

ABB BALDOR RELIANCE III

Customer information packet

ECP4115T-5

50HP, 1770RPM, 3PH, 60HZ, 326T, 1272M, 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	575.0 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	1.0
Current @ Voltage	45.000 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	AD
Type	AC
Mech. spec.	12F904
Base	
Status	PRD/A
Elec. spec.	12WGY613
Layout	12LYF904
Eff. date	10-16-2025
CD Diagram	CD0006
Poles	04
Leads	3#8
Proprietary	False
Created date	10-31-2013

Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	45.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1272M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	30.28 IN
Power Factor	87
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
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

NP3241																	
CAT.NO.	ECP4115T-5			P/N						ENCLOSURE		TEFC					
SPEC.	12F904Y613		CC	010A	FRAME	326T		S/N									
HP	50			CLASS	F	HZ	60	DES	B								
RPM	1770			RPM MAX		2700		PH	3	KVA-CODE		F					
VOLT	575			MOTOR WEIGHT			652										
AMP	45			SER.F.	1.15	PF	87	ODE BRG		6312	DE BRG		6312				
RATING	40C AMB-CONT			NEMA-NOM-EFF			94.5		GREASE		POLYREX EM						
								INV.TYPE		PWM							
TEMP CODE	T3	INVERTER-TEMP-CODE			200												
TEMP =	200	C HP FR	60	C HP TO		90											
CT HZ FROM	1.0	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
SA271692	SA 12F904Y613	1.000 ea
RA258317	RA 12F904Y613	1.000 ea
09FN3001C03	XTERNAL FAN, PLASTIC (COMES W/SCREW FRO	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
HA4017A10	1/8X1.25 GREASE EXT (F/S)	1.000 ea
HW4019A01	PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING	1.000 ea
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
10CB1503P	CONDUIT BOX LIPPED, CAST W/EPOXY PRIMER	1.000 ea
HA1005A04	SLINGER, OD 3.620, ID 1.98,	1.000 ea
HW5100A15	W4997-050 WVY WSHR (WB)	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
12EP1111A30P	SPL PUEP 312 BRG W/EPOXY	1.000 ea
10XN5013K32	1/2-13 X 2.00" HEX HD GRD 5 (20051)	4.000 ea
12FH1002A33P	FAN COVER, MACH ,EPOXY PRIMER	1.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 ea
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 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
HW2501H34	KEY, 1/2 SQ X 4.00	1.000 ea

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
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 ea
12EP1111A35LP5	FREP, MACH W/EPOXY PRIMER & MG1025L14	1.000 ea
HA3400A13	STUD, 1/2-13 X 7" WELKER	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
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.200 lb
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
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN 8	0.125 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0006	CONNECTION LABEL	1.000 ea
NP3241	SS SUPER-E INV UL CSA-EEV PREM CC	1.000 ea
14PA2000	PKGP, CTN ID 42X34X25, STD BASE	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea

AC Induction Motor Performance Data

Record # 93263

Typical performance - not guaranteed values

Winding: 12WGY613-R006			Type: 1272M		Enclosure: TEFC		
Nameplate Data			575 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		50	Full Load Torque		148 LB-FT		
Volts		575	Start Configuration		direct on line		
Full Load Amps		45	Breakdown Torque		435 LB-FT		
R.P.M.		1770	Pull-up Torque		178 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		248 LB-FT	
NEMA Design Code		B	KVA Code	F	Starting Current		290 A
Service Factor (S.F.)		1.15	No-load Current		14.2 A		
NEMA Nom. Eff.		94.5	Power Factor	87	Line-line Res. @ 25°C		0.186 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		24.3	
				Rotor inertia		9.59 lb-ft²	

Load Characteristics 575 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	59	79	85	87	88	87	88
Efficiency	92.3	94.8	95	94.5	93.8	92.7	94
Speed	1791	1785	1779	1771	1764	1755	1767
Line amperes	17.4	25.3	34.6	45.4	57	69.8	52.4

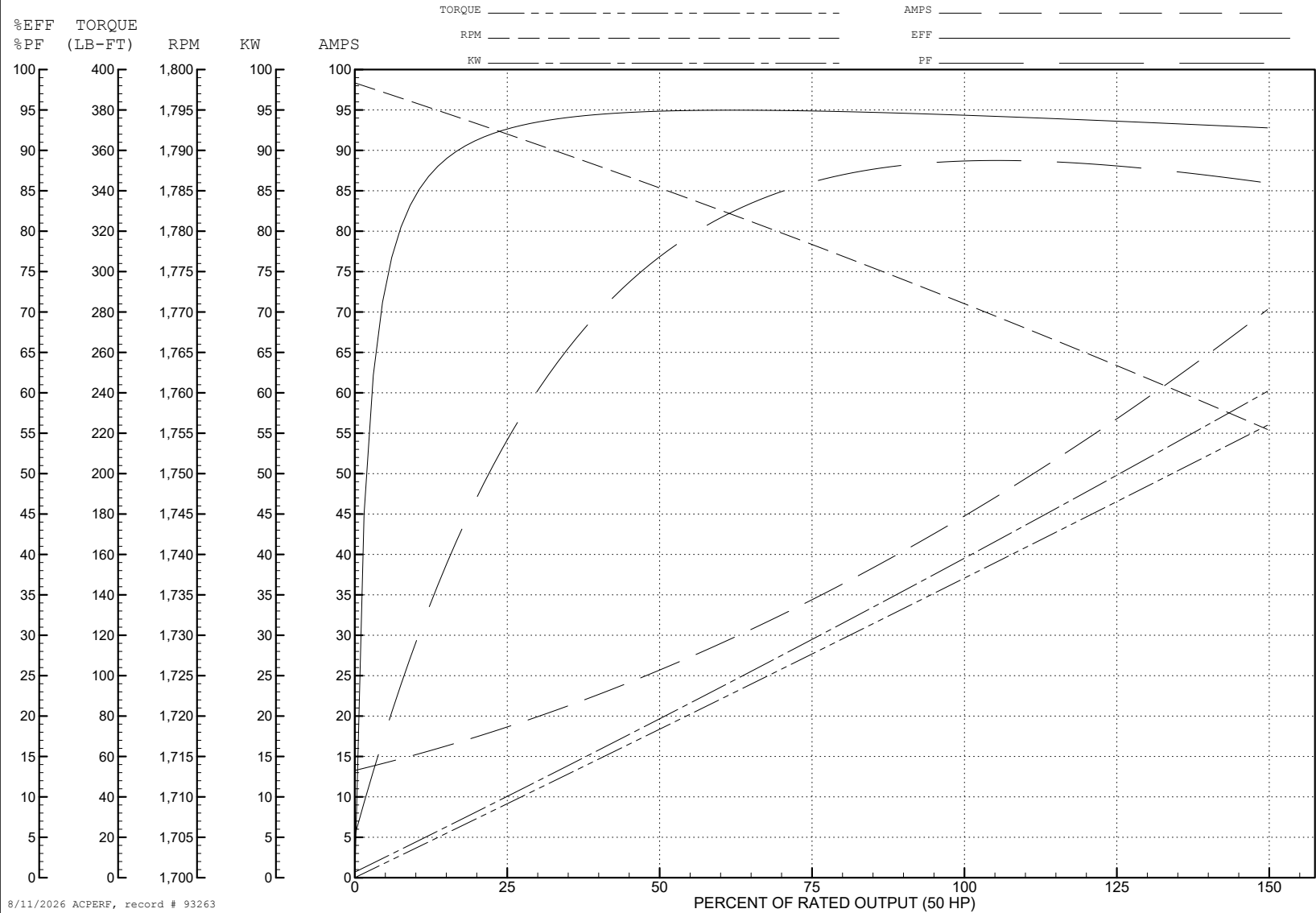
ABB Motors and Mechanical Inc.

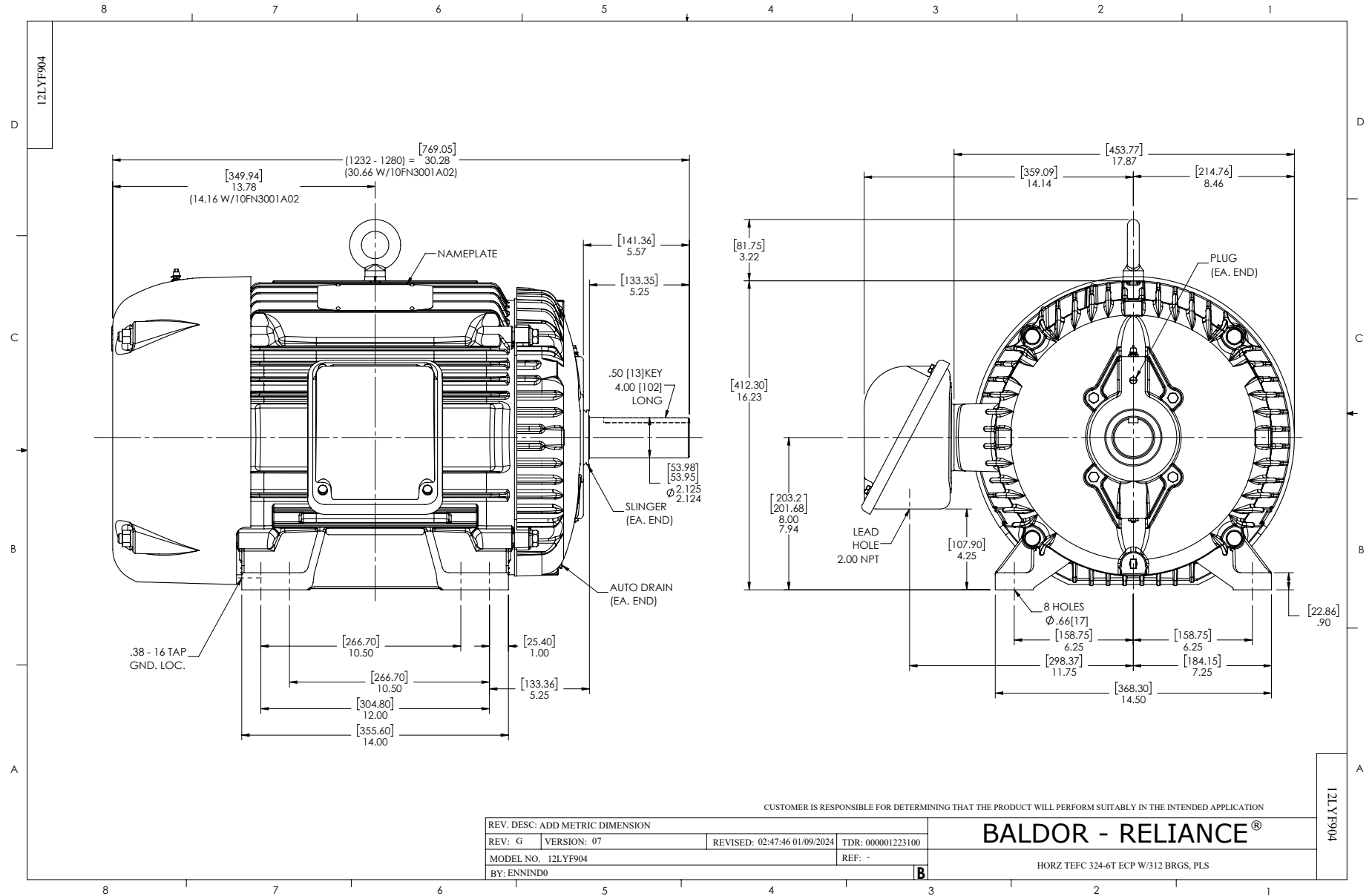
WINDING # 12WGY613

Typical performance - not guaranteed values.

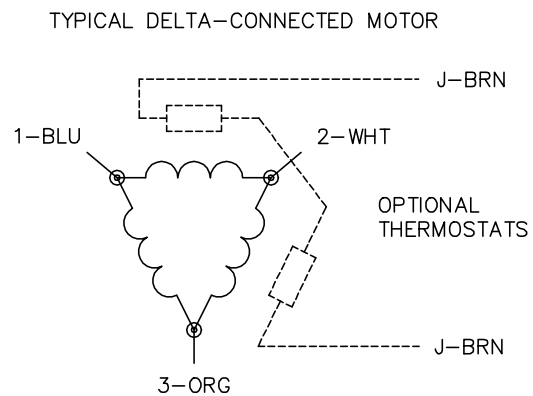
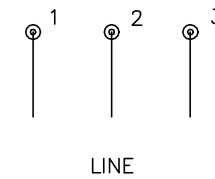
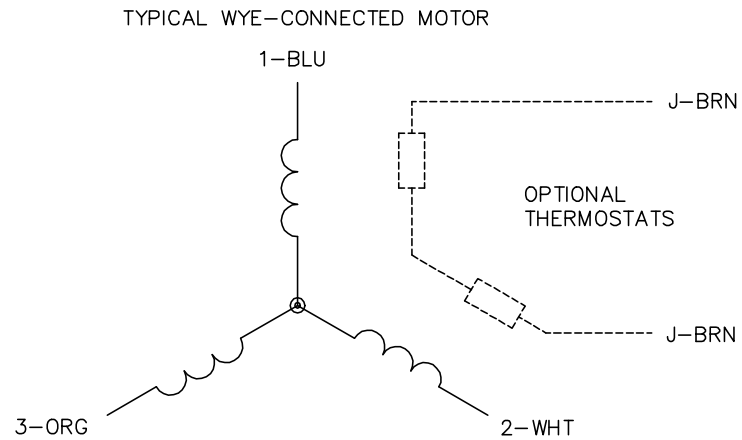
50 HP 3 PH 60 HZ 1770 RPM 575 V 1272M

TORQUES (LB-FT): PO=435 PU=178 LR=248 LRA=290





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

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BY: ENBRIRO

MTL: —


BALDOR - RELIANCE®

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

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