ABB BALDOR RELIANCE

Customer information packet

EM4114T

50HP, 3540RPM, 3PH, 60HZ, 326TS, 1252M, TEFC, F
Class - None
Division - Not Applicable

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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	460.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	CURUSEEV
	NEMA PREMIUM
	NEMA PREMIUM (OLD LOGO)
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	122.000 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	W
Type	AC
Mech. spec.	12M09
Base	
Status	PRD/A
Elec. spec.	12WGY291
Layout	12LYM009
Eff. date	06-27-2024
CD Diagram	CD0180
Poles	02
Leads	9#8
Proprietary	False
Created date	05-06-2010

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 @ 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	90
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

NP3443LUA											
CAT.NO.	EM4114T			**CUST. P/N**						**ENCL**	TEFC
SPEC.	12M009Y291G1	**CC**	010A	**FRAME**	326TS		**SER.NO.**				
HP	50		**CLASS**	F	**HZ**	60					
R.P.M.	3540		**PH.**	3	**DES.**	A					
VOLTS	230/460			**CODE**	H		**ODE BRG**	6311	**DE BRG**	6312	
AMPS	112/56										
RATING	40C AMB-CONT			**NEMA NOM. EFF.**	93			**GREASE**	POLYREX EM		
P.F.	90	**SER.F.**	1.15	**CT6-60H(10:1)VT3-60H(20:1**							
USABLE AT	50Hz 50HP 190/380V 134/67A			SF1.0							
VOLTS	**AMPS**		**MAX. SPACE HEATER TEMP.**								

Accessories

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

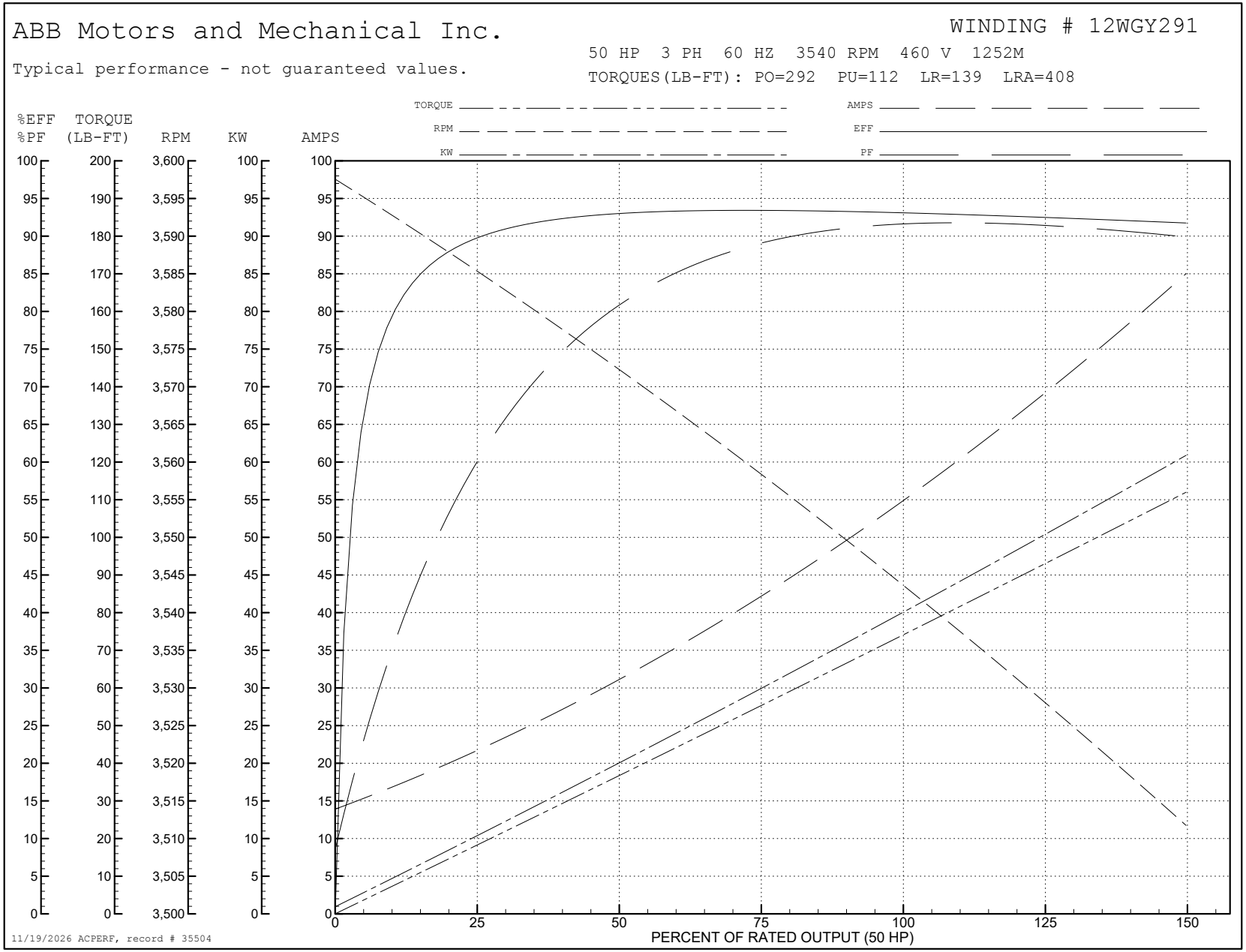
AC Induction Motor Performance Data
Record # 35504
Typical performance - not guaranteed values

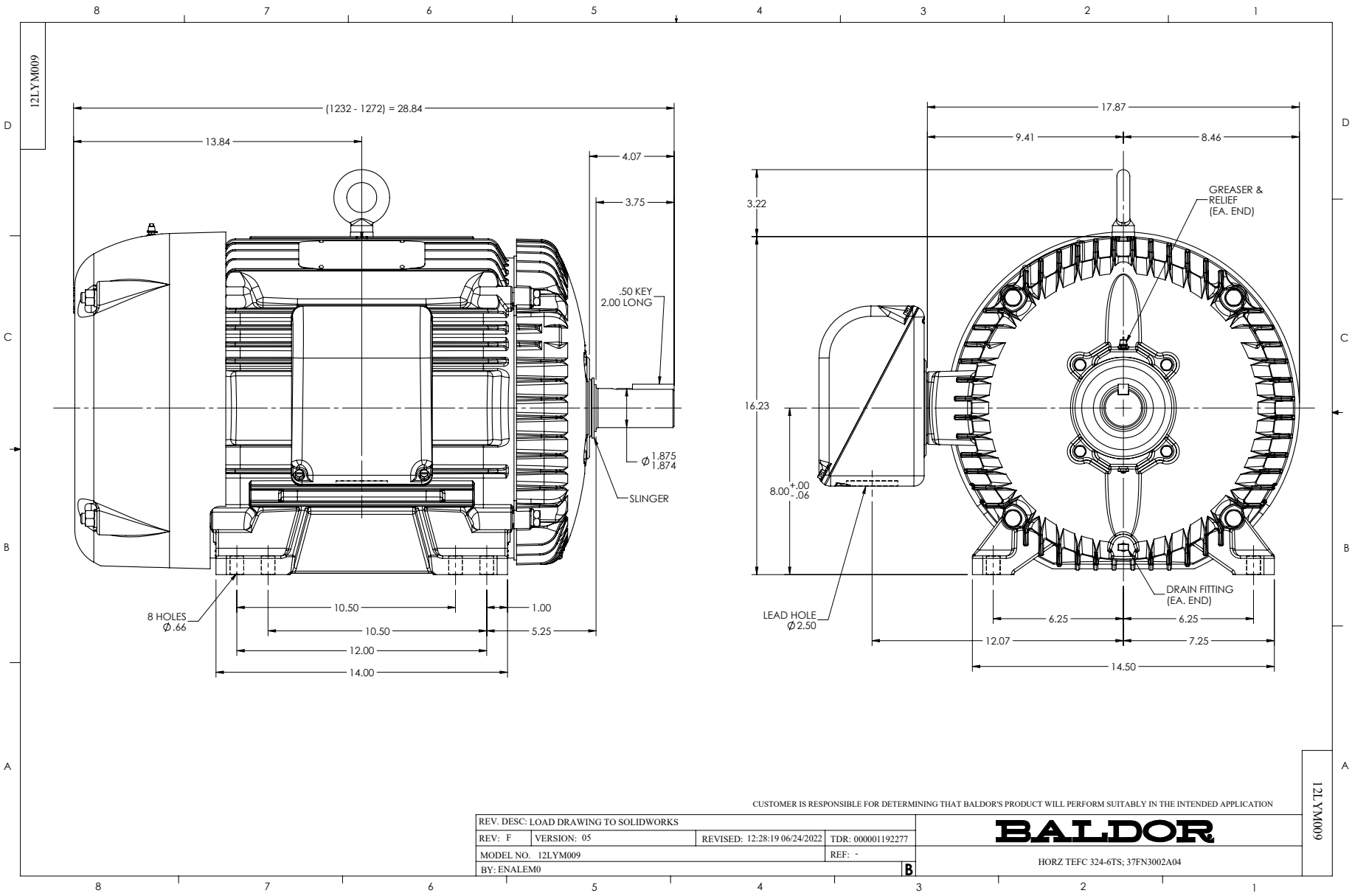
Winding: 12WGY291-R005	**Type:** 1252M	**Enclosure:** TEFC

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**	408 A
Service Factor (S.F.)			1.15	**No-load Current**	14.9 A
NEMA Nom. Eff.	93	**Power Factor**	90	**Line-line Res. @ 25ºC**	0.11257 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	77°C
S.F. Amps				**Temp. Rise @ S.F. Load**	95°C
				Locked-rotor Power Factor	20.9
				Rotor inertia	4.07 LB-FT2

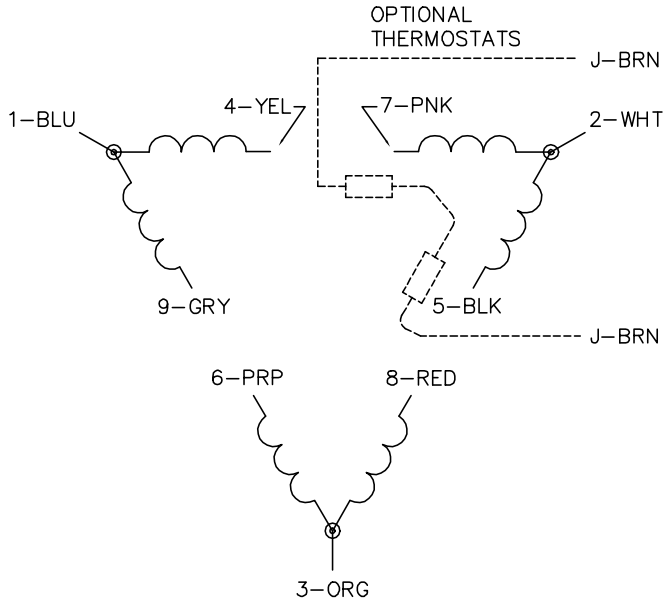
Load Characteristics 460 V, 60 Hz, 50 HP

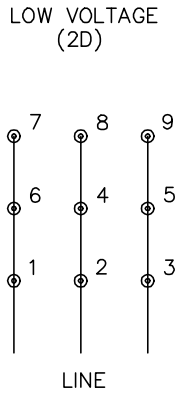
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	66	82	88	90	91	90	91
Efficiency	91.1	93.8	94.2	93.9	93.2	92.3	93.5
Speed	3584.1	3571.8	3558.2	3544.1	3528.2	3511.2	3535
Line amperes	20.4	30.8	42.9	55.8	69.5	84.6	64

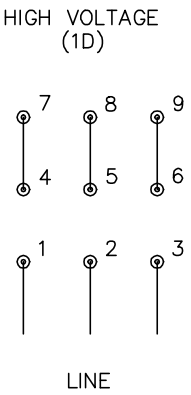

ABB Motors and Mechanical Inc.
WINDING # 12WGY291
Typical performance - not guaranteed values.
50 HP 3 PH 60 HZ 3540 RPM 460 V 1252M
TORQUES(LB-FT): PO=292 PU=112 LR=139 LRA=408
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF
%PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (50 HP)
11/19/2026 ACPERF, record # 35504


12LYM009
(1232 - 1272) = 28.84
13.84
4.07
3.75
.50 KEY
2.00 LONG
Ø 1.875
1.874
SLINGER
8 HOLES
Ø .66
10.50
1.00
10.50
5.25
12.00
14.00
17.87
9.41
8.46
3.22
GREASER &
RELIEF
(EA. END)
16.23
8.00 +.00 -.06
LEAD HOLE
Ø 2.50
DRAIN FITTING
(EA. END)
6.25
6.25
12.07
7.25
14.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD DRAWING TO SOLIDWORKS
REV: F
VERSION: 05
REVISED: 12:28:19 06/24/2022
TDR: 000001192277
MODEL NO. 12LYM009
REF: -
BY: ENALEM0
B
BALDOR
HORZ TEFC 324-6TS; 37FN3002A04
12LYM009

CD0180







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: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1