



Customer information packet

ECP4114T-4

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	CLI 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
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
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 Shaft Indicator	None
Haz Area Temp Code	T3

Part detail

Revision	E
Type	AC
Mech. spec.	12G154
Base	
Status	PRD/A
Elec. spec.	12WGY318
Layout	12LYG154
Eff. date	08-01-2023
CD Diagram	CD0006
Poles	02
Leads	3#8
Proprietary	False
Created date	06-20-2018

Heater Indicator	No Heater
High Voltage Full Load Amps	56.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Quantity/Wire Size	3 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1252M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	29.15 IN
Power Factor	90
Product Family	Super-E Chemical Processing
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 Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft 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

NP3241

CAT.NO.	ECP4114T-4	P/N		ENCLOSURE	TEFC
SPEC.	12G154Y318G7	CC	010A	FRAME	326TS
HP	50	CLASS	F	HZ	60
RPM	3540	RPM MAX	5400	PH	3
VOLT	460	MOTOR WEIGHT	610	KVA-CODE	H
AMP	56	SER.F.	1.15	PF	90
RATING	40C AMB-CONT	NEMA-NOM-EFF	93	ODE BRG	6312
				DE BRG	6312
				GREASE	POLYREX EM
			INV.TYPE	PWM	
TEMP CODE	T3	INVERTER-TEMP-CODE	200		
TEMP =	200	C HP FR	60	C HP TO	90
CT HZ FROM	6	CT HZ TO	60		
HTR-VOLTS		HTR-AMPS		HTR-WATTS	
				MAX. SPACE HEATER TEMP.	
				VT HZ FROM	6
				VT HZ TO	60

Accessories

Part number	Description	Multiplier
12-1105	C FACE KIT	A8

AC Induction Motor Performance Data

Record # 71338

Typical performance - not guaranteed values

Winding: 12WGY318-R036		Type: 1252M	Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)	50	Full Load Torque	74.4 LB-FT		
Volts	460	Start Configuration	direct on line		
Full Load Amps	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.)	1.15	No-load Current	14.9 A		
NEMA Nom. Eff.	93	Power Factor	90	Line-line Res. @ 25°C	0.104 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	77°C	
S.F. Amps			Temp. Rise @ S.F. Load	93°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	S.F.
Power Factor	66	82	88	90	91	90	91
Efficiency	88.7	92.7	93.5	93.2	92.7	91.6	92.9
Speed	3584	3572	3558	3544	3528	3511	3534
Line amperes	20.4	30.8	42.9	55.8	69.5	84.6	64

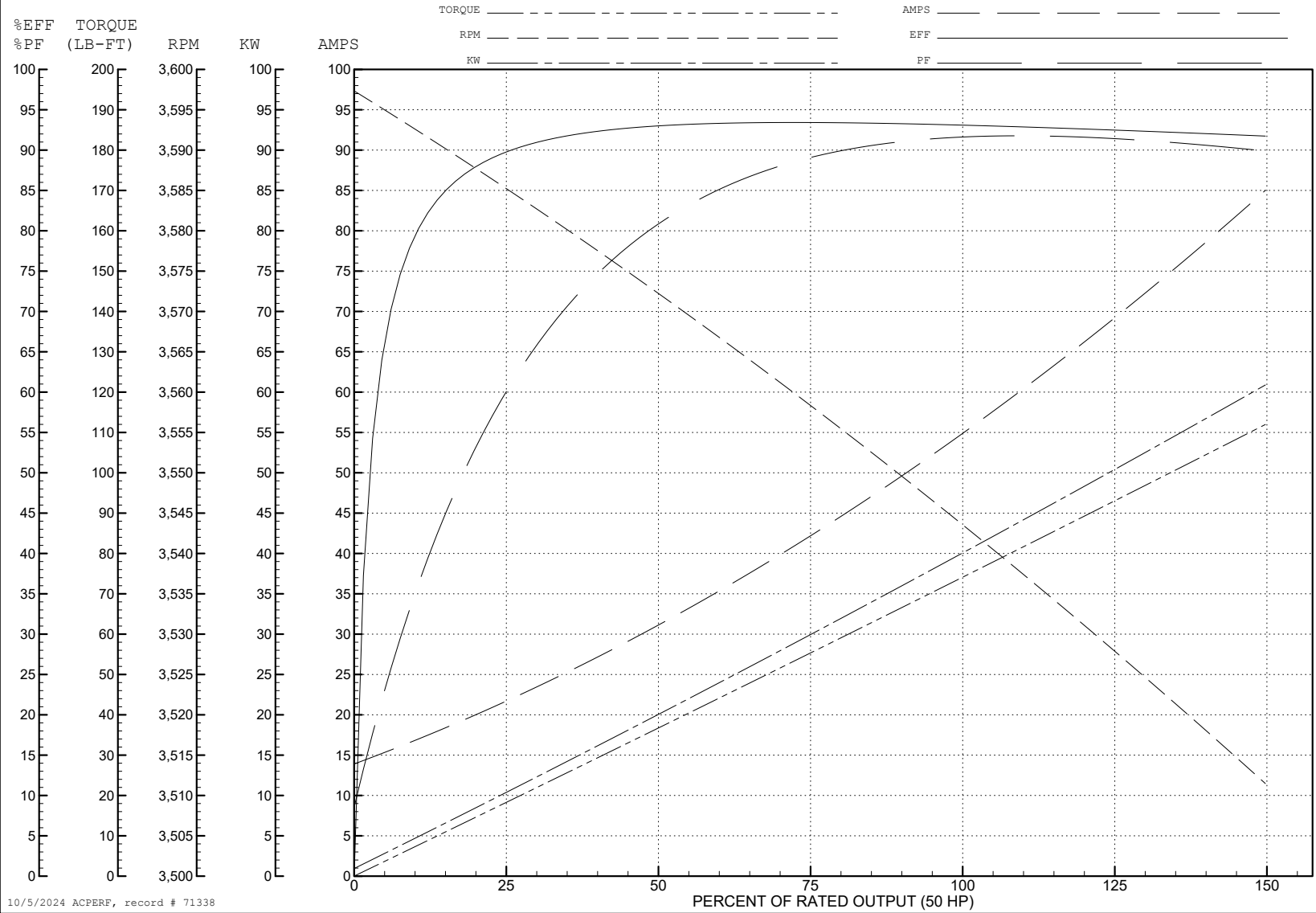
ABB Motors and Mechanical Inc.

WINDING # 12WGY318

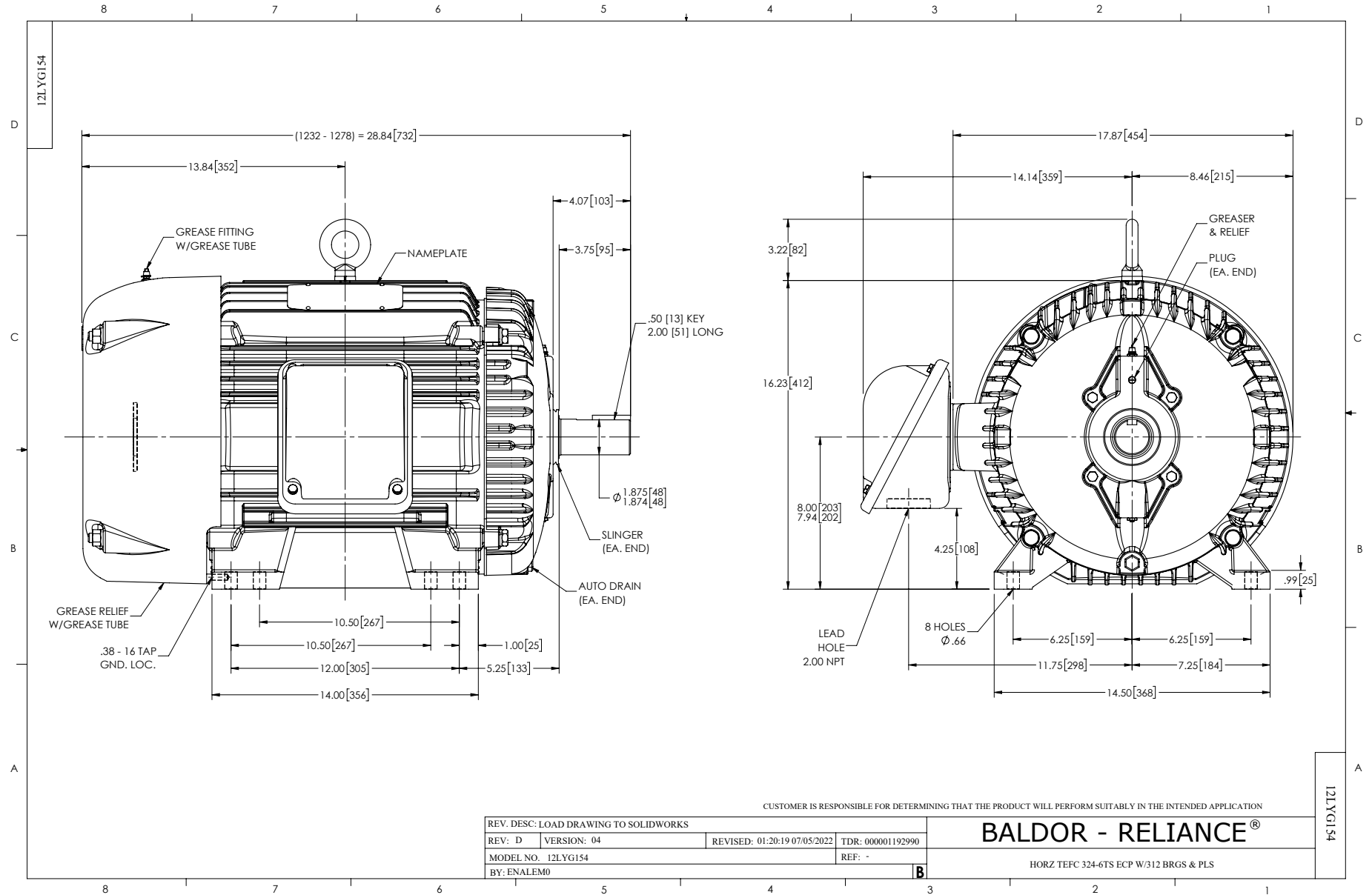
50 HP 3 PH 60 HZ 3540 RPM 460 V 1252M

Typical performance - not guaranteed values.

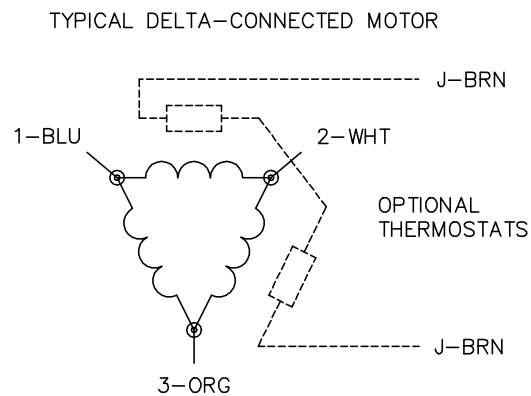
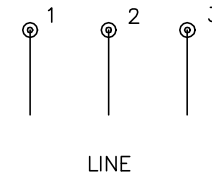
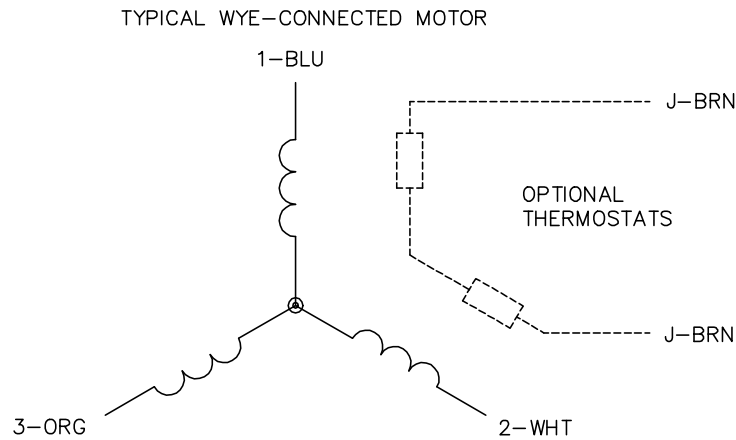
TORQUES (LB-FT): PO=292 PU=112 LR=139 LRA=408



10/5/2024 ACPERF, record # 71338



CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007		
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BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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