ABB BALDOR RELIANCE

Customer information packet

EM2542T-CI

50HP, 3540RPM, 3PH, 60HZ, 324TS, 1250M, OPEN, F
Class - None
Division - Not Applicable

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Specifications

Enclosure	OPEN
Frame	324TS
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	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.	12E01
Base	
Status	PRD/A
Elec. spec.	12WGY256
Layout	12LYE001
Eff. date	06-27-2024
CD Diagram	CD0180
Poles	02
Leads	9#6
Proprietary	False
Created date	03-08-2010

Heater Indicator	No Heater
High Voltage Full Load Amps	56.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	G
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	1250M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	24.63 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	No 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

NP3554LUA												
CAT.NO.	EM2542T-CI			**P/N**						**ENCL**	OPEN	
SPEC.	12E001Y256G1	**CC**	010A		**FRAME**	324TS		**SER.NO.**				
HP	50		**CLASS**	F	**HZ**	60						
RPM	3540		**PH**	3	**DES**	A						
VOLTS	230/460			**CODE**	G		**ODE BRG**	6311	**DE BRG**	6311		
AMPS	112/56											
RATING	40C AMB-CONT			**NEMA-NOM-EFF**	93		**GREASE**	POLYREX EM				
PF	89	**SER.F.**	1.15			**CT30-60(2:1) VT3-60(20:1)**						
USABLE AT	50HZ 50HP 190/380V 138/69A				SF 1.0							
HTR-VOLTS	**HTR-AMPS**			**MAX. SPACE HEATER TEMP.**								

AC Induction Motor Performance Data
Record # 53034
Typical performance - not guaranteed values

Winding: 12WGY256-R003	**Type:** 1250M	**Enclosure:** OPEN

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**	276 LB-FT
R.P.M.			3540	**Pull-up Torque**	91.7 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	126 LB-FT
NEMA Design Code	A	**KVA Code**	G	**Starting Current**	383 A
Service Factor (S.F.)			1.15	**No-load Current**	16.6 A
NEMA Nom. Eff.	93	**Power Factor**	89	**Line-line Res. @ 25ºC**	0.117 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	81°C
S.F. Amps				**Temp. Rise @ S.F. Load**	100°C
				Locked-rotor Power Factor	21
				Rotor inertia	3.91 LB-FT2

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	59	80	86	89	90	90	90
Efficiency	90.6	93.7	94.2	94	93.3	92.4	93.6
Speed	3584	3572	3560	3547	3535	3521	3540
Line amperes	21.6	31.4	43.1	56	69.8	83.7	64.3

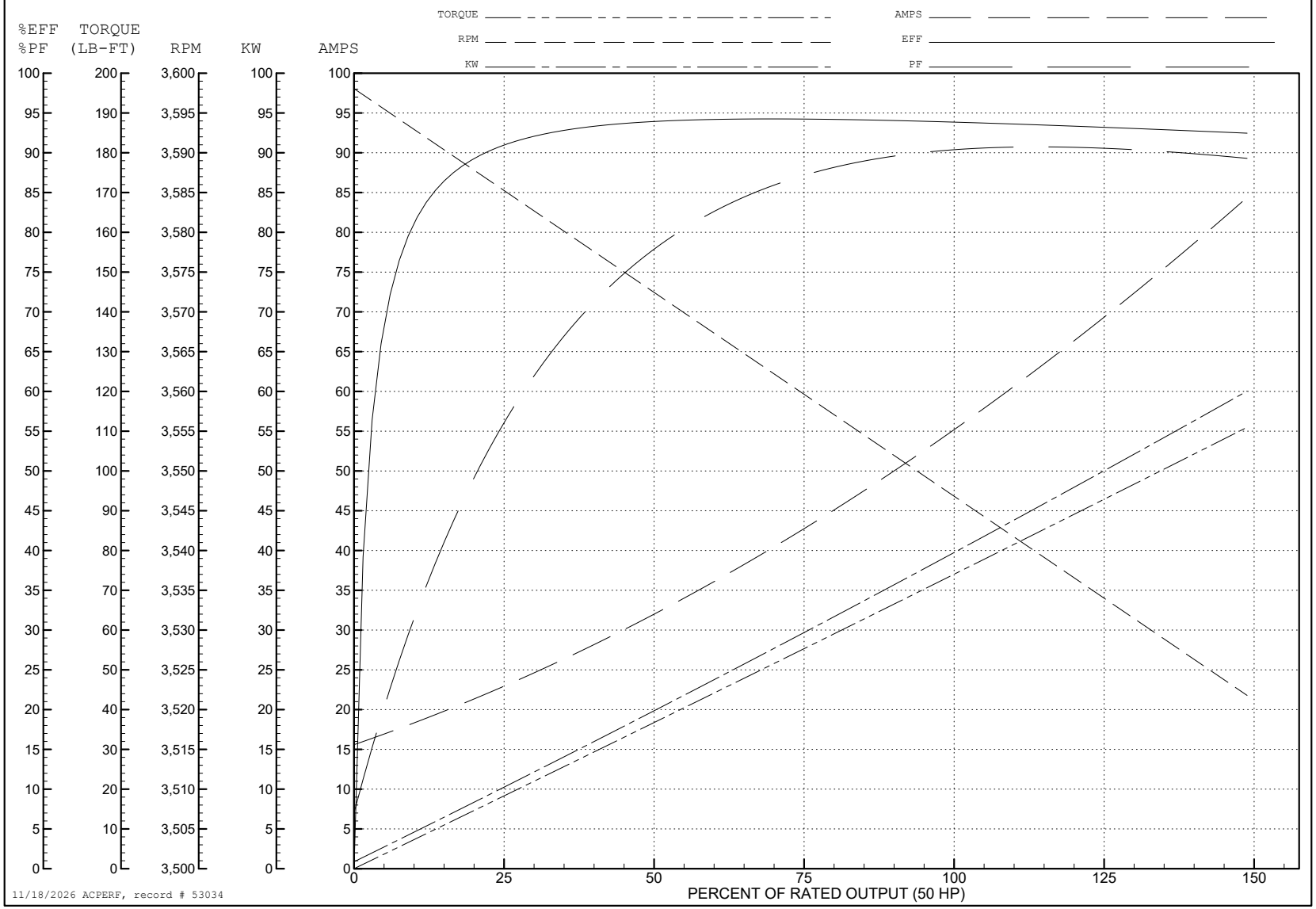
ABB Motors and Mechanical Inc.

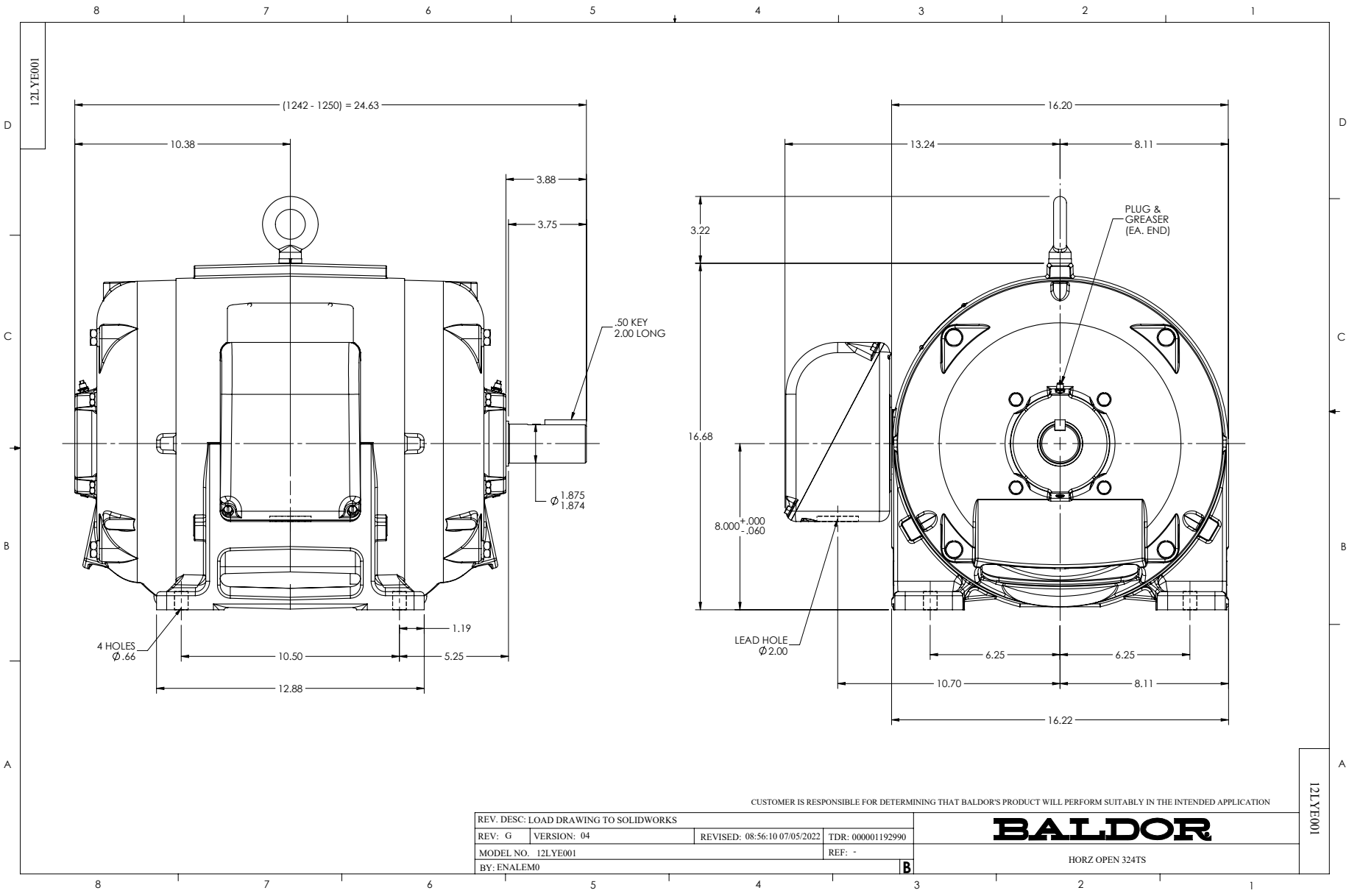
WINDING # 12WGY256

50 HP 3 PH 60 HZ 3540 RPM 460 V 1250M

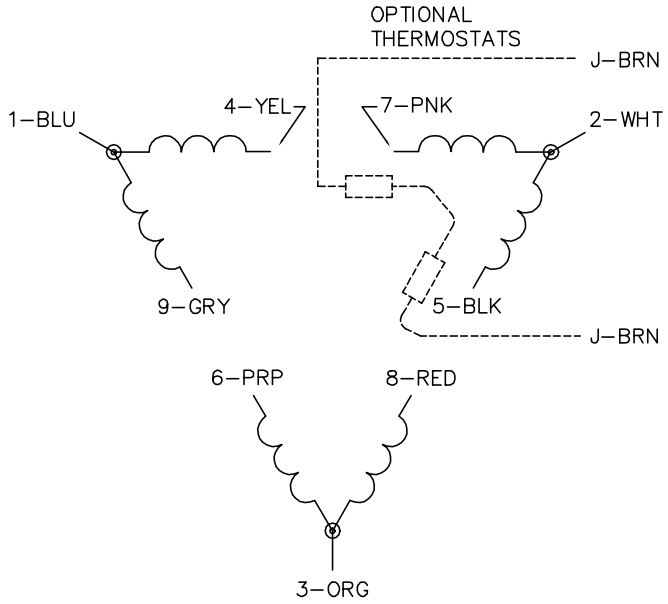
Typical performance - not guaranteed values.

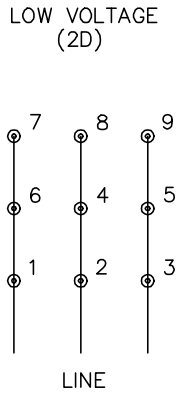
TORQUES(LB-FT): PO=276 PU=91.7 LR=126 LRA=383

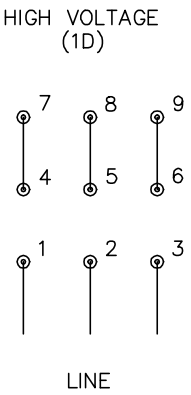



12LYE001
(1242 - 1250) = 24.63
10.38
3.88
3.75
.50 KEY
2.00 LONG
Ø 1.875
1.874
1.19
4 HOLES
Ø.66
10.50
5.25
12.88
16.20
13.24
8.11
3.22
PLUG &
GREASER
(EA. END)
16.68
8.000 +.000 -.060
LEAD HOLE
Ø2.00
6.25
6.25
10.70
8.11
16.22
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD DRAWING TO SOLIDWORKS
REV: G
VERSION: 04
REVISED: 08:56:10 07/05/2022
TDR: 000001192990
MODEL NO. 12LYE001
REF: -
BY: ENALEM0
B
BALDOR
HORZ OPEN 324TS
12LYE001

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

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