

ABB BALDOR RELIANCE III

Customer information packet

FDEM4104T-5

30HP, 1775RPM, 3PH, 60HZ, 286T, 1056M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	286T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	30.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM NEMA PREMIUM (OLD LOGO)
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
Current @ Voltage	31.000 A @ 575.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	31.0 a
Insulation Class	F
Inverter Code	Inverter Ready

Part Detail

Revision	H
Type	AC
Mech. spec.	10J526
Base	
Status	PRD/A
Elec. spec.	10WGZ313
Layout	10LYJ526
Eff. date	09-10-2025
CD Diagram	CD0006
Poles	04
Leads	3#10
Proprietary	False
Created date	06-14-2018

KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	3 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1056M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.76 IN
Power Factor	78
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1775 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

NP3126L									
CAT.NO.	FDEM4104T-5								
SPEC.	10J526Z313G1								
HP	30								
VOLTS	575								
AMP	31								
RPM	1775								
FRAME	286T		HZ	60			PH	3	
SER.F.	1.15	CODE	J	DES	A	CL	F		
NEMA-NOM-EFF	93.6	PF	78						
RATING	40C AMB-CONT								
CC	010A								
DE	6311		ODE	6309					
ENCL	TEFC	SN							

AC Induction Motor Performance Data

Record # 46990

Typical performance - not guaranteed values

Winding: 10WGZ313-R001			Type: 1056M		Enclosure: TEFC		
Nameplate Data			575 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		30	Full Load Torque		88.6 LB-FT		
Volts		575	Start Configuration		direct on line		
Full Load Amps		31	Breakdown Torque		338 LB-FT		
R.P.M.		1775	Pull-up Torque		146 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		183 LB-FT	
NEMA Design Code		A	KVA Code	J	Starting Current		222 A
Service Factor (S.F.)		1.15	No-load Current		15.2 A		
NEMA Nom. Eff.		93.6	Power Factor	78	Line-line Res. @ 25°C		0.308 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		64°C
S.F. Amps					Temp. Rise @ S.F. Load		76°C
					Locked-rotor Power Factor		31
					Rotor inertia		4.47 LB-FT2

Load Characteristics 575 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	39	61	72	78	81	84	78
Efficiency	87.4	91.9	93.2	93.6	93.5	92.7	93
Speed	1792	1788	1783	1777	1771	1763	1777
Line amperes	16.7	20.2	25.2	30.6	36.9	44.5	35.5

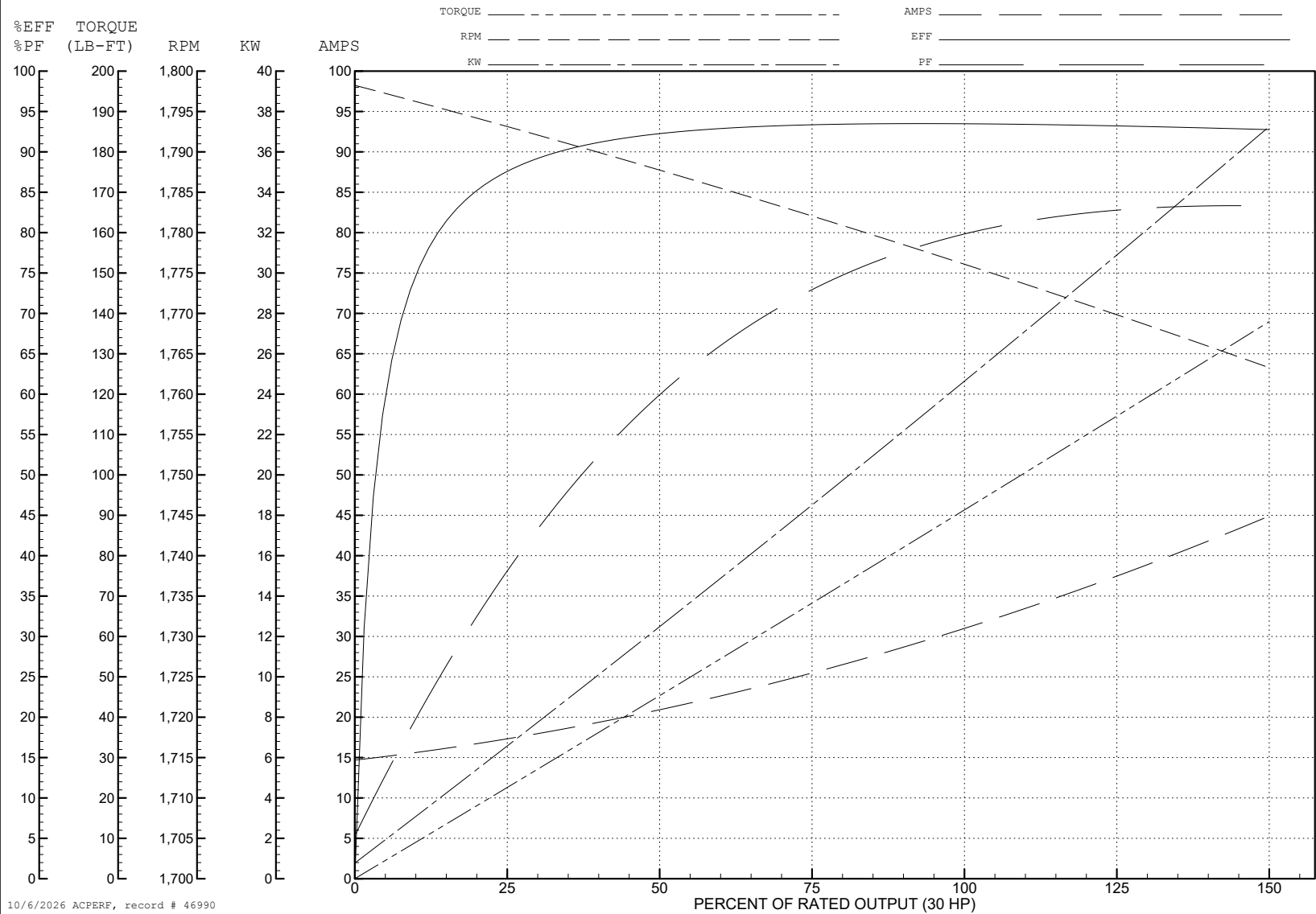
ABB Motors and Mechanical Inc.

WINDING # 10WGZ313

Typical performance - not guaranteed values.

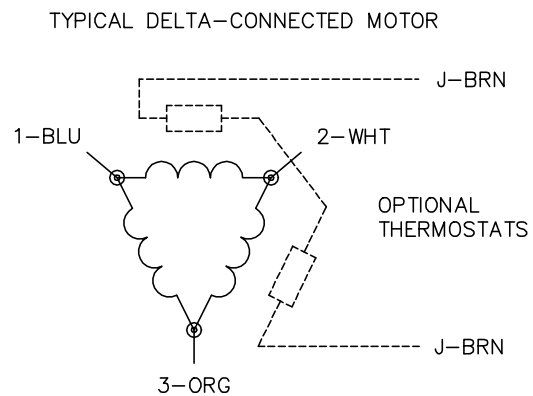
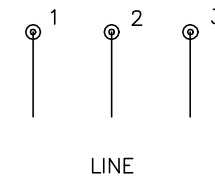
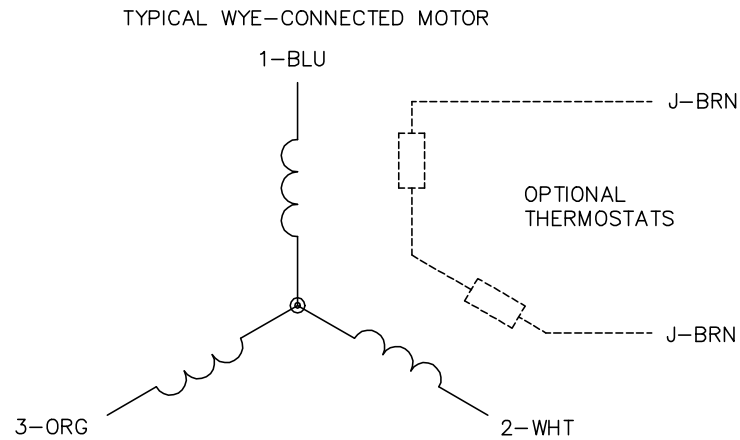
30 HP 3 PH 60 HZ 1775 RPM 575 V 1056M

TORQUES (LB-FT): PO=338 PU=146 LR=183 LRA=222





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