

ABB BALDOR RELIANCE III

Customer information packet

EJMM4114T

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

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	326JM
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	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV UR
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	124.000 A @ 208.0 V 56.000 A @ 460.0 V 112.000 A @ 230.0 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

Part Detail

Revision	U
Type	AC
Mech. spec.	12J43
Base	
Status	PRD/A
Elec. spec.	12WGY277
Layout	12LYJ043
Eff. date	10-21-2024
CD Diagram	CD0180
Poles	02
Leads	9#6
Proprietary	False
Created date	04-29-2010

Heater Indicator	No Heater
High Voltage Full Load Amps	56.0 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	9 @ 6 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1252M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	30.65 IN
Power Factor	89
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Tapped & Key
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.375 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 (OLD)
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2

None

Nameplate

NP2138LUA													
CAT.NO.	EJMM4114T			P/N					ENCLOSURE			TEFC	
SPEC.	12J043Y277G1		CC	010A	FRAME		326JM		S/N				
HP	50			CLASS		F	HZ		60				
RPM	3540			PH	3	DES		A					
VOLT	230/460			KVA-CODE			H	ODE BRG		6311	DE BRG		6312
AMP	112/56												
RATING	40C AMB-CONT				GREASE		POLYREX EM						
NEMA-NOM-EFF	93	PF	89	SER.F.	1.15								
	50HZ 50HP 190/380V 136/68A						SF1.0						
HTR-VOLTS	HTR-AMPS												

AC Induction Motor Performance Data

Record # 30950

Typical performance - not guaranteed values

Winding: 12WGY277-R001			Type: 1252M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		50	Full Load Torque		74.1 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		112/56	Breakdown Torque		310 LB-FT		
R.P.M.		3540	Pull-up Torque		105 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		144 LB-FT	
NEMA Design Code		A	KVA Code	H	Starting Current		431 A
Service Factor (S.F.)		1.15		No-load Current		18.9 A	
NEMA Nom. Eff.		93	Power Factor	89	Line-line Res. @ 25°C		0.104 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		79°C	
S.F. Amps				Temp. Rise @ S.F. Load		95°C	
				Locked-rotor Power Factor		21	
				Rotor inertia		4.07 LB-FT2	

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	56	78	85	89	90	90	90
Efficiency	90.1	93.5	94.3	94.1	93.5	93	93.7
Speed	3585	3574	3563	3552	3541	3530	3545
Line amperes	23.2	32.3	43.6	56.3	69.6	83.1	64.3

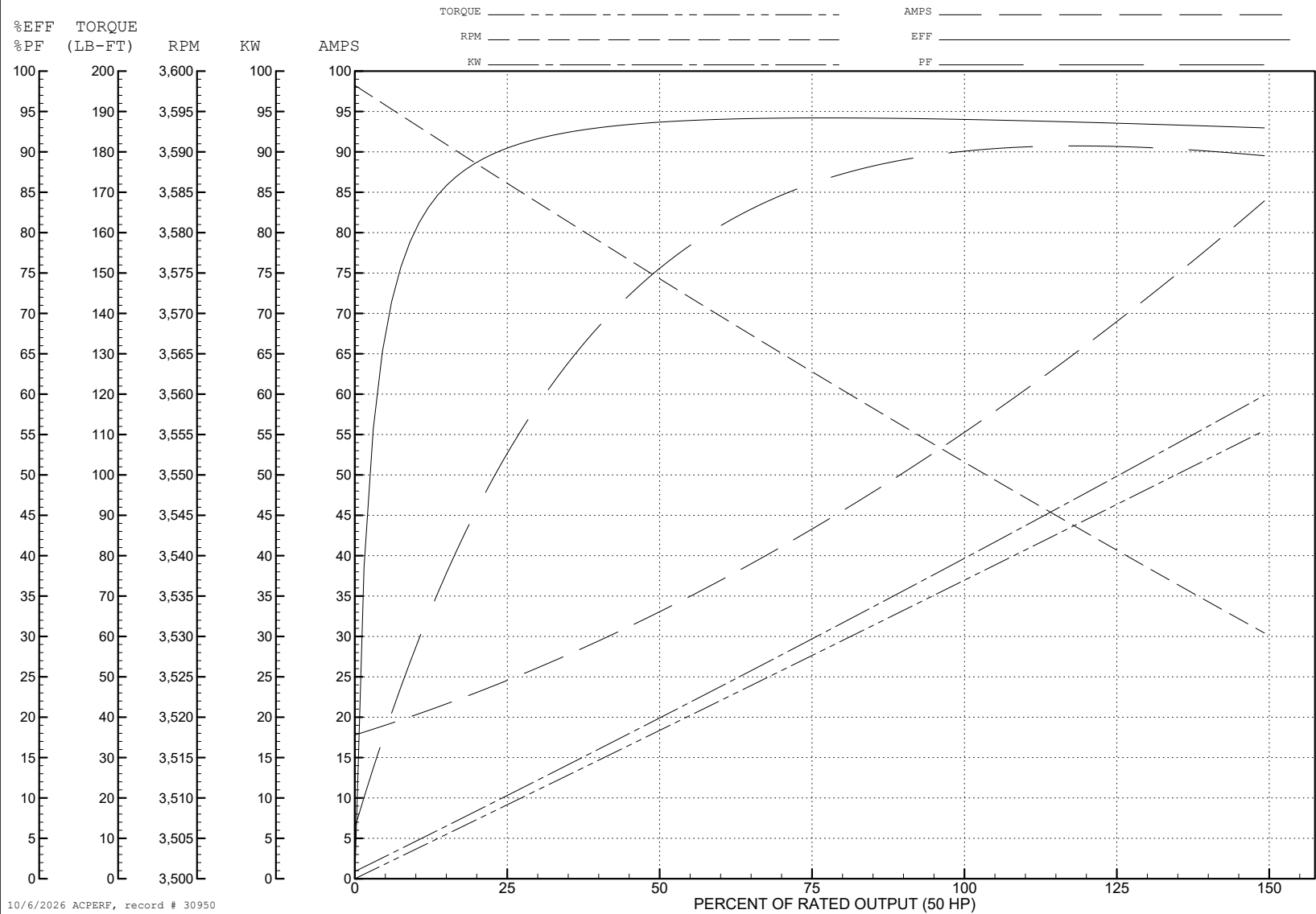
ABB Motors and Mechanical Inc.

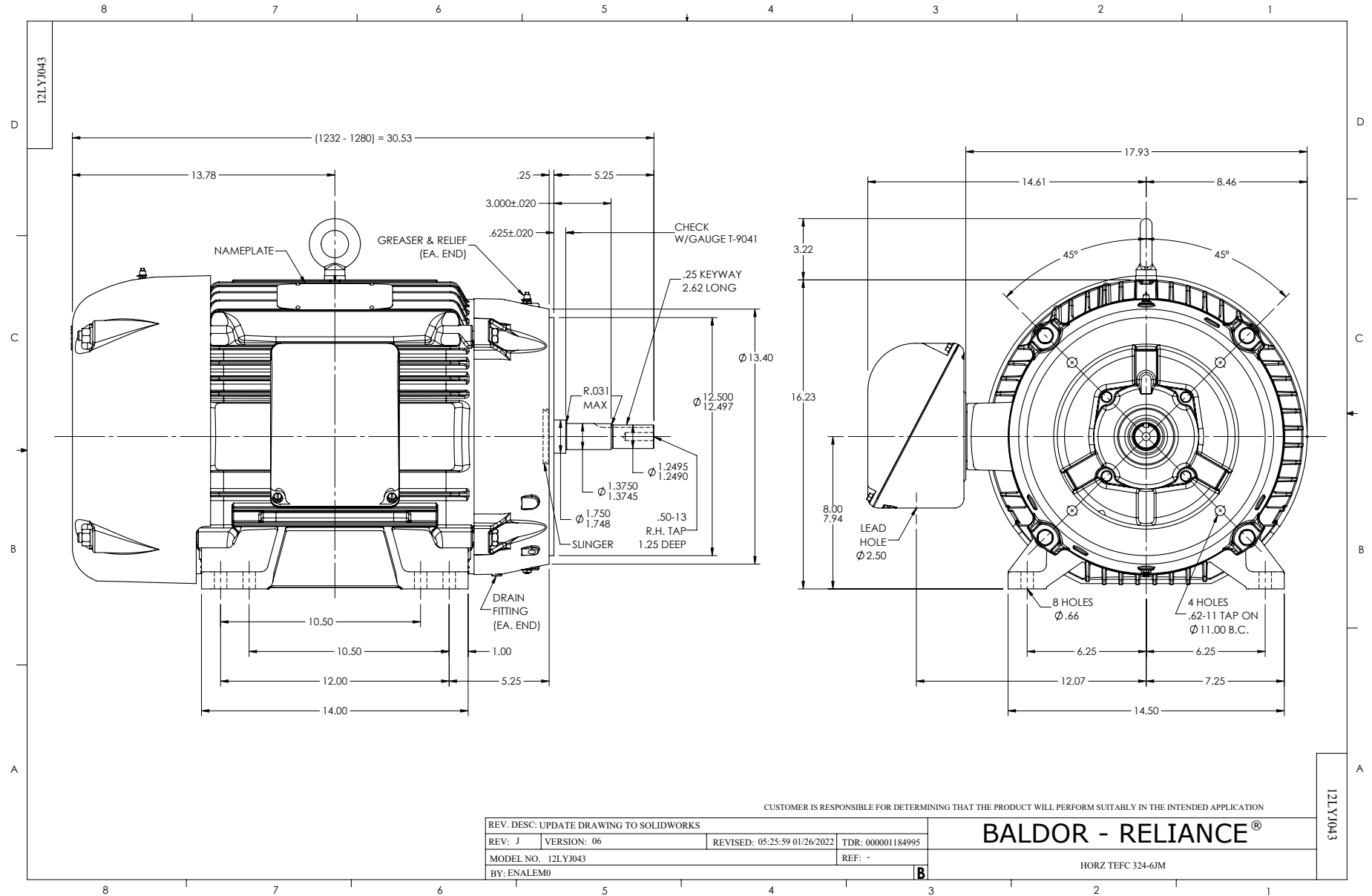
WINDING # 12WGY277

Typical performance - not guaranteed values.

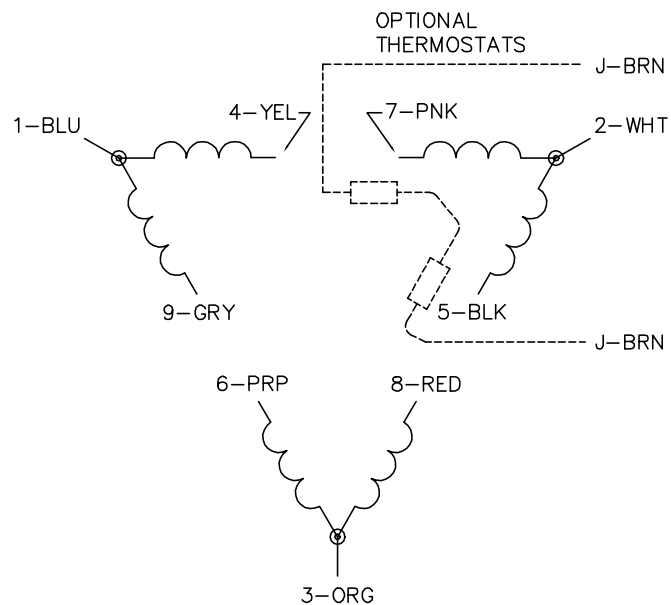
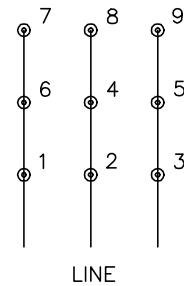
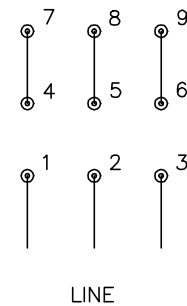
50 HP 3 PH 60 HZ 3540 RPM 460 V 1252M

TORQUES (LB-FT): PO=310 PU=105 LR=144 LRA=431





CD0180


LOW VOLTAGE
(2D)

HIGH VOLTAGE
(1D)

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.

REV. DESC: ADD CLASS CONN00000007

REV. LTR: D

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\148

REVISED: 10: 25: 29 02/19/2019

BY: ENBRIRO

MTL: -


BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1

CD0180