

**BALDOR • RELIANCE**

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# Customer information packet

## XT3504T

50HP, 1770RPM, 3PH, 60HZ, 326T, 1272M, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

## Specifications

Enclosure	TEFC
Frame	326T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CL I GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	50.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CCSA US CSA EEV 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
Constant Torque Speed Range	3
Current @ Voltage	57.000 A @ 460.0 V 125.000 A @ 208.0 V 114.000 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

## Part detail

Revision	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	12WGY627
Layout	12LYH013
Eff. date	06-28-2024
CD Diagram	CD0005
Poles	04
Leads	9#8
Proprietary	False
Created date	11-16-2020

Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	57.0 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1272M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	30.28 IN
Power Factor	87
Product Family	General Purpose
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1770 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**

<b>NP4163L</b>									
<b>CAT.NO.</b>	XT3504T				<b>I.P.</b>	54			
<b>SPEC.</b>	12-0000-1915				<b>ENCL</b>	TEFC			
<b>FRAME</b>	326T	<b>H.P.</b>	50						
<b>VOLTS</b>	230/460	<b>P.F.</b>	87						
<b>F.L. AMPS</b>	114/57	<b>RATING</b>	40C AMB-CONT						
<b>R.P.M.</b>	1770								
<b>HZ.</b>	60	<b>PH.</b>	3	<b>CLASS</b>	F				
<b>SER.F.</b>	1.15	<b>DES.</b>	B	<b>SL HZ</b>	1				
<b>NEMA NOM. EFF.</b>	94.5	<b>WK2</b>	9.59						
<b>DE</b>	6312	<b>ODE</b>	6311						
<b>MAG. CUR.</b>	36/18								
<b>INV TYPE</b>	PWM	<b>CHP</b>	60	<b>TO</b>	90	<b>T. CODE</b>	T3		
<b>CT</b>	3	<b>TO</b>	60	<b>VT</b>	3	<b>TO</b>	60		
<b>CC</b>	010A	<b>SN</b>							
	USABLE AT 50 HZ 40HP 190/380V								
	112/56A								

**AC Induction Motor Performance Data**

Record # 40068

Typical performance - not guaranteed values

<b>Winding: 12WGY627-R001</b>		<b>Type: 1272M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: Single Voltage Motor</b>		
<b>Rated Output (HP)</b>	50		<b>Full Load Torque</b>	148 LB-FT	
<b>Volts</b>	230/460		<b>Start Configuration</b>	direct on line	
<b>Full Load Amps</b>	114/57		<b>Breakdown Torque</b>	446 LB-FT	
<b>R.P.M.</b>	1770		<b>Pull-up Torque</b>	182.7 LB-FT	
<b>Hz</b>	<b>60 Phase</b>	3	<b>Locked-rotor Torque</b>	253.9 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	G	<b>Starting Current</b>	344 A	
<b>Service Factor (S.F.)</b>	1.15		<b>No-load Current</b>	18.3 A	
<b>NEMA Nom. Eff.</b>	<b>94.5 Power Factor</b>	87	<b>Line-line Res. @ 25°C</b>	0.11 Ω	
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	61°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	76°C	
			<b>Locked-rotor Power Factor</b>	24.4	
			<b>Rotor inertia</b>	9.59 LB-FT <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 50 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	57	78	85	87	88	87	88
<b>Efficiency</b>	92.5	94.7	94.9	94.5	93.8	92.9	94.1
<b>Speed</b>	1791	1785	1779	1772	1765	1756	1768
<b>Line amperes</b>	22.3	31.9	43.5	56.9	71.3	87.1	65.5

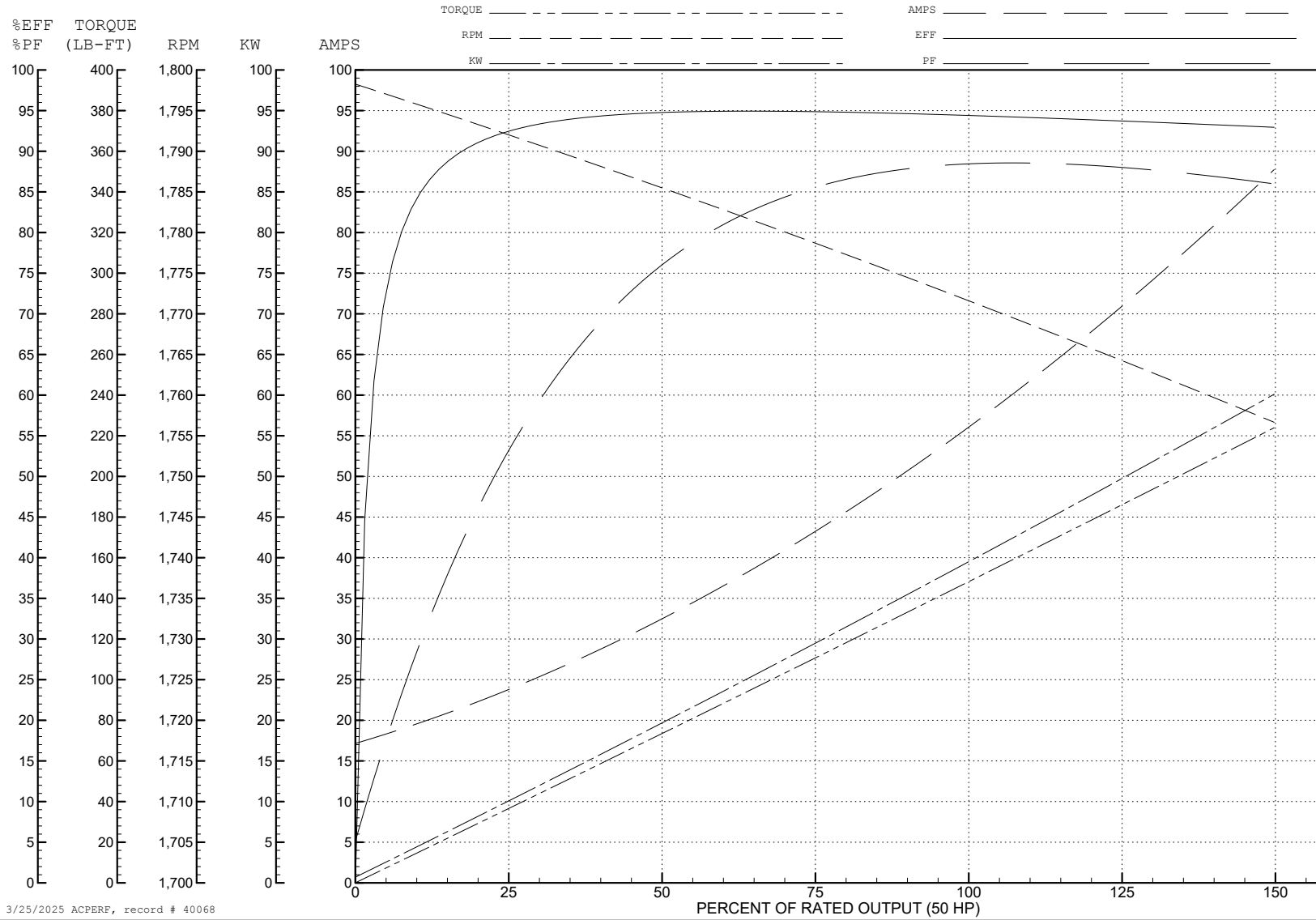
ABB Motors and Mechanical Inc.

WINDING # 12WGY627

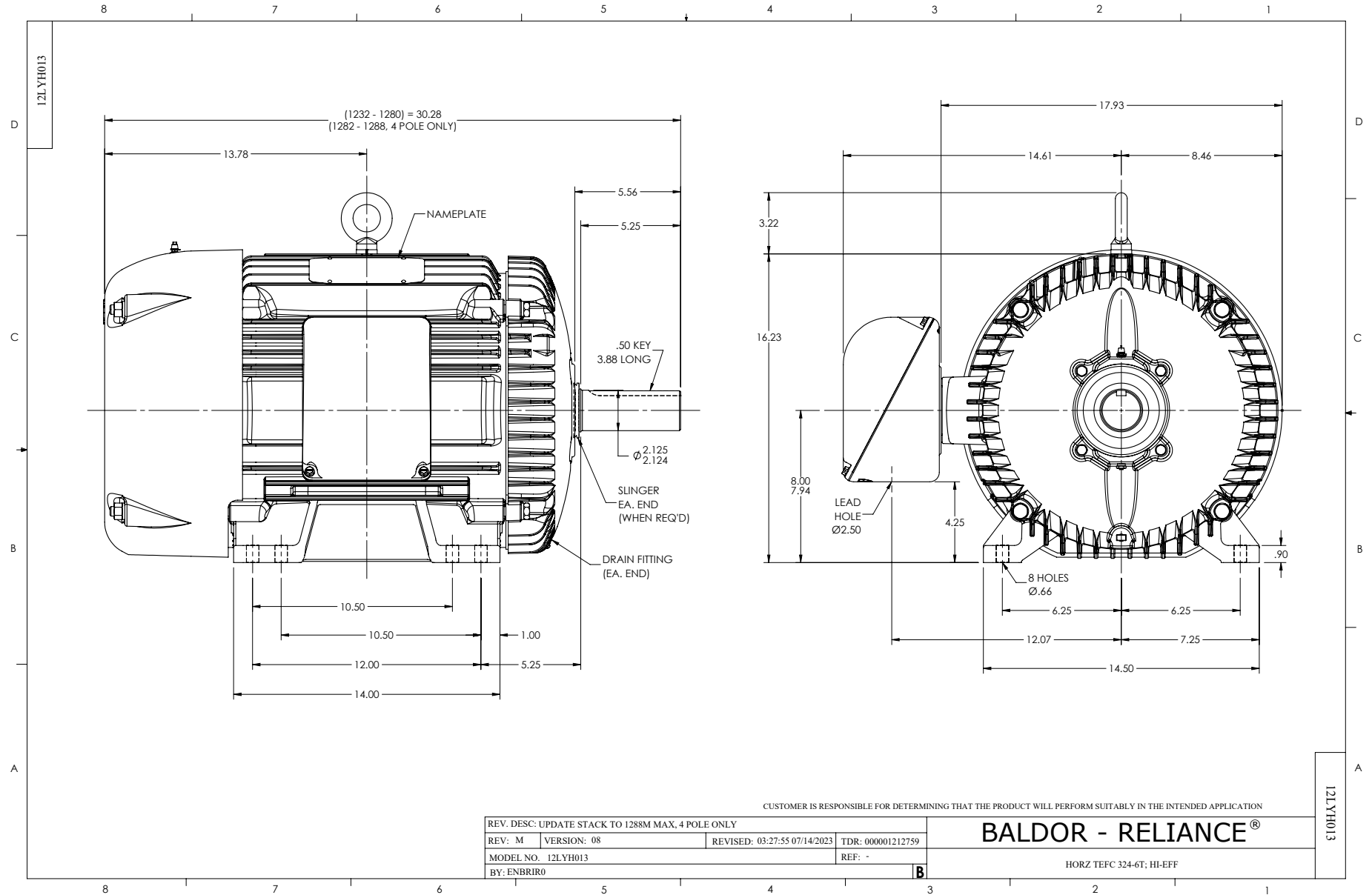
Typical performance - not guaranteed values.

50 HP 3 PH 60 HZ 1770 RPM 460 V 1272M

TORQUES (LB-FT): PO=446 PU=182.7 LR=253.9 LRA=344



3/25/2025 ACPERF, record # 40068



CD0005



LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS