

ABB BALDOR RELIANCE III

Customer information packet

ECP84104T-4

30HP, 1770RPM, 3PH, 60HZ, 286T, 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	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. @ 25°C	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

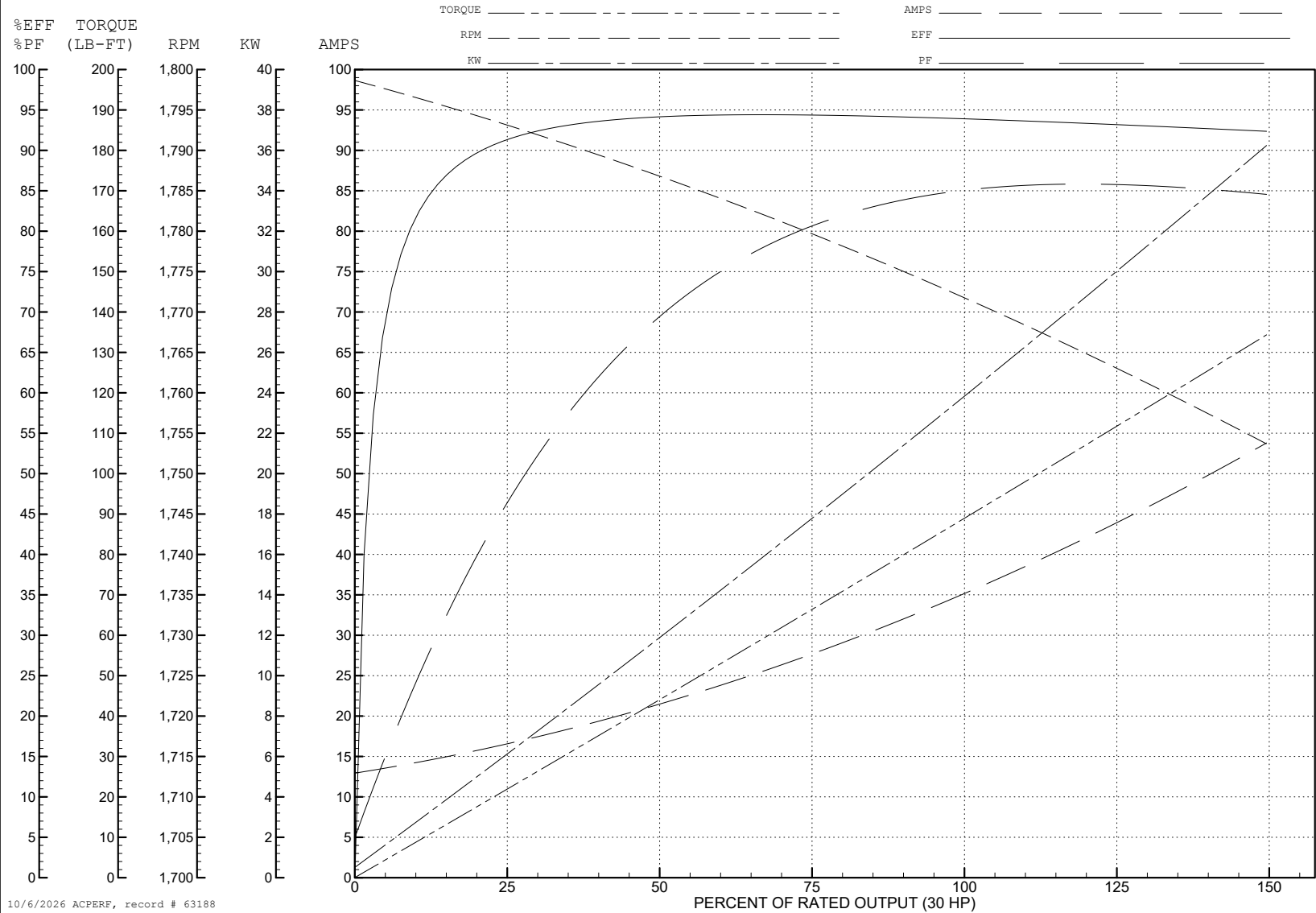
ABB Motors and Mechanical Inc.

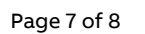
WINDING # 10WGZ438

Typical performance - not guaranteed values.

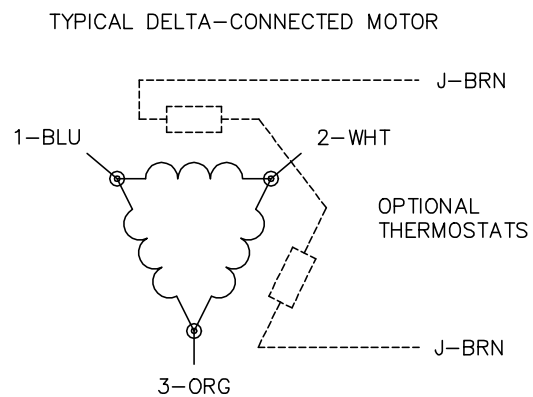
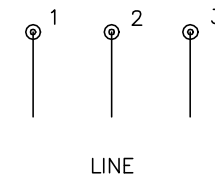
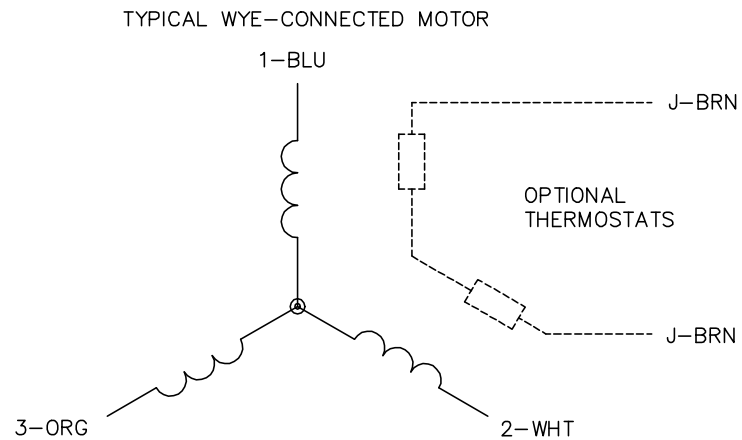
30 HP 3 PH 60 HZ 1770 RPM 460 V 1060M

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





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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