

ABB BALDOR RELIANCE III

Customer information packet

ECR9304T

30HP, 1770RPM, 3PH, 60HZ, 286T, 1072M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	286T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	30.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 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	37.000 A @ 460.0 V 74.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	Severe Duty Features

Part Detail

Revision	T
Type	AC
Mech. spec.	10J907
Base	
Status	PRD/A
Elec. spec.	10WGZ351
Layout	10LYJ907
Eff. date	08-01-2023
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	01-08-2015

Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	37.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	G
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	1072M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	28.00 IN
Power Factor	81
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.25
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	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

NP3293													
CAT.NO.	ECR9304T		P/N					ENCLOSURE	TEFC				
SPEC.	10J907Z351G1	CC	010A	FRAME	286T		S/N						
HP	30		CLASS	F	HZ	60	DES	A					
RPM	1770	RPM MAX	2700		PH	3	KVA-CODE	G					
VOLT	230/460				I.P.	55							
AMP	74/37		SER.F.	1.25	PF	81	ODE BRG	6311	DE BRG	6312			
RATING	40C AMB-CONT		NEMA-NOM-EFF	93.6	GREASE	POLYREX EM							
HTR-VOLTS	HTR-AMPS		HTR-WATTS		INV.TYPE								
	SFA 92/46												
			C HP FR	60	C HP TO	90							
			CT HZ FROM	6	CT HZ TO	60							
			MOTOR WEIGHT	465	VT HZ FROM	6	VT HZ TO	60					

AC Induction Motor Performance Data

Record # 49559

Typical performance - not guaranteed values

Winding: 10WGZ351-R001				Type: 1072M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		30		Full Load Torque		89.2 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		74/37		Breakdown Torque		237 LB-FT	
R.P.M.		1770		Pull-up Torque		156 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		233 LB-FT	
NEMA Design Code		A	KVA Code	Starting Current		221 A	
Service Factor (S.F.)		1.25		No-load Current		14.1 A	
NEMA Nom. Eff.		93.6	Power Factor	Line-line Res. @ 25°C		0.219 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		63°C	
S.F. Amps		92/46		Temp. Rise @ S.F. Load		87°C	
				Locked-rotor Power Factor		34.6	
				Rotor inertia		5.69 lb-ft²	

Load Characteristics 460 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	48	69	78	81	83	83	83
Efficiency	90.8	93.8	94.3	93.9	93.3	92.2	93.3
Speed	1793	1786	1779	1771	1763	1752	1763
Line amperes	16.5	21.9	28.7	36.9	45.5	55	45.5

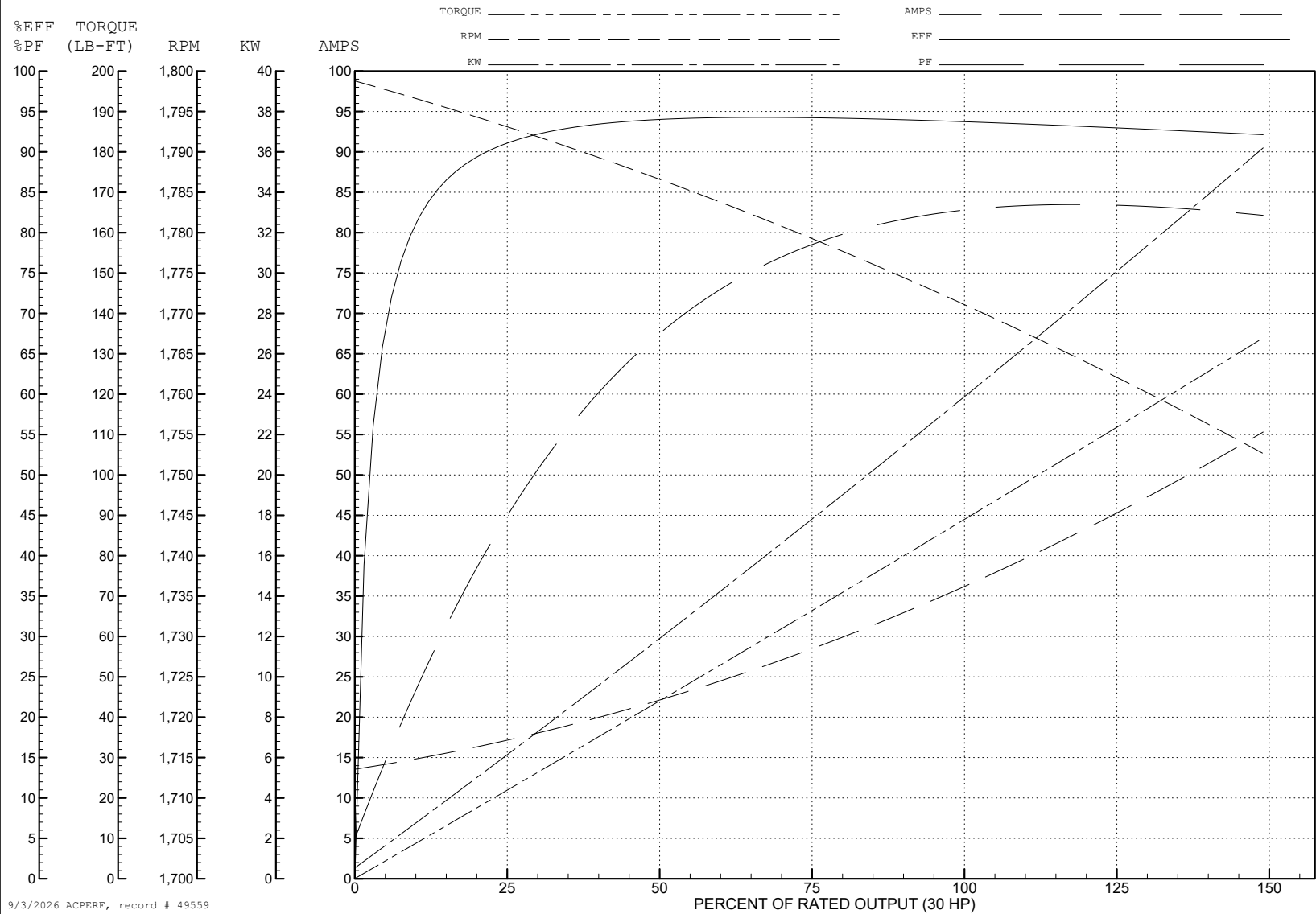
ABB Motors and Mechanical Inc.

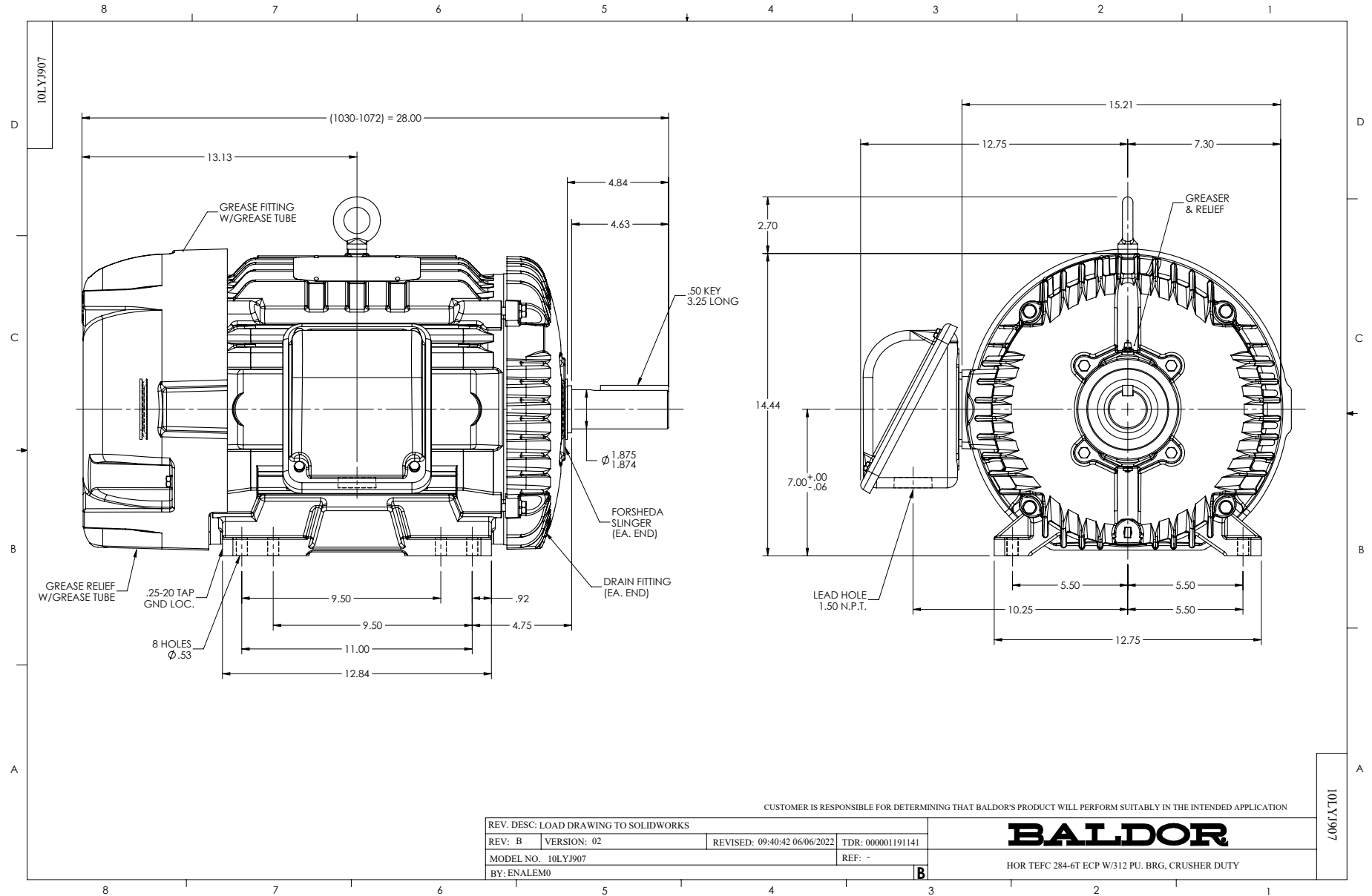
WINDING # 10WGZ351

Typical performance - not guaranteed values.

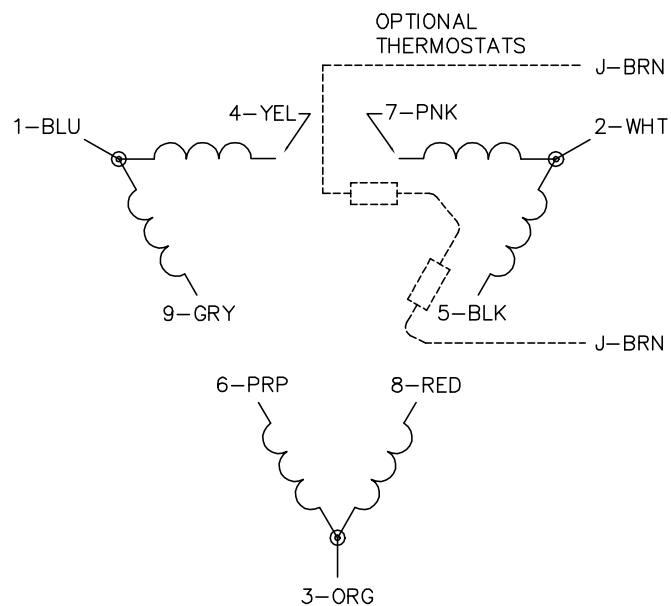
30 HP 3 PH 60 HZ 1770 RPM 460 V 1072M

TORQUES (LB-FT): PO=237 PU=156 LR=233 LRA=221

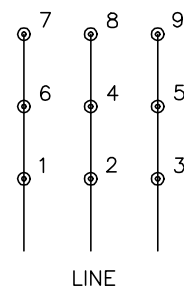




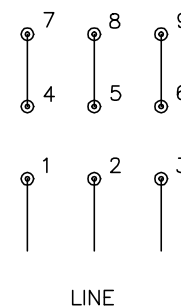
CD0180



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.

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

CD0180