

ABB BALDOR RELIANCE III

Customer information packet

EM4115T-58

50HP, 1470RPM, 3PH, 50HZ, 326T, 1272M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	326T
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	50.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	400.0 V @ 50 HZ
Agency Approvals	CE CSA IE3 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	67.000 A @ 400.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.9 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	L
Type	AC
Mech. spec.	12C51
Base	
Status	PRD/A
Elec. spec.	12WGZ201
Layout	12LYC051
Eff. date	08-05-2025
CD Diagram	CD0382
Poles	04
Leads	6#6
Proprietary	False
Created date	10-24-2017

High Voltage Full Load Amps	67.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 6 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1272M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	30.28 IN
Power Factor	85
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	2.125 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	EM4115T-58								
SPEC.	12C051Z201G1								
HP	50/37KW						PH	3	
VOLTS	400								
AMP	67 IC411 209KG								
RPM	1470 1/MIN								
FRAME	326T		HZ	50		I.P.		54	
SER.F.	1.15	CODE	G	DES	B	CL	F		
NOM.EFF.	93.9								
PF	85	USABLE AT 208V					N/A		
RATING	40C AMB-CONT				CC				
DE BRG	6312		ODE	6311					
ENCL	TEFC	SN							
VPWM INVERTER READY									
CT5-50(10:1)VT2.5-50(20:1									
BLANK	IE3-94.6(75%)94.4(50%)								

AC Induction Motor Performance Data

Record # 68342

Typical performance - not guaranteed values

Winding: 12WGZ201-R001			Type: 1272M		Enclosure: TEFC			
Nameplate Data			400 V, 50 Hz: Single Voltage Motor					
Rated Output (HP)		50	Full Load Torque		178.5 LB-FT			
Volts		400	Start Configuration		direct on line			
Full Load Amps		67	Breakdown Torque		534 LB-FT			
R.P.M.		1470	Pull-up Torque		269 LB-FT			
Hz	50	Phase	3	Locked-rotor Torque		283 LB-FT		
NEMA Design Code		B	KVA Code	G	Starting Current		440 A	
Service Factor (S.F.)		1.15	No-load Current		23 A			
NEMA Nom. Eff.		93.9	Power Factor		85	Line-line Res. @ 25°C		0.1064 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		77°C	
S.F. Amps					Temp. Rise @ S.F. Load		88°C	
					Locked-rotor Power Factor		29.4	

Load Characteristics 400 V, 50 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	52	74	82	85	86	87	86
Efficiency	92	94.4	94.6	94.1	93.6	93.2	93.8
Speed	1493.6	1487.3	1480.7	1473.6	1469	1465.6	1471
Line amperes	28.2	38.7	52	67	76.7	83.4	72.8

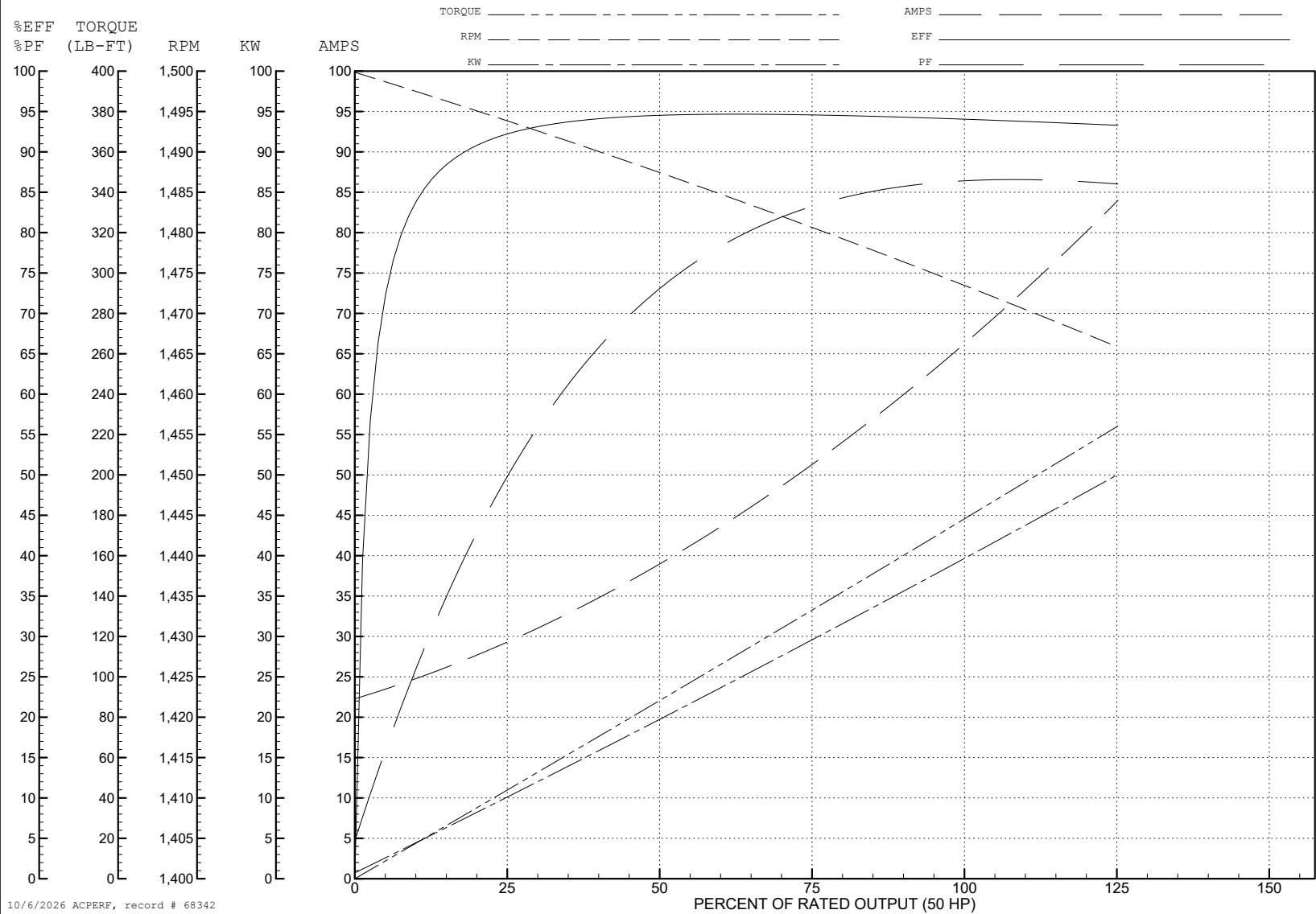
ABB Motors and Mechanical Inc.

WINDING # 12WGZ201

Typical performance - not guaranteed values.

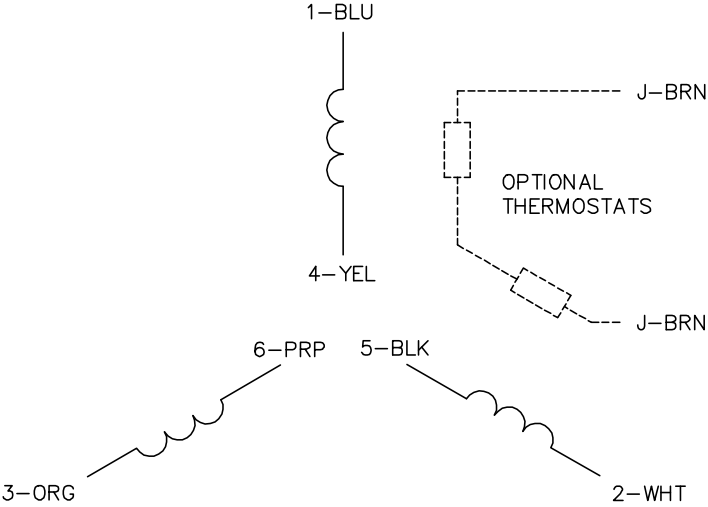
50 HP 3 PH 50 HZ 1470 RPM 400 V 1272M

TORQUES (LB-FT): PO=534 PU=269 LR=283 LRA=440

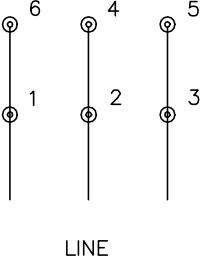




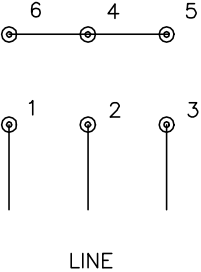
CD0382



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.

CD0382

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
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