

ABB BALDOR RELIANCE III

Customer information packet

EM4314TS

60HP, 1780RPM, 3PH, 60HZ, 364TS, A3658M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	364TS
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	60.000 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	CURUSEEV NEMA PREMIUM NEMA PREMIUM (OLD LOGO)
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	70.000 A @ 460.0 V 152.000 A @ 208.0 V 140.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.0 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	70.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G

Part Detail

Revision	U
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4075
Layout	617428-076
Eff. date	02-13-2025
CD Diagram	CD0180
Poles	04
Leads	3#4,6#6
Proprietary	False
Created date	11-18-2010

Lifting Lugs	Standard Lifting Lugs
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA
Motor Type	A3658M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	31.36 IN
Power Factor	84
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1780 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate
NP3979LUA

CAT #		EM4314TS					SER				CC		010A						
SPEC		P36G3431					RATING		40C AMB-CONT										
HZ		VOLTS			AMPS			RPM		HP	CODE	-	SF	DES	PF	NEMA NOM. EFF			
60		230/460			140/70			1780		60	G		1.15	B	84	%	95	%	
		-														%		%	
PH	3	CL	F	MAX CORR KVAR			15												
BRG		DE	6313		ODE		6313		ENCL	TEFC		FR	364TS			54			
GREASE		POLYREX EM										MTR WT		834		LBS			
USABLE AT		50HZ 50HP 190/380V 138/69A										SF1.0							
INVERTER DUTY			CT	15-60	HZ	4:1	VT	3-60	HZ		20:1		CHP	60-90		HZ	1.5:1	1.0 SF VPWM	
MAX RPM		2700																	

Accessories

Part number	Description	Multiplier
K36G2	C-FACE KIT	A8
085922068B	BRKT,E360,D-FLG,313,FINISHED-TURNED	P1

AC Induction motor performance data

Record #72794 - Typical performance - not guaranteed values

Winding	A36WG4075
Type	A3658M
Enclosure	TEFC

Nameplate data

Rated Output	60		
Volts	230 / 460		
Full Load Amps	140 / 70		
R.P.M.	1780		
Hz	60	Phase	3
KVA Code	G		
S.F.	1.15		
NEMA Nom. Eff.	95	Power Factor	84
Duty	CONT		
S.F. Amps			

460 V. 60 Hz:

High Voltage Connection

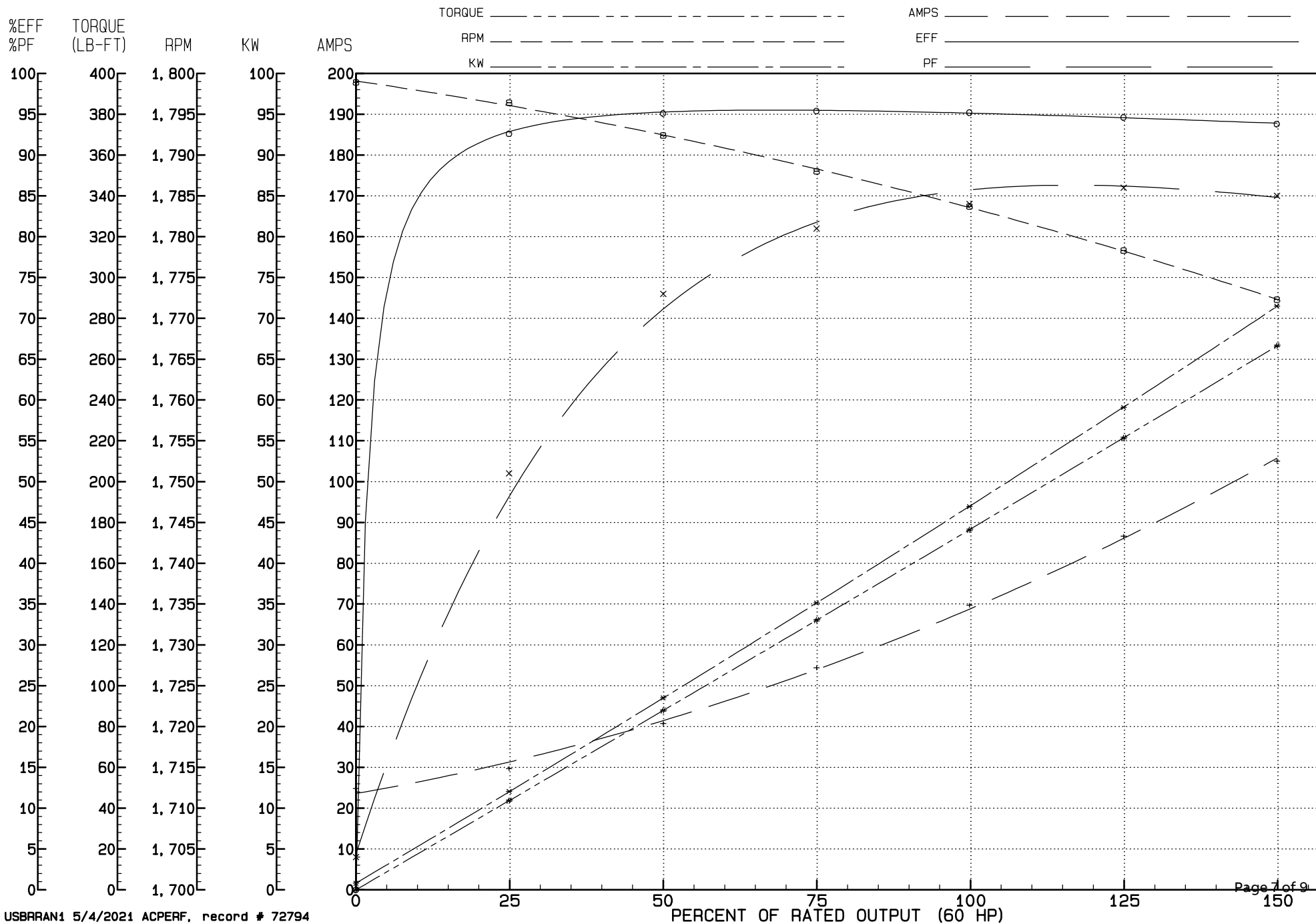
Full Load Torque	176.4 LB-FT
Start Configuration	direct on line
Breakdown Torque	422 LB-FT
Pull-up Torque	276 LB-FT
Locked-rotor Torque	352 LB-FT
Starting Current	462 A
No-load Current	24.8
Line-line Res. @ 25°C	0.10816 Ω
Temp. Rise @ Rated Load	56°C
Temp. Rise @ S.F. Load	70°C
Locked-rotor Power Factor	32.3
Rotor inertia	0

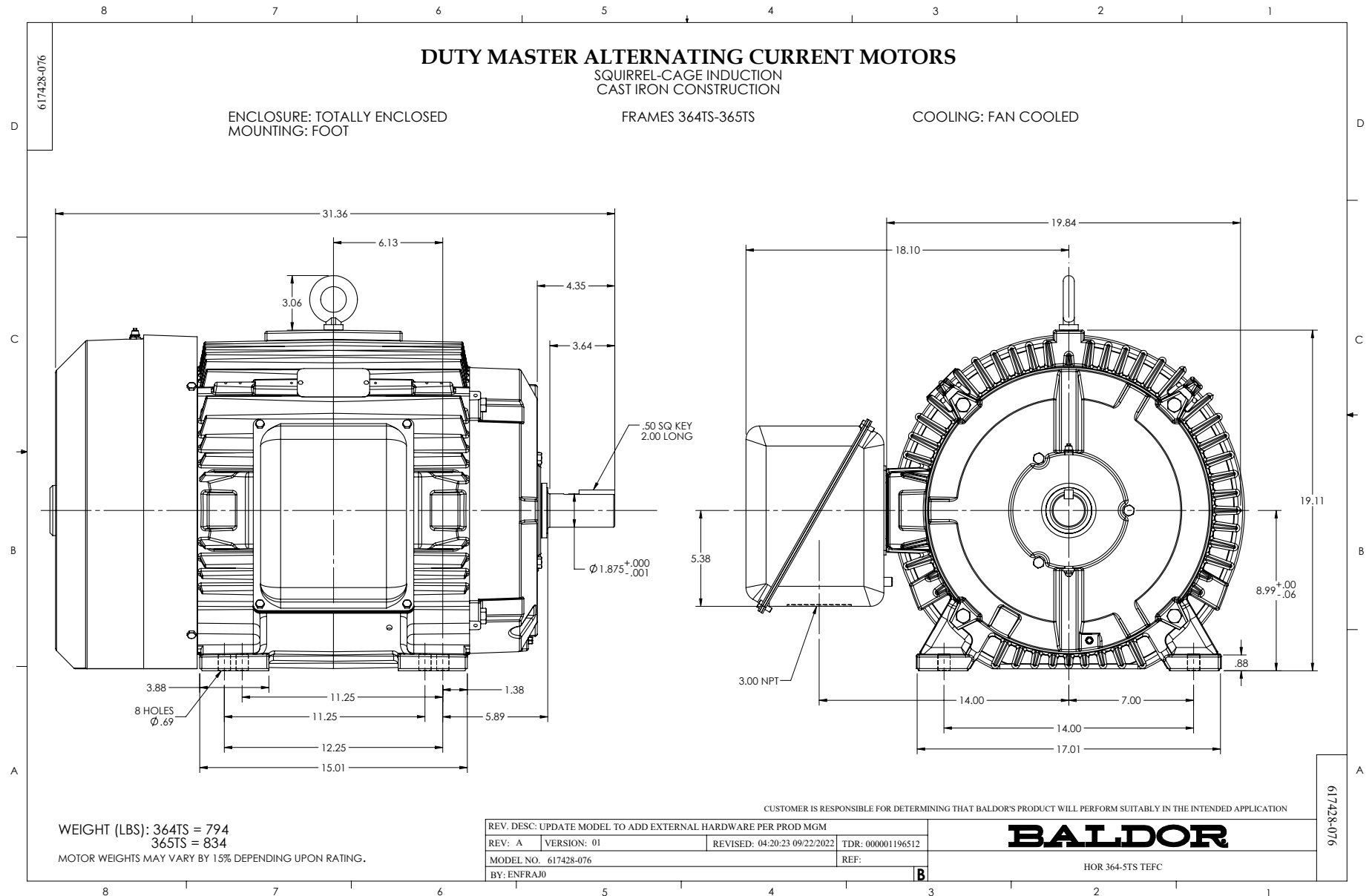
Load Characteristics 460 V, 60 Hz, 60 HP

% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	4	51	73	81	84	86	85	85
Efficiency	0	92.6	95.1	95.4	95.2	94.6	93.8	94.8
Speed	1798.9	1796.4	1792.4	1788	1783.7	1778.3	1772.3	1780
Line amperes	24.8	29.7	40.7	54.4	69.7	86.6	105	79.8

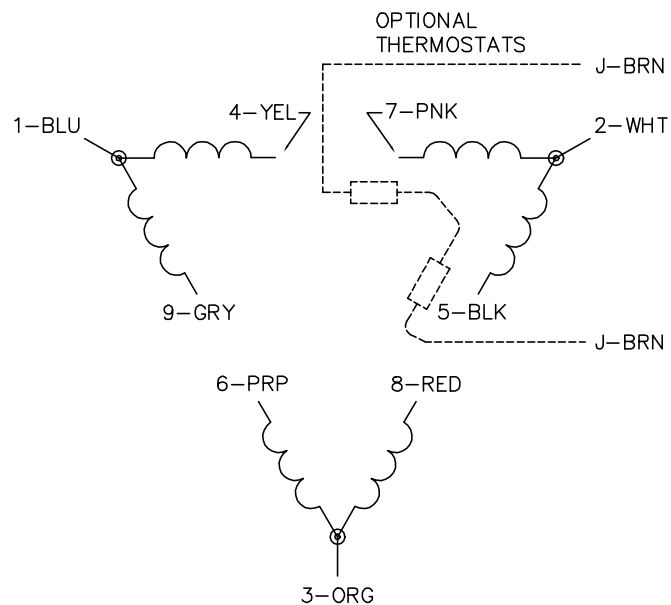
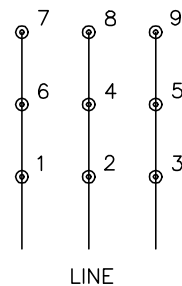
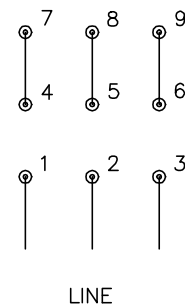
60 HP 3 PH 60 HZ 1780 RPM 460 V A3658M

TORQUES (LB-FT): P0=422.00 PU=276.00 LR=352.00 LRA=462.00





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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