

BALDOR • RELIANCE

Customer information packet

ECP2334T

20HP, 1770RPM, 3PH, 60HZ, 256T, 0960M, 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	CLI 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	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	1.0
Current @ Voltage	52.000 A @ 208.0 V 48.000 A @ 230.0 V 24.000 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

Part detail

Revision	Q
Type	AC
Mech. spec.	09J371
Base	
Status	PRD/A
Elec. spec.	09WGT459
Layout	09LYJ371
Eff. date	07-19-2024
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	11-27-2017

Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	24.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0960M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	24.78 IN
Power Factor	83
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	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

NP3995ABEL

CAT #	ECP2334T		SER			CC	010A				
SPEC	09J371T459G1		RATING	40C AMB-CONT							
HZ	VOLTS	AMPS	RPM	HP	CODE	SF	DES	PF	NEMA NOM. EFF		
60	230/460	48/24	1770	20	J	1.15	A	83 %	93 %		
								%	%		
PH	3	CL	F	MAX RPM	2700	MAX CORR KVAR	5.35	USABLE AT 208V	N/A		
IP55		FR	256T	ENCL	TEFC	DE BRG	6309	ODE BRG	6309		
GREASE	POLYREX EM			MTR WT	334	LBS					
USABLE AT	50HZ 15HP 190/380V 44/22A				SF1.0						
CL I DIV 2 GRPS A,B,C,D			CL I ZONE 2 GRPS			IIA,IIB,IIC		TEMP T	160	C	
1.0 SF ON PWM INVERTER		POWER	INV TEMP CL		180	C					
CHP	60-90	HZ	1.5:1	CT	1.0-60	HZ	60:1	VT	0-60	HZ	1000:1
SPACE HEATER LEADS H1-H2:			TIE LIKE NUMBERS			TOGETHER					
V		A		W		MAX SPACE HEATER TEMP					

Accessories

Part number	Description	Multiplier
09-1309	C FACE KIT	A8

AC Induction Motor Performance Data

Record # 68075

Typical performance - not guaranteed values

Winding: 09WGT459-R011		Type: 0960M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	20	Full Load Torque	59.27 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	48/24	Breakdown Torque	232 LB-FT		
R.P.M.	1770	Pull-up Torque	126 LB-FT		
Hz	60	Locked-rotor Torque	141 LB-FT		
NEMA Design Code	A	Starting Current	198 A		
Service Factor (S.F.)	1.15	No-load Current	10.4 A		
NEMA Nom. Eff.	93	Line-line Res. @ 25°C	0.33814 Ω		
Rating - Duty	40C	Temp. Rise @ Rated Load	58°C		
S.F. Amps	AMB-CONT	Temp. Rise @ S.F. Load	70°C		
		Locked-rotor Power Factor	26.5		

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	67	78	83	86	87	85
Efficiency	89.2	93	93.7	93.6	93.1	92.4	93.3
Speed	1793.2	1786.4	1779.1	1771.9	1763.7	1755.3	1767
Line amperes	11.8	15	19.2	24	29.3	34.9	27.2

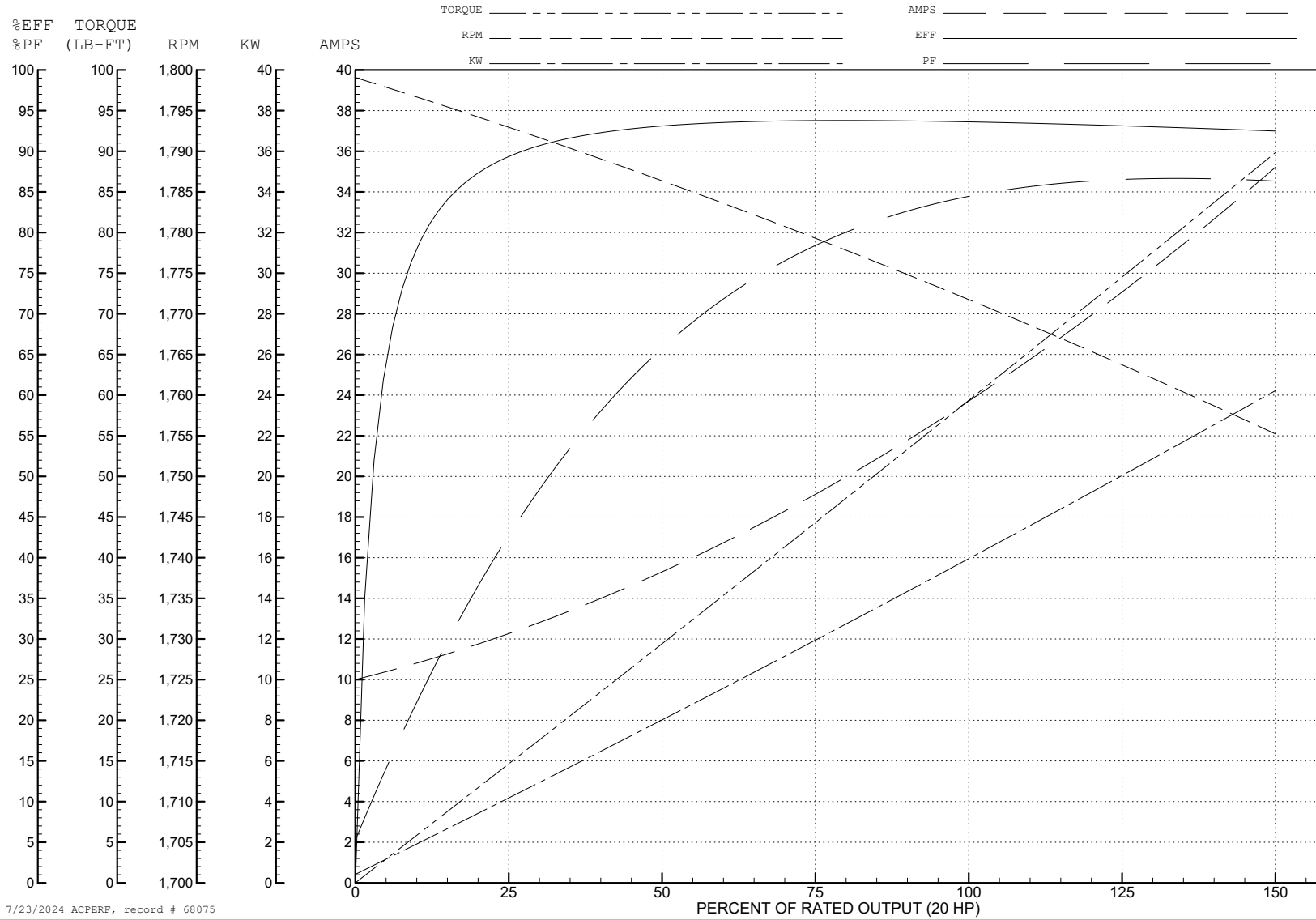
ABB Motors and Mechanical Inc.

WINDING # 09WGT459

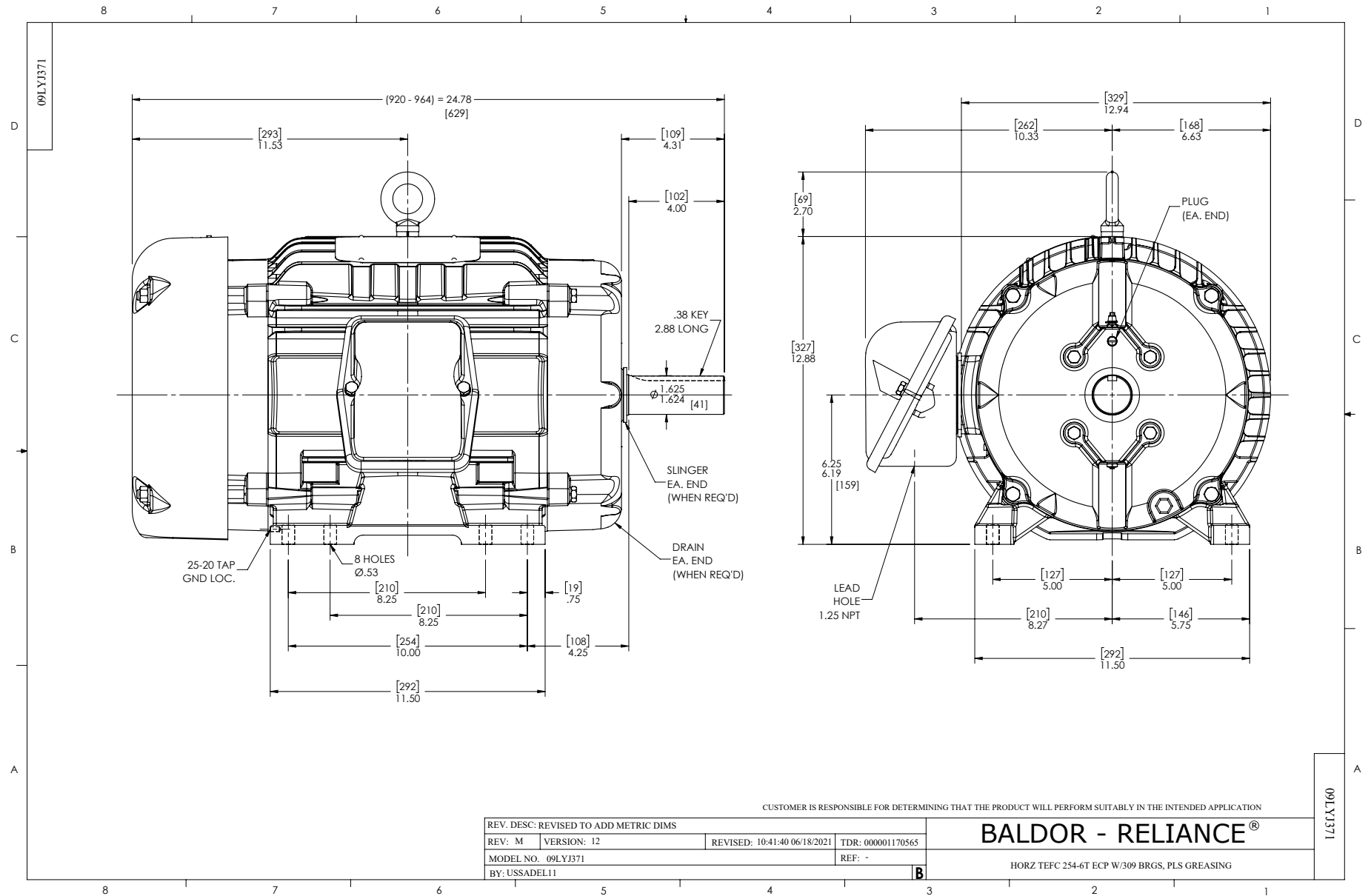
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1770 RPM 460 V 0960M

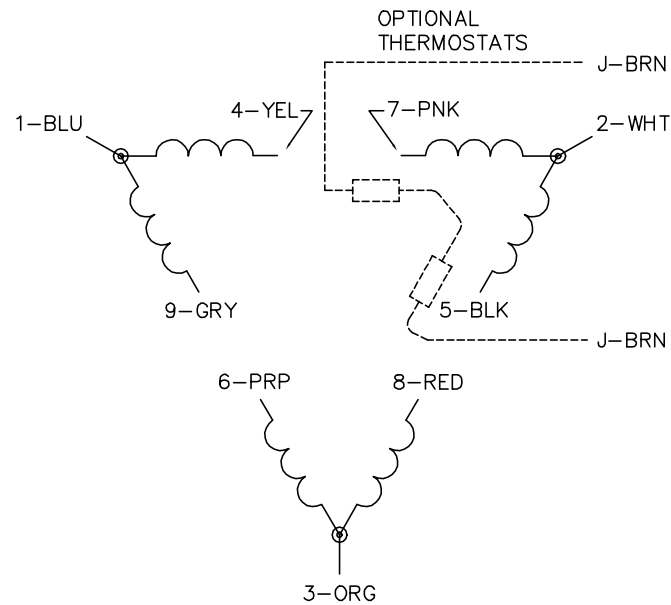
TORQUES (LB-FT): PO=232 PU=126 LR=141 LRA=198



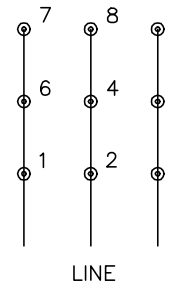
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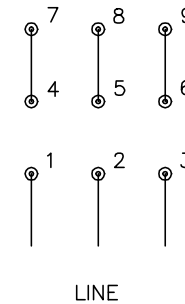
CD0180



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: -	© □	

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3PH, DV, 9 LEADS, DELTA CONNECTION

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