

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										

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

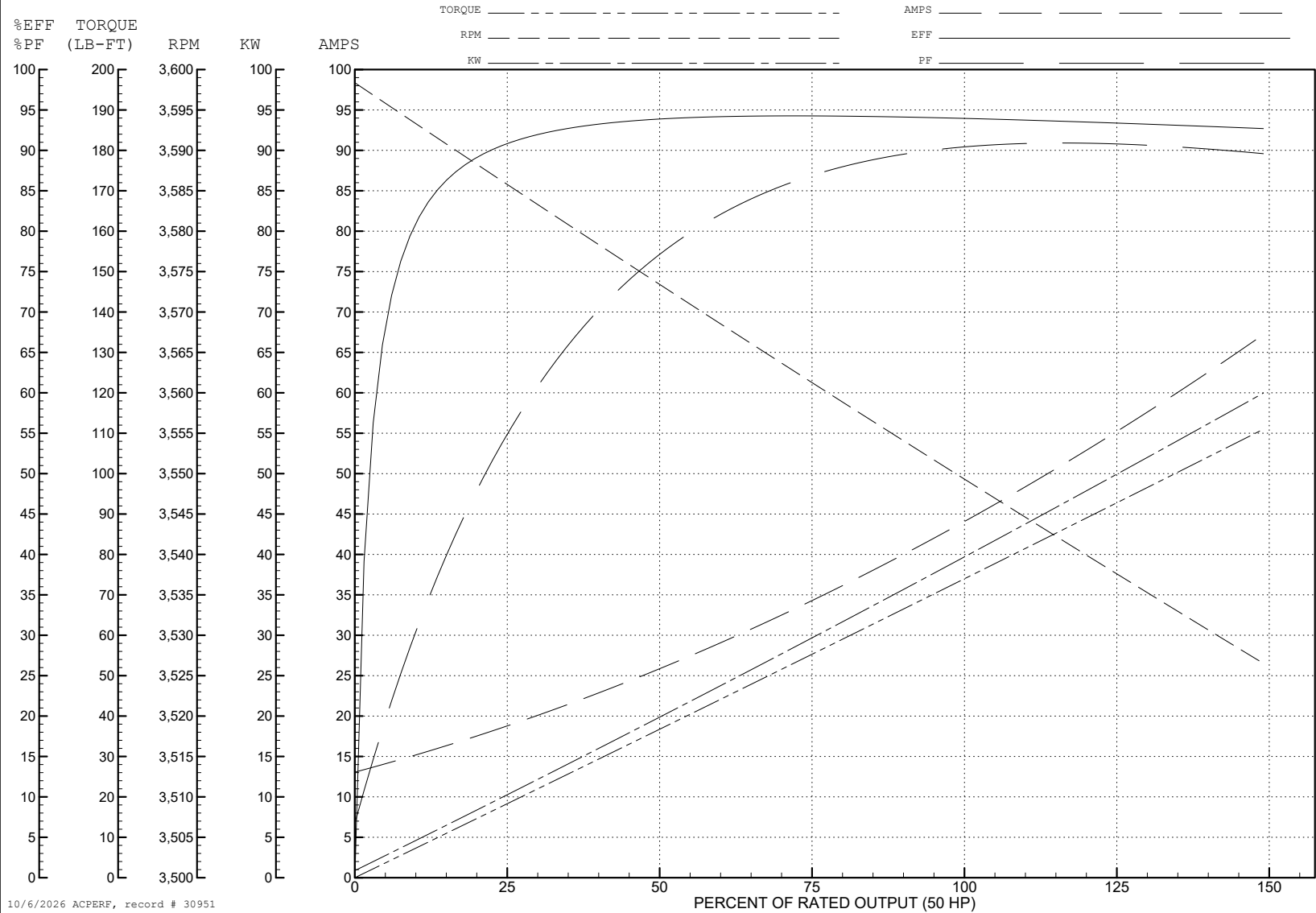
ABB Motors and Mechanical Inc.

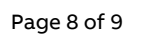
WINDING # 12WGY278

Typical performance - not guaranteed values.

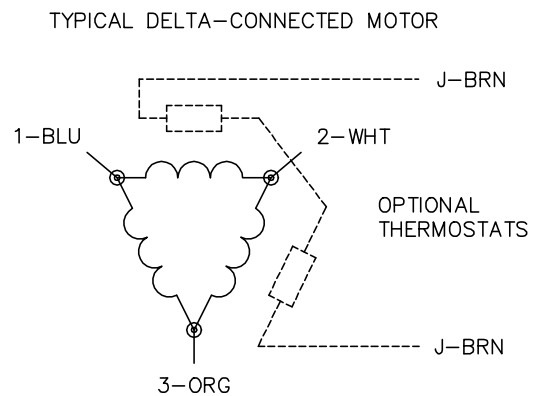
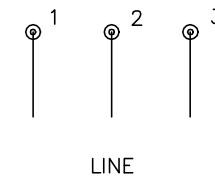
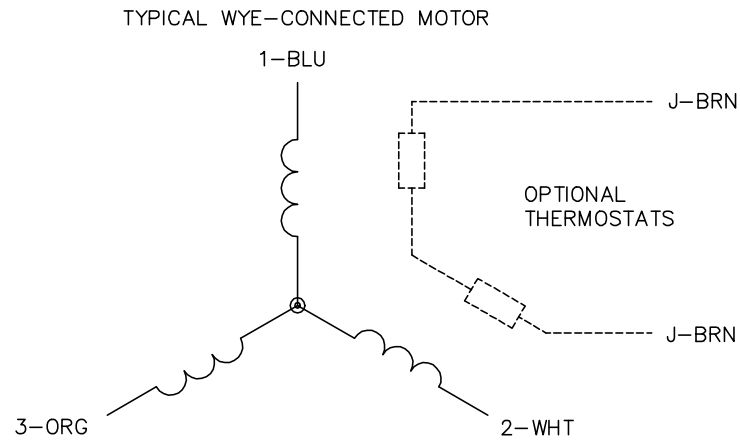
50 HP 3 PH 60 HZ 3540 RPM 575 V 1252M

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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