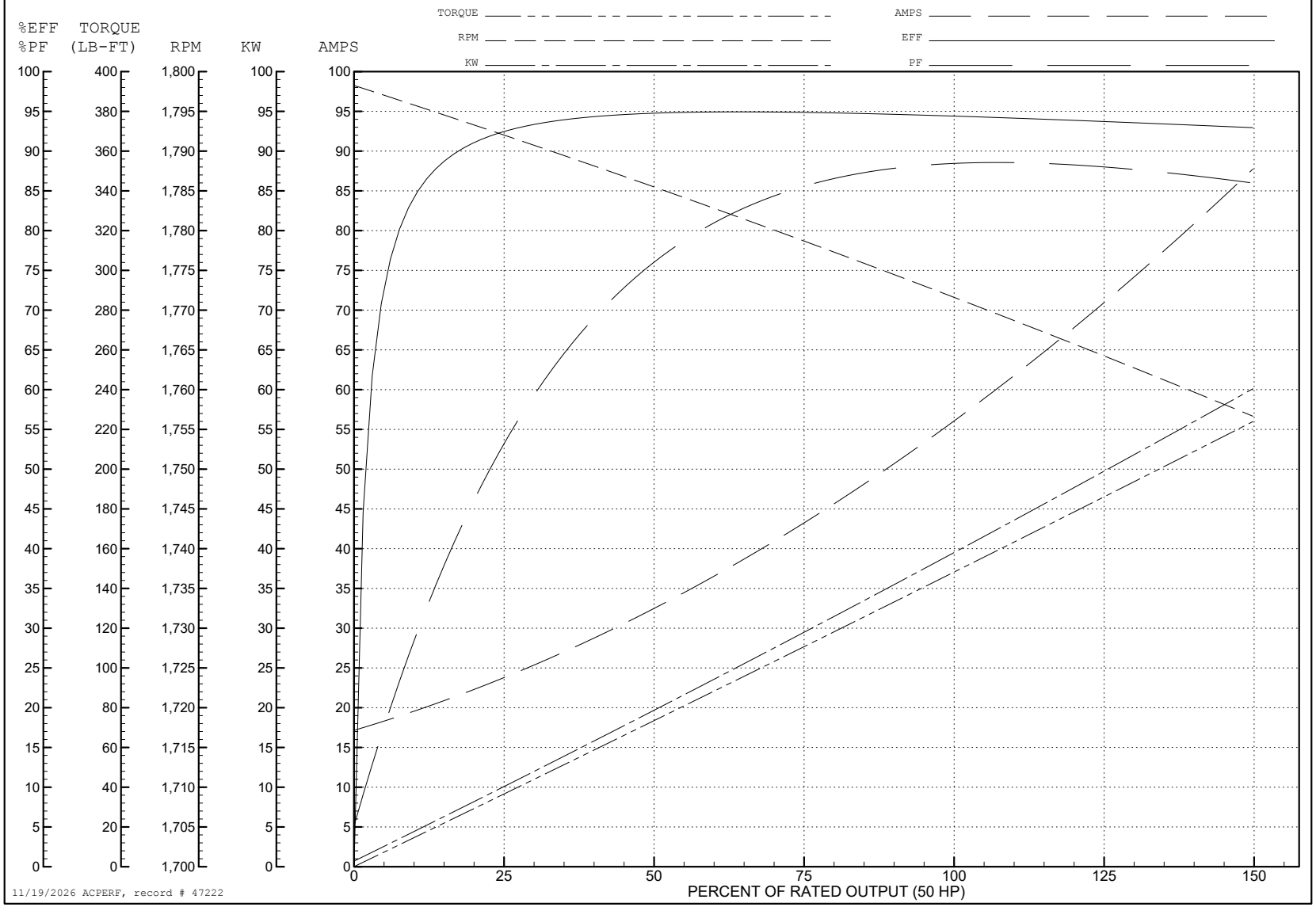
ABB Motors and Mechanical Inc.

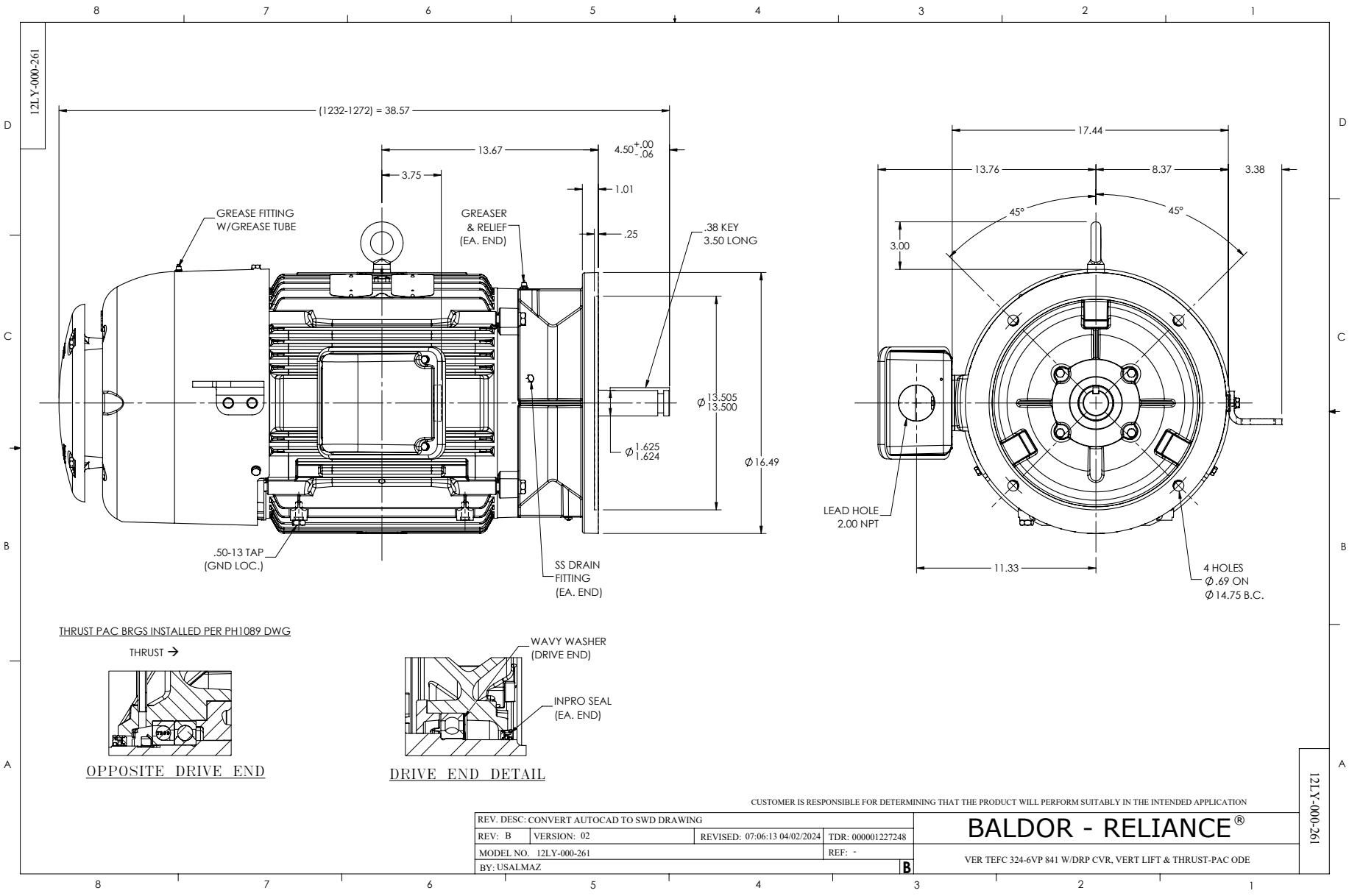
WINDING # 12WGX731

50 HP 3 PH 60 HZ 1770 RPM 460 V 1272M

Typical performance - not guaranteed values.

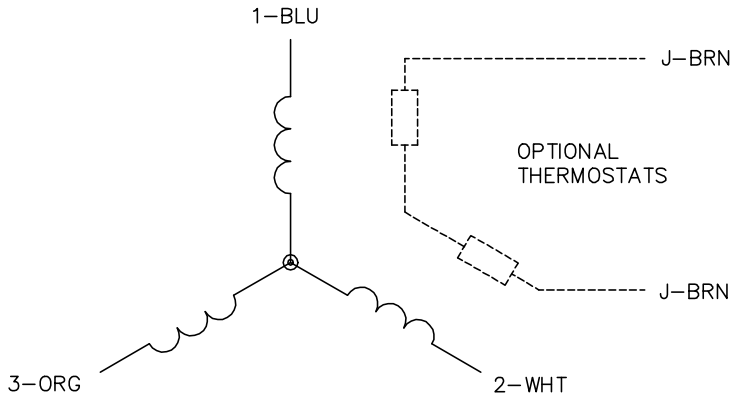
TORQUES(LB-FT): PO=446 PU=183 LR=254 LRA=355

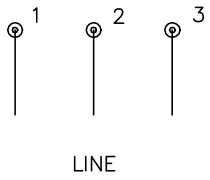



12LY-000-261
(1232-1272) = 38.57
13.67
4.50 +.00 -.06
3.75
1.01
.25
GREASE FITTING W/GREASE TUBE
GREASER & RELIEF (EA. END)
.38 KEY 3.50 LONG
Ø 13.505 13.500
Ø 1.625 1.624
Ø 16.49
.50-13 TAP (GND LOC.)
SS DRAIN FITTING (EA. END)
17.44
13.76
8.37
3.38
45°
45°
3.00
LEAD HOLE 2.00 NPT
11.33
4 HOLES Ø .69 ON Ø 14.75 B.C.
THRUST PAC BRGS INSTALLED PER PH1089 DWG
THRUST →
OPPOSITE DRIVE END
WAVY WASHER (DRIVE END)
INPRO SEAL (EA. END)
DRIVE END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT AUTOCAD TO SWD DRAWING
REV: B
VERSION: 02
REVISED: 07:06:13 04/02/2024
TDR: 000001227248
MODEL NO. 12LY-000-261
REF: -
BY: USALMAZ
B
BALDOR - RELIANCE®
VER TEFC 324-6VP 841 W/DRP CVR, VERT LIFT & THRUST-PAC ODE
12LY-000-261

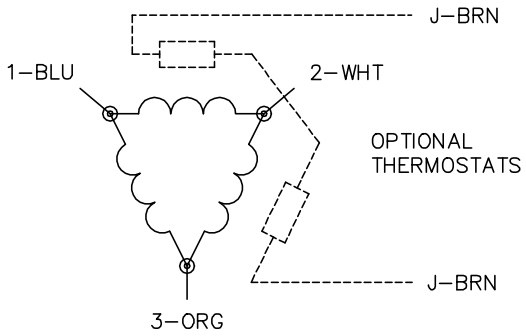
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



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

REV. DESC: ADD CLASS CONN00000007			BALDOR - RELIANCE®
REV. LTR: E	VERSION: 01	TDR: 000001099922	
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0	3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED
MTL: –			SH 1 of 1