



Customer information packet

ECP4109T-4

40HP, 3540RPM, 3PH, 60HZ, 324TS, 1244M, TEFC, F
Class - CLI GP A,B,C,D
Division - Division II

Specifications

Enclosure	TEFC
Frame	324TS
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	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR CCSA US
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	46.000 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 Face Code	Standard
Front Shaft Indicator	None

Part detail

Revision	N
Type	AC
Mech. spec.	12G154
Base	
Status	PRD/A
Elec. spec.	12WGY192
Layout	12LYG154
Eff. date	08-01-2023
CD Diagram	CD0006
Poles	02
Leads	3#8
Proprietary	False
Created date	01-27-2015

Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	46.0 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 Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1244M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	29.15 IN
Power Factor	88
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Extension Location	Pulley End
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.	ECP4109T-4	P/N		ENCLOSURE	TEFC
SPEC.	12G154Y192G2	CC	010A	FRAME	324TS
HP	40	CLASS	F	HZ	60
RPM	3540	RPM MAX	5400	PH	3
VOLT	460	MOTOR WEIGHT	635	DES	A
AMP	46	SER.F.	1.15	PF	88
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	3
				VT HZ TO	60

Accessories

Part number	Description	Multiplier
12-1105ECP	C FACE KIT (C-FACE SWAP FOR ECP MOTOR)	A8

AC Induction Motor Performance Data

Record # 47241

Typical performance - not guaranteed values

Winding: 12WGY192-R006		Type: 1244M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)	40	Full Load Torque	59.3 LB-FT		
Volts	460	Start Configuration	direct on line		
Full Load Amps	46	Breakdown Torque	235 LB-FT		
R.P.M.	3540	Pull-up Torque	84.3 LB-FT		
Hz	60	Locked-rotor Torque	100 LB-FT		
NEMA Design Code	A	Starting Current	352 A		
Service Factor (S.F.)	1.15	No-load Current	15.5 A		
NEMA Nom. Eff.	93	Line-line Res. @ 25°C	0.13313 Ω		
Rating - Duty	40C	Temp. Rise @ Rated Load	67°C		
S.F. Amps	AMB-CONT	Temp. Rise @ S.F. Load	80°C		
		Rotor inertia	3.44 LB-FT ²		

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	57	76	84	88	89	89	89
Efficiency	88	92.2	93.2	93.3	93	92.4	93.1
Speed	3585.6	3575.4	3564.2	3553.6	3540.6	3527.7	3546
Line amperes	19.4	27.1	36.3	46.3	57.3	68.5	52.9

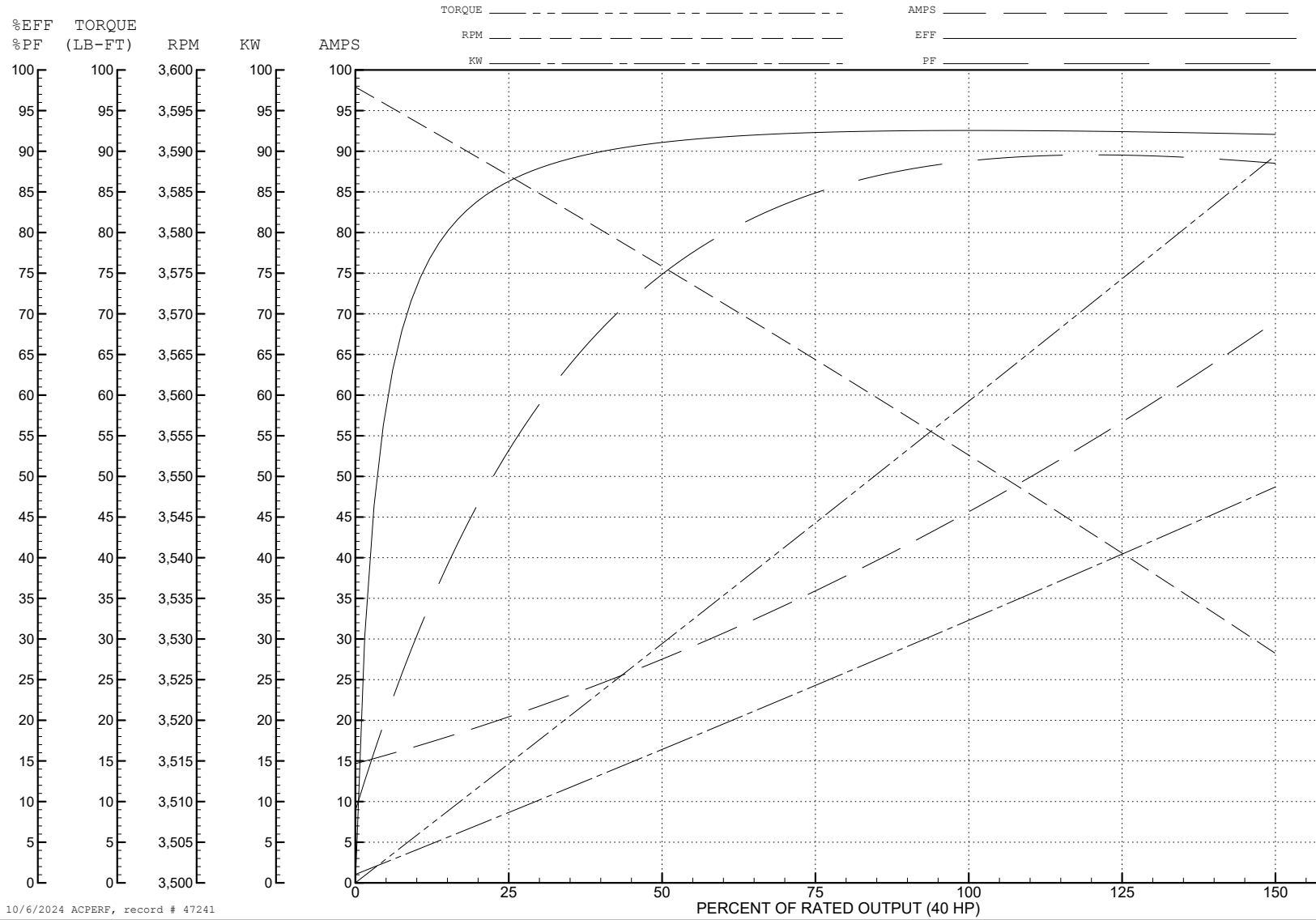
ABB Motors and Mechanical Inc.

WINDING # 12WGY192

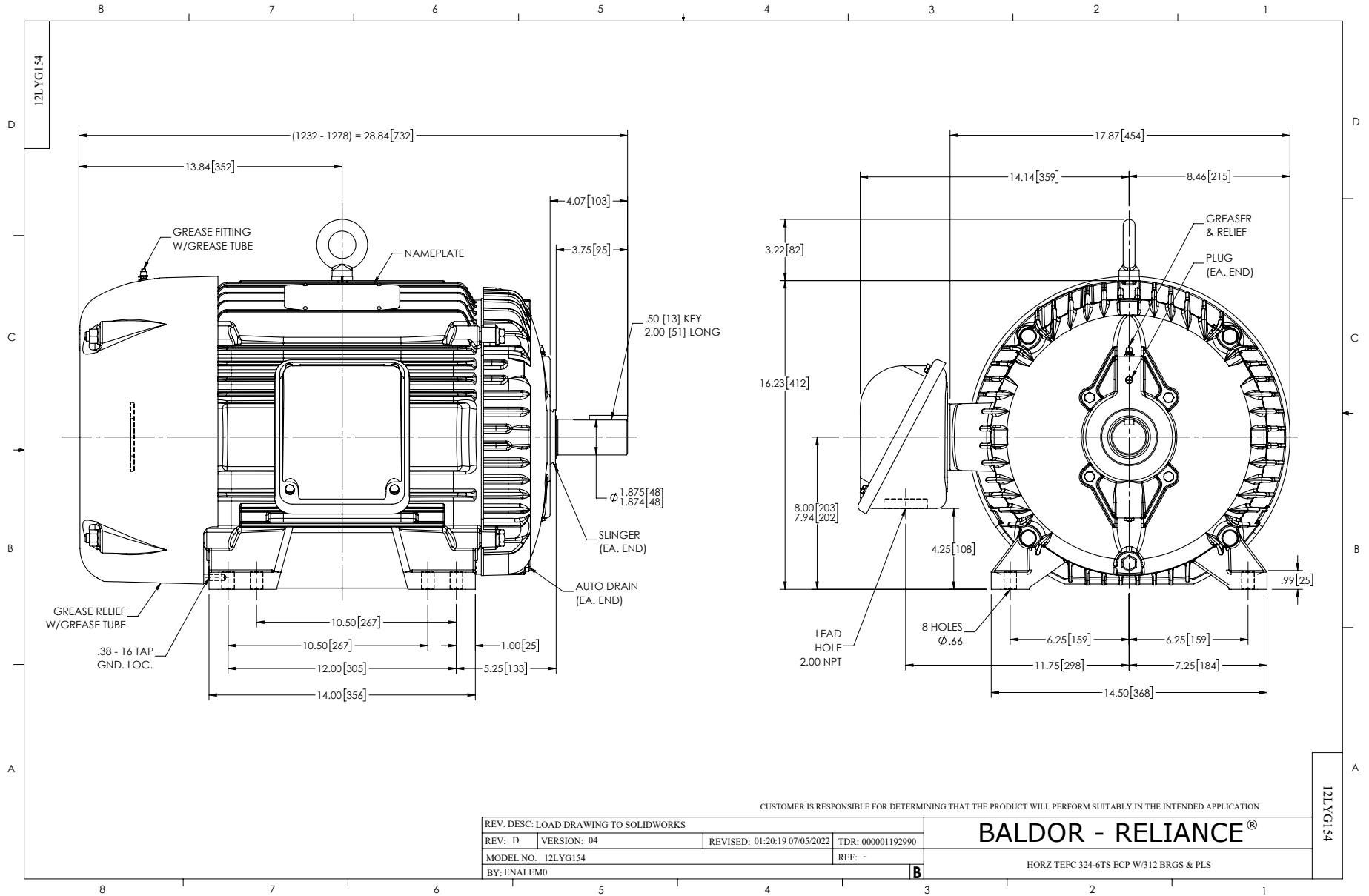
Typical performance - not guaranteed values.

40 HP 3 PH 60 HZ 3540 RPM 460 V 1244M

TORQUES (LB-FT): PO=235 PU=84.3 LR=100 LRA=352



10/6/2024 ACPERF, record # 47241



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

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BALDOR - RELIANCE®

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

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