

ABB BALDOR RELIANCE III

Customer information packet

ECP84103T-4

25HP, 1770RPM, 3PH, 60HZ, 284T, 1056M, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	284T
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	25.000 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	30.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C

Part Detail

Revision	L
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	10WZ580
Layout	10LYH231
Eff. date	09-26-2025
CD Diagram	CD0006
Poles	04
Leads	3#10
Proprietary	False
Created date	12-06-2018

Heater Indicator	No Heater
High Voltage Full Load Amps	30.0 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	IP56
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Ring Terminals
Motor Standards	NEMA
Motor Type	1056M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	28.00 IN
Power Factor	85
Product Family	Chem Process S/P 32-8 IEEE 841
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.875 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.	ECP84103T-4			P/N		ENCLOSURE			TEFC				
SPEC.	10-0000-0396		CC	010A	FRAME	284T	S/N						
HP	25		CLASS	F	HZ	60	ODE BRG	6311	DE BRG	6311			
RPM	1770	RPM MAX	2700	PH	3	DES	B	D.E. BRG.		55BC03X30X			
VOLT	460		KVA-CODE	F		O.D.E. BRG.		55BC03X30X					
AMP	30		MOTOR WEIGHT			468	GREASE	POLYREX EM					
RATING	40C AMB-CONT			MAX. KVAR		5.9	BLANK						
NEMA-NOM-EFF	93.6	# OF ROTOR BARS		40	SER.F.	1.15	IP	56					
G.MIN.EFF	92.4	# OF STATOR SLOTS		48	PF	85	INV.TYPE	PWM					
TEMP CODE	T3C	INVERTER-TEMP-CODE			180								
TEMP =	160	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
SA363734	SA 10-0000-0396	1.000 ea
RA353025	RA 10-0000-0396	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
WD1000B49	T&B C73,RING TERMINAL 10-12 AWG 3/8 STUD	3.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
80XN3816J12	3/8-16 X 3/4 SET SCREW, HEX SOC, CUP PT	4.000 ea
10FH1007LP5	FAN COVER, W/MG1025L14, PRIMED CASTING	1.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	3.000 ea
10XN3118K20	5/16-18 X 1 1/4 GRADE 5 STEEL ZC PLATED	3.000 ea
09FN3001C02	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	0.130 lb
10XN2520K06	1/4-20 X 3/8" HX HD SCREWGRADE 5, ZINC P	1.000 ea
10EP1110A02GP6	FR ENDPLATE, MACH W/PRIMER & PAINT	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
HW4601A53	INPRO/SEAL VBXX FOR 311 BEARING/310 FRAM	1.000 ea
HW5100A13	W4627-047 WVY WSHER	1.000 ea
HA4017A02	.125X2.50 GREASER EXTENS.F/S	1.000 ea
HA4017A02	.125X2.50 GREASER EXTENS.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
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
HA4002A03	#304 S.S. DRAIN FITTING, .125 NPT (.44 H	1.000 ea

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10EP1110A01P	MACH'D EPOXY PRIMED EP	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
HW4601A53	INPRO/SEAL VBXX FOR 311 BEARING/310 FRAM	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
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
10CB1000A09P	KOBX, MACH W/1.50 NPT & 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
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
59XW2520G07	.25-20X.44,HEX SER WSHR,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
10PA1000	PACKAGING GROUP COMBINED PRINT PK1023A07	1.000 ea
HW2501H28	KEY, 1/2 SQ X 3.250	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 # 61560

Typical performance - not guaranteed values

Winding: 10WGZ580-R001			Type: 1056M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		25	Full Load Torque		74.31 LB-FT	
Volts		460	Start Configuration		direct on line	
Full Load Amps		30	Breakdown Torque		197 LB-FT	
R.P.M.		1770	Pull-up Torque		91.4 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		115 LB-FT
NEMA Design Code		B	KVA Code	F	Starting Current	
Service Factor (S.F.)		1.15	No-load Current		10.4 A	
NEMA Nom. Eff.		93.6	Power Factor	85	Line-line Res. @ 25°C	
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load	
S.F. Amps				Temp. Rise @ S.F. Load		67°C
				Locked-rotor Power Factor		30.3
				Rotor inertia		4.46 lb-ft²

Load Characteristics 460 V, 60 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	51	73	81	85	86	86	86
Efficiency	91	93.8	94.1	93.7	92.9	91.8	93.2
Speed	1792.8	1785.5	1778.9	1770.7	1762.4	1751.5	1766
Line amperes	12.5	17	22.9	29.5	36.5	44.7	33.7

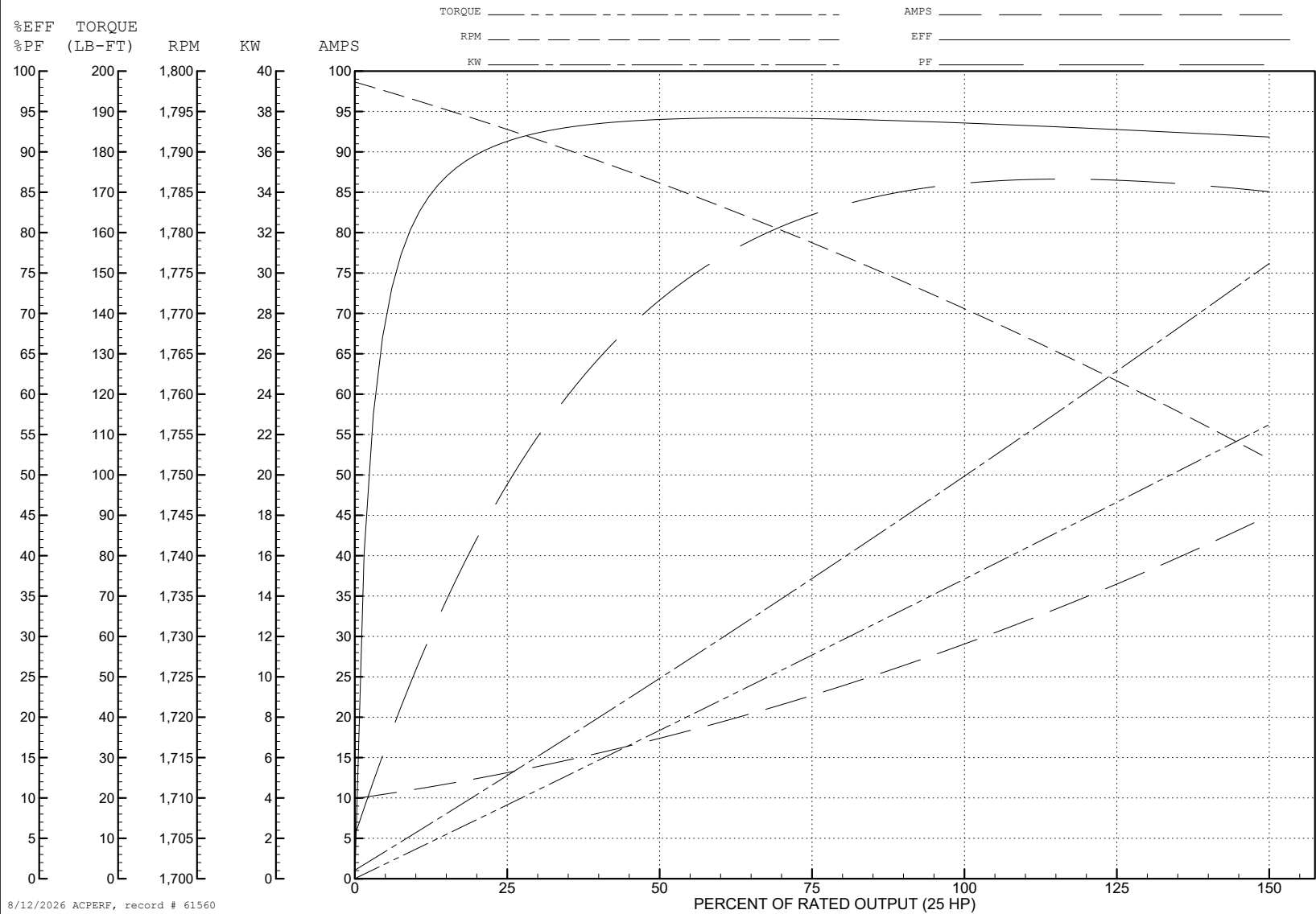
ABB Motors and Mechanical Inc.

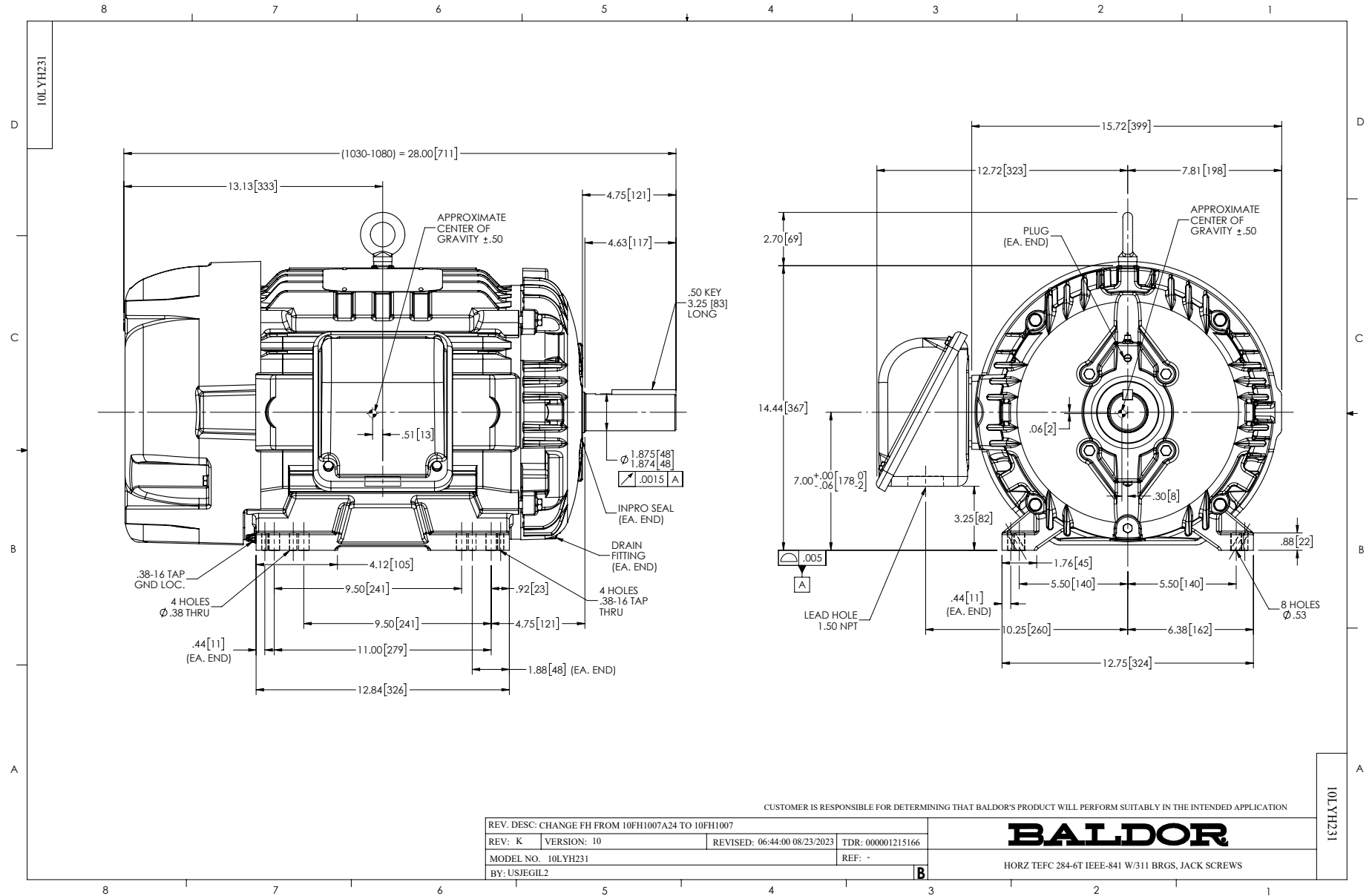
WINDING # 10WGZ580

Typical performance - not guaranteed values.

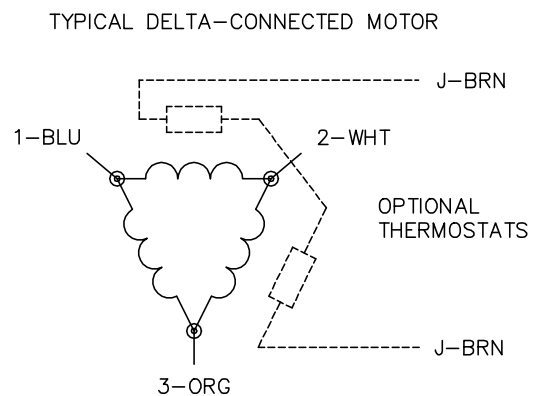
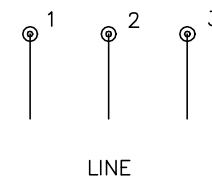
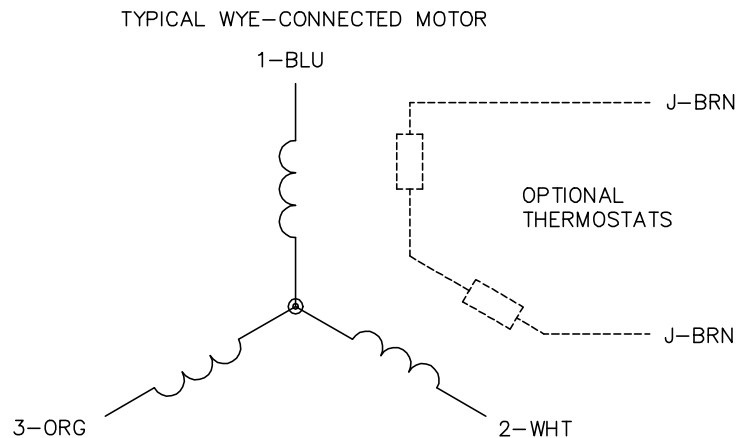
25 HP 3 PH 60 HZ 1770 RPM 460 V 1056M

TORQUES (LB-FT): PO=197 PU=91.4 LR=115 LRA=173





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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