

ABB BALDOR RELIANCE III

Customer information packet

ECP84115T-4

50HP, 1770RPM, 3PH, 60HZ, 326T, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	326T
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	CCSA US CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
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
Constant Torque Speed Range	1
Current @ Voltage	57.000 A @ 460.0 V
Design Code	B
Drip Cover	No 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

Part Detail

Revision	N
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	12WGX731
Layout	12LYG135
Eff. date	11-03-2025
CD Diagram	CD0006
Poles	04
Leads	3#8
Proprietary	False
Created date	12-12-2018

Heater Indicator	No Heater
High Voltage Full Load Amps	57.0 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	IP56
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Ring Terminals
Motor Standards	NEMA
Motor Type	1272M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	30.74 IN
Power Factor	87
Product Family	Chem Process S/P 32-8 IEEE 841
Pulley Face Code	Standard
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.	ECP84115T-4			P/N		ENCLOSURE			TEFC	
SPEC.	12-0000-0367			CC	010A	FRAME	326T	S/N		
HP	50			CLASS	F	HZ	60	ODE BRG	6312	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.		60BC03X30X	
AMP	57			MOTOR WEIGHT			679	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 0- VT HZ TO 60

Parts List

Part number	Description	Quantity
SA363996	SA 12-0000-0367	1.000 ea
RA353299	RA 12-0000-0367	1.000 ea
LC0006	CONNECTION LABEL	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 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
WD1000B19	TERMINAL BURNDY L250HP	1.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	1.000 ea
80XN3816J12	3/8-16 X 3/4 SET SCREW, HEX SOC, CUP PT	4.000 ea
12FH1002A15GP6	FAN COVER, MACH, W/PRIMER W/MG1025N19	1.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT, .879 OD, .509 I	4.000 ea
XY5013A12	NUT, 1/2-13, HEX, STEEL, ZINC PLATED	4.000 ea
09FN3001C03	XTERNAL 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
10XN3816K08	3/8-16 X .50 HEX HD CAP SCREW GRADE 5	1.000 ea
12EP1111A02GP6	FR ENDPLATE, MACH W/EPOXY PRIMER & RELIA	1.000 ea
HA3400A32	STUD, 1/2-13 X 7.38	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT, .879 OD, .509 I	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
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
HA4017A02	.125X2.50 GREASER EXTENS.F/S	1.000 ea
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 ea
HW4019A01	PIPE COUPLING 1/8 NPT, STEEL, ZINC COATING	1.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 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	1.000 ea
12EP1111A01P	SPL PUEP 312 BRG FOR INPRO SEAL W/EPOXY	1.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT, .879 OD, .509 I	4.000 ea
10XN5013K28	1/2-13 X 1.75 HEX HEAD MACH SCREW, GRAD	4.000 ea
HW4601A55	INPRO/SEAL #1698-A-M0022-0 VBXX 312 BRG/	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
10XN3118K40	5/16-18 X 2.50" 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
HA4002A03	#304 S.S. DRAIN FITTING, .125 NPT (.44 H	1.000 ea
10CB1000A203P	KOBX W/2.00 NPT & .31 GND MTG, EPOXY PRI	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
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
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.025 ea
12PA1000	PACKAGING GROUP PRINT PK1024A07	1.000 ea
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 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 # 93262

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	362.5 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-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

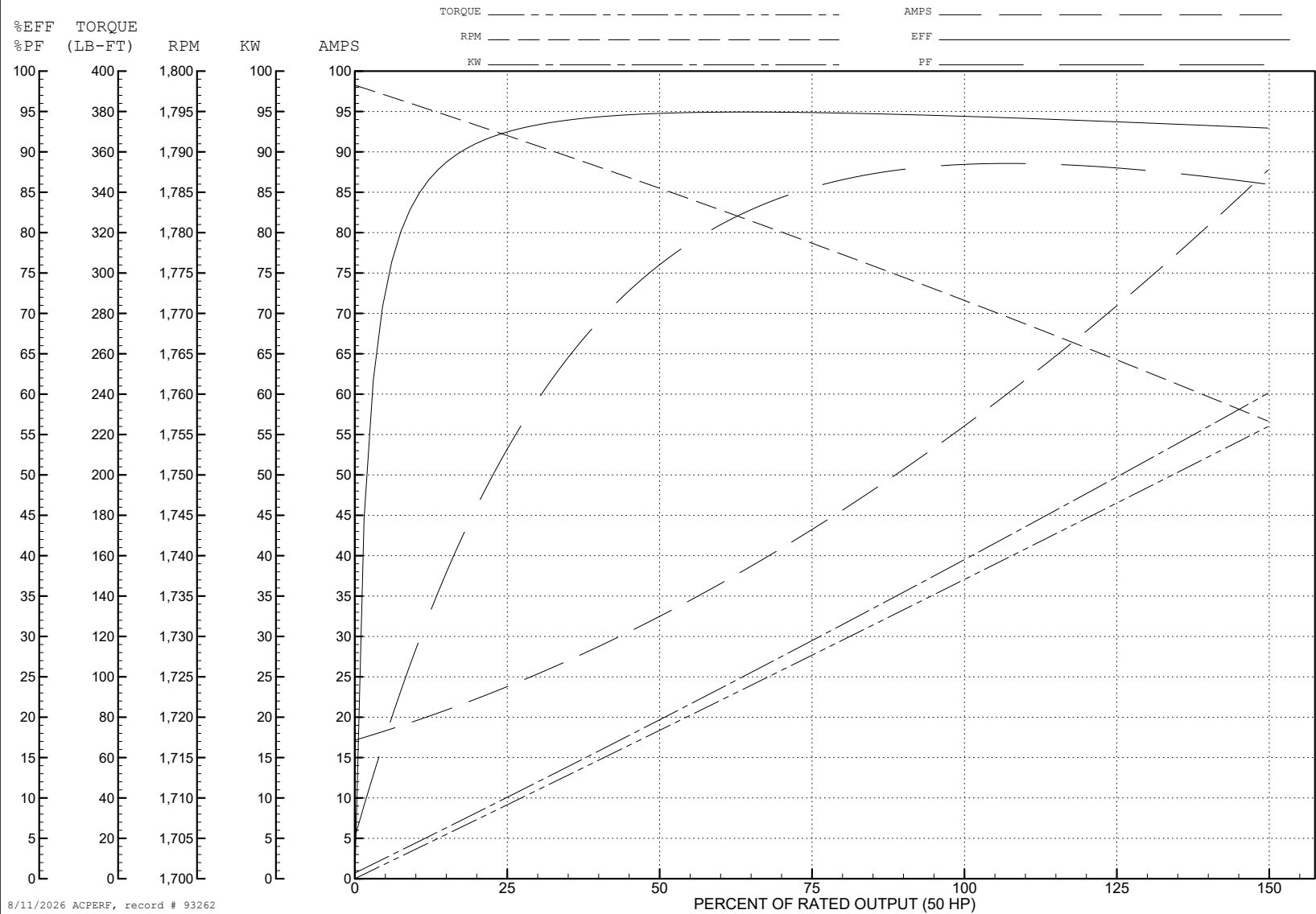
ABB Motors and Mechanical Inc.

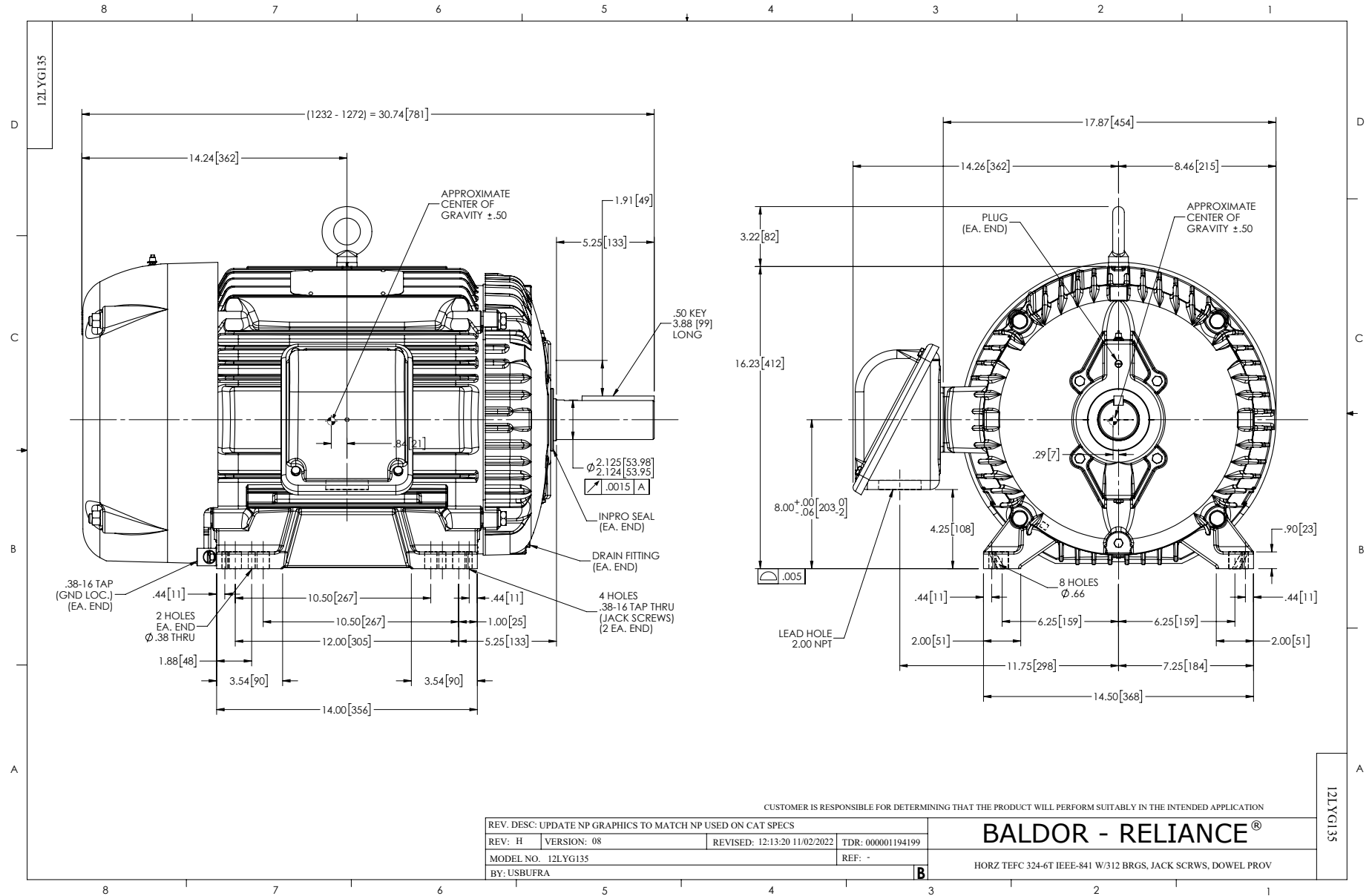
WINDING # 12WGX731

Typical performance - not guaranteed values.

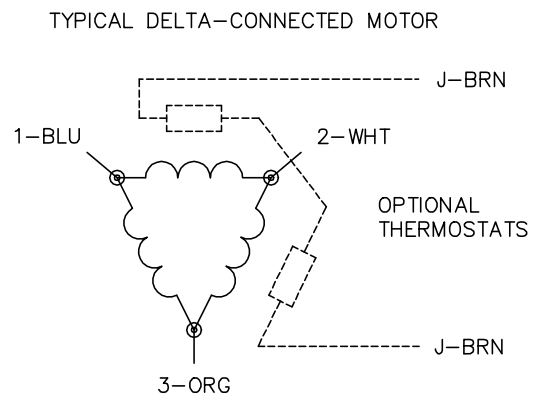
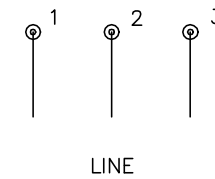
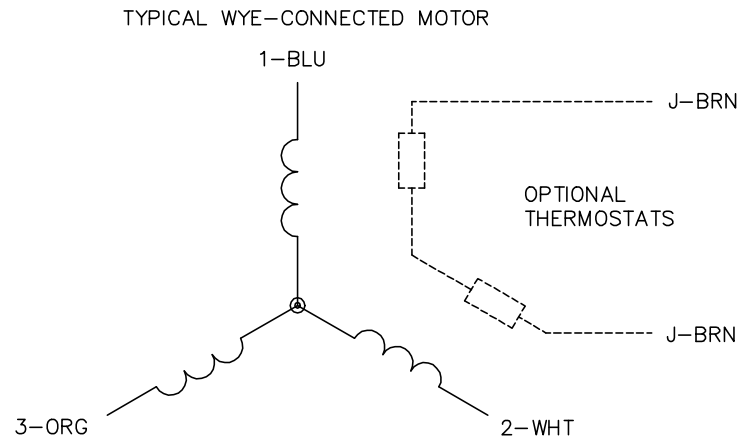
50 HP 3 PH 60 HZ 1770 RPM 460 V 1272M

TORQUES (LB-FT): PO=446 PU=183 LR=254 LRA=362.5





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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