

ABB BALDOR RELIANCE III

Customer information packet

ECP4107T-4

25HP, 3520RPM, 3PH, 60HZ, 284TS, 1048M, TEFC, F

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	284TS
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	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR CCSA US
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	1.3
Current @ Voltage	28.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	R
Type	AC
Mech. spec.	10H423
Base	
Status	PRD/A
Elec. spec.	10WGZ242
Layout	10LYH423
Eff. date	09-29-2025
CD Diagram	CD0006
Poles	02
Leads	3#10
Proprietary	False
Created date	12-12-2014

Front Shaft Indicator	None
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	28.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1048M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	26.63 IN
Power Factor	90
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	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3520 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.	ECP4107T-4				P/N				ENCLOSURE				TEFC				
SPEC.	10H423Z242G3			CC	010A	FRAME		284TS		S/N							
HP	25				CLASS	F	HZ	60	DES	B							
RPM	3520				RPM MAX		5400		PH	3	KVA-CODE		F				
VOLT	460				MOTOR WEIGHT				342								
AMP	28				SER.F.	1.15		PF	90	ODE BRG		6311	DE BRG		6311		
RATING	40C AMB-CONT				NEMA-NOM-EFF				91.7		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	1.3		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
SA291371	SA 10H423Z242G3	1.000 ea
RA277503	RA 10H423Z242G3	1.000 ea
37FN3002C03	EXFN, PLASTIC, 6.00 OD, 1.690 ID	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
10CB1503P	CONDUIT BOX LIPPED, CAST W/EPOXY PRIMER	1.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
10XN2520K06	1/4-20 X 3/8" HX HD SCREWGRADE 5, ZINC P	1.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	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
HW4600B40	V-RING SLINGER 2.000 X 2.680 X .28 VITON	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
HA4017A11	1/8 X 2.75 GREASE EXT (F/S)	1.000 ea
HA4017A03	.125 X 1.75 GREASE EXT (F/S)	1.000 ea
HW4019A01	PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING	1.000 ea
10XN3118K40	5/16-18 X 2.25" HEX HD, GRADE 5	4.000 ea
HW5100A13	W4627-047 WVY WSHER	1.000 ea
10EP1110A47P	PU ENDPLATE, MACH W/PRIMER	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
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
HW4600B40	V-RING SLINGER 2.000 X 2.680 X .28 VITON	1.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 ea
10FH1007P	FAN COVER, CAST W/EPOXY PRIMER	1.000 ea
10XN3118K24	5/16-18 X 1.50" HEX HD, GRADE 5	3.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	3.000 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
HW2501G18	SQUARE STEEL KEY .375 X 2.00 LONG	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
10EP1110A44LP5	FREP, MACH W/PRIMER & MG1025L14	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
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.130 lb
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 ea
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN 8	0.070 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
10PA1000	PACKAGING GROUP COMBINED PRINT PK1023A07	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 ea

AC Induction Motor Performance Data

Record # 47223

Typical performance - not guaranteed values

Winding: 10WGZ242-R004			Type: 1048M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		25	Full Load Torque		37.3 LB-FT		
Volts		460	Start Configuration		direct on line		
Full Load Amps		28	Breakdown Torque		103 LB-FT		
R.P.M.		3520	Pull-up Torque		42.1 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		54 LB-FT	
NEMA Design Code		B	KVA Code	F	Starting Current		171 A
Service Factor (S.F.)		1.15	No-load Current		6.99 A		
NEMA Nom. Eff.		91.7	Power Factor	90	Line-line Res. @ 25°C		0.29072 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		57°C
S.F. Amps			Temp. Rise @ S.F. Load		70°C		
			Locked-rotor Power Factor		23.3		

Load Characteristics 460 V, 60 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	69	83	89	90	90	90	90
Efficiency	87.8	91.6	92.2	91.8	90.9	89.7	91.3
Speed	3580.1	3563.2	3542.7	3521.3	3497	3469.9	3507
Line amperes	10.1	15.4	21.7	28.3	35.7	43.5	32.7

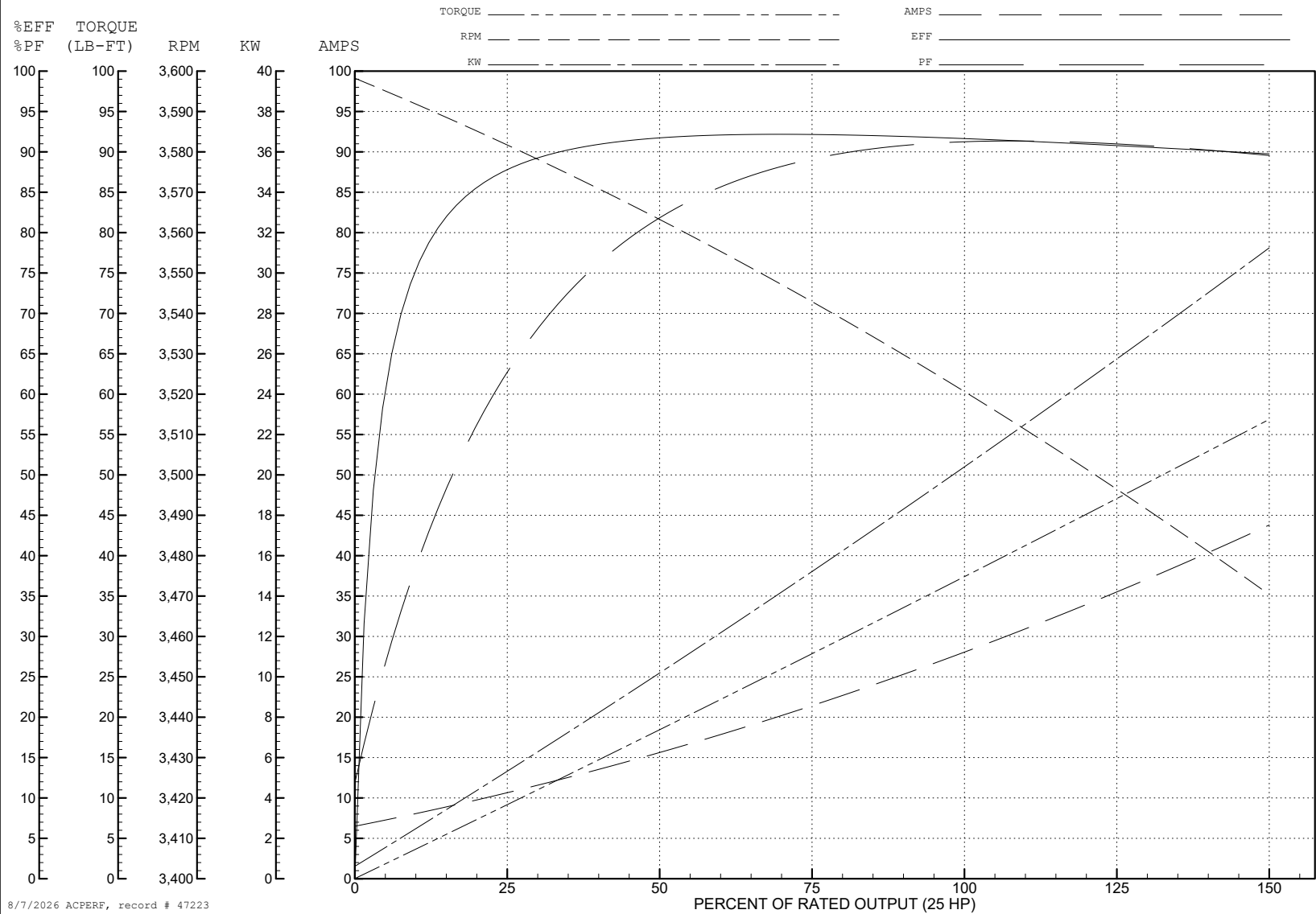
ABB Motors and Mechanical Inc.

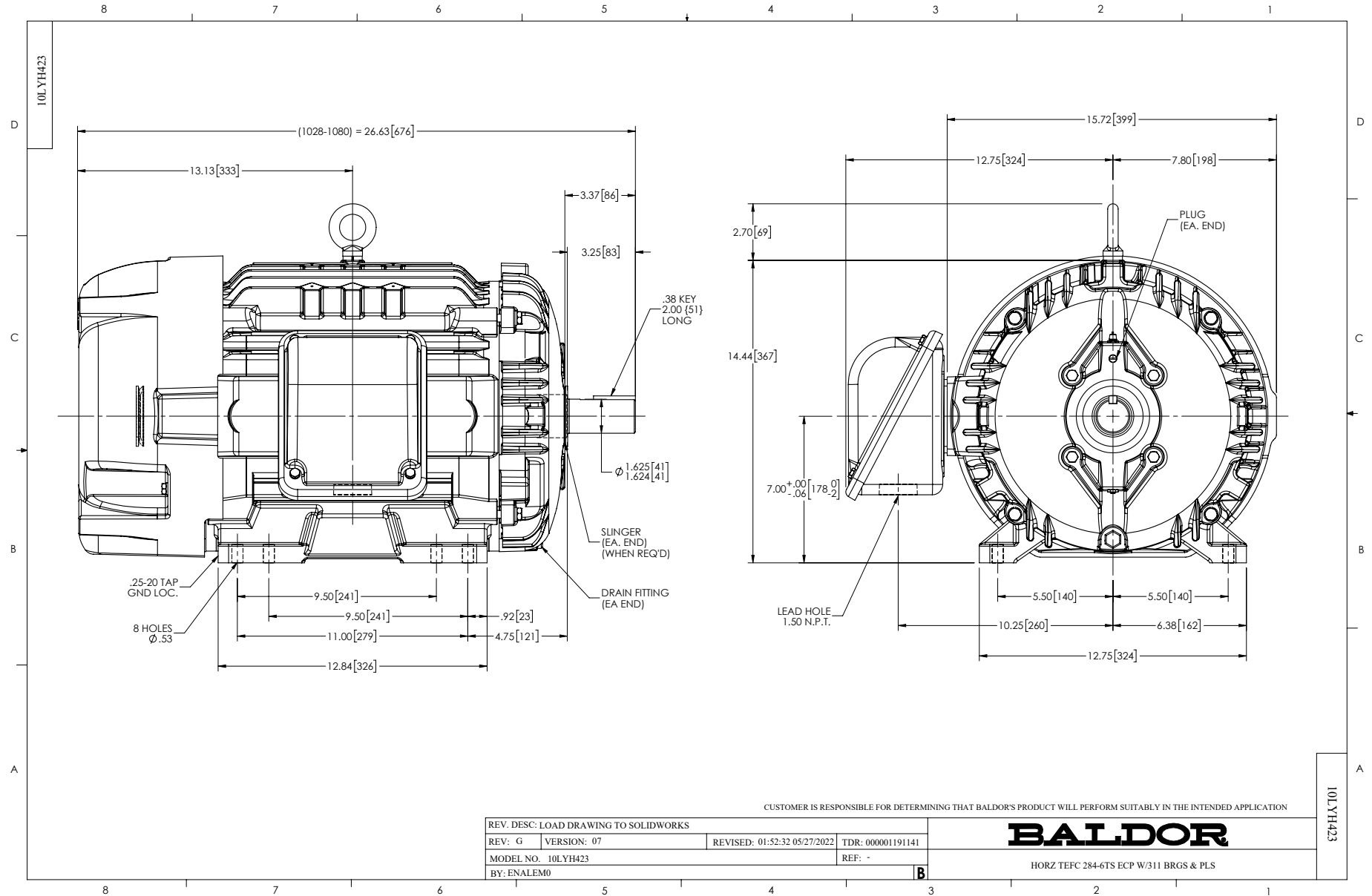
WINDING # 10WGZ242

Typical performance - not guaranteed values.

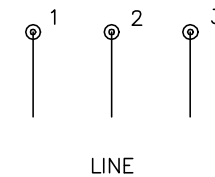
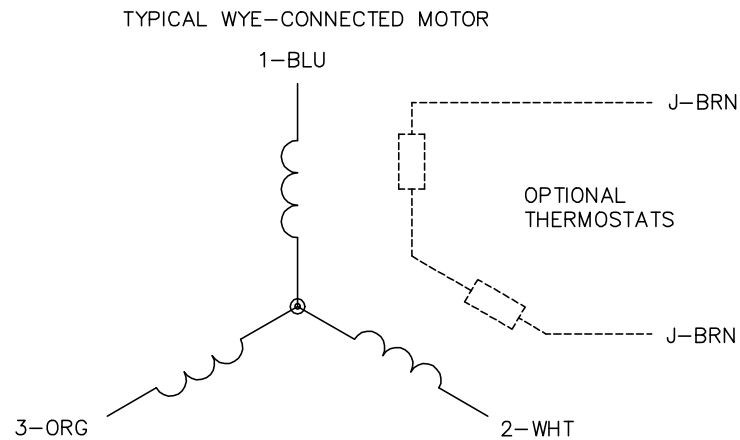
25 HP 3 PH 60 HZ 3520 RPM 460 V 1048M

TORQUES (LB-FT): PO=103 PU=42.1 LR=54 LRA=171





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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