BALDOR • RELIANCE

Customer information packet

FDEM4314T

60HP, 1780RPM, 3PH, 60HZ, 364T, 1462M, TEFC, F1
Class - None
Division - Not Applicable

8/11/2024 2:59:05 AM

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
Auxillary 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	J
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4075
Layout	617428-066
Eff. date	05-22-2023
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

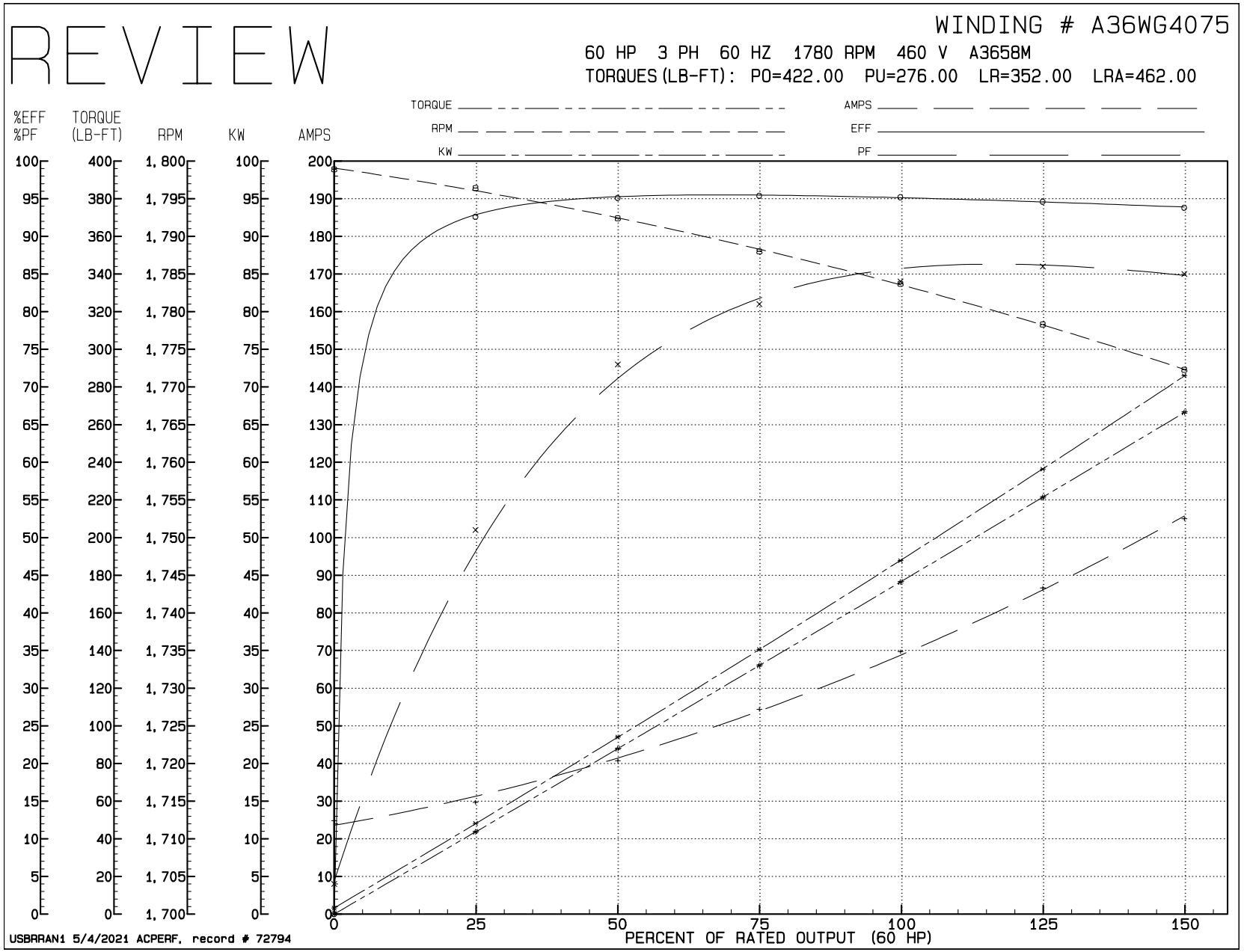
Nameplate data			
Rated Output			60
Volts			230/460
Full Load Amps			140/70
R.P.M.			1780
Hz	60	Phase	3
KVA Code			G
S.F.			1.15
NEMA Nom. Eff.	95	Power Factor	84
Duty			CONT
S.F. Amps			

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


REVIEW
WINDING # A36WG4075
60 HP 3 PH 60 HZ 1780 RPM 460 V A3658M
TORQUES(LB-FT): PO=422.00 PU=276.00 LR=352.00 LRA=462.00
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF
%PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (60 HP)
USBRAN1 5/4/2021 ACPERF, record # 72794

617428-066

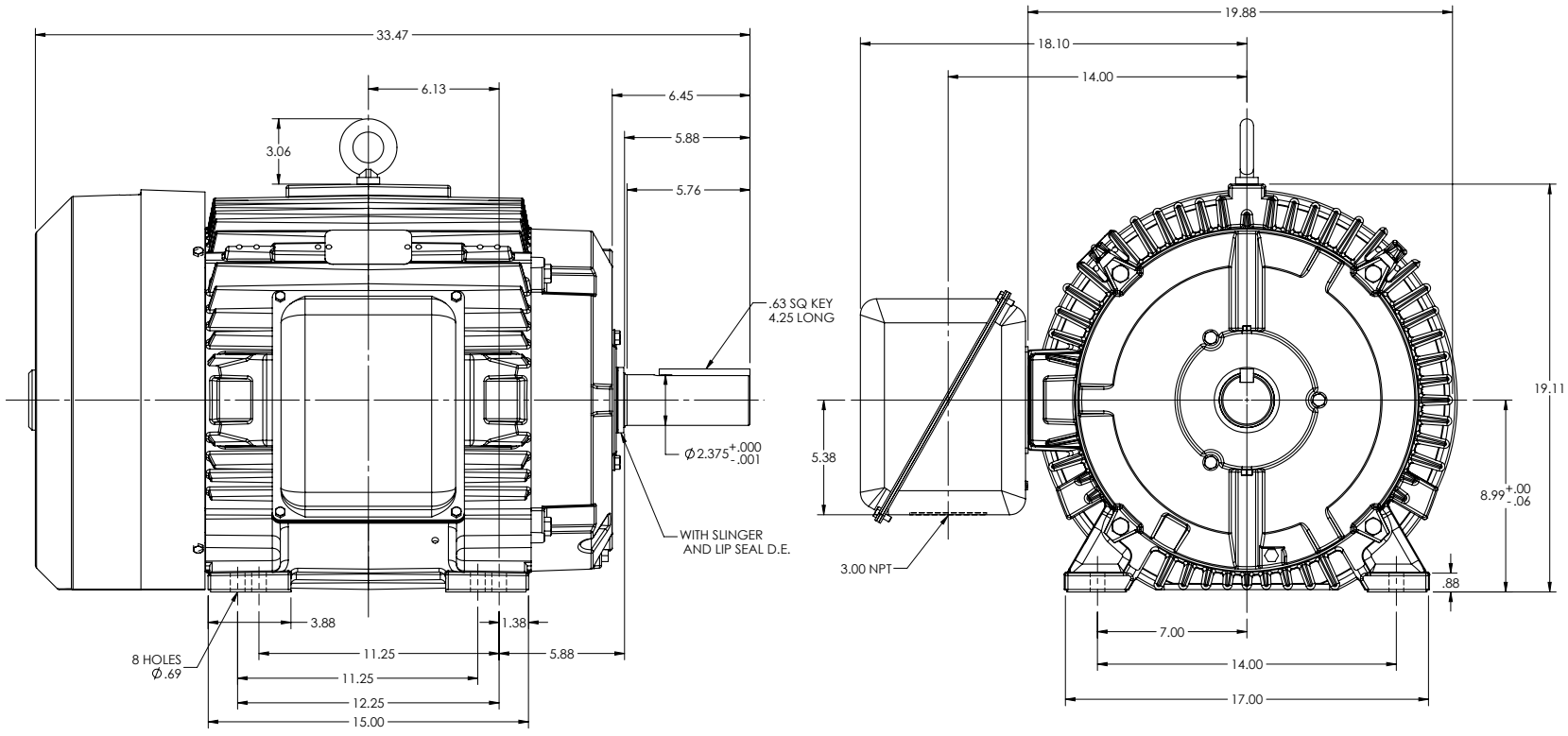
DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION
CAST IRON CONSTRUCTION

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT

FRAMES 364T-365T

COOLING: FAN COOLED



MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF SHAFT EXTENSION IS .003 T.I.R.

WEIGHT (LBS): 364T = 800
365T = 840

MOTOR WEIGHTS MAY VARY BY 15% DEPENDING UPON RATING.

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

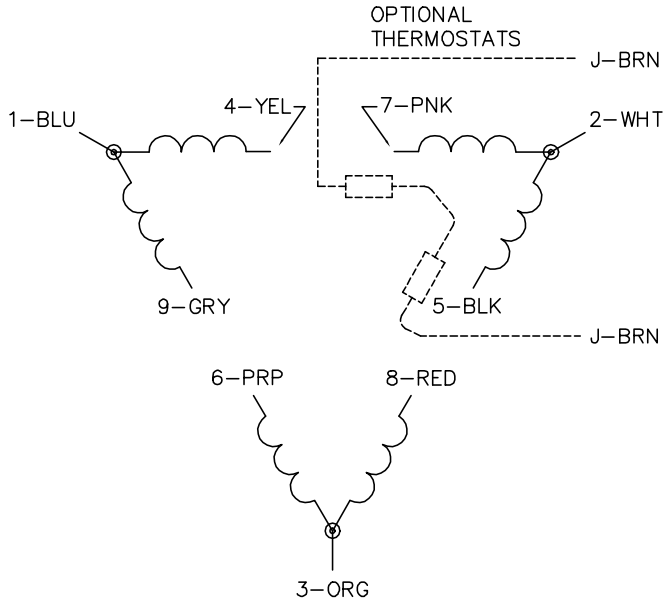
REV. DESC: UPDATE MODEL TO ADD EXTERNAL HARDWARE PER PROD MGM			
REV: A	VERSION: 01	REVISED: 02:44:51 09/29/2022	TDR: 000001196512
MODEL NO. 617428-066			REF:
BY: ENFRAJ0			B

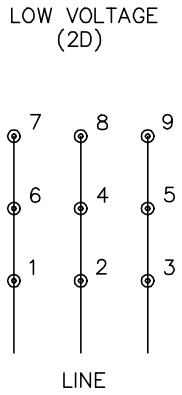
BALDOR

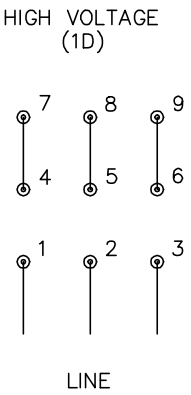
D/S TEFC 364-365T FT MTG W/PLUGS/LIP SEAL/SLINGERS/LIP SEAL

617428-066

CD0180







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: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1