



Customer information packet

XT3502TS

50HP, 3540RPM, 3PH, 60HZ, 326TS, 1252M, TEFC, F

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	326TS
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	3600 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	6
Current @ Voltage	56.000 A @ 460.0 V 122.000 A @ 208.0 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

Part detail

Revision	B
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	12WGY291
Layout	12LYH011
Eff. date	06-28-2024
CD Diagram	CD0180
Poles	02
Leads	9#8
Proprietary	False
Created date	12-04-2020

Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	56.0 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
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 Face Code	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
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

NP4163L										
CAT.NO.	XT3502TS					I.P.	54			
SPEC.	12-0000-1940					ENCL	TEFC			
FRAME	326TS		H.P.	50						
VOLTS	230/460		P.F.	90						
F.L. AMPS	112/56		RATING	40C AMB-CONT						
R.P.M.	3540									
HZ.	60		PH.	3		CLASS	F			
SER.F.	1.00		DES.	A		SL HZ	1			
NEMA NOM. EFF.	93		WK2	4.07						
DE	6312		ODE	6311						
MAG. CUR.	29.8/14.9									
INV TYPE	PWM	CHP	60		TO	90		T. CODE	T3	
CT	6	TO	60		VT	3		TO	60	
CC	010A		SN							
USABLE AT 50HZ 40HP 190/380V										
108/54A SF1.0										

AC Induction Motor Performance Data

Record # 78204

Typical performance - not guaranteed values

Winding: 12WGY291-R008		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	No-load Current	14.9 A	
NEMA Nom. Eff.	93 Power Factor	90	Line-line Res. @ 25°C	0.11257 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	77°C
			Locked-rotor Power Factor	20.9
			Rotor inertia	4.07 LB-FT ²

Load Characteristics 460 V, 60 Hz, 50 HP

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

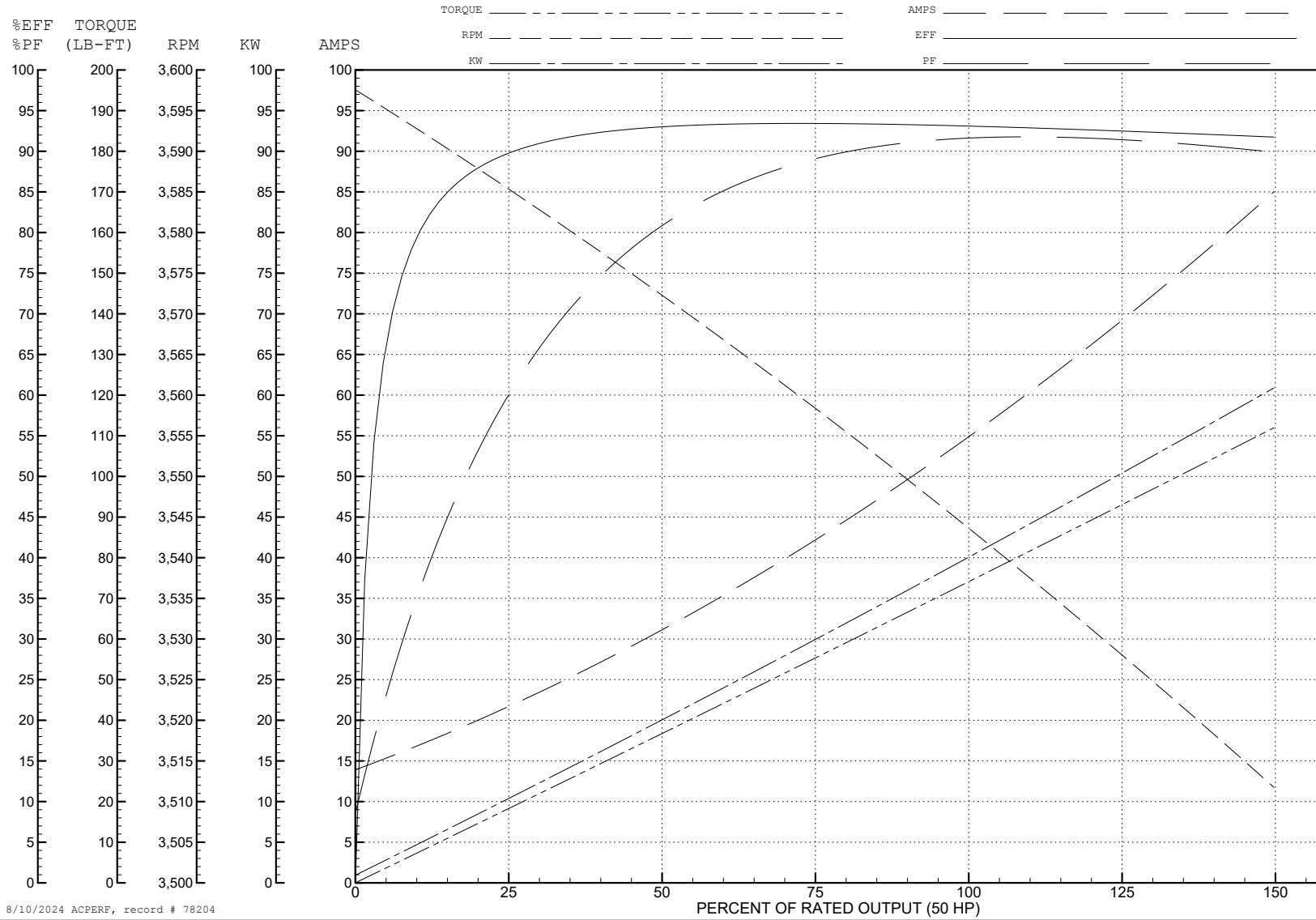
ABB Motors and Mechanical Inc.

WINDING # 12WGY291

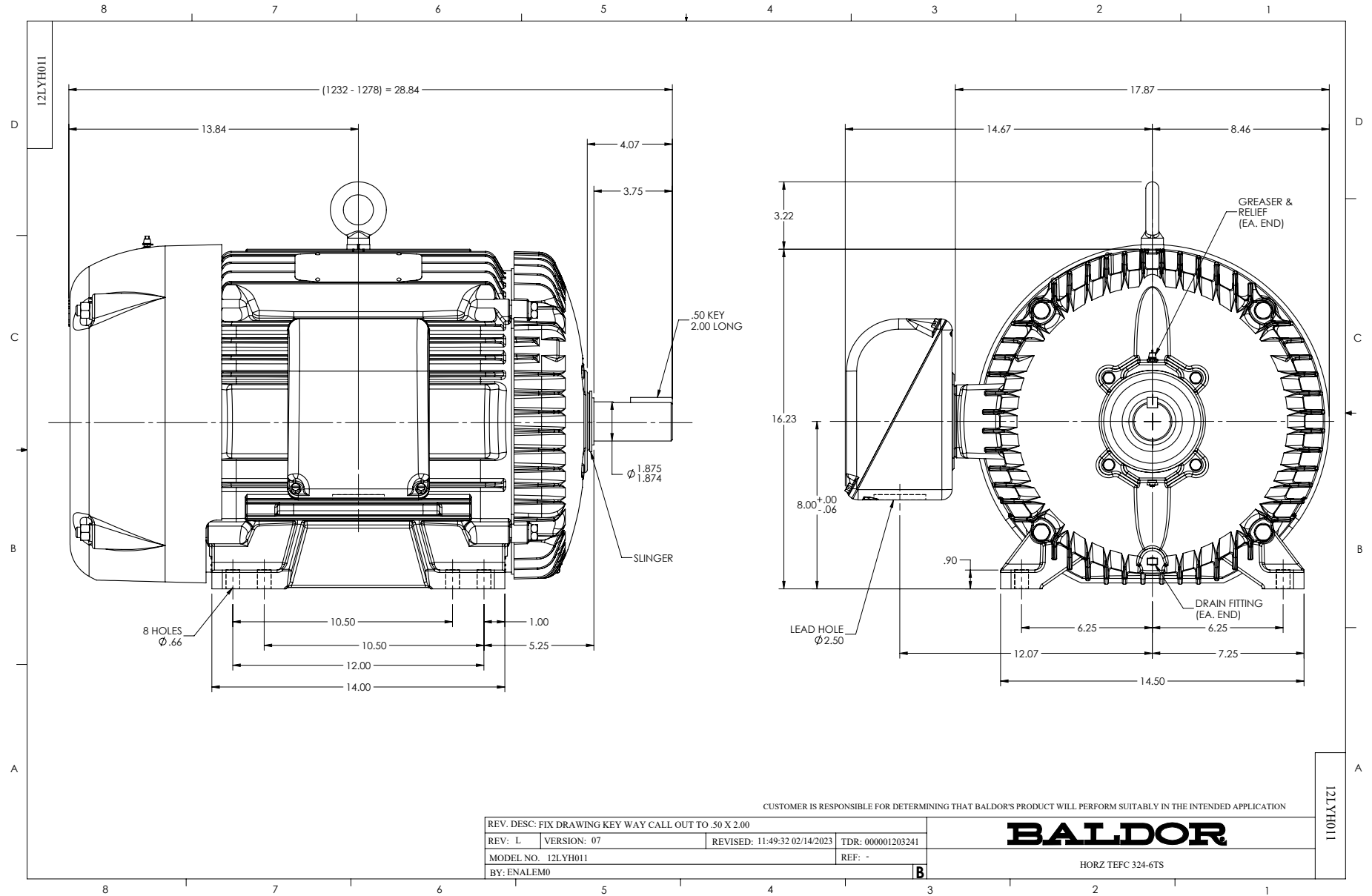
Typical performance - not guaranteed values.

50 HP 3 PH 60 HZ 3540 RPM 460 V 1252M

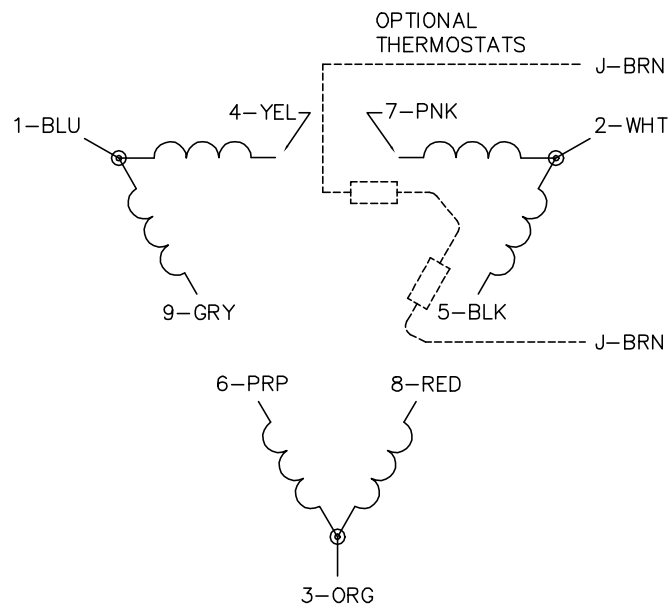
TORQUES (LB-FT): PO=292 PU=112 LR=139 LRA=408



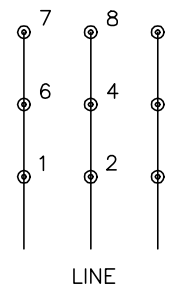
8/10/2024 ACPERF, record # 78204



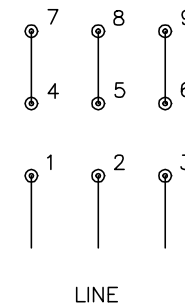
CD0180



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		
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FILE: \AAA\00005\148	REVISED: 10: 25: 29 02/19/2019	BY: ENBRIRO
MTL: -	© □	

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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