

ABB BALDOR RELIANCE III

Customer information packet

EM4114T-5

50HP, 3540RPM, 3PH, 60HZ, 326TS, 1252M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	326TS
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	50.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM (OLD LOGO) CURUSEEV NEMA PREMIUM
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	45.000 A @ 575.0 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
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	45.0 a
Insulation Class	F

Part Detail

Revision	W
Type	AC
Mech. spec.	12M09
Base	
Status	PRD/A
Elec. spec.	12WGY278
Layout	12LYM009
Eff. date	06-27-2024
CD Diagram	CD0006
Poles	02
Leads	3#8
Proprietary	False
Created date	04-22-2010

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	3 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1252M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	28.84 IN
Power Factor	89
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
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	3540 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

NP3443L													
CAT.NO.	EM4114T-5				CUST. P/N				ENCL				TEFC
SPEC.	12M009Y278G1		CC	010A	FRAME	326TS		SER.NO.					
HP	50			CLASS	F	HZ	60						
R.P.M.	3540			PH	3	DES	A						
VOLTS	575				CODE	H		ODE BRG	6311	DE BRG	6312		
AMPS	45												
RATING	40C AMB-CONT			NEMA NOM. EFF.				93	GREASE	POLYREX EM			
P.F.	89	SER.F.	1.15		VPWM INVERTER READY								
HTR-VOLTS	HTR-AMPS		HTR-WATTS										

Parts List

Part number	Description	Quantity
SA193936	SA 12M009Y278G1	1.000 ea
RA181530	RA 12M009Y278G1	1.000 ea
37FN3002C04	EXFN, PLASTIC, 6.00 OD, 2.003 ID	1.000 ea
10CB3001	CONDUIT BOX CAST W/2.500 LEAD HOLE	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
12EP1107A05	FR ENDPLATE, MACH	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
HW5100A13	W4627-047 WVY WSHR	1.000 ea
12EP1106A01	PU ENDPLATE, MACH	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
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
HA3400A13	STUD, 1/2-13 X 7" WELKER	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
12FH1002SP	FAN COVER, CAST	1.000 ea
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 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
HW2501H18	KEY, 1/2 SQ X 2.000	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	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	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0006	CONNECTION LABEL	1.000 ea
NP3443L	SS SUPER-E,INV RED,CURUS EEV,NEMA PREM,C	1.000 ea
12PA1000	PACKAGING GROUP PRINT PK1024A07	1.000 ea
PE-0000013	ZRTG PE ASSEMBLY	1.000 ea
FE-0000022	ZRTG FE ASSEMBLY	1.000 ea

Accessories

Part number	Description	Multiplier
12-1105	C FACE KIT	A8
12EP1501A03SP	D-FLANGE KIT	A8

AC Induction Motor Performance Data

Record # 30951

Typical performance - not guaranteed values

Winding: 12WGY278-R001			Type: 1252M	Enclosure: TEFC	
Nameplate Data			575 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)		50	Full Load Torque		74.2 LB-FT
Volts		575	Start Configuration		direct on line
Full Load Amps		45	Breakdown Torque		292 LB-FT
R.P.M.		3540	Pull-up Torque		98.7 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	135 LB-FT
NEMA Design Code	A	KVA Code	H	Starting Current	325 A
Service Factor (S.F.)		1.15	No-load Current		13.9 A
NEMA Nom. Eff.	93	Power Factor	89	Line-line Res. @ 25°C	0.174 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		80°C
S.F. Amps			Temp. Rise @ S.F. Load		98°C
			Locked-rotor Power Factor		21
			Rotor inertia		4.07 LB-FT2

Load Characteristics 575 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	58	79	86	89	90	90	90
Efficiency	90.6	93.6	94.3	94.1	93.3	92.7	93.6
Speed	3585	3573	3561	3550	3538	3526	3543
Line amperes	17.7	25.4	34.6	44.8	55.7	66.6	51.3

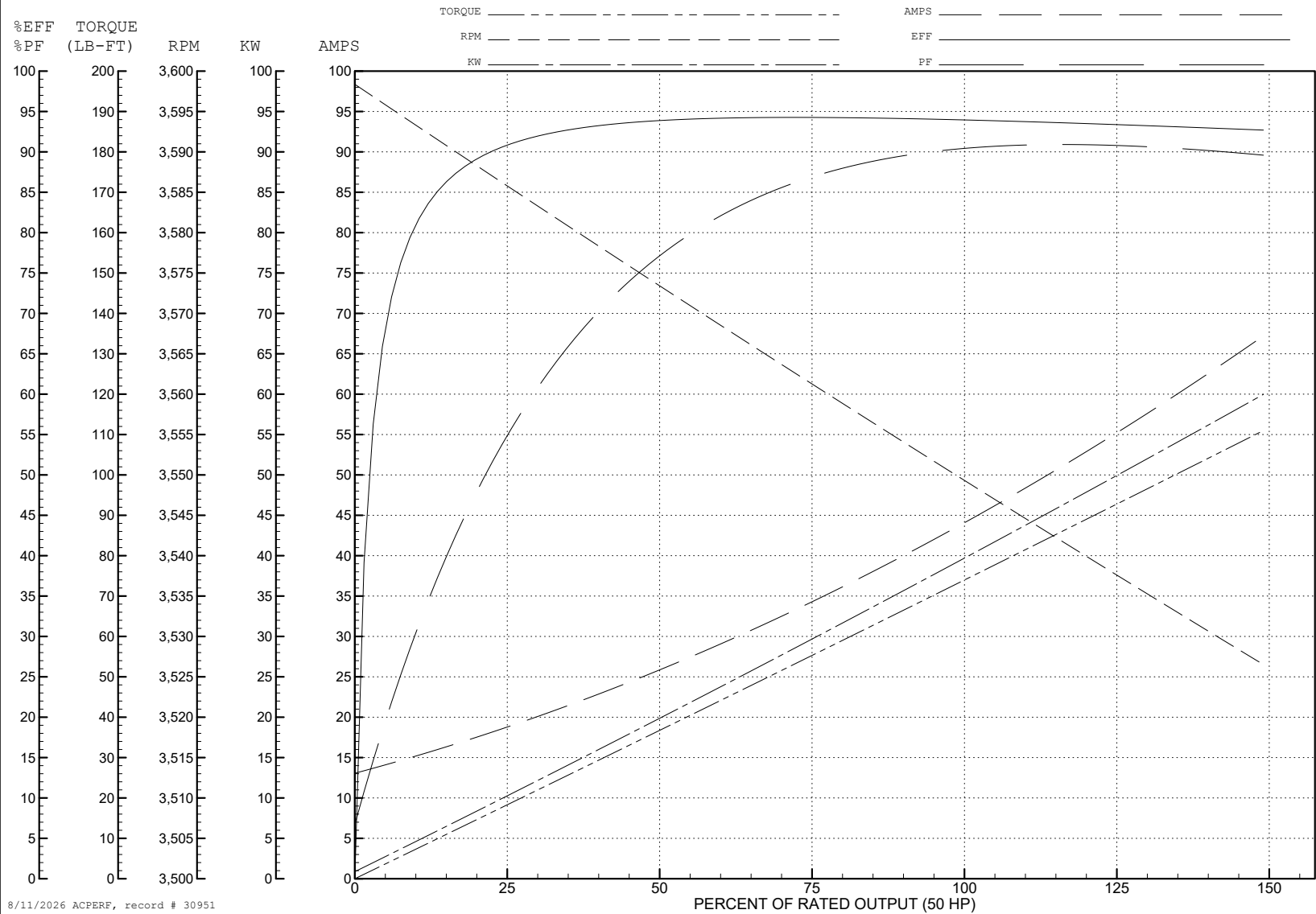
ABB Motors and Mechanical Inc.

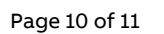
WINDING # 12WGY278

Typical performance - not guaranteed values.

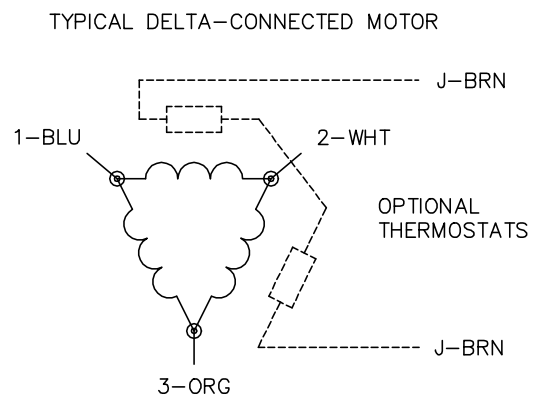
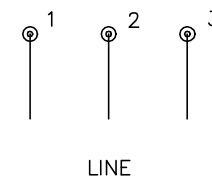
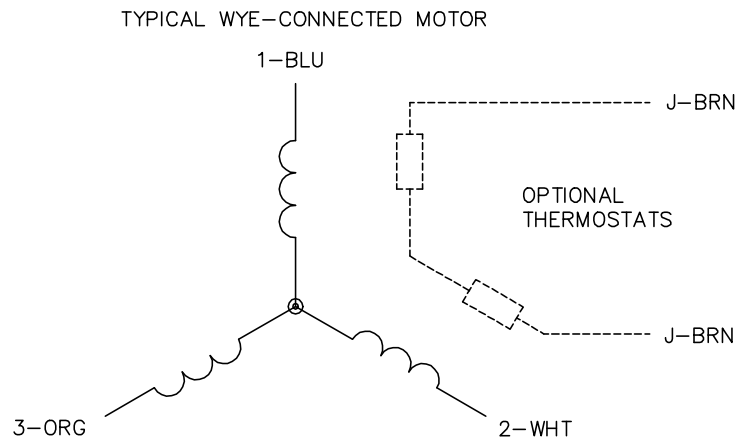
50 HP 3 PH 60 HZ 3540 RPM 575 V 1252M

TORQUES (LB-FT): PO=292 PU=98.7 LR=135 LRA=325





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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