

ABB BALDOR RELIANCE III

Customer information packet

EM4104T-58

30HP, 1470RPM, 3PH, 50HZ, 286T, 1064M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	286T
Frame Material	Iron
Frequency	50.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	30.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	400.0 V @ 50 HZ
Agency Approvals	CE CSA CURUS IE3 UKCA UR WEEE
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	43.000 A @ 400.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	Q
Type	AC
Mech. spec.	10C151
Base	
Status	PRD/A
Elec. spec.	10WGZ706
Layout	10LYC151
Eff. date	01-07-2026
CD Diagram	CD0382
Poles	04
Leads	6#8
Proprietary	False
Created date	11-10-2017

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	43.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1064M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.76 IN
Power Factor	81
Product Family	General Purpose
Pulley End Bearing Type	Ball
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	Shaft Slinger
Speed	1470 rpm
Speed Code	Single Speed
Starting Method	Wye Start - Delta Run
Thermal Device - Bearing	None
Thermal Device - Winding	None

Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3444L									
CAT NO	EM4104T-58								
SPEC.	10C151Z706G1								
HP	30/22KW						PH	3	
VOLTS	400								
AMP	43 245 KG								
RPM	1470 1/MIN IC411								
FRAME	286T		HZ	50		I.P.		54	
SER.F.	1.15	CODE	H	DES	A	CL	F		
NOM.EFF.	93								
PF	81	USABLE AT 208V				N/A			
RATING	40C AMB-CONT				CC				
DE BRG	6311		ODE	6309					
ENCL	TEFC	SN							
VPWM INVERTER READY									
CT5-50(10:1)VT2.5-50(20:1									
BLANK	IE3-93.6(75)92.8(50%)								

AC Induction Motor Performance Data

Record # 68540

Typical performance - not guaranteed values

Winding: 10WGZ706-R001			Type: 1064M		Enclosure: TEFC		
Nameplate Data			400 V, 50 Hz: Single Voltage Motor				
Rated Output (HP)		30	Full Load Torque		107.2 LB-FT		
Volts		400	Start Configuration		direct on line		
Full Load Amps		43	Breakdown Torque		349 LB-FT		
R.P.M.		1470	Pull-up Torque		154 LB-FT		
Hz	50	Phase	3	Locked-rotor Torque		180 LB-FT	
NEMA Design Code		A	KVA Code	H	Starting Current		292 A
Service Factor (S.F.)		1.15	No-load Current		19.1 A		
NEMA Nom. Eff.		93	Power Factor	81	Line-line Res. @ 25°C		0.18648 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		69°C	
S.F. Amps				Temp. Rise @ S.F. Load		78°C	
				Locked-rotor Power Factor		34.7	

Load Characteristics 400 V, 50 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	64	76	81	83	84	82
Efficiency	89	92.8	93.6	93.4	93	92.8	93.2
Speed	1493.1	1487.1	1480.8	1474.1	1469.7	1466.8	1471
Line amperes	21.7	27.1	34.3	42.6	48.2	51.9	46

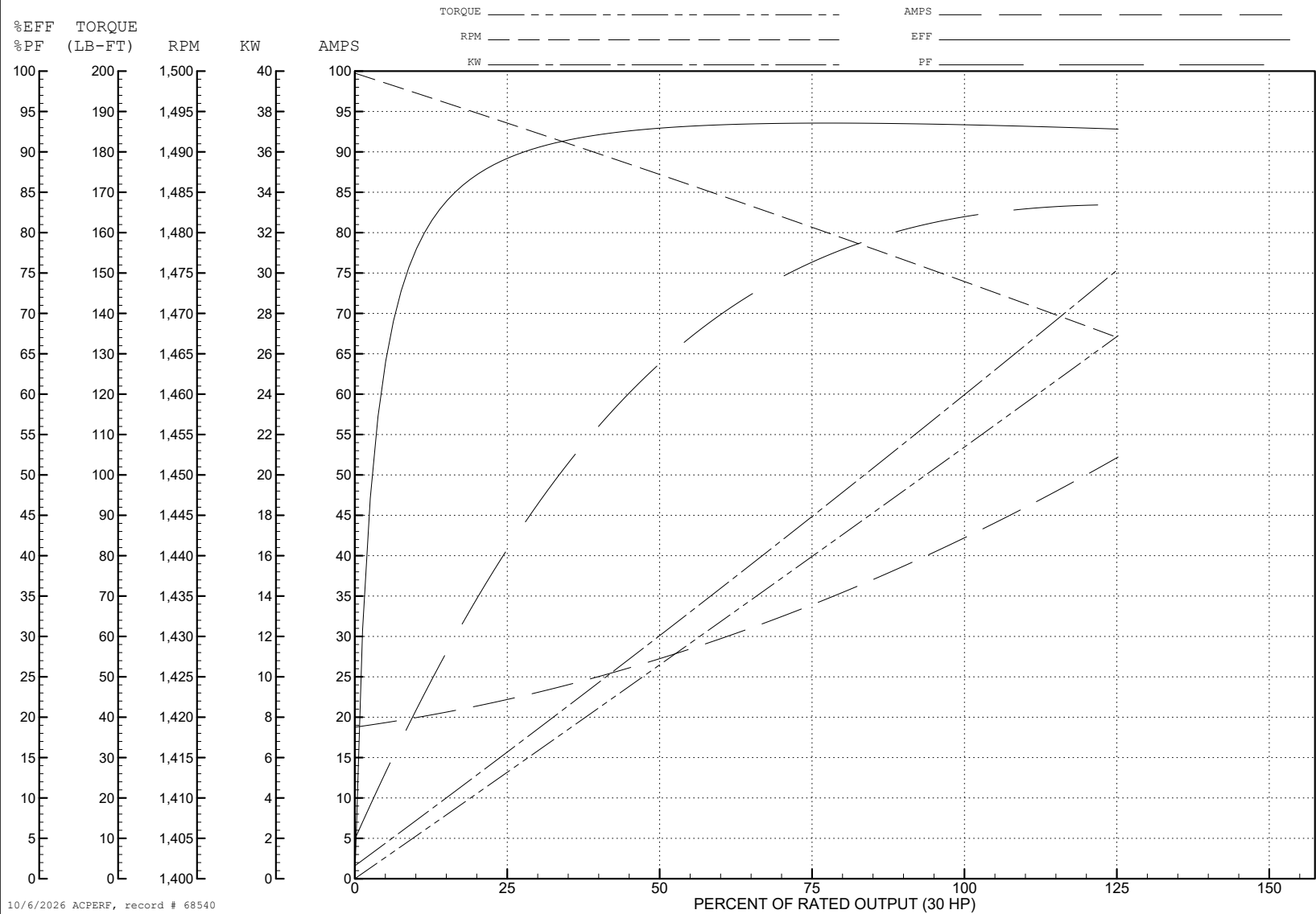
ABB Motors and Mechanical Inc.

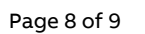
WINDING # 10WGZ706

Typical performance - not guaranteed values.

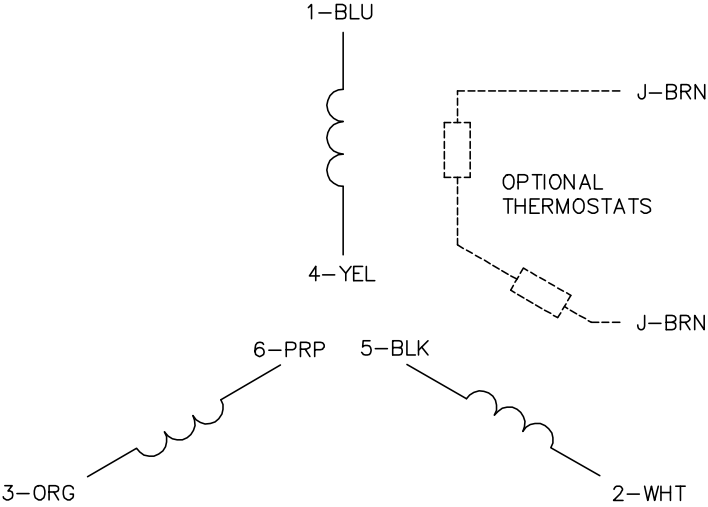
30 HP 3 PH 50 HZ 1470 RPM 400 V 1064M

TORQUES (LB-FT): PO=349 PU=154 LR=180 LRA=292

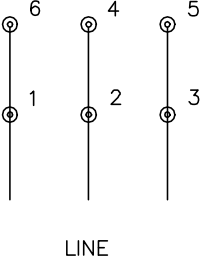




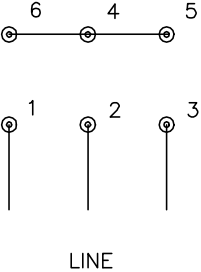
CD0382



RUN CONNECTION
(1D)



START CONNECTION
(1Y)



- NOTES:
- 1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
 - 2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
 - 3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
 - 4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.
 - 5. FOR ACROSS-THE-LINE STARTING, USE 'RUN' CONNECTION.

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: F	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\243	REVISED: 09:05:32 02/19/2019	BY: ENBRIRO
MTL: —		

BALDOR - RELIANCE®

3PH, SV, 6 LEADS, Y START/D RUN
SH 1 of 1

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