

ABB BALDOR RELIANCE III

Customer information packet

ECR9206T

20HP, 1180RPM, 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	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 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	29.000 A @ 460.0 V 58.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	Severe Duty Features

Part Detail

Revision	S
Type	AC
Mech. spec.	10J907
Base	
Status	PRD/A
Elec. spec.	10WGZ354
Layout	10LYJ907
Eff. date	08-01-2023
CD Diagram	CD0180
Poles	06
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	29.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	1800 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	6
Overall Length	28.00 IN
Power Factor	71
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	1180 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.	ECR9206T			P/N						ENCLOSURE		TEFC					
SPEC.	10J907Z354G1		CC	010A	FRAME		286T		S/N								
HP	20		CLASS		F	HZ	60	DES	A								
RPM	1180	RPM MAX		1800		PH		3	KVA-CODE		J						
VOLT	230/460					I.P.		55									
AMP	58/29			SER.F.		1.25		PF	71	ODE BRG		6311	DE BRG		6312		
RATING	40C AMB-CONT			NEMA-NOM-EFF				91.7	GREASE		POLYREX EM						
HTR-VOLTS	HTR-AMPS			HTR-WATTS				INV.TYPE									
	SFA 68/34																
				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 # 50118

Typical performance - not guaranteed values

Winding: 10WGZ354-R001			Type: 1072M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		20	Full Load Torque		88.3 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		58/29	Breakdown Torque		277 LB-FT		
R.P.M.		1180	Pull-up Torque		178 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque		209 LB-FT		
NEMA Design Code		A KVA Code	J		Starting Current		197 A
Service Factor (S.F.)		1.25	No-load Current		15.7 A		
NEMA Nom. Eff.		91.7 Power Factor	71	Line-line Res. @ 25°C		0.32 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		54°C		
S.F. Amps		68/34	Temp. Rise @ S.F. Load		70°C		
			Locked-rotor Power Factor		24.8		
			Rotor inertia		8.82 lb-ft²		

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	32	52	64	71	75	76	75
Efficiency	85.7	91	92.3	92.5	91.7	91.6	91.7
Speed	1196	1193	1189	1186	1181	1177	1181
Line amperes	16.8	19.8	23.7	28.4	34.1	40.2	34.1

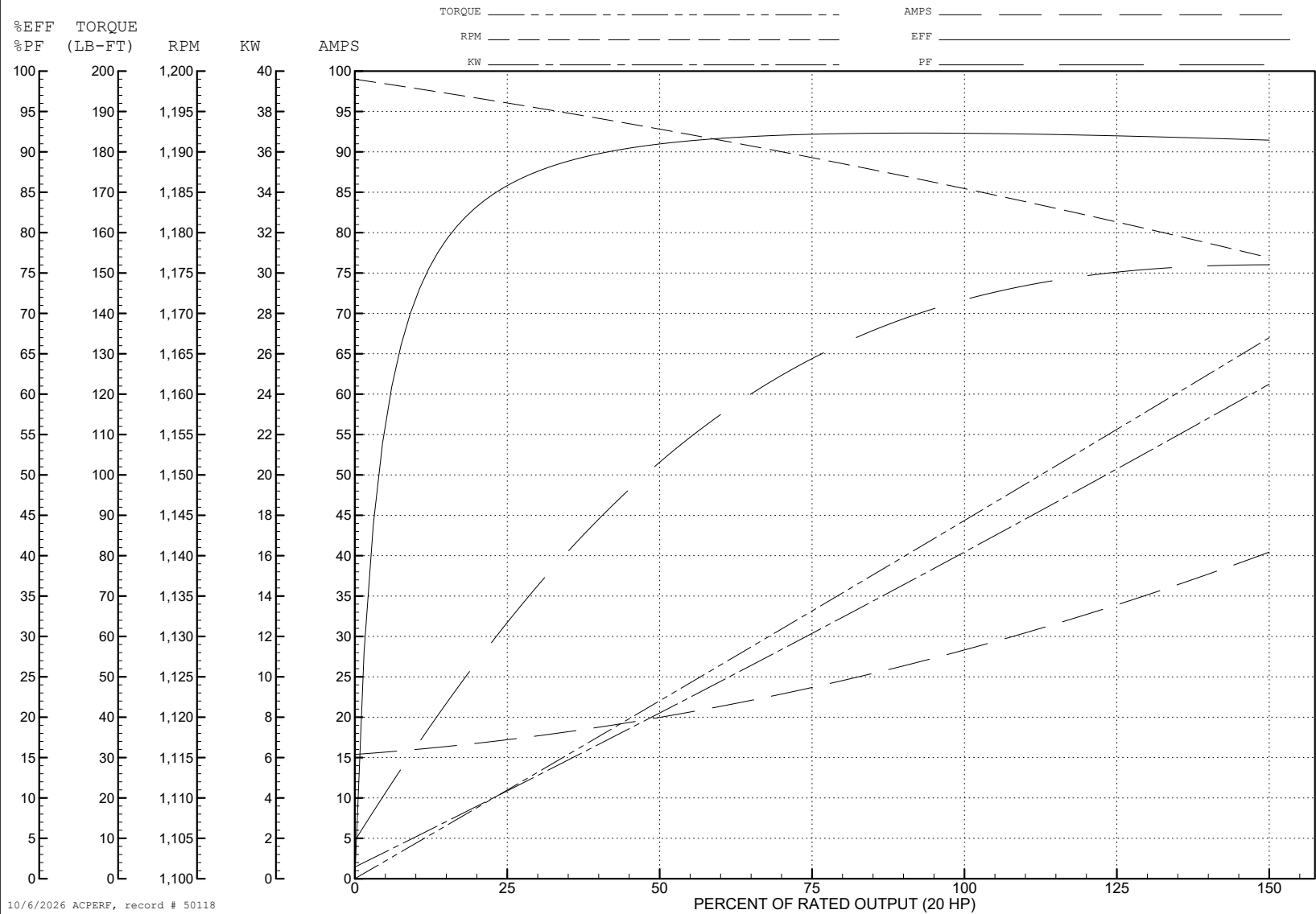
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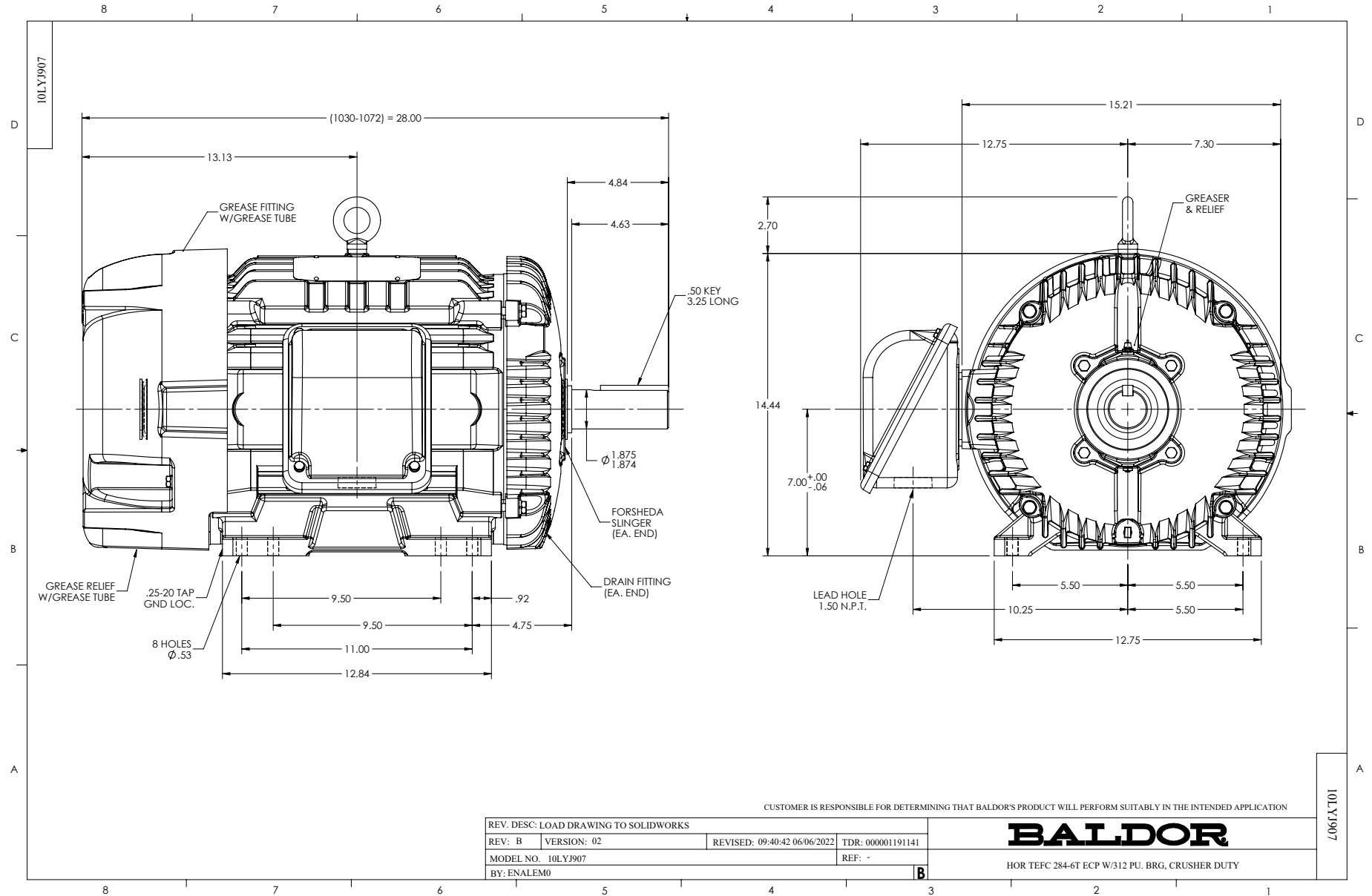
WINDING # 10WGZ354

Typical performance - not guaranteed values.

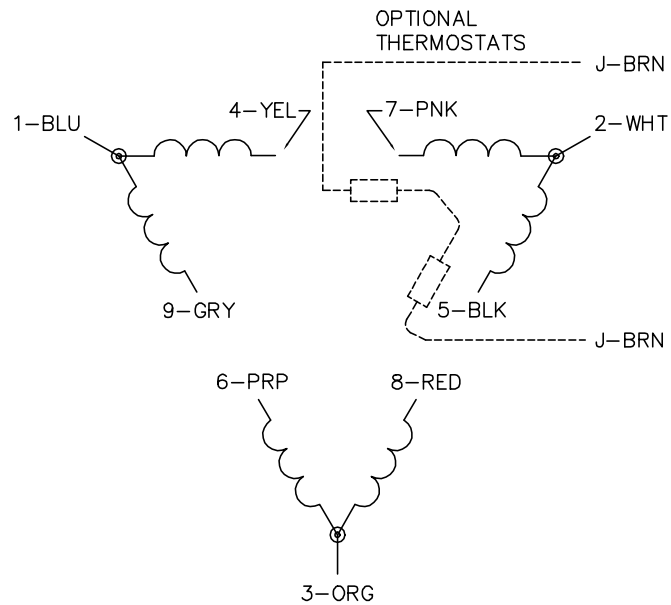
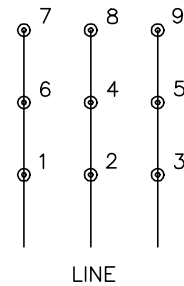
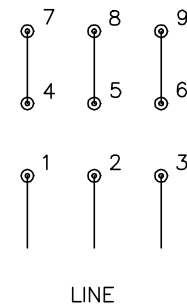
20 HP 3 PH 60 HZ 1180 RPM 460 V 1072M

TORQUES (LB-FT): PO=277 PU=178 LR=209 LRA=197





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

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