



Customer information packet

ECP4106T

20HP, 3540RPM, 3PH, 60HZ, 256T, 0944M, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	256T
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	20.000 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
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	48.000 A @ 208.0 V 44.000 A @ 230.0 V 22.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated

Part detail

Revision	AX
Type	AC
Mech. spec.	09J371
Base	
Status	PRD/A
Elec. spec.	09WGY799
Layout	09LYJ371
Eff. date	09-12-2024
CD Diagram	CD0180
Poles	02
Leads	9#12
Proprietary	False
Created date	08-29-2010

Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	22.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0944M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	24.78 IN
Power Factor	92
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	1.625 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

NP3995ABEL																							
CAT #		ECP4106T				SER				CC		010A											
SPEC		09J371Y799G1				RATING		40C AMB-CONT															
HZ		VOLTS		AMPS		RPM		HP		CODE		SF DES PF NEMA NOM. EFF											
60		230/460		44/22		3540		20		J		1.15 A 92 % 91.7 %											
PH		3 CL F		MAX RPM		5400		MAX CORR KVAR		6.61		USABLE AT 208V N/A											
IP55		FR		256T		ENCL		TEFC		DE BRG		6309 ODE BRG 6309											
GREASE		POLYREX EM						MTR WT		331		LBS											
USABLE AT		50HZ 15HP 190/380V 40.8/20.4A						SF1.0															
CL I DIV 2 GRPS A,B,C,D				CL I ZONE 2 GRPS				IIA,IIB,IIC				TEMP T 200 C											
1.0 SF ON PWM INVERTER				POWER		INV TEMP CL		200		C													
CHP		60-90		HZ		1.5:1		CT		6-60		HZ		10:1		VT		3-60		HZ		20:1	
SPACE HEATER LEADS H1-H2:						TIE LIKE NUMBERS						TOGETHER											
V				A				W				MAX SPACE HEATER TEMP											

AC Induction Motor Performance Data

Record # 47264

Typical performance - not guaranteed values

Winding: 09WGY799-R020				Type: 0944M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		20		Full Load Torque		29.76 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		44/22		Breakdown Torque		121 LB-FT	
R.P.M.		3540		Pull-up Torque		49.4 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		62.2 LB-FT	
NEMA Design Code		A	KVA Code	J	Starting Current		183 A
Service Factor (S.F.)		1.15		No-load Current		6.12 A	
NEMA Nom. Eff.		91.7	Power Factor	92	Line-line Res. @ 25°C		0.377 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		62°C	
S.F. Amps				Temp. Rise @ S.F. Load		76°C	
				Locked-rotor Power Factor		27.8	
				Rotor inertia		1.12 LB-FT2	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	63	83	90	92	93	93	93
Efficiency	88.7	92.8	93.2	93.2	92.6	91.8	92.8
Speed	3583	3567	3551	3534	3516	3497	3523
Line amperes	8.14	12.12	16.69	21.89	27.18	33.06	25.1

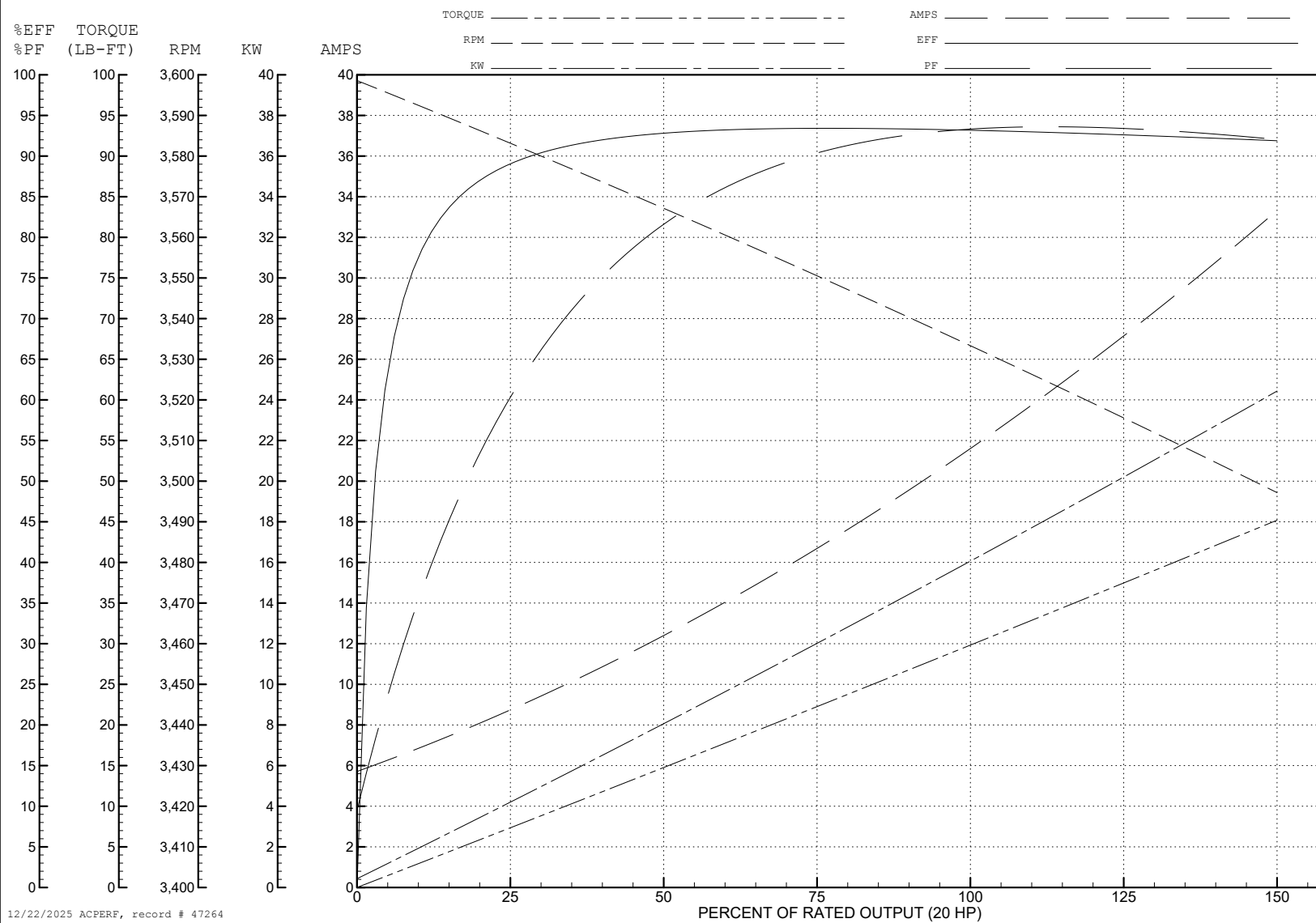
ABB Motors and Mechanical Inc.

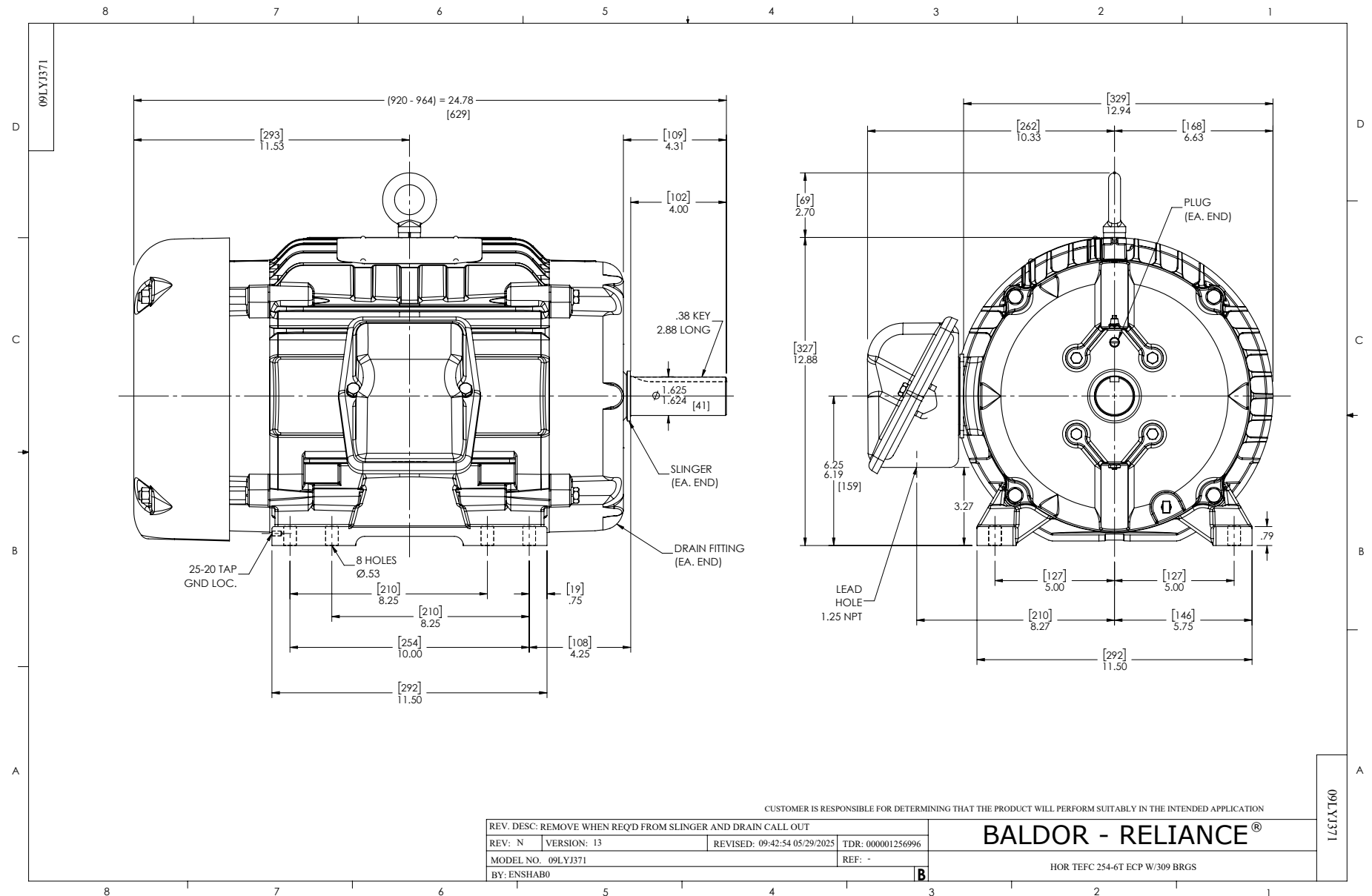
WINDING # 09WGY799

Typical performance - not guaranteed values.

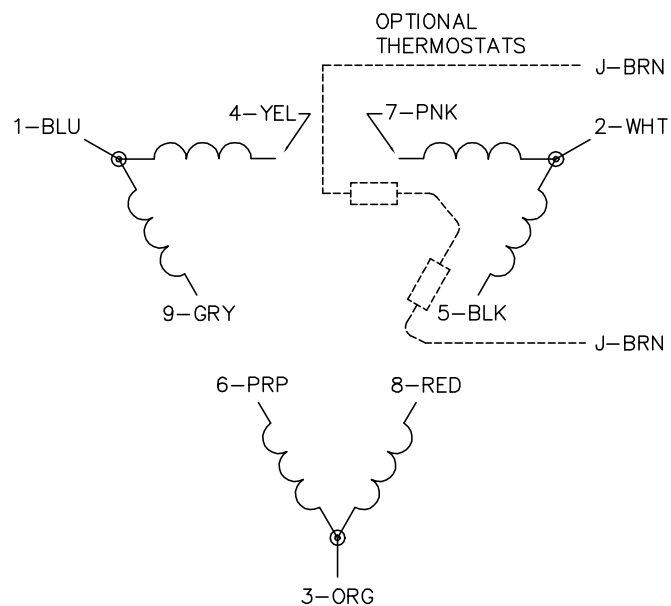
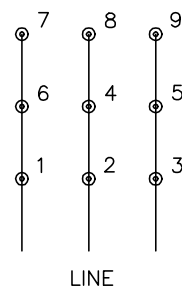
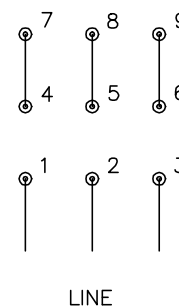
20 HP 3 PH 60 HZ 3540 RPM 460 V 0944M

TORQUES (LB-FT): PO=121 PU=49.4 LR=62.2 LRA=183





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