

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

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

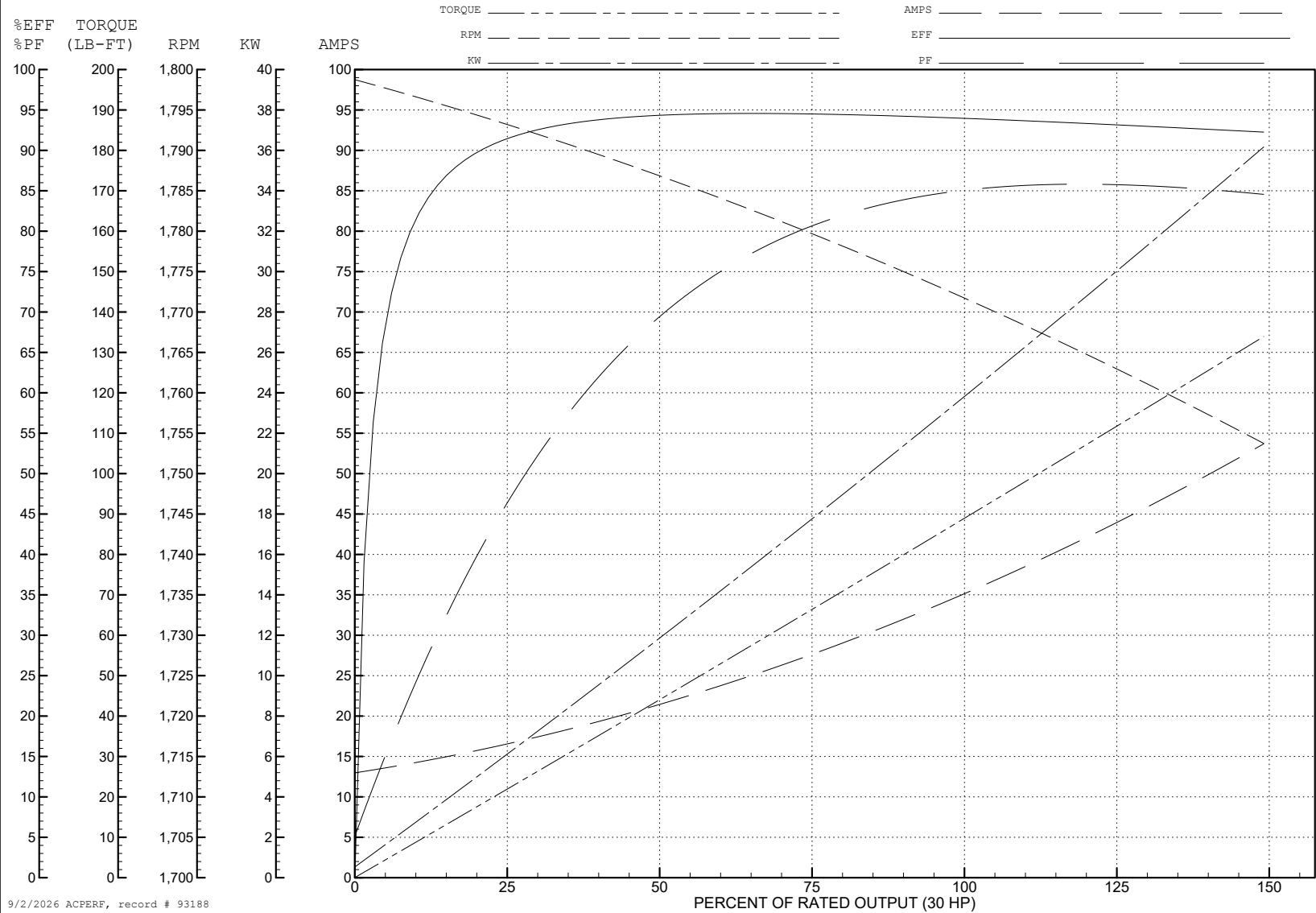
ABB Motors and Mechanical Inc.

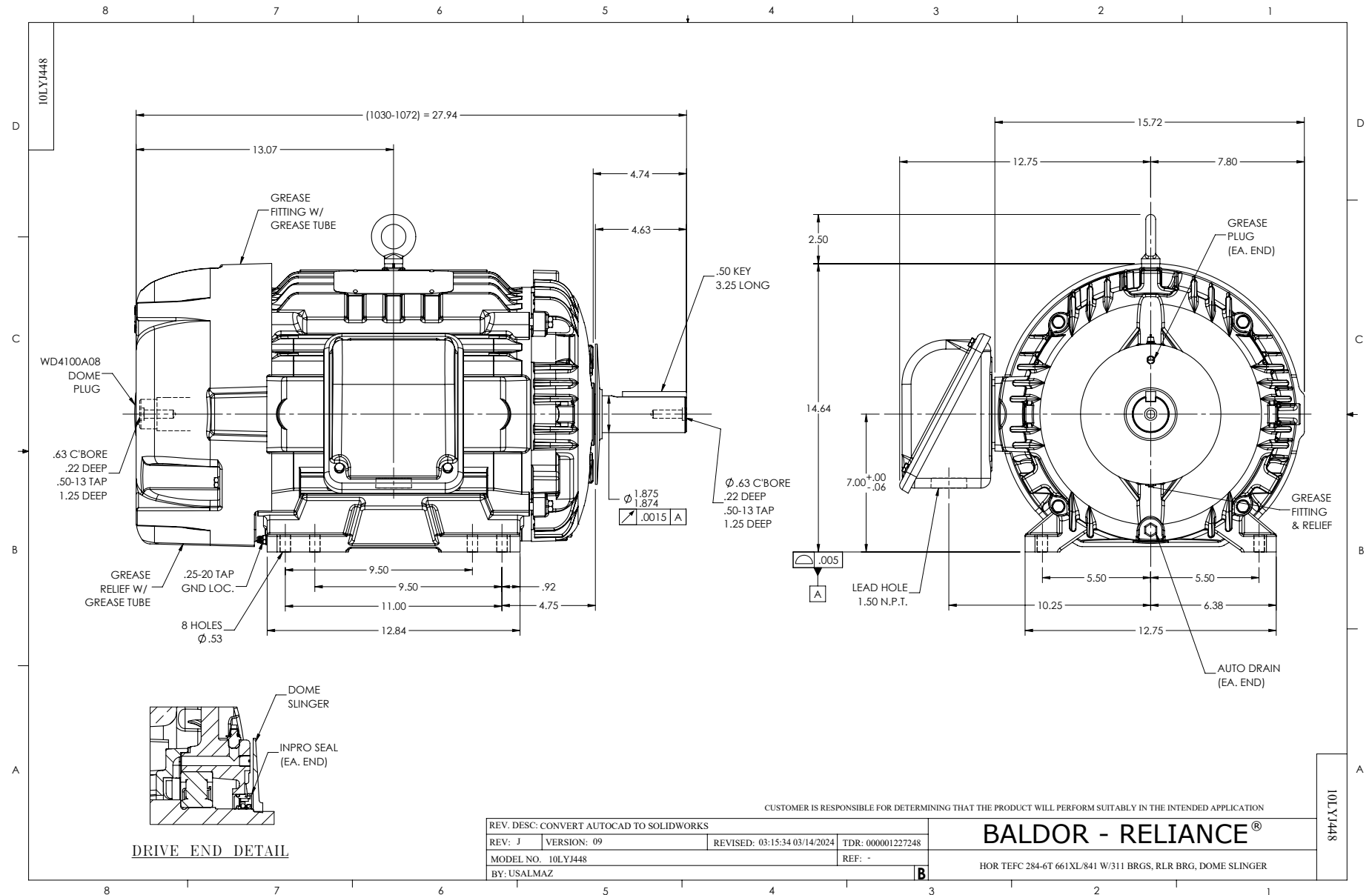
WINDING # 10WGZ438

Typical performance - not guaranteed values.

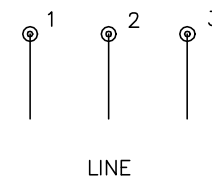
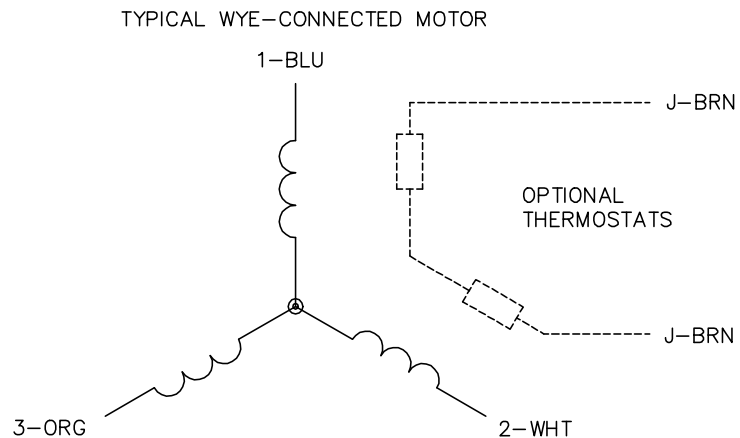
30 HP 3 PH 60 HZ 1770 RPM 460 V 1060M

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

SH 1 of 1