

ABB BALDOR RELIANCE III

Customer information packet

ECP2334T-4

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
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR CCSA US
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	1.0
Current @ Voltage	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
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	Q
Type	AC
Mech. spec.	09J371
Base	
Status	PRD/A
Elec. spec.	09WGT506
Layout	09LYJ371
Eff. date	09-16-2025
CD Diagram	CD0006
Poles	04
Leads	3#10
Proprietary	False
Created date	11-27-2017

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	3 @ 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

NP3995ABBL													
CAT #		ECP2334T-4				SER				CC		010A	
SPEC		09J371T506G1				RATING		40C AMB-CONT					
HZ	VOLTS		AMPS		RPM	HP	CODE	SF	DES	PF	NEMA NOM. EFF		
60	460		24		1770	20	J	1.15	A	83	%	93	%
											%		%
PH	3	CL	F	MAX RPM	2700	MAX CORR KVAR		5.45	USABLE AT 208V		N/A		
IP55		FR	256T	ENCL	TEFC	DE BRG		6309	ODE BRG		6309		
GREASE		POLYREX EM				MTR WT		333	LBS				
USABLE AT		50HZ 15HP 380V 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 # 72646

Typical performance - not guaranteed values

Winding: 09WGT506-R002			Type: 0960M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		20	Full Load Torque		59.27 LB-FT		
Volts		460	Start Configuration		direct on line		
Full Load Amps		24	Breakdown Torque		232 LB-FT		
R.P.M.		1770	Pull-up Torque		126 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		141 LB-FT	
NEMA Design Code		A	KVA Code	J	Starting Current		198 A
Service Factor (S.F.)		1.15		No-load Current		10.4 A	
NEMA Nom. Eff.		93	Power Factor	83	Line-line Res. @ 25°C		0.332 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		58°C	
S.F. Amps				Temp. Rise @ S.F. Load		70°C	
				Locked-rotor Power Factor		26.9	
				Rotor inertia		2.65 LB-FT2	

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	1786	1779	1772	1764	1755	1767
Line amperes	11.8	15	19.2	24	29.3	34.9	27.2

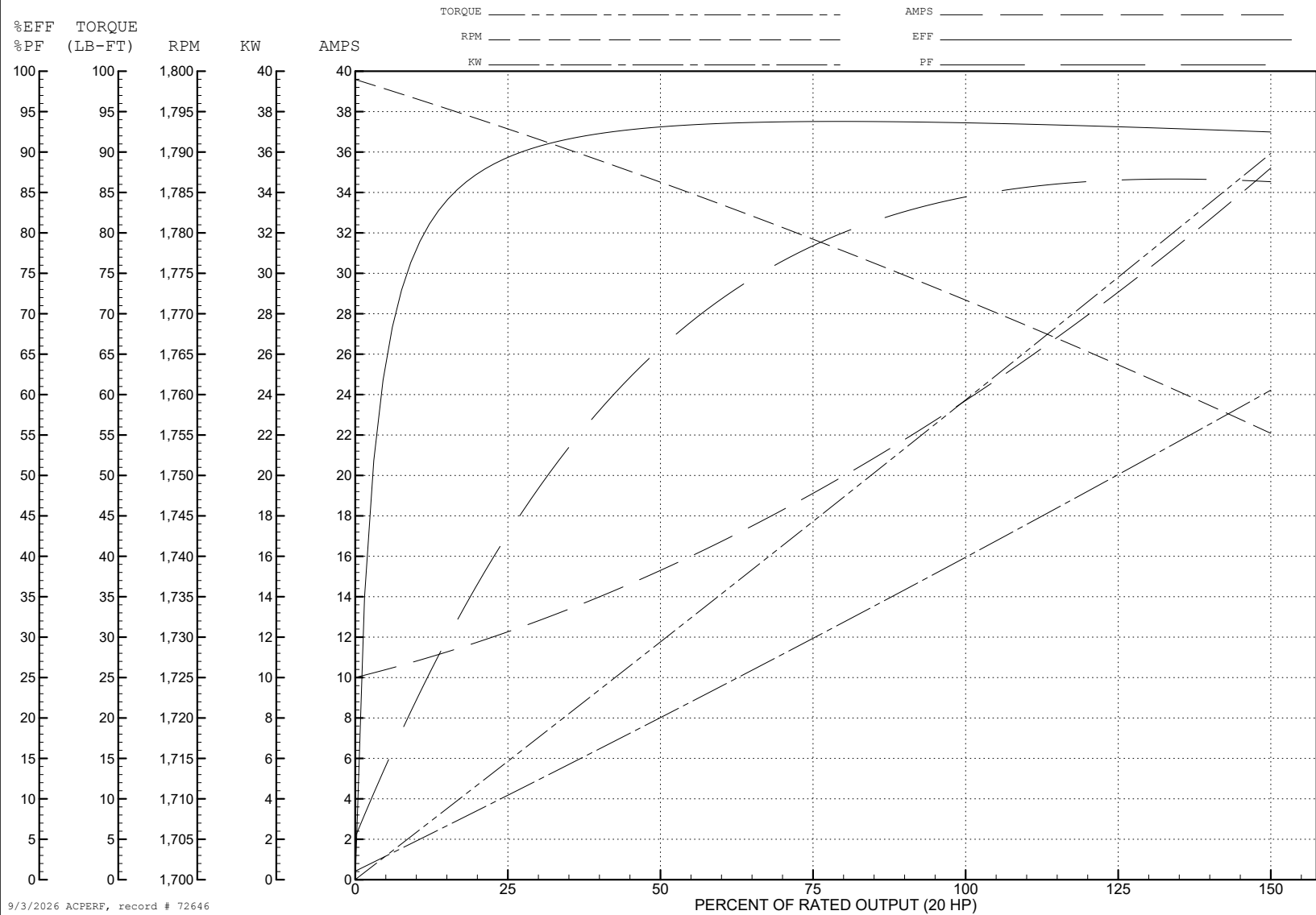
ABB Motors and Mechanical Inc.

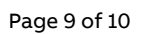
WINDING # 09WGT506

Typical performance - not guaranteed values.

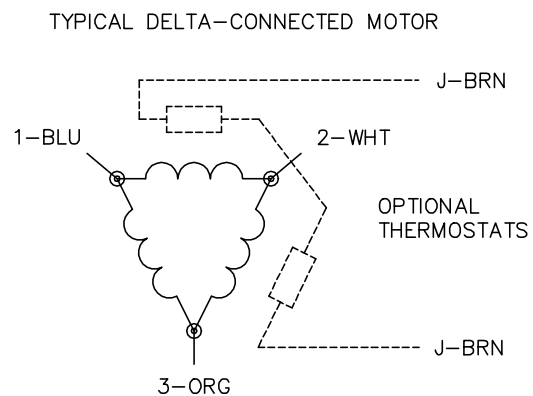
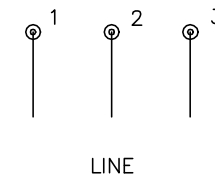
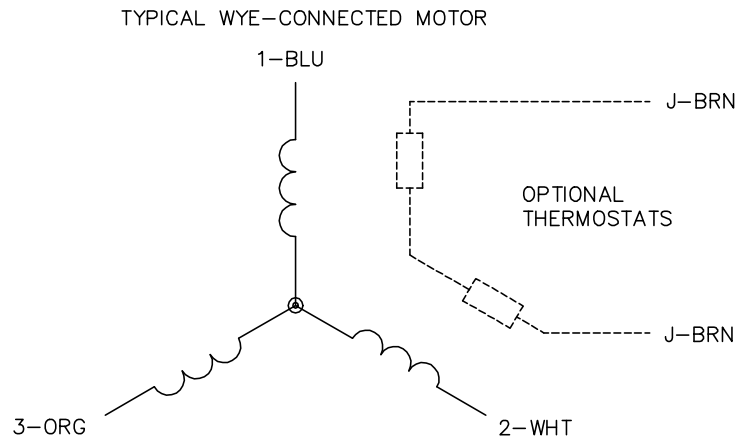
20 HP 3 PH 60 HZ 1770 RPM 460 V 0960M

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





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

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10:24:49 02/19/2019

BY: ENBRIRO

MTL: -



BALDOR - RELIANCE®

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

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