

ABB BALDOR RELIANCE III

Customer information packet

FDEM4314T

60HP, 1780RPM, 3PH, 60HZ, 364T, 1462M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	364T
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	CSA EEV CCSA US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	140.000 A @ 230.0 V 152.000 A @ 208.0 V 70.000 A @ 460.0 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
IP Rating	NONE
KVA Code	G

Part Detail

Revision	K
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4075
Layout	617428-066
Eff. date	02-13-2025
CD Diagram	CD0180
Poles	04
Leads	3#4,6#6 Y
Proprietary	False
Created date	05-16-2019

Lifting Lugs	No Lifting Lugs
Motor Lead Quantity/Wire Size	9 @ 4 AWG
Motor Standards	NEMA
Motor Type	A3658M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	33.48 IN
Power Factor	84
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.374 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1780 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP3159L																	
SPEC NO.	A36-5276-4075			CAT.NO.		FDEM4314T				FRAME		364T					
HP	60	VOLTS		230/460		PHASE		3	DESIGN		B	TYPE	P				
RPM	1780	AMPS		140/70		HZ		60	AMB		40	SF	1.15				
DRIVE END BEARING	65BC03JGG30A			DUTY		CONT		INSUL.CLASS		F							
OPP D.E. BEARING	65BC03JGG30A			ENCL		TEFC		CODE		G							
SER.NO.				POWER FACTOR		84		NEMA-NOM-EFFICIENCY					95				
							MAX CORR KVAR		15	GUARANTEED EFFICIENCY		94.1					
							SUIT FOR 208 V @ 152 AMPS							NEMA NOM/CSA QUOTED EFF			
50HZ 50HP 190/380V 138/69A 1.0					SF		MOTOR WEIGHT					910					

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

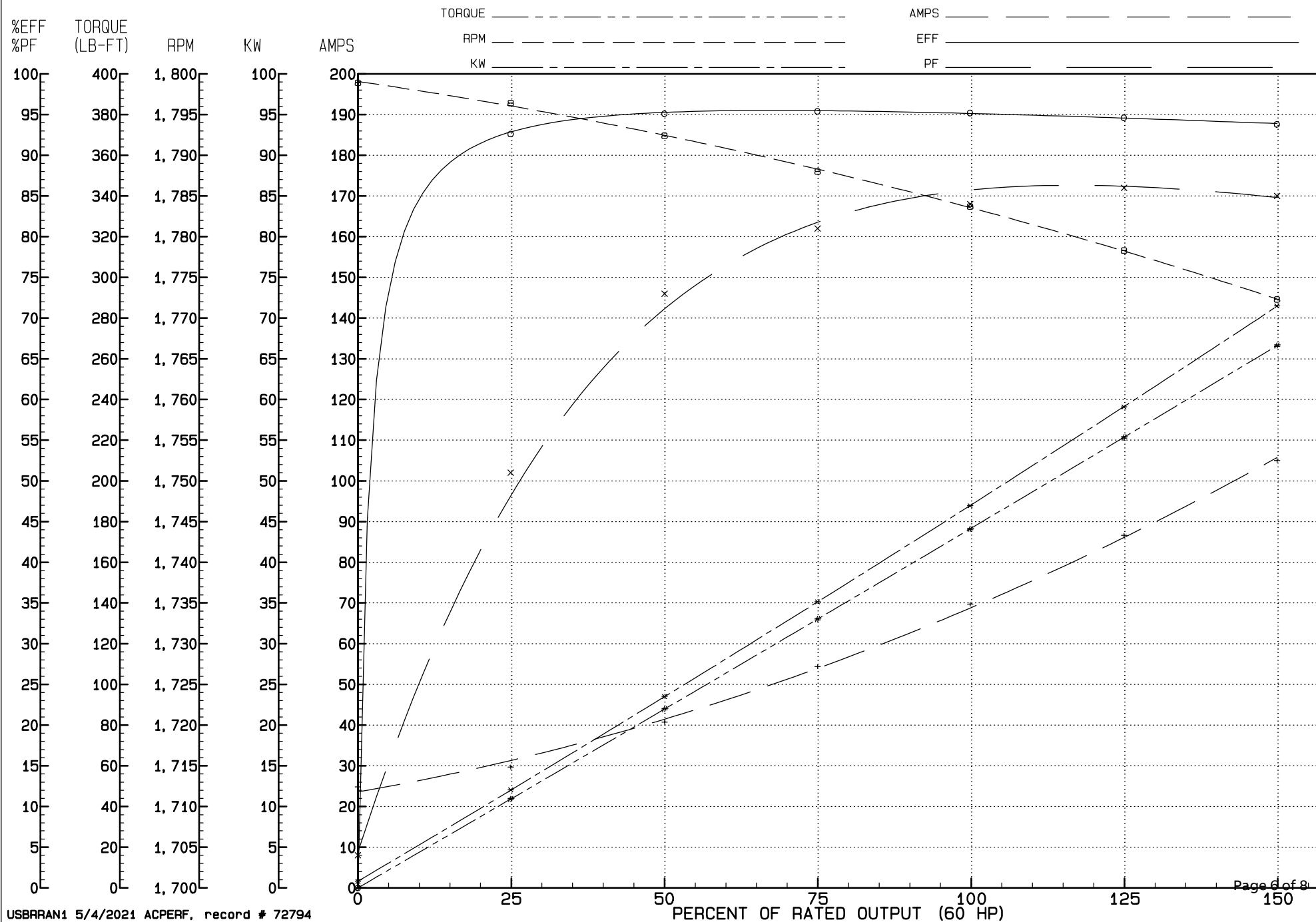
Full Load Torque	176.4 LB-FT
Start Configuration	direct on line
Breakdown Torque	422 LB-FT
Pull-up Torque	276 LB-FT
Locked-rotor Torque	352 LB-FT
Starting Current	462 A
No-load Current	24.8
Line-line Res. @ 25°C	0.10816 Ω
Temp. Rise @ Rated Load	56°C
Temp. Rise @ S.F. Load	70°C
Locked-rotor Power Factor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

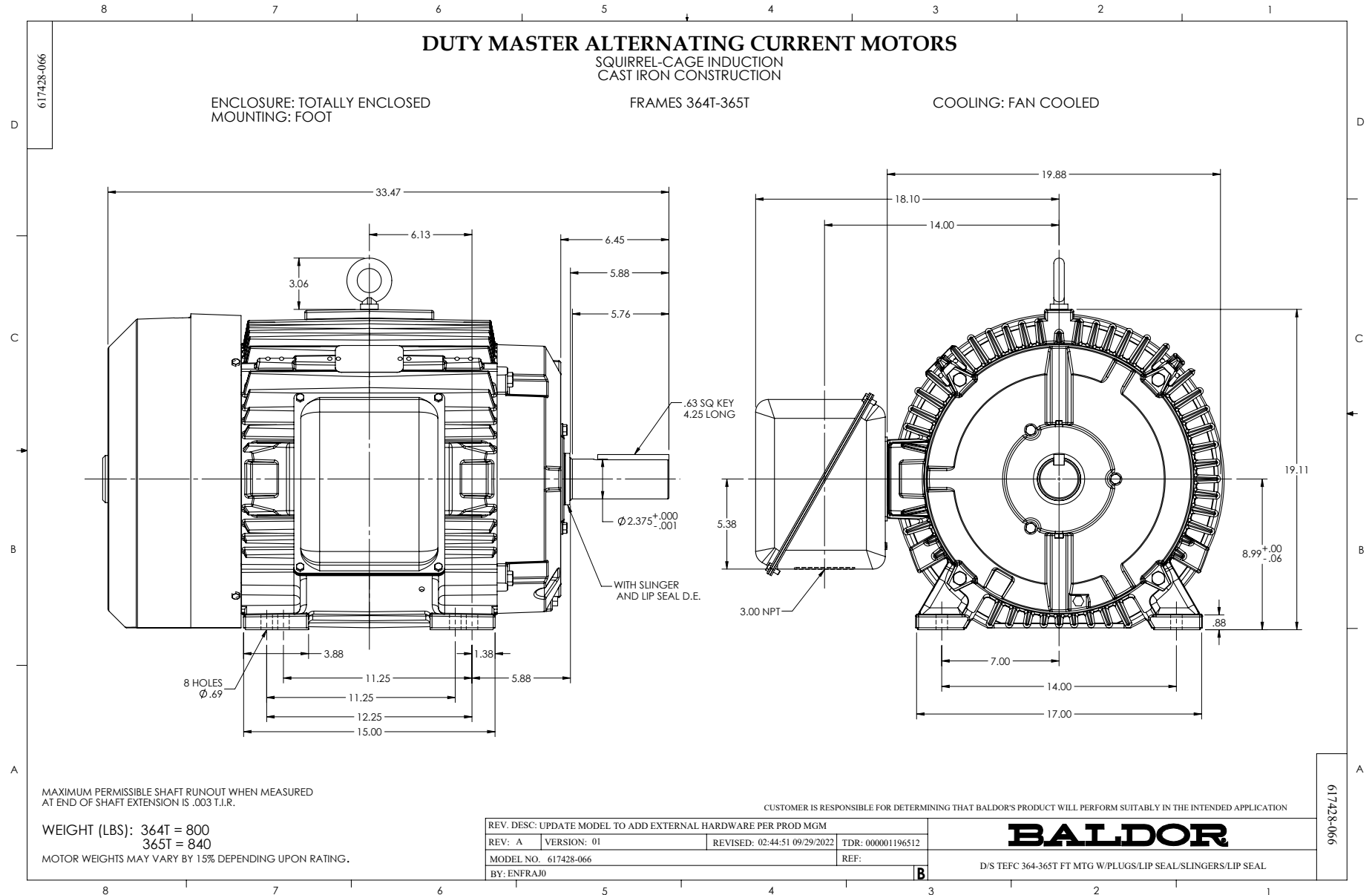
Load Characteristics 460 V, 60 Hz, 60 HP

% 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

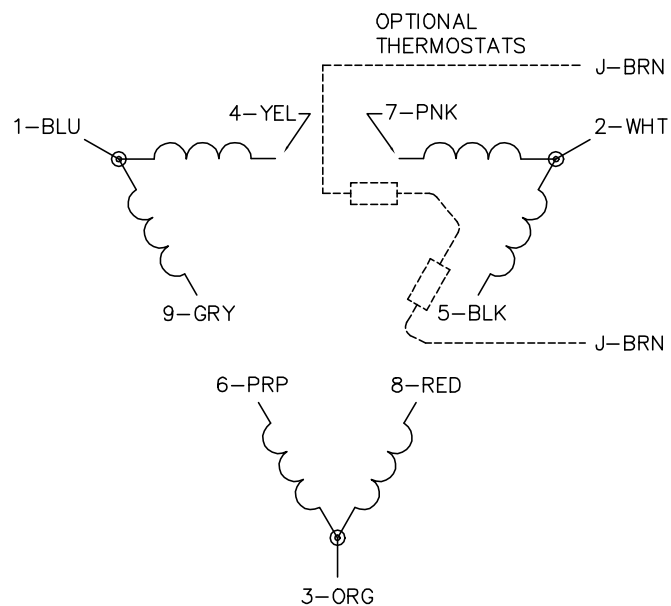
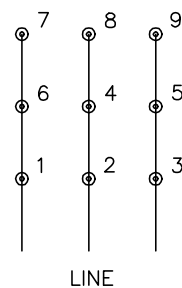
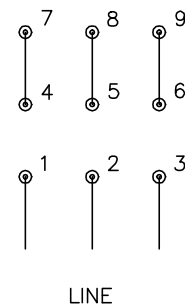
60 HP 3 PH 60 HZ 1780 RPM 460 V A3658M

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.

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