



Customer information packet

EM2543T-CI

50HP, 1775RPM, 3PH, 60HZ, 326T, 1256M, OPEN, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPEN
Frame	326T
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	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV CURUSEEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	126.000 A @ 208.0 V 60.000 A @ 460.0 V 120.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

Part detail

Revision	AE
Type	AC
Mech. spec.	12D01
Base	
Status	PRD/A
Elec. spec.	12WGX320
Layout	12LYD001
Eff. date	06-27-2024
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	01-01-0001

Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	60.0 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 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1256M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.63 IN
Power Factor	83
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.	EM2543T-CI	P/N		ENCL	OPEN
SPEC.	12D001X320G1	CC	010A	FRAME	326T
HP	50	CLASS	F	HZ	60
RPM	1775	PH	3	DES	B
VOLTS	230/460	CODE	G	ODE BRG	6311
AMPS	120/60	DE BRG			6311
RATING	40C AMB-CONT	NEMA-NOM-EFF	94.5	GREASE	POLYREX EM
PF	83	SER.F.	1.15	CT30-60(2:1) VT3-60(20:1)	
USABLE AT	50HZ 50HP 190/380V 136/68A		SF 1.0		
HTR-VOLTS	HTR-AMPS	MAX. SPACE HEATER TEMP.			

AC Induction Motor Performance Data

Record # 56462

Typical performance - not guaranteed values

Winding: 12WGX320-R001		Type: 1256M	Enclosure: OPEN	
Nameplate Data			460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	50	Full Load Torque	148 LB-FT	
Volts	230/460	Start Configuration	direct on line	
Full Load Amps	120/60	Breakdown Torque	404 LB-FT	
R.P.M.	1775	Pull-up Torque	204 LB-FT	
Hz	60 Phase	Locked-rotor Torque	237 LB-FT	
NEMA Design Code	B KVA Code	Starting Current	382 A	
Service Factor (S.F.)	1.15	No-load Current	23.6 A	
NEMA Nom. Eff.	94.5 Power Factor	Line-line Res. @ 25°C	0.13209 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	41°C	
S.F. Amps		Temp. Rise @ S.F. Load	50°C	
		Locked-rotor Power Factor	27.1	

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	47	69	79	83	85	85	84
Efficiency	92.1	94.8	95.1	94.8	94.3	93.5	94.5
Speed	1794.9	1789.6	1784.2	1777.7	1771.1	1764	1774
Line amperes	27.4	35.9	47	59.6	73.4	88.6	67.9

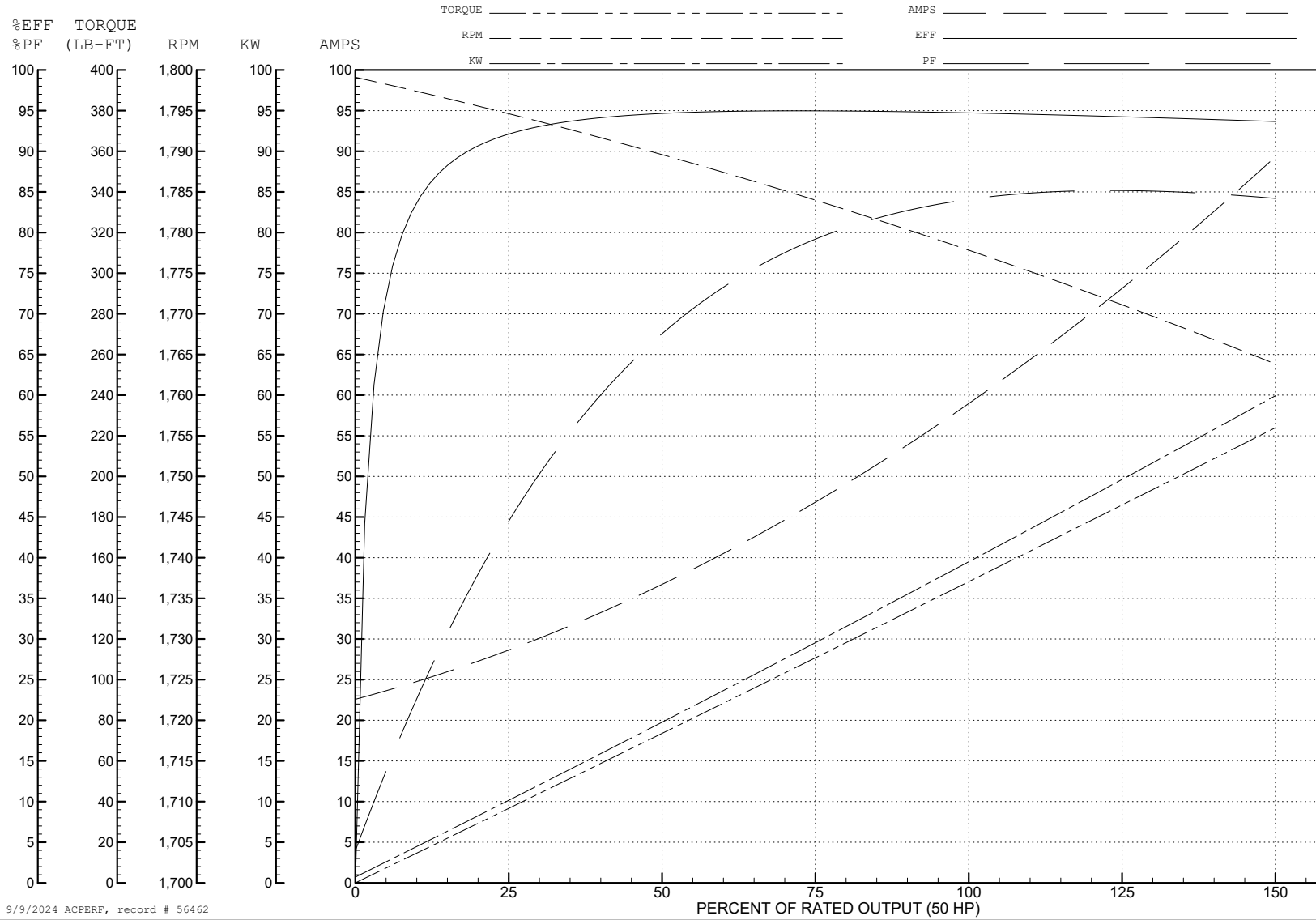
ABB Motors and Mechanical Inc.

WINDING # 12WGX320

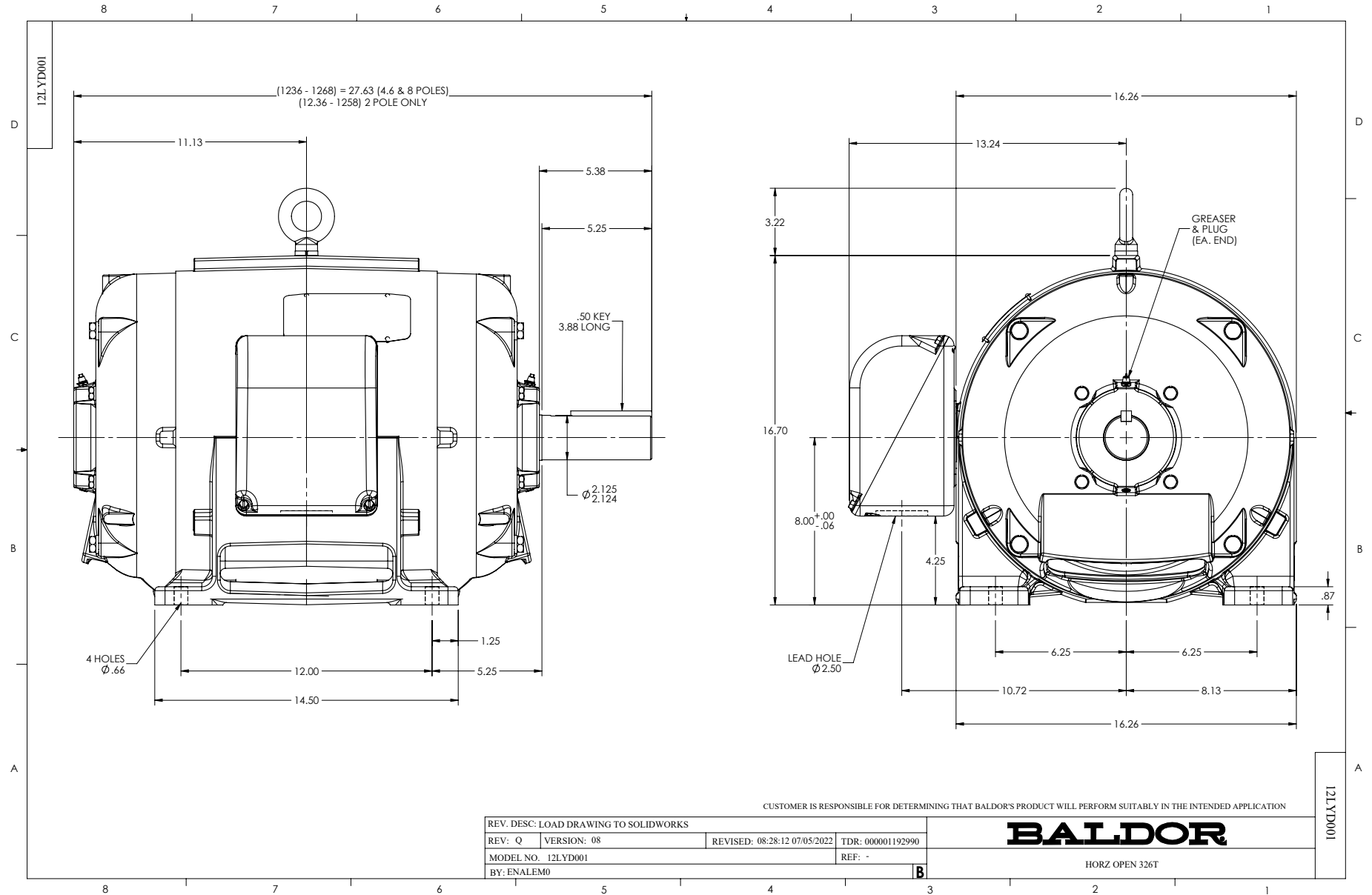
50 HP 3 PH 60 HZ 1775 RPM 460 V 1256M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=404 PU=204 LR=237 LRA=382



9/9/2024 ACPERF, record # 56462



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

SH 1 of 1