

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%)								

Parts List

Part number	Description	Quantity
SA346783	SA 12C051Z201G1	1.000 ea
RA335325	RA 12C051Z201G1	1.000 ea
09FN3001B03SP	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
09GS1000	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 ea
10XN3118K12	5/16-18 X .75 GRADE 5, ZINC PLATED	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 ea
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 ea
HA3400A13	STUD, 1/2-13 X 7" WELKER	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
HW5100A13	W4627-047 WVY WSHR	1.000 ea
10XN3118K40	5/16-18 X 2.25" HEX HD, GRADE 5	2.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 ea
12EP1106A01	PU ENDPLATE, MACH	1.000 ea
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 ea
10XN5013K28	1/2-13 X 1.75 HEX HEAD MACH SCREW,GRAD	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
12FH1002SP	FAN COVER, CAST	1.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	4.000 ea
10CB3500SP	CONDUIT BOX LID, CAST	1.000 ea
10GS1000	GASKET, CONDUIT BOX LID	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 ea
10CB3001	CONDUIT BOX CAST W/2.500 LEAD HOLE	1.000 ea
12EP1107A05	FR ENDPLATE, MACH	1.000 ea
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 ea
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea

HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.200 lb
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.125 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0382	CONNECTION LABEL	1.000 ea
NP3444L	ALUM SUPER-E VPWM INV READY NEMA IE3 UL	1.000 ea
12PA1000	PACKAGING GROUP PRINT PK1024A07	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1594	MYLAR WEEE WHEELIE BIN SYMBOL FOR CE MOT	1.000 ea
PE-0000013	ZRTG PE ASSEMBLY	1.000 ea
FE-0000022	ZRTG FE ASSEMBLY	1.000 ea

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





