

ABB BALDOR RELIANCE III

Customer information packet

VPECP84115T-4

50HP, 1770RPM, 3PH, 60HZ, 326VP, 1272M, TEFC, V

Class - CLI GP A,B,C,D

Division - Division II

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

Parts List

Part number	Description	Quantity
SA371679	SA 12-0000-0804	1.000 ea
RA361381	RA 12-0000-0804	1.000 ea
LC0006	CONNECTION LABEL	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
LB1182	WARNING LABEL FOR MOTORS WITH EYENUTS	2.000 ea
NP4332	SS IEEE841-2021 INV DIV-2 UL CSA-C US EE	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
WD1000B48	T&B D73, RING TERMINAL 8 AWG 3/8 STUD	3.000 ea
WD1000B53	TERMINAL BURNDY KPA34	1.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT, .879 OD, .509 I	1.000 ea
12FH1003A01GP6	FAN COVER, MACH W/EPOXY PRIMER	1.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	3.000 ea
10XN3118K16	5/16-18 X 1' GRADE #5, STL, ZINC PLATE	3.000 ea
HA6387P	EYE BRACKET PRIMED	2.000 ea
10XN3816K20	3/8-16 X 1.25 HEX HD CAP GRADE 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
09FN3001C01SP	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.200 lb
10XN5013K10	1/2-13 X .625 HEX HD, GRADE 5	1.000 ea
HW2501G30	KEY, 3/8 SQ X 3.500	1.000 ea
12EP1711A02GP6	FREP, W/PRIMER, DUPLEX 309 LOCKED BRG	1.000 ea
10XN5013K36	1/2-13 X 2.25" HEX HD GRADE 5	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT, .879 OD, .509 I	4.000 ea
HW4601A61	INPRO SEAL #1698-A-17120-0, VBXX 309 BRG	1.000 ea
HA4017A12	GREASER EXTENSION A=5.50	1.000 ea
10XN3816K68	3/8-16 X 4.25 HEX HEAD CAP SCREW, GRADE	3.000 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

HA4002A03	#304 S.S. DRAIN FITTING, .125 NPT (.44 H	2.000 ea
12EP1502A47P	ENDPLATE, MACH W/EPOXY PRIMER	1.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT, .879 OD, .509 I	4.000 ea
10XN5013K36	1/2-13 X 2.25" HEX HD GRADE 5	4.000 ea
HW4601A55	INPRO/SEAL #1698-A-M0022-0 VBXX 312 BRG/	1.000 ea
HW5100A15	W4997-050 WVY WSHR (WB)	1.000 ea
10XN3118K72	5/16-18 X 4.50" HEX HD, GRADE 5	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
10CB1000A353P	SPL CONDUIT BOX W/ PRIMER	1.000 ea
09GS1010	GASKET, DWG, LEADWIRE SEPERATOR	1.000 ea
10XN3118K16	5/16-18 X 1' GRADE #5, STL, ZINC PLATE	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
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 ea
10CB1503P	CONDUIT BOX LIPPED, CAST W/EPOXY PRIMER	1.000 ea
14GS1003	GASKET CONDUIT BOX LID, NEOP	1.000 ea
10XN2520K16	1/4-20 X 1" HX HD SCRW GRADE 5, ZINC P	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
12FH1500A01P	MACH DRIP COVER 310-312 MTRS	1.000 ea
10XN3816K36	3/8-16 X 2.25 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN 8	0.125 ga
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 qt
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.033 ea
PK6014	STEEL STRAP FOR 309-312 BASELESS MOTORS	4.000 ea
14PA2005	PKGP,CTN ID 42X34X25,2X4 RISERS,SIDE LIF	1.000 ea
10XN5013K10	1/2-13 X .625 HEX HD, GRADE 5	4.000 ea
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.025 ea
MJ5004A59	ADHESIVE LOCTITE #401 MSC #88545264	0.010 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

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. @ 25°C		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-FT ²	

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

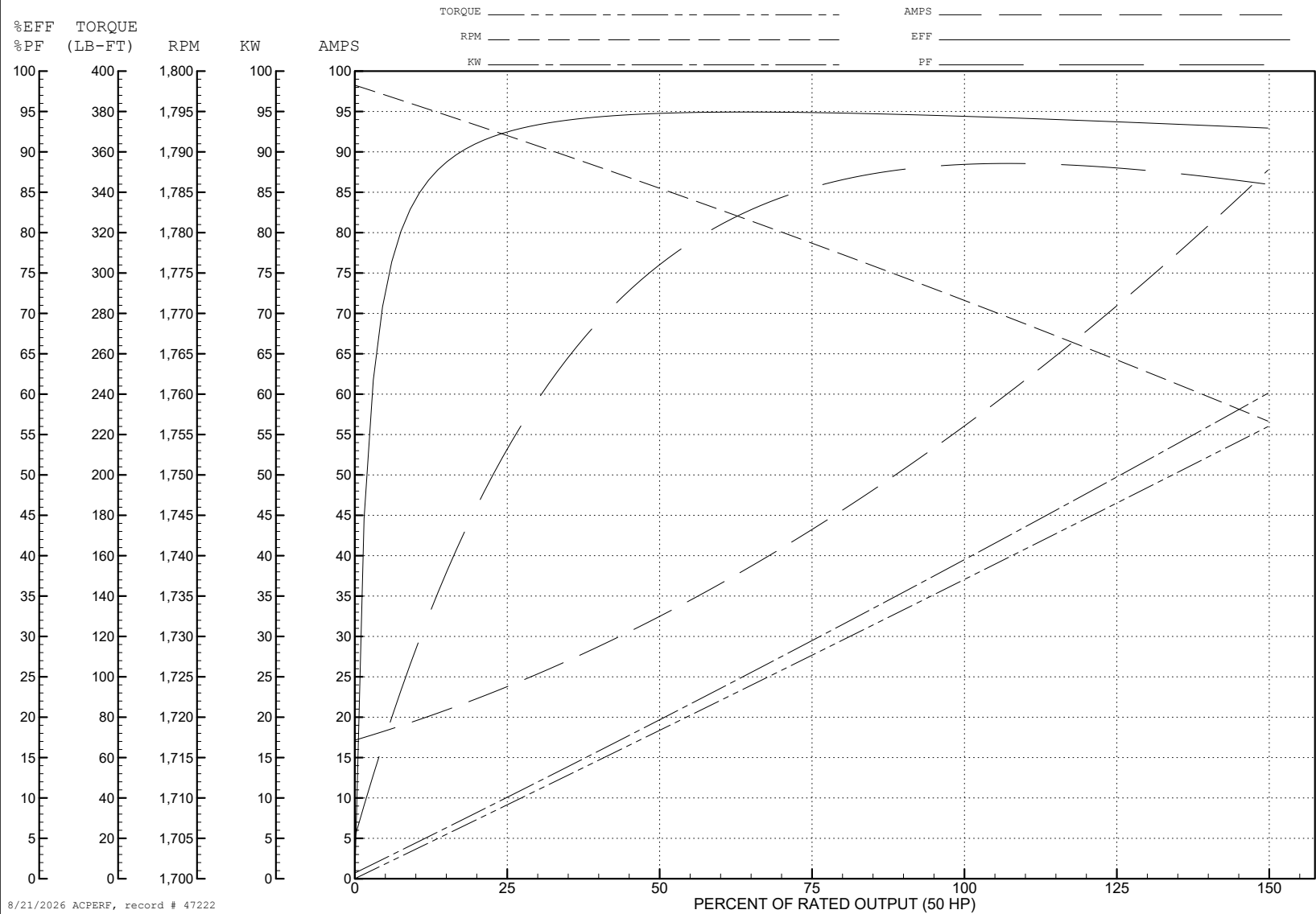
ABB Motors and Mechanical Inc.

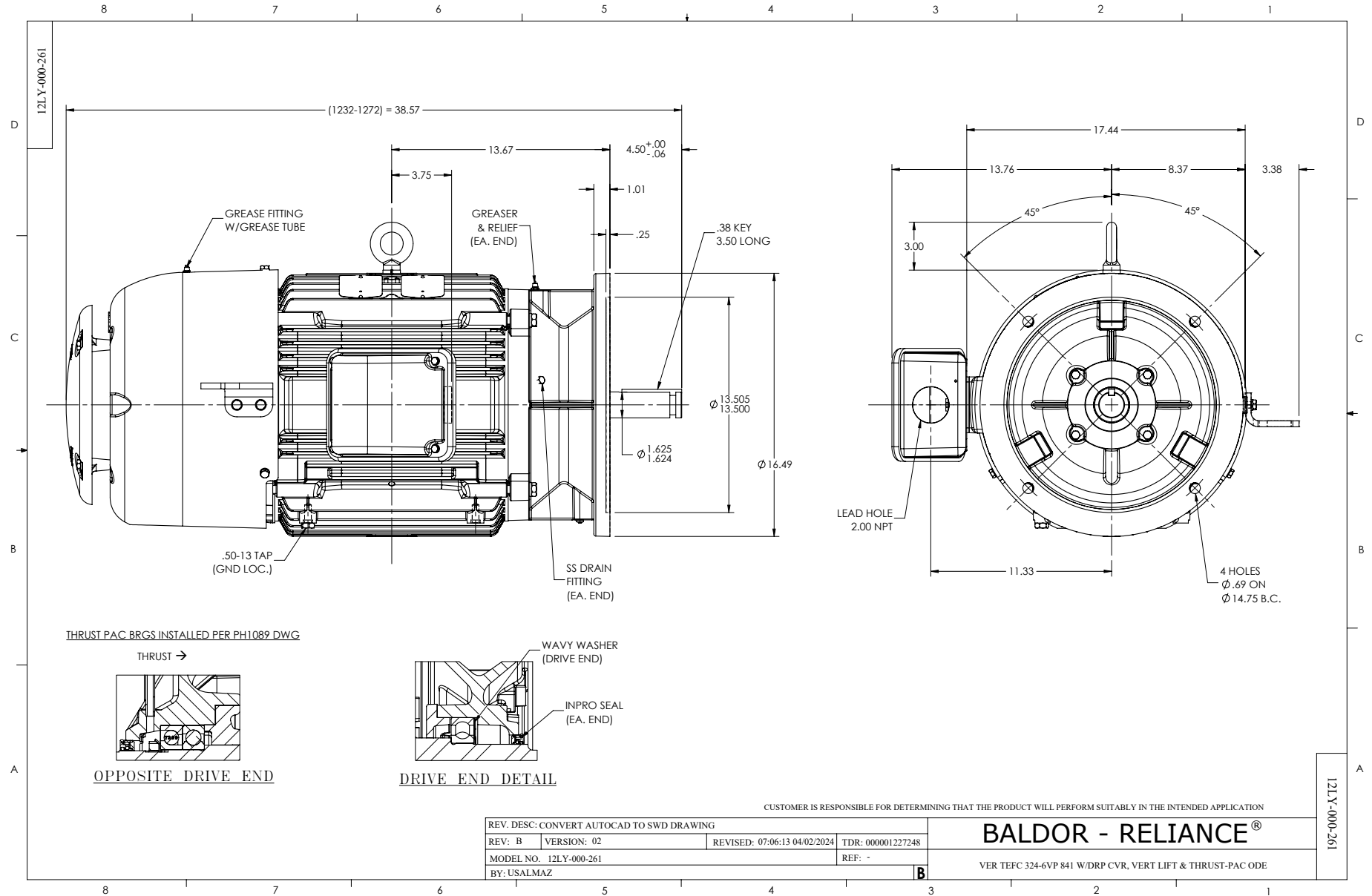
WINDING # 12WGX731

Typical performance - not guaranteed values.

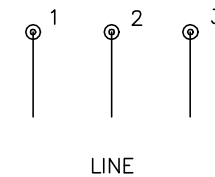
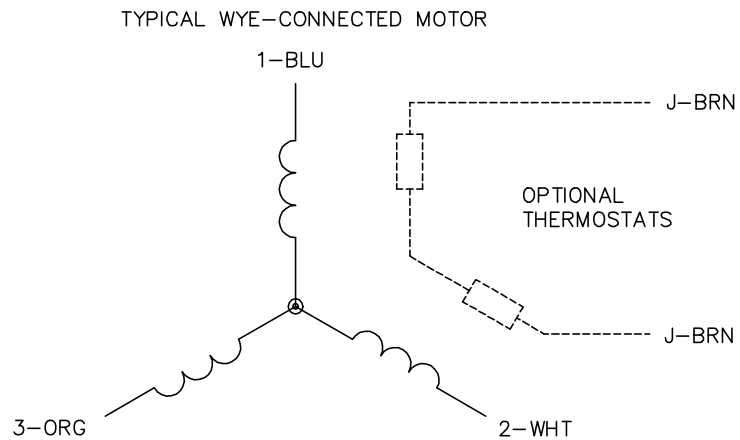
50 HP 3 PH 60 HZ 1770 RPM 460 V 1272M

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





CD0006


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

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10: 24: 49 02/19/2019

BY: ENBRIRO

MTL: —


BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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