



Customer information packet

EM4316TS

75HP, 1780RPM, 3PH, 60HZ, 365TS, A36070M, TEFC

Class - None

Division - Not Applicable

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	W
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4076
Layout	617428-076
Eff. date	07-08-2024
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

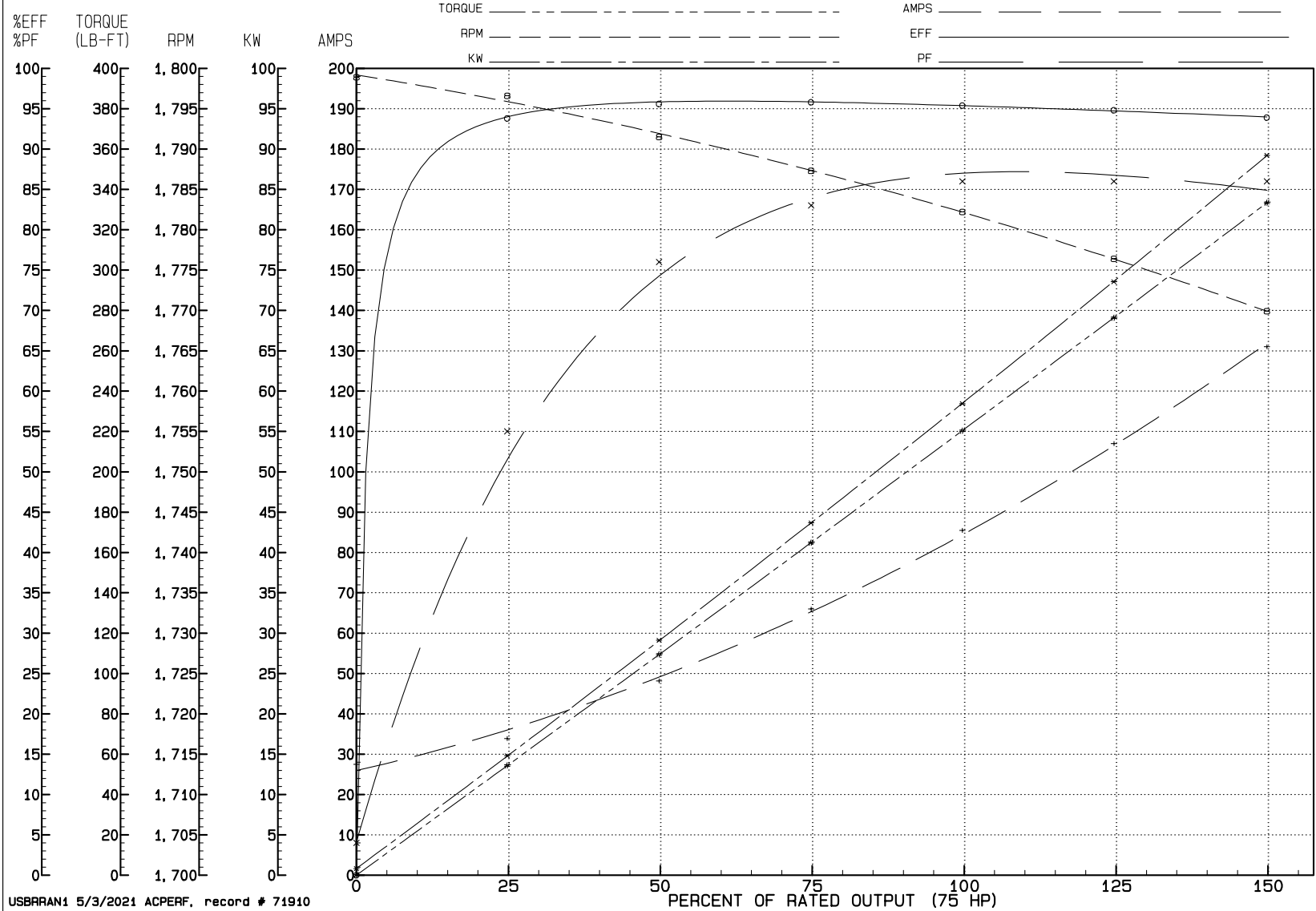
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	4	55	76	83	86	86	86	86
Efficiency	0	93.8	95.6	95.8	95.4	94.8	93.9	95
Speed	1798.9	1796.6	1791.5	1787.3	1782.2	1776.4	1769.9	1779
Line amperes	27.5	33.9	48.2	66	85.5	107	131	98.4

REVIEW

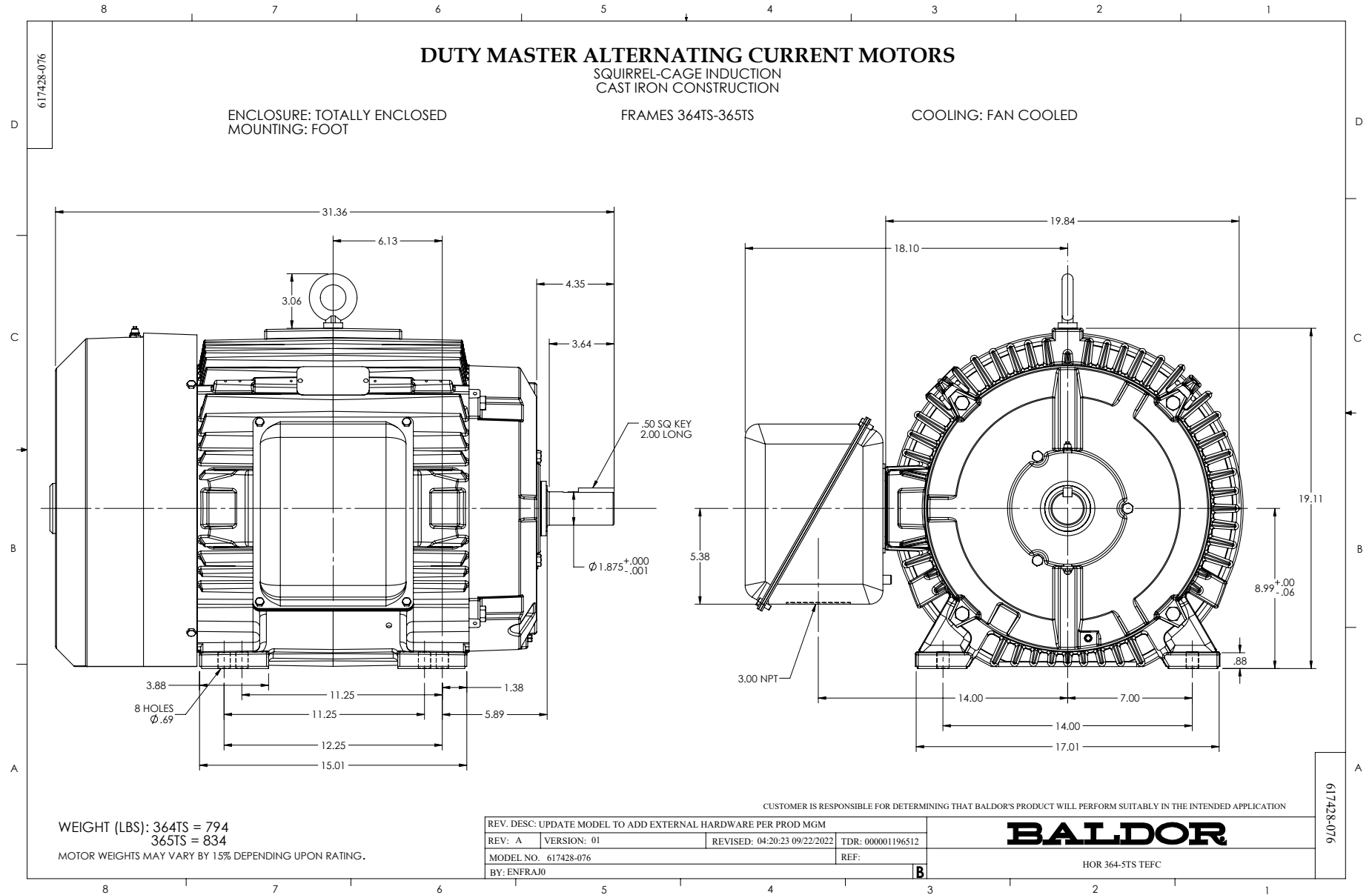
WINDING # A36WG4076

75 HP 3 PH 60 HZ 1780 RPM 460 V A3670M

TORQUES (LB-FT): P0=618.00 PU=341.00 LR=434.00 LRA=545.00

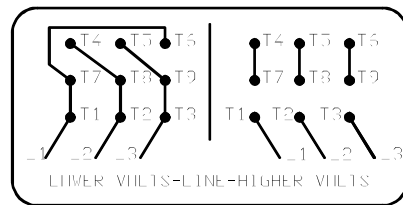
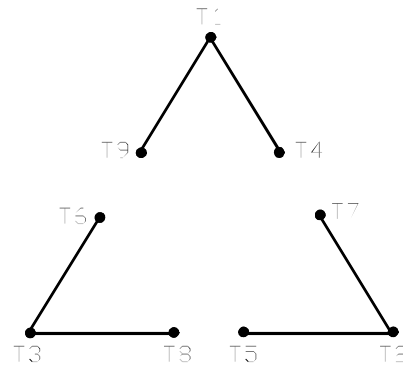


USBRRAN1 5/3/2021 ACPERF, record # 71910



416820-002

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



(N.P. 1575-B)

416820-002

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BALDOR - RELIANCE®

CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED

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