ABB BALDOR RELIANCE

Customer information packet

ECP84104T-4

30HP, 1770RPM, 3PH, 60HZ, 286T, TEFC, F1
Class - CLI GP A,B,C,D
Division - Division II

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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	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	35.600 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	Q
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	10WGZ438
Layout	10LYH231
Eff. date	09-04-2026
CD Diagram	CD0006
Poles	04
Leads	3#10
Proprietary	False
Created date	12-06-2018

Heater Indicator	No Heater
High Voltage Full Load Amps	35.6 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	IP56
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Ring Terminals
Motor Standards	NEMA
Motor Type	1060M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	28.00 IN
Power Factor	84
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.	ECP84104T-4			**P/N**				**ENCLOSURE**	TEFC			
SPEC.	10-0000-0398			**CC**	010A	**FRAME**	286T	**S/N**				
HP	30			**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**	G			**O.D.E. BRG.**	55BC03X30X			
AMP	35.6			**MOTOR WEIGHT**	545	**GREASE**	POLYREX EM					
RATING	40C AMB-CONT			**MAX. KVAR**	7.7	**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**	84	**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**	0-	**VT HZ TO**	60	

AC Induction Motor Performance Data
Record # 63188
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**	215 A
Service Factor (S.F.)			1.15	**No-load Current**	13.5 A
NEMA Nom. Eff.	93.6	**Power Factor**	84	**Line-line Res. @ 25ºC**	0.23736 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	62°C
S.F. Amps				**Temp. Rise @ S.F. Load**	77°C
				Locked-rotor Power Factor	30.5

Load Characteristics 460 V, 60 Hz, 30 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	49	71	80	84	85	85	85
Efficiency	91.1	94	94.4	94	93.3	92.3	93.6
Speed	1793.2	1786.5	1779.4	1772.3	1763.5	1753.3	1767
Line amperes	15.8	21.1	27.8	35.6	44	53.5	40.6

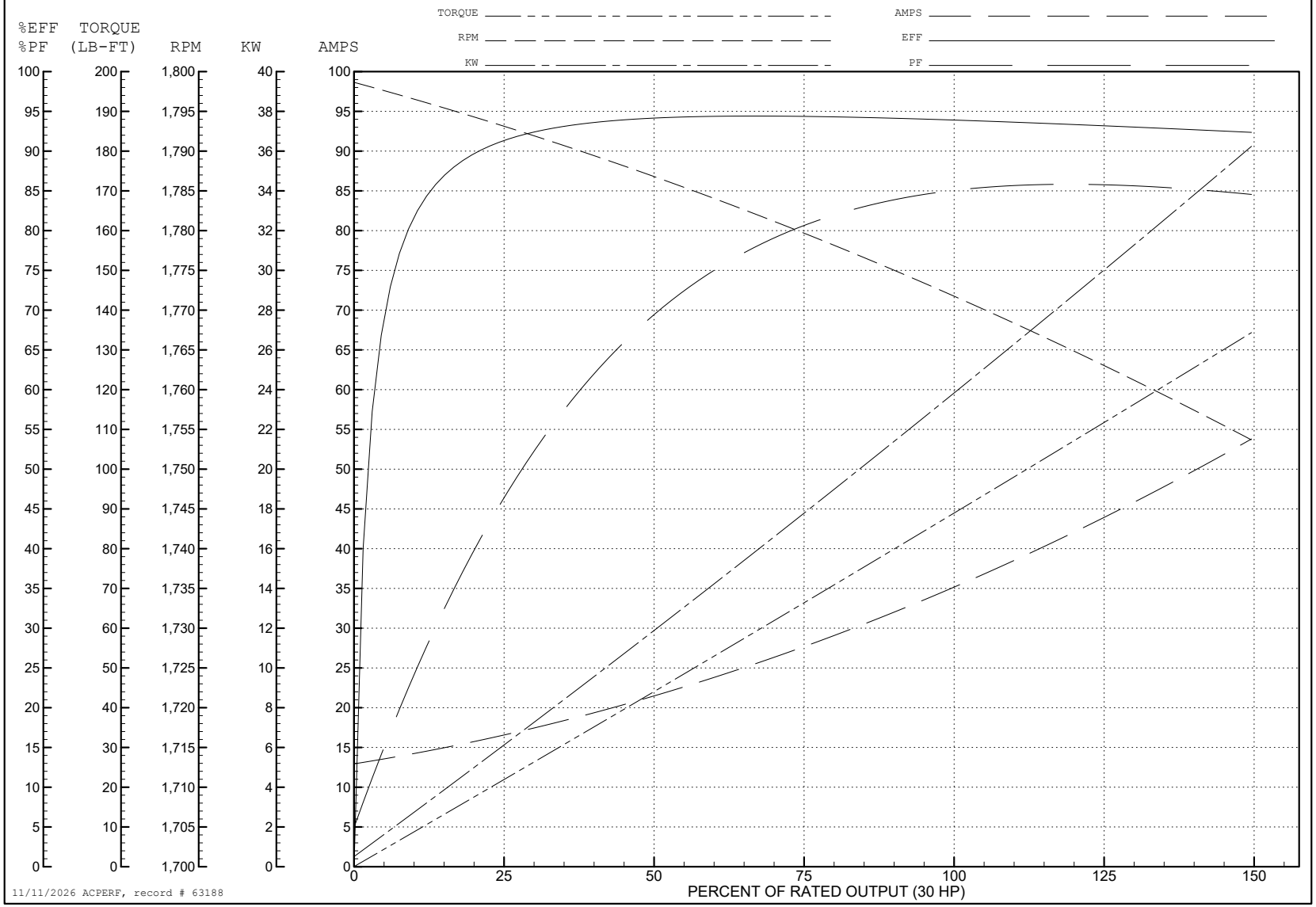
ABB Motors and Mechanical Inc.

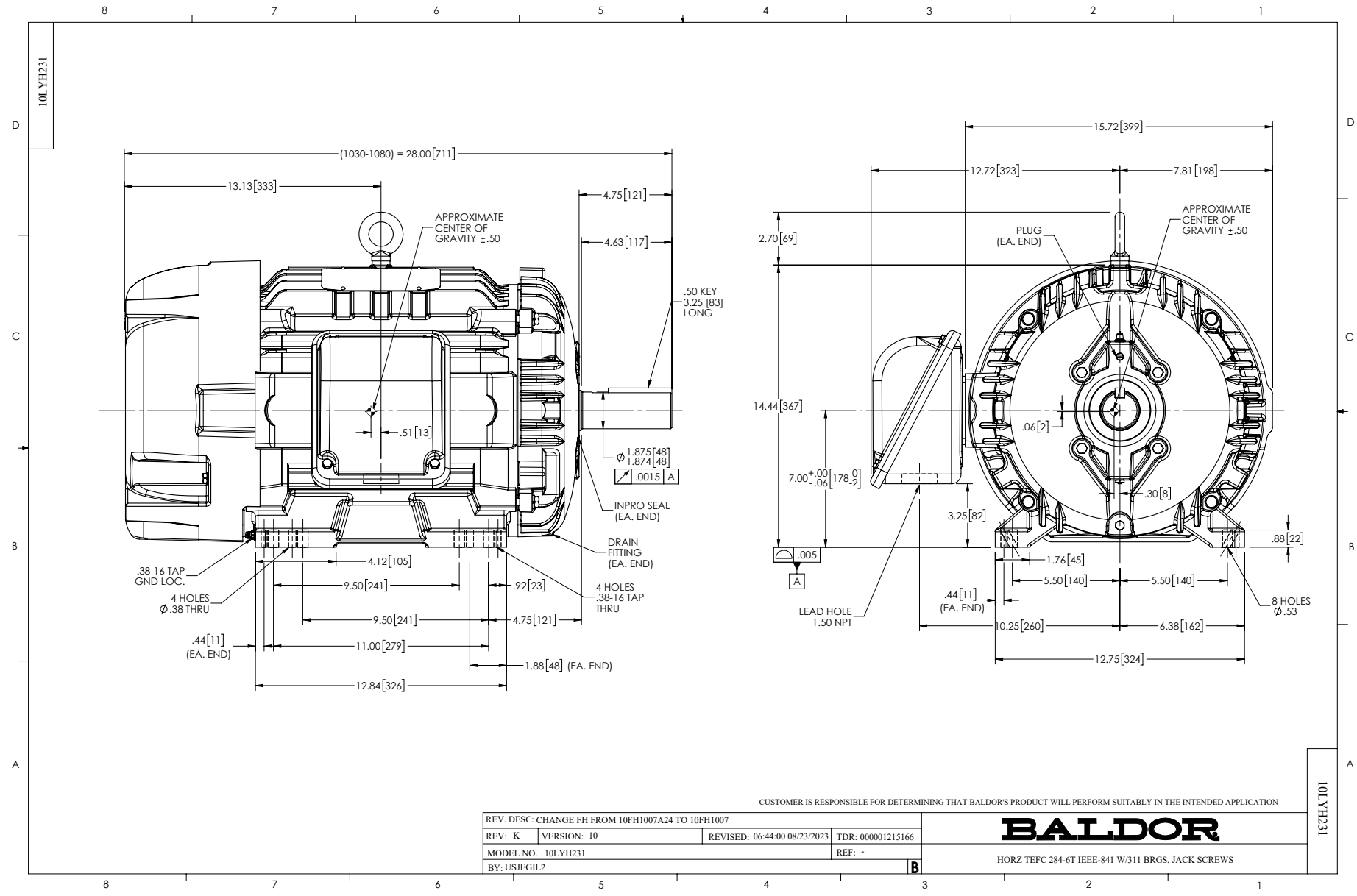
WINDING # 10WGZ438

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

Typical performance - not guaranteed values.

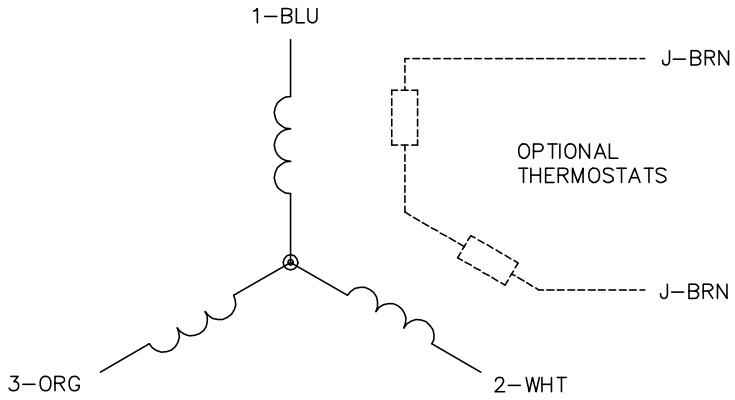
TORQUES(LB-FT): PO=267 PU=116 LR=142 LRA=215

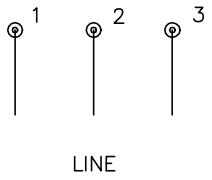



10LYH231
(1030-1080) = 28.00[711]
13.13[333]
4.75[121]
4.63[117]
APPROXIMATE CENTER OF GRAVITY ±.50
.50 KEY 3.25 [83] LONG
.51[13]
Ø 1.875[48] 1.874[48]
.0015 A
INPRO SEAL (EA. END)
DRAIN FITTING (EA. END)
.38-16 TAP GND LOC.
4 HOLES Ø.38 THRU
4.12[105]
9.50[241]
.92[23]
4 HOLES .38-16 TAP THRU
9.50[241]
4.75[121]
.44[11] (EA. END)
11.00[279]
1.88[48] (EA. END)
12.84[326]
15.72[399]
12.72[323]
7.81[198]
APPROXIMATE CENTER OF GRAVITY ±.50
PLUG (EA. END)
2.70[69]
14.44[367]
.06[2]
7.00 +.00 -.06 [178 0 -2]
.30[8]
3.25[82]
.88[22]
.005
A
1.76[45]
5.50[140]
5.50[140]
.44[11] (EA. END)
LEAD HOLE 1.50 NPT
8 HOLES Ø.53
10.25[260]
6.38[162]
12.75[324]
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CHANGE FH FROM 10FH1007A24 TO 10FH1007
REV: K
VERSION: 10
REVISED: 06:44:00 08/23/2023
TDR: 000001215166
MODEL NO. 10LYH231
REF: -
BY: USJEGIL2
B
BALDOR
HORZ TEFC 284-6T IEEE-841 W/311 BRGS, JACK SCREWS
10LYH231

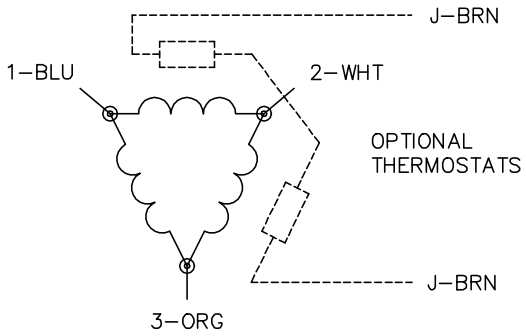
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



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: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

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

SH 1 of 1