ABB BALDOR RELIANCE

Customer information packet

EM2539T-CI

40HP, 1770RPM, 3PH, 60HZ, 324T, 1250M, OPEN, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	OPEN
Frame	324T
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	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM
	CURUSEEV
	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	48.000 A @ 460.0 V
	96.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	V
Type	AC
Mech. spec.	12B01
Base	
Status	PRD/A
Elec. spec.	12WGY580
Layout	12LYB001
Eff. date	06-27-2024
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	05-14-2012

High Voltage Full Load Amps	48.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
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	1250M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	26.13 IN
Power Factor	82
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	2.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1775 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.	EM2539T-CI			**P/N**						**ENCL**	OPEN	
SPEC.	12B001Y580G1	**CC**	010A		**FRAME**	324T		**SER.NO.**				
HP	40		**CLASS**	F	**HZ**	60						
RPM	1775		**PH**	3	**DES**	A						
VOLTS	230/460			**CODE**	H		**ODE BRG**	6311	**DE BRG**	6311		
AMPS	96/48											
RATING	40C AMB-CONT			**NEMA-NOM-EFF**	94.1		**GREASE**	POLYREX EM				
PF	82	**SER.F.**	1.15			**CT30-60(2:1) VT3-60(20:1)**						
USABLE AT	50HZ 40HP 190/380V 114/57A				SF 1.0							
HTR-VOLTS	**HTR-AMPS**			**MAX. SPACE HEATER TEMP.**								

AC Induction Motor Performance Data
Record # 66028
Typical performance - not guaranteed values

Winding: 12WGY580-R001	**Type:** 1250M	**Enclosure:** OPEN

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			40	**Full Load Torque**	118.8 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			96/48	**Breakdown Torque**	378 LB-FT
R.P.M.			1775	**Pull-up Torque**	178 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	219 LB-FT
NEMA Design Code	A	**KVA Code**	H	**Starting Current**	324 A
Service Factor (S.F.)			1.15	**No-load Current**	20 A
NEMA Nom. Eff.	94.1	**Power Factor**	82	**Line-line Res. @ 25ºC**	0.16075 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	32°C
S.F. Amps				**Temp. Rise @ S.F. Load**	39°C
				Locked-rotor Power Factor	27.3

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	45	67	77	82	84	84	83
Efficiency	91.7	94.5	95	94.8	94.3	93.6	94.5
Speed	1795.1	1790.4	1785.1	1780	1773.8	1767.5	1776
Line amperes	23.2	29.8	38.5	48.4	59.2	71	54.9

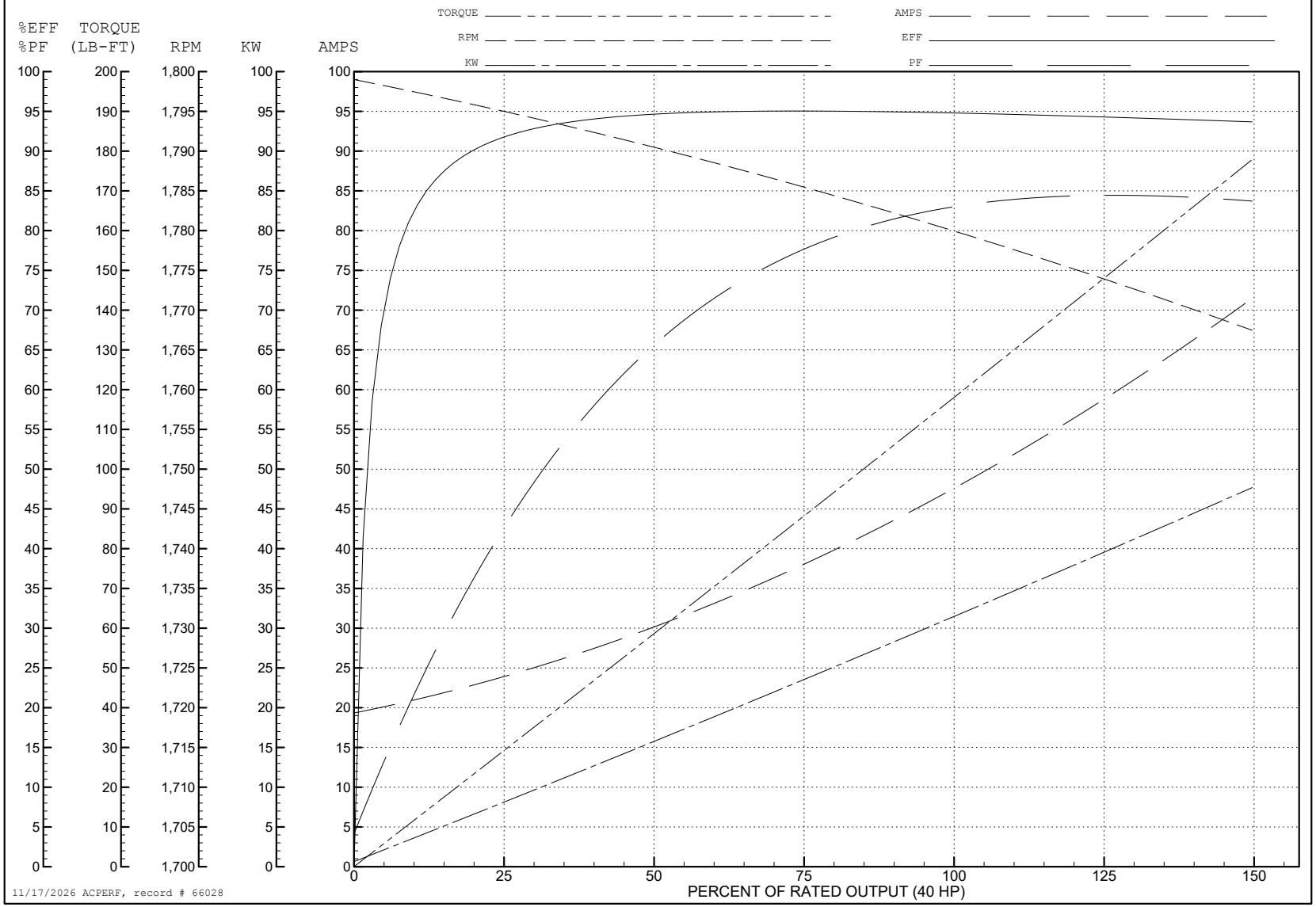
ABB Motors and Mechanical Inc.

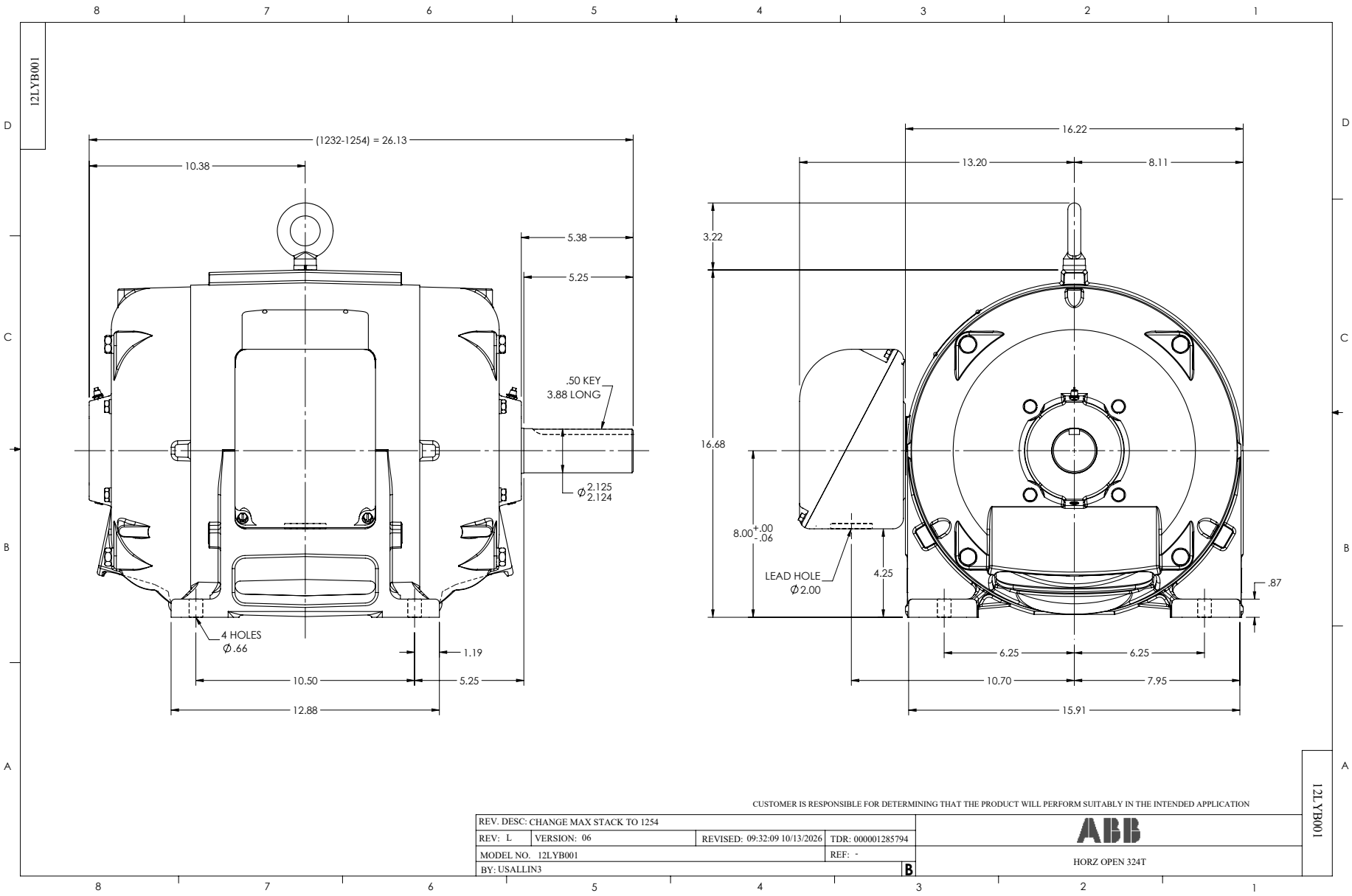
WINDING # 12WGY580

40 HP 3 PH 60 HZ 1775 RPM 460 V 1250M

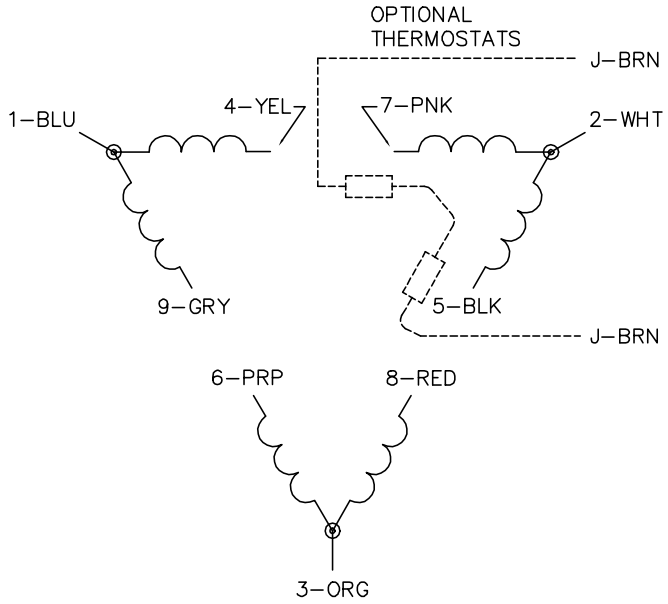
Typical performance - not guaranteed values.

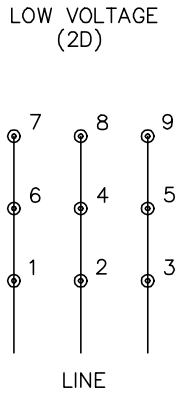
TORQUES(LB-FT): PO=378 PU=178 LR=219 LRA=324

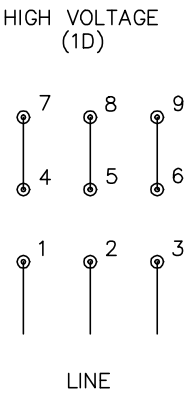



12LYB001
(1232-1254) = 26.13
10.38
5.38
5.25
.50 KEY
3.88 LONG
Ø2.125
2.124
4 HOLES
Ø.66
1.19
10.50
5.25
12.88
16.22
13.20
8.11
3.22
16.68
8.00 +.00 -.06
LEAD HOLE
Ø2.00
4.25
.87
6.25
6.25
10.70
7.95
15.91
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CHANGE MAX STACK TO 1254
REV: L
VERSION: 06
REVISED: 09:32:09 10/13/2026
TDR: 000001285794
MODEL NO. 12LYB001
REF: -
BY: USALLIN3
B
ABB
HORZ OPEN 324T
12LYB001

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