

ABB BALDOR RELIANCE III

Customer information packet

EM4316T-5

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

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	365T
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	575.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV 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	69.000 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	69.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	No Lifting Lugs

Part Detail

Revision	X
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4078
Layout	617428-011
Eff. date	09-26-2025
CD Diagram	416820-036
Poles	04
Leads	3#4
Proprietary	False
Created date	10-19-2010

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	33.48 IN
Power Factor	86
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.375 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 #		EM4316T-5				SER				CC		010A				
SPEC		P36G3428				RATING		40C AMB-CONT								
HZ		VOLTS		AMPS		RPM		HP	CODE	-	SF	DES	PF	NEMA NOM. EFF		
60		575		69		1780		75	G		1.15	B	86	%	95.4	%
													%			%
PH	3	CL	F	MAX CORR KVAR		16										
BRG	DE	6313	ODE		6313	ENCL	TEFC	FR	365T		54					
GREASE		POLYREX EM								MTR WT		907	LBS			
USABLE AT		N/A														
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	SFA 80													

Parts List

Part number	Description	Quantity
SA209406	SA P36G3428	1.000 ea
RA196667	RA P36G3428	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
NP3979LUA	SS SUPER-E UR CSA-C-US-EEV NEMA PREM CC	1.000 ea
004824015A	GREASE POLYREX EM	0.544 lb
032018008AK	HHCS 1/4-20X1 PLATED	4.000 ea
032018012DK	HHCS 1/2-13X1-1/2 PLTD. 032018012DR	4.000 ea
032018024CK	HHCS 3/8-16X3 PLTD.	3.000 ea
034180012DA	KEY 1X4X1/4X1-1/2 L	1.000 ea
032018012DK	HHCS 1/2-13X1-1/2 PLTD. 032018012DR	4.000 ea
032018024CK	HHCS 3/8-16X3 PLTD.	3.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
415045002E	SLGR	1.000 ea
034690001AB	1/8" NPT SQHDPLG	1.000 ea
034530052AB	P/NIP 1/8X6-1/2 Zinc	1.000 ea
034690001AB	1/8" NPT SQHDPLG	1.000 ea
034690002AB	PPLG 1/4" PLTD.	1.000 ea
078559001A	+FANCV - 360	1.000 ea
085922073B	BRKT 360 085922072WCC KB	1.000 ea
410700004F	WSHR	1.000 ea
415072001B	CLAMP	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
702676001C	FAN 360	1.000 ea
034690002AB	PPLG 1/4" PLTD.	1.000 ea
085922073B	BRKT 360 085922072WCC KB	1.000 ea
032018005AK	HHCS 1/4-20X5/8 PLATED	4.000 ea
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
043292000AJ	GASK 320-400	1.000 ea
077176000L	C/BOX, PAINTED 440	1.000 ea
077176001A	CBOX Cover 360-400	1.000 ea

402731001A	GASK 360-440	1.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
MG1025Y17	WILKOFAST, 789.701, SUPER E PEARL GOLD	0.250 ga
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 ea
034180034HA	KEY 5/8X5/8X4-1/4 L	1.000 ea
421948051	LABEL, MYLAR	1.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
14PA1000	PACKAGING 314 GROUP COMBINED PRINT	1.000 ea

Record #71925 - Typical performance - not guaranteed values

Winding	A36WG4078
Type	A3670M
Enclosure	TEFC

Nameplate data

Rated Output	75		
Volts	575		
Full Load Amps	69		
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			

575 V, 60 Hz:

Single Voltage Motor

Full Load Torque	220 LB-FT
Start Configuration	direct on line
Breakdown Torque	619 LB-FT
Pull-up Torque	339 LB-FT
Locked-rotor Torque	431 LB-FT
Starting Current	437 A
No-load Current	22.31
Line-line Res. @ 25°C	0.14 Ω
Temp. Rise @ Rated Load	61°C
Temp. Rise @ S.F. Load	77°C
Locked-rotor Power Factor	32.1
Rotor inertia	16.2 lb-ft ²

Load Characteristics 575 V, 60 Hz, 75 HP

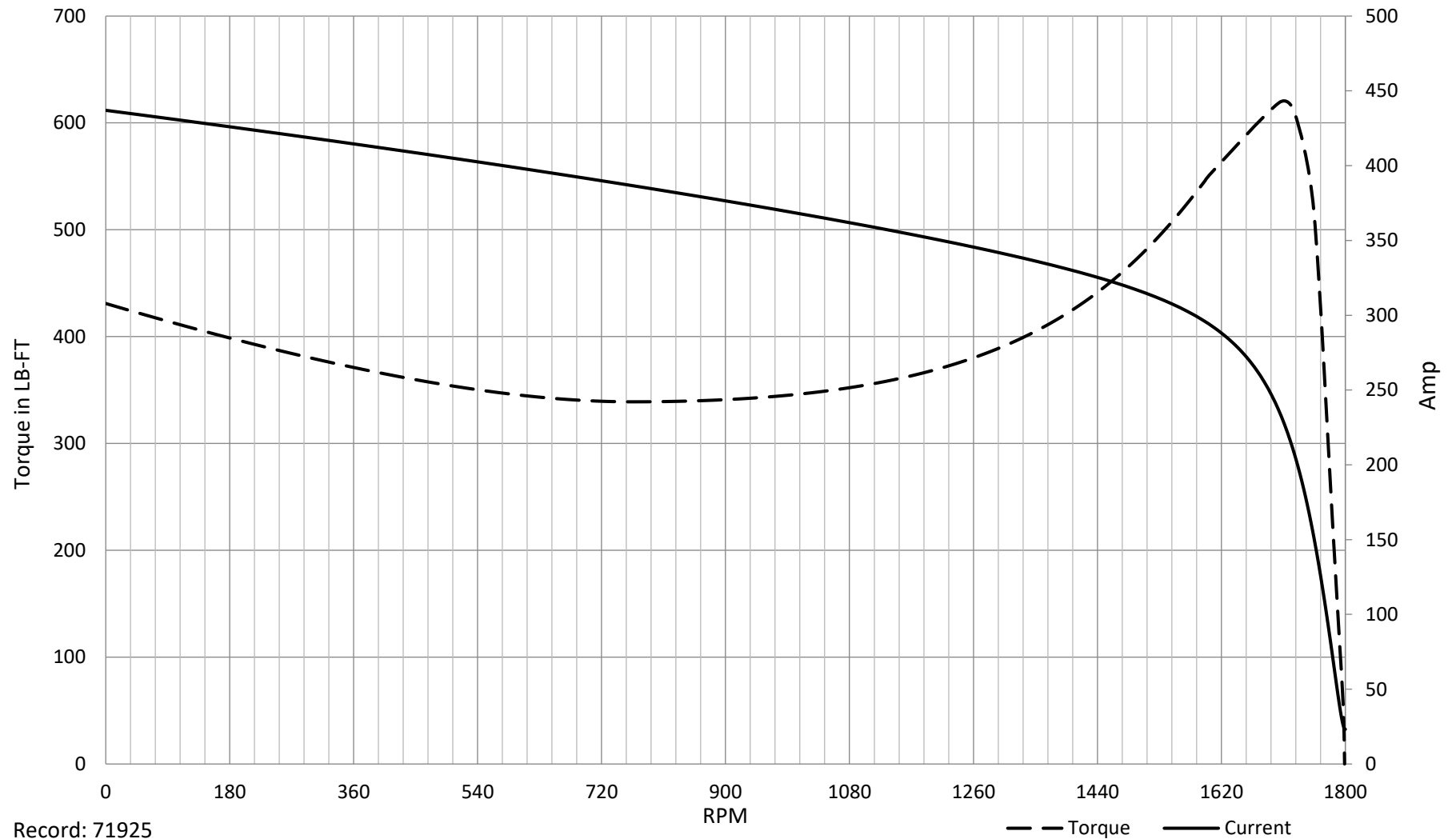
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	4	54	76	83	86	86	85	86
Efficiency	0	93.7	95.9	95.7	95.4	94.6	93.7	94.8
Speed	1799	1797	1792	1787	1782	1777	1770	1779
Line amperes	22.31	27.39	38.79	53.01	68.52	85.75	105	78.9

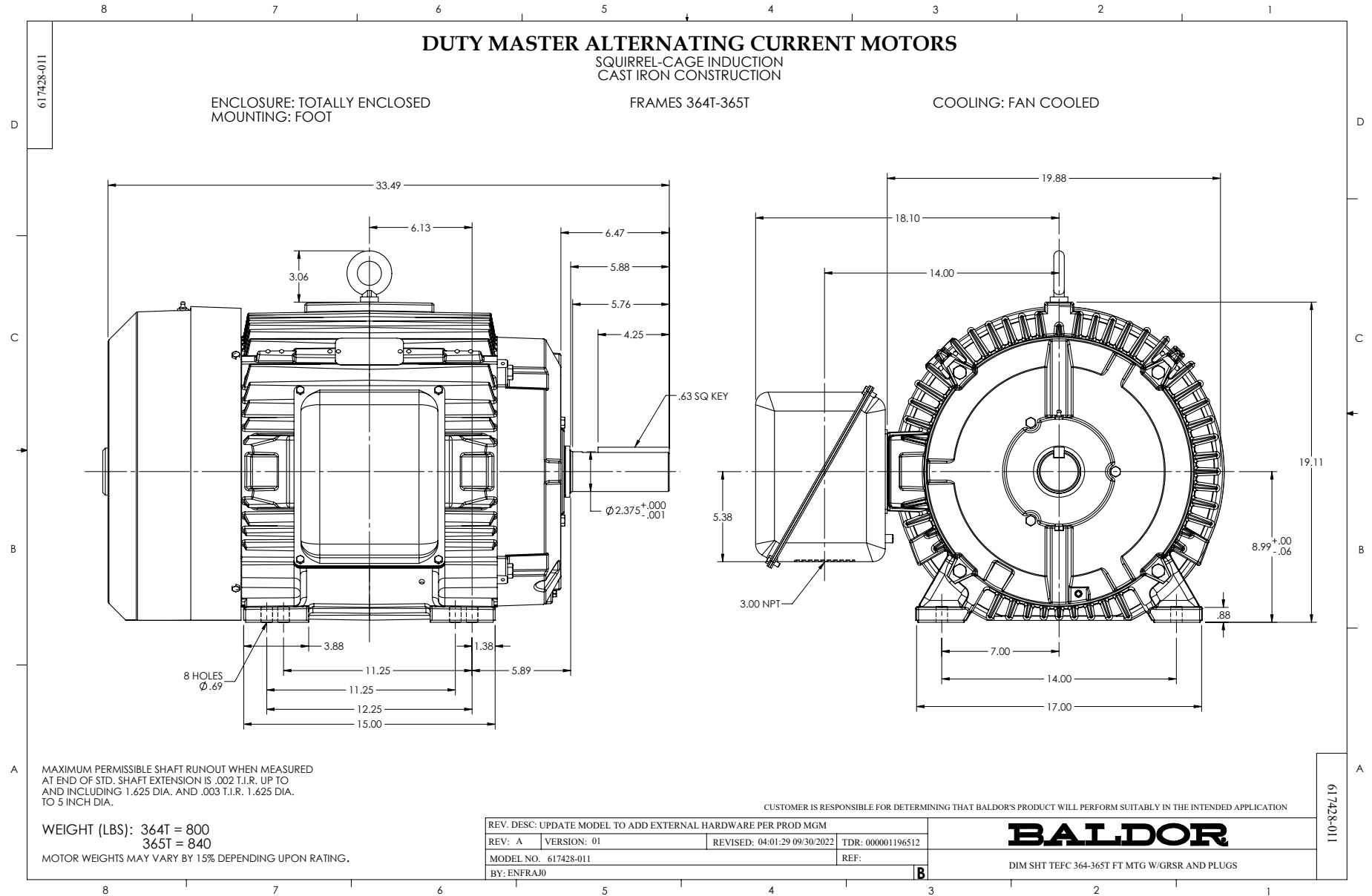
SPEED TORQUE / SPEED CURRENT CURVES



A36WG4078

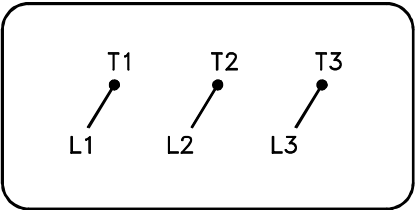
75HP 575V 60HZ





416820-036

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

416820-036

REV. DESC: LOADED TO BUS, C/R 335225		
REV. LTR: -	VERSION: 00	TDR: 000000538207
FILE: \MGA\00000\682		REVISED: 11: 54: 06 04/30/2010
MTL: -		BY: RAGRA

BALDOR

CONN DIAG - STANDARD 3 LEAD
SH 1 of 1