

ABB BALDOR RELIANCE III

Customer information packet

EWDM4114T

50HP, 3540RPM, 3PH, 60HZ, 326TS, TEFC, F1

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	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM 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	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
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	56.0 a

Part Detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	12WGY291
Layout	12LYL042
Eff. date	02-21-2024
CD Diagram	CD0180
Poles	02
Leads	9#8
Proprietary	False
Created date	08-19-2019

Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	IP55
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1252M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	28.77 IN
Power Factor	90
Product Family	Washdown Features
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
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

NP1669L									
CAT.NO.	EWDM4114T								
SPEC.	12-0000-0910								
HP	50								
VOLTS	230/460 10:1 CT/VT								
AMP	112/56								
RPM	3540								
FRAME	326TS		HZ	60			PH	3	
SER.F.	1.00	CODE	H	DES	A	CLASS		F	
NEMA-NOM-EFF	93	PF	90						
RATING	40C AMB-CONT								
CC	010A								
DE	6312		ODE	6311					
ENCL	TEFC	SN							
BLANK	1.15SF ON SINEWAVE								

AC Induction Motor Performance Data

Record # 78204

Typical performance - not guaranteed values

Winding: 12WGY291-R008			Type: 1252M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)		50		Full Load Torque		74.4 LB-FT
Volts		230/460		Start Configuration		direct on line
Full Load Amps		112/56		Breakdown Torque		292 LB-FT
R.P.M.		3540		Pull-up Torque		112 LB-FT
Hz	60	Phase	3	Locked-rotor Torque		139 LB-FT
NEMA Design Code		A	KVA Code	H	Starting Current	
Service Factor (S.F.)		1		No-load Current		14.9 A
NEMA Nom. Eff.		93	Power Factor	90	Line-line Res. @ 25°C	
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load
						77°C
						Locked-rotor Power Factor
						20.9
						Rotor inertia
						4.07 LB-FT2

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	66	82	88	90	91	90
Efficiency	91.1	93.8	94.2	93.9	93.2	92.3
Speed	3584.1	3571.8	3558.2	3544.1	3528.2	3511.2
Line amperes	20.4	30.8	42.9	55.8	69.5	84.6

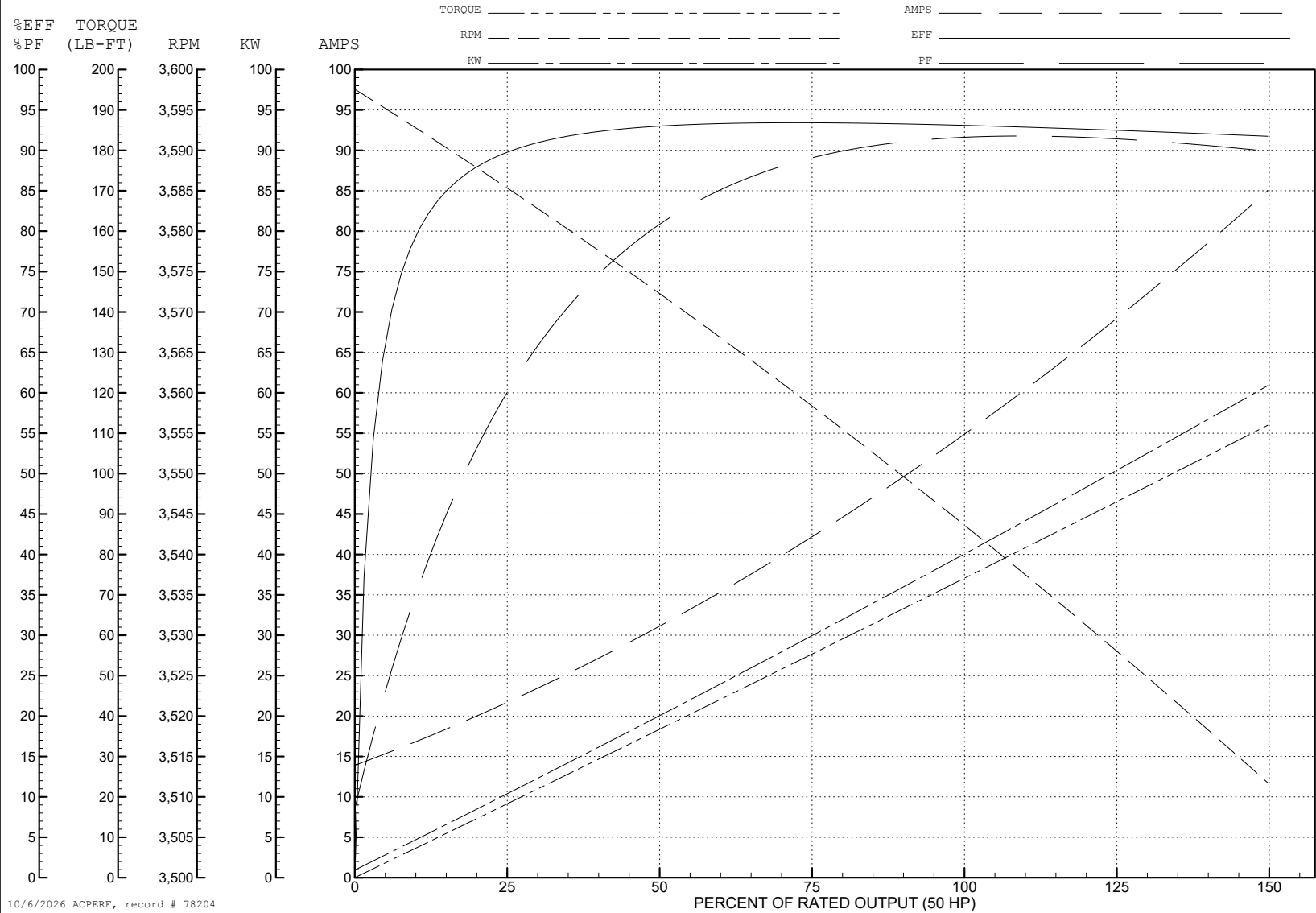
ABB Motors and Mechanical Inc.

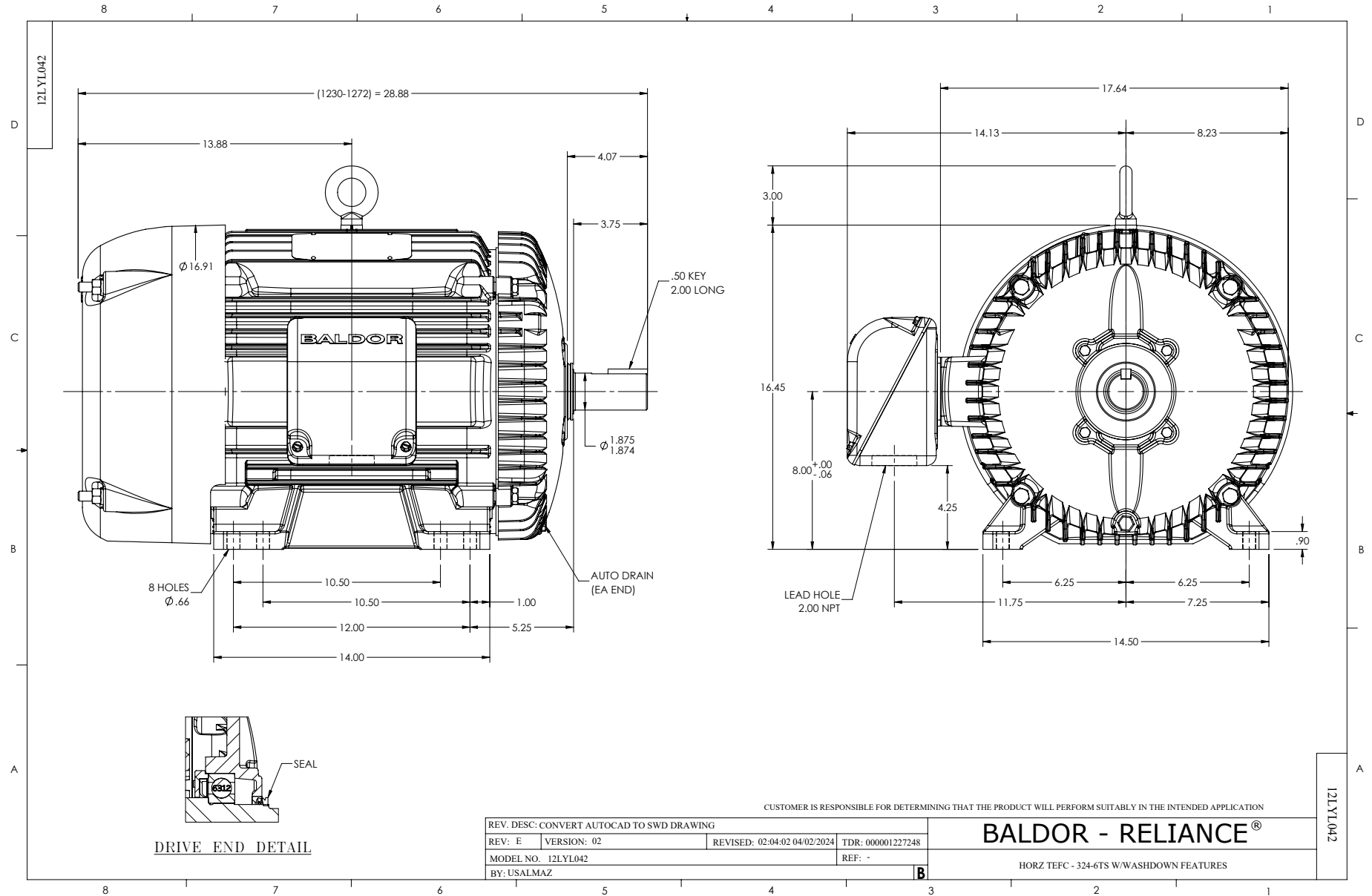
WINDING # 12WGY291

Typical performance - not guaranteed values.

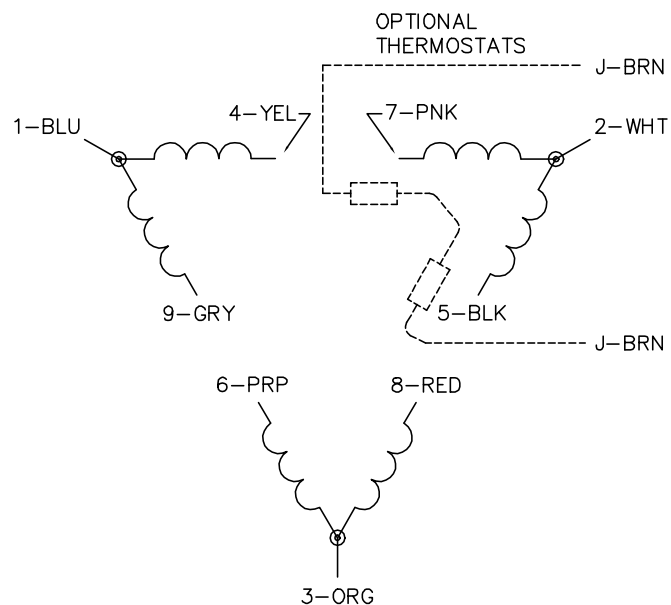
50 HP 3 PH 60 HZ 3540 RPM 460 V 1252M

TORQUES (LB-FT): PO=292 PU=112 LR=139 LRA=408

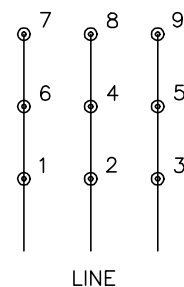




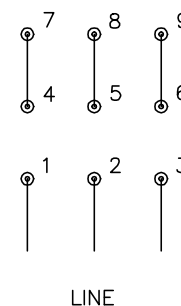
CD0180



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.

CD0180

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

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