

ABB BALDOR RELIANCE III

Customer information packet

ECP64104TR-4

30HP, 1770RPM, 3PH, 60HZ, 286T, 1060M, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	286T
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	30.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA PREMIUM (OLD LOGO) UR CCSA US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	MOBIL SHC POLYREX 222
Blower	None
Constant Torque Speed Range	1
Current @ Voltage	36.000 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
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	AA
Type	AC
Mech. spec.	10J448
Base	
Status	PRD/A
Elec. spec.	10WGZ438
Layout	10LYJ448
Eff. date	09-29-2025
CD Diagram	CD0006
Poles	04
Leads	3#10
Proprietary	False
Created date	11-04-2015

Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	36.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	G
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 @ 10 AWG
Motor Lead Termination	Ring Terminals
Motor Standards	NEMA
Motor Type	1060M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	28.01 IN
Power Factor	84
Product Family	Chem Process S/P 32-8 IEEE 841
Pulley End Bearing Type	Roller
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No 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
NP4367

CAT.NO.	ECP64104TR-4			CUST. P/N				ENCL			TEFC				
SPEC.	10J448Z438			CC	010A	FRAME	286T	SER.NO.							
HP	30			CLASS		F	HZ	60	ODE BRG	6311	DE BRG	NU311			
R.P.M.	1770	MAX. R.P.M.		2700	PH.	3	DES.	B	ABMA DE BRG		55RU03X30X				
VOLTS	460			CODE		G	ABMA ODE BRG		55BC03X30X						
AMPS	36			MOTOR WT.			487	LUBRICATION		MOBIL SHC 222					
RATING	40C AMB-CONT				MAX. KVAR			7.7	BLANK	AIR COOLED HEAT					
NEMA NOM. EFF.	93.6	# OF ROTOR BARS			40	SER.F.	1.15	IP	56	EXCHANGER					
GUAR.MIN.EFF	92.4	# OF STATOR SLOTS			48	P.F.	84	1.0 S.F. ON		PWM					
TEMP CODE	T3C		INVERTER TEMP CODE:TEMP=				180								
TEMP =	160	CHP	60	TO	90										
CT	1	TO	60												
VOLTS		AMPS		WATTS			MAX. SPACE HEATER TEMP.					VT	0-	TO	60

Parts List

Part number	Description	Quantity
SA310041	SA 10J448Z438	1.000 ea
RA297416	RA 10J448Z438	1.000 ea
09FN3001C02	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	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
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
HW4500A20	1/8NPT SL PIPE PLUG	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
HA4017A02	.125X2.50 GREASER EXTENS.F/S	2.000 ea
HW4019A01	PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING	1.000 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
HW4600G54	DOME SLINGER, 7.125 OD X 1.870/1.810 ID	1.000 ea
10EP1110A123P	MACH'D W/EPOXY PRIMER	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	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
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 ea
WD4100A08	HEYCO #2783 DOME PLUG DP-2000(CUSTOME	1.000 ea
10XN3118K16	5/16-18 X 1' GRADE #5, STL, ZINC PLATE	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
MJ5004A59	ADHESIVE LOCTITE #401 MSC #88545264	0.010 ea
HW2501H28	KEY, 1/2 SQ X 3.250	1.000 ea
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.025 ea
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.033 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 qt
WD1000B49	T&B C73,RING TERMINAL 10-12 AWG 3/8 STUD	3.000 ea
10EP1110A139LP5	FR ENDPLATE, MACH W/EPOXY & MG1025L14	1.000 ea
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HA4002A03	#304 S.S. DRAIN FITTING, .125 NPT (.44 H	1.000 ea
MJ1000B28	GREASE, MOBIL SHC POLYREX 222	0.130 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
HA4002A03	#304 S.S. DRAIN FITTING, .125 NPT (.44 H	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
10FH1007A70LP5	FAN COVER, MACH W/2.00 BORE,EPOXY PRIMER	1.000 ea
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN 8	0.070 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0006	CONNECTION LABEL	1.000 ea
NP4367	2gd	1.000 ea
12PA1000	PACKAGING GROUP PRINT PK1024A07	1.000 ea
10PA1086	SHAFT TENSIONER 2X4 5-1/4 LEG 4-3/4 OPEN	1.000 ea
10XN5013K48	1/2-13 X 3.00 HEX HD GRADE 5	1.000 ea
HW1000A50	1/2 SAE FLAT WASHERS	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

AC Induction Motor Performance Data

Record # 93188

Typical performance - not guaranteed values

Winding: 10WGZ438-R001			Type: 1060M	Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)		30	Full Load Torque		88.64 LB-FT
Volts		460	Start Configuration		direct on line
Full Load Amps		36	Breakdown Torque		267 LB-FT
R.P.M.		1770	Pull-up Torque		116 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	142 LB-FT
NEMA Design Code	B	KVA Code	G	Starting Current	217.5 A
Service Factor (S.F.)			1.15	No-load Current	13.5 A
NEMA Nom. Eff.	93.6	Power Factor	84	Line-line Res. @ 25°C	0.234 Ω
Rating - Duty			40C AMB-CONT	Temp. Rise @ Rated Load	62°C
S.F. Amps				Temp. Rise @ S.F. Load	76°C
				Locked-rotor Power Factor	29.7
				Rotor inertia	4.77 lb-ft²

Load Characteristics 460 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	48	71	80	84	85	85	83
Efficiency	91	94	94.3	93.6	93.7	92	93.4
Speed	1793	1787	1779	1772	1764	1753	1769
Line amperes	15.8	21.1	27.8	35.6	44	53.5	41.5

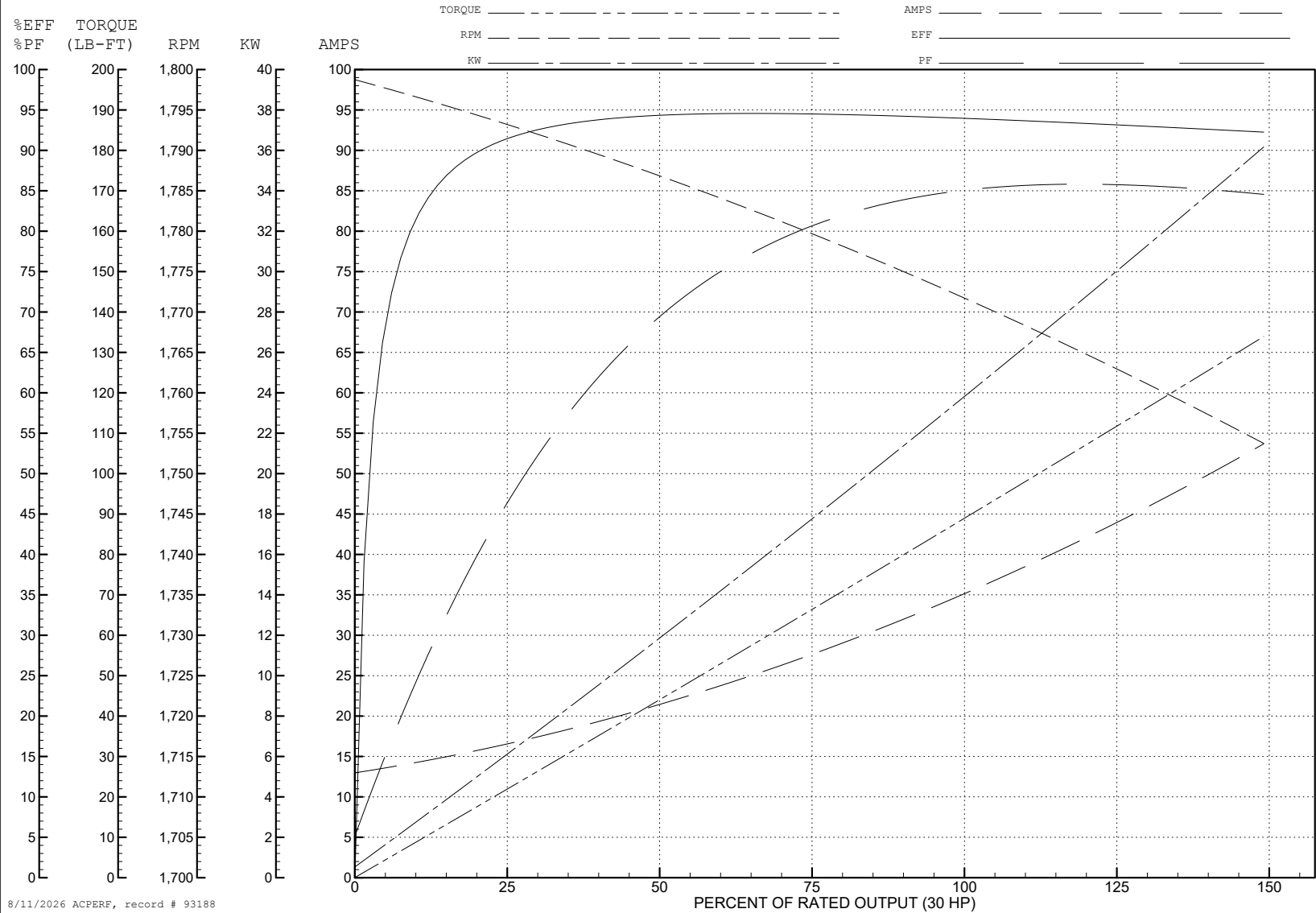
ABB Motors and Mechanical Inc.

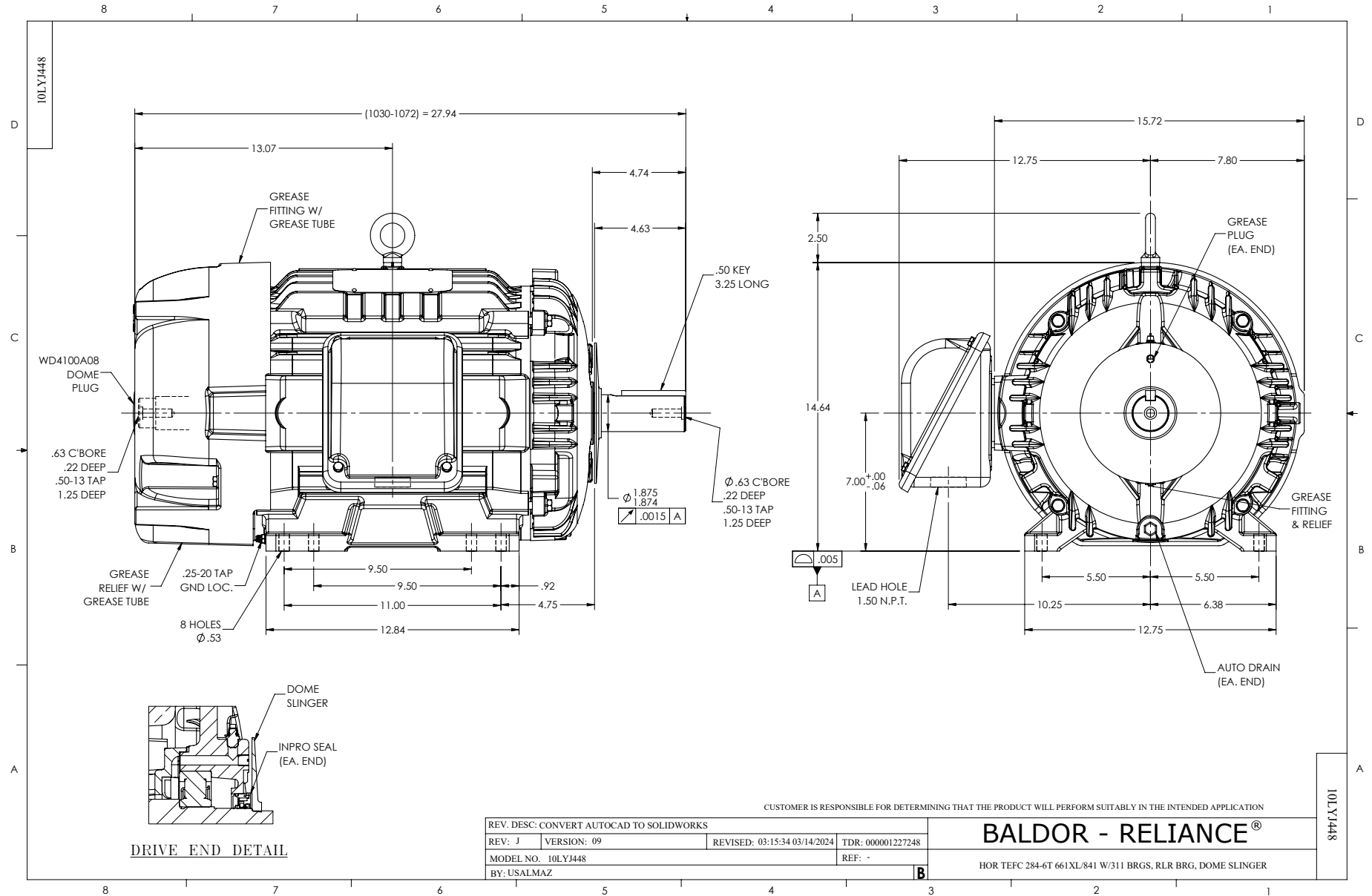
WINDING # 10WGZ438

Typical performance - not guaranteed values.

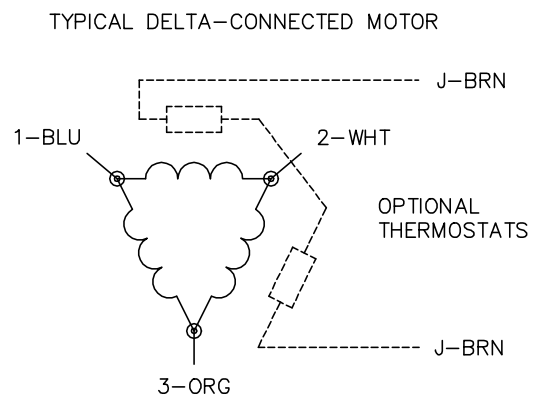
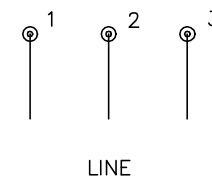
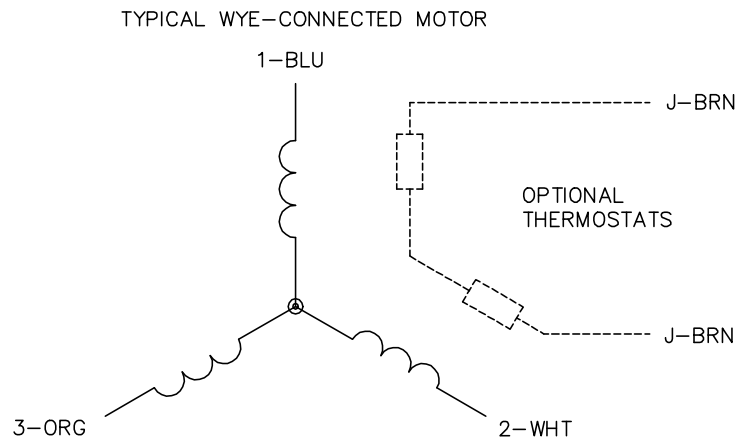
30 HP 3 PH 60 HZ 1770 RPM 460 V 1060M

TORQUES (LB-FT): PO=267 PU=116 LR=142 LRA=217.5





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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