Customer information packet

EM4316TS

75HP, 1780RPM, 3PH, 60HZ, 365TS, A36070M, TEFC
Class - None
Division - Not Applicable

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6/9/2025 4:34:09 AM

Specifications

Enclosure	TEFC
Frame	365TS
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	75.000 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	CCSAUSEEV CURUSEEV NEMA PREMIUM NEMA_PREMIUM
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	86.000 A @ 460.0 V 188.000 A @ 208.0 V 172.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	86.0 a
Insulation Class	F
Inverter Code	Inverter Ready

Part detail

Revision	X
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4076
Layout	617428-076
Eff. date	02-13-2025
CD Diagram	416820-002
Poles	04
Leads	3#4,6#6
Proprietary	False
Created date	12-17-2010

KVA Code	G
Lifting Lugs	No Lifting Lugs
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA
Motor Type	A36070M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	31.36 IN
Power Factor	86
Product Family	Other
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	Shaft Slinger
Speed	1780 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP3979LUA

CAT #	EM4316TS					**SER**				**CC**	010A								
SPEC	P36G3434					**RATING**	40C AMB-CONT												
HZ	**VOLTS**		**AMPS**		**RPM**	**HP**	**CODE**	**-**	**SF**	**DES**	**PF**		**NEMA NOM. EFF**						
60	230/460		172/86		1780	75	G		1.15	B	86	**%**	95.4	**%**					
	-											**%**		**%**					
PH	3	**CL**	F	**MAX CORR KVAR**	15.8														
BRG	**DE**	6313	**ODE**	6313	**ENCL**	TEFC	**FR**	365TS		IP54									
GREASE	POLYREX EM							**MTR WT**	903	**LBS**									
USABLE AT	50HZ 60HP 190/380V 168/84A						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 #71910 - Typical performance - not guaranteed values

Winding	A36WG4076
Type	A3670M
Enclosure	TEFC

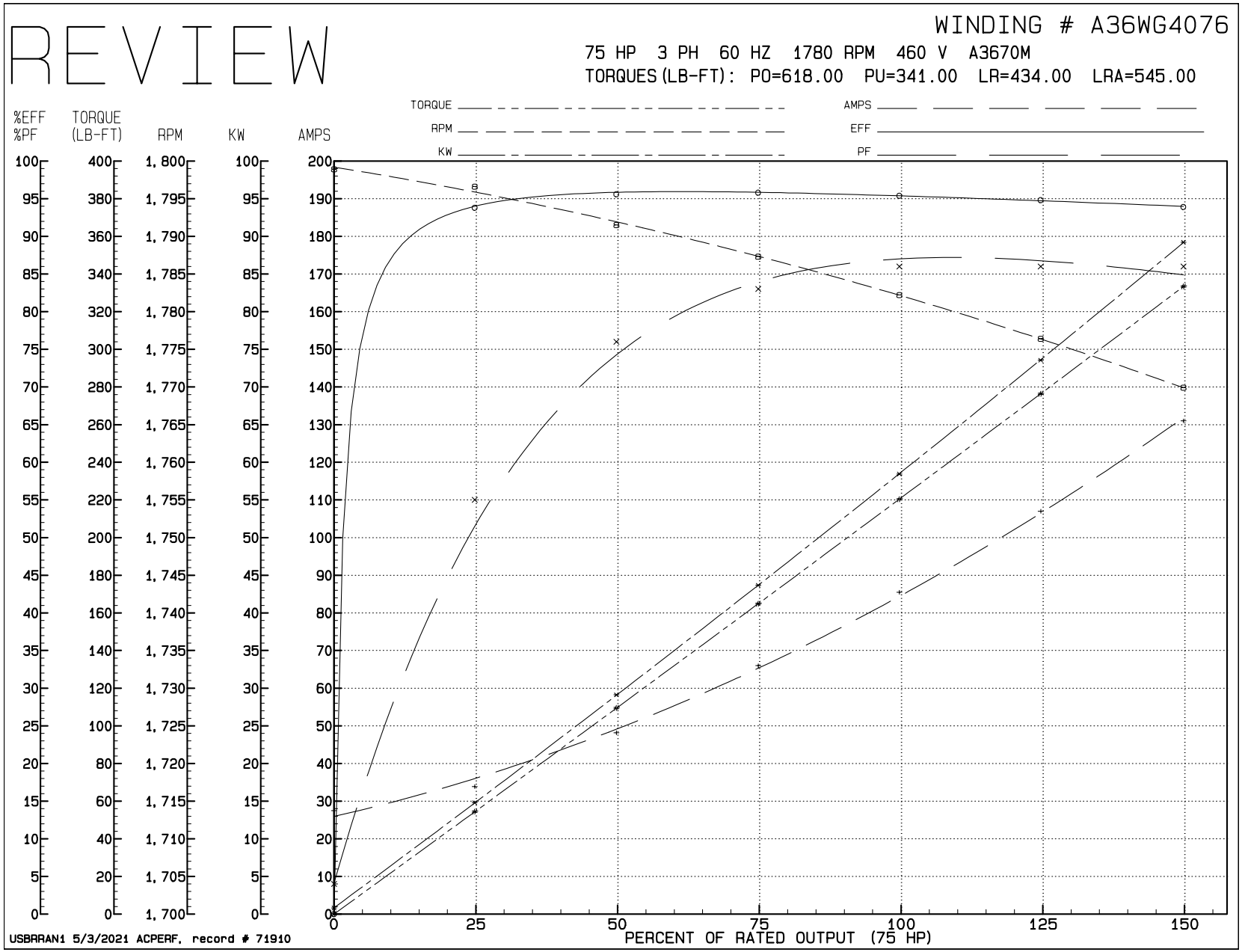
Nameplate data			
Rated Output			75
Volts			230/460
Full Load Amps			172/86
R.P.M.			1780
Hz	60	Phase	3
KVA Code			G
S.F.			1.15
NEMA Nom. Eff.	95.4	Power Factor	86
Duty			CONT
S.F. Amps			

460 V, 60 Hz:

High Voltage Connection	
Full Load Torque	220.4 LB-FT
Start Configuration	direct on line
Breakdown Torque	618 LB-FT
Pull-up Torque	341 LB-FT
Locked-rotor Torque	434 LB-FT
Starting Current	545 A
No-load Current	27.5
Line-line Res. @ 25°C	0.081965 Ω
Temp. Rise @ Rated Load	60°C
Temp. Rise @ S.F. Load	75°C
Locked-rotor Power Factor	31.8
Rotor inertia	0

Load Characteristics 460 V, 60 Hz, 75 HP

% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	4	55	76	83	86	86	86	86
Efficiency	0	93.8	95.6	95.8	95.4	94.8	93.9	95
Speed	1798.9	1796.6	1791.5	1787.3	1782.2	1776.4	1769.9	1779
Line amperes	27.5	33.9	48.2	66	85.5	107	131	98.4


REVIEW
WINDING # A36WG4076
75 HP 3 PH 60 HZ 1780 RPM 460 V A3670M
TORQUES(LB-FT): PO=618.00 PU=341.00 LR=434.00 LRA=545.00
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (75 HP)
USBRAN1 5/3/2021 ACPERF, record # 71910

617428-076

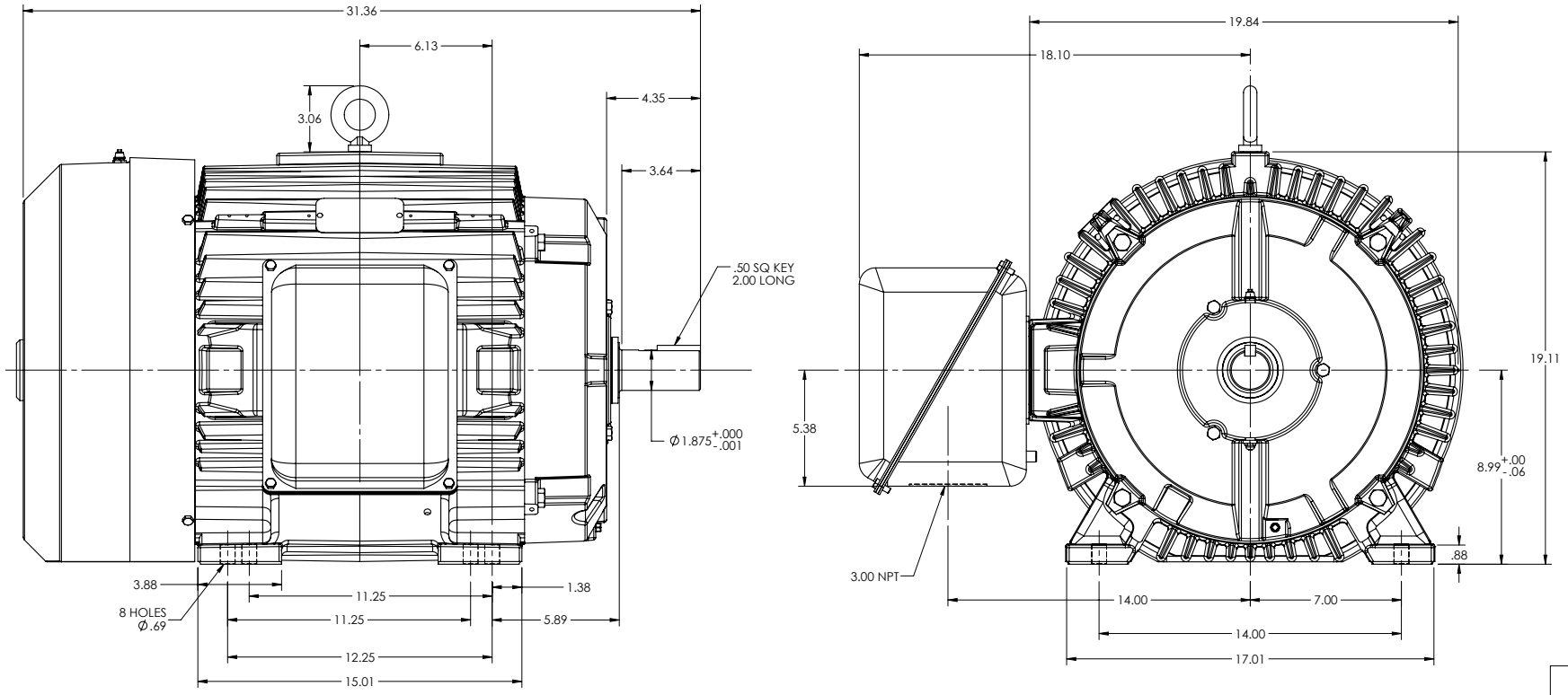
DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION
CAST IRON CONSTRUCTION

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT

FRAMES 364TS-365TS

COOLING: FAN COOLED



WEIGHT (LBS): 364TS = 794
365TS = 834

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: 04:20:23 09/22/2022	TDR: 000001196512
MODEL NO. 617428-076			REF:
BY: ENFRAJ0			B

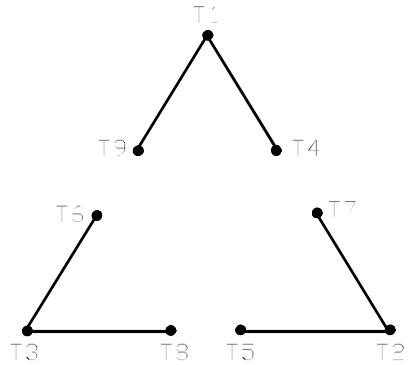
BALDOR

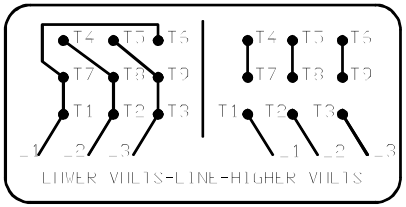
HOR 364-5TS TEFC

617428-076

416820–002

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 9 LEAD DELTA-CONNECTED





(N.P. 1575-B)

416820–002

REV. DESC: FONT CHANGE FOR PDF SEARCHABLE		
REV. LTR: A	VERSION: 01	TDR: 000001009382
FILE: \MGA\00000\661	REVISED: 02:46:19 02/13/2020	BY: MGHMTT
MTL: –		

BALDOR - RELIANCE®

CONN DIAG – STANDARD 9 LEAD, DELTA–CONNECTED

SH 1 of 1