

ABB BALDOR RELIANCE III

Customer information packet

ECTM4316T-5G

75HP, 1780RPM, 3PH, 60HZ, 364T, A36070M, TEFC

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	75.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV
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 %
Feedback Device	NO FEEDBACK
Heater Indicator	Heater Included, 115 V
High Voltage Full Load Amps	69.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA
Motor Type	A36070M
Mounting Arrangement	F1

Part Detail

Revision	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4078
Layout	617438-196
Eff. date	02-13-2025
CD Diagram	416820-036
Poles	04
Leads	3#4
Proprietary	False
Created date	04-12-2022

Number of Poles	4
Overall Length	33.78 IN
Power Factor	86
Product Family	Cooling Tower
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.374 IN
Shaft Ground Indicator	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

000613007EW													
CAT.NO.	ECTM4316T-5G				SPEC NO.	A36-6008-4078							
HP	75HP	AMPS	69		VOLTS	575		DESIGN	B				
FRAME	364T	RPM	1780		HZ	60	AMB	40	SF	1.15			
DRIVE END BEARING	65BC03JGG30A		PH	3	DUTY	CONT	INSUL.CLASS		F				
OPP D.E. BEARING	65BC03JGG30A		TYPE	P	ENCL	TEFC	CODE	G					
D.E.BRG.DATA	6313		POWER FACTOR			86	NEMA NOM EFFICIENCY				95.4		
O.D.E.BRG.DATA	6313		MAX CORR KVAR			16.00	GUARANTEED EFFICIENCY				94.5		
3/4 LOAD EFF.	95.4		NEMA NOM/CSA QUOTED EFF										
SER.NO.					MOTOR WEIGHT								

000901002AAA	
INV DUTY 20:1 VT	

Motor performance data

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

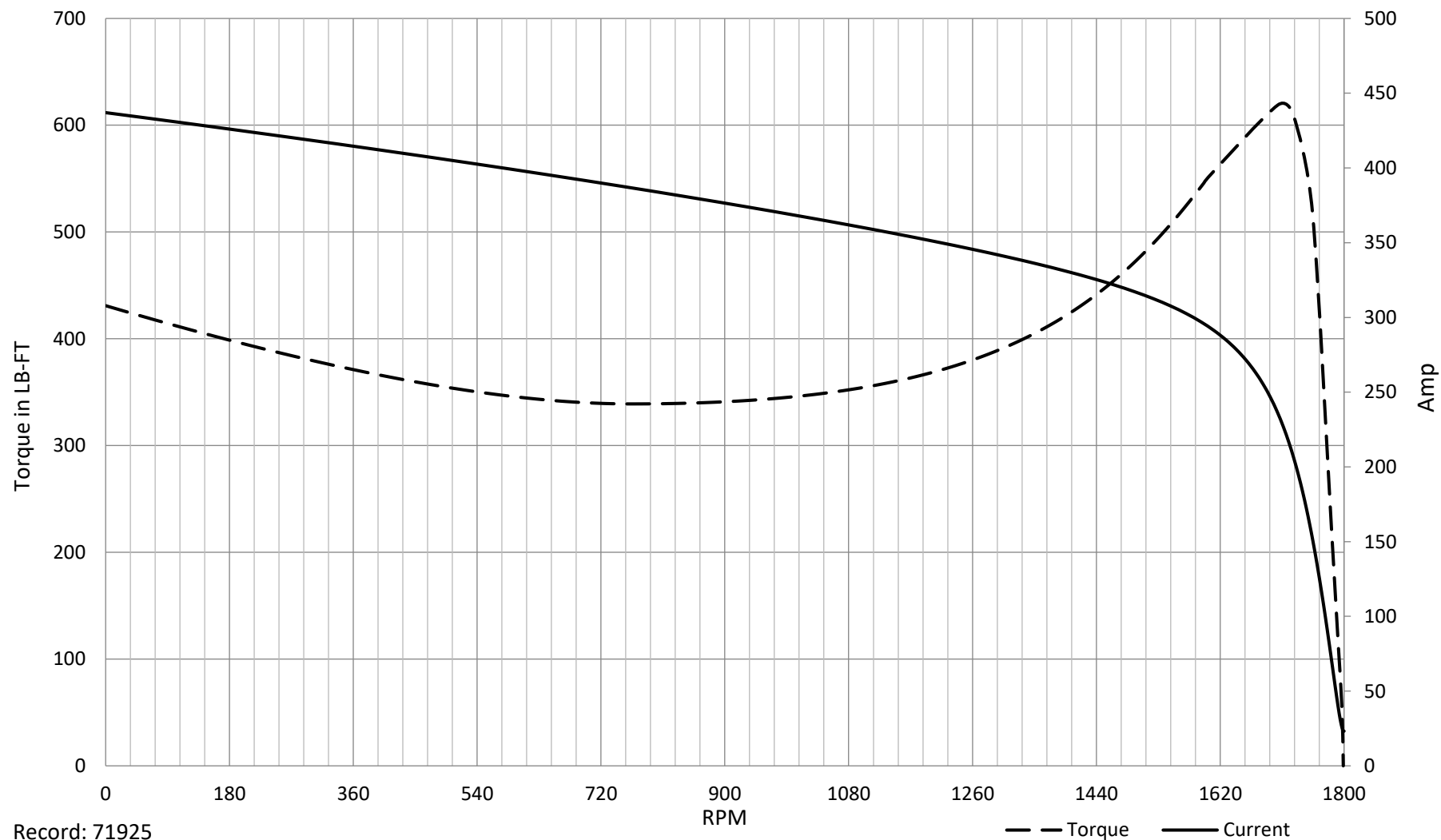
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	4	54	76	83	86	86	85	86
Efficiency	0	93.7	95.9	95.7	95.4	94.6	93.7	94.8
Speed	1799	1797	1792	1787	1782	1777	1770	1779
Line amperes	22.31	27.39	38.79	53.01	68.52	85.75	105	78.9

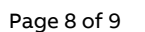
SPEED TORQUE / SPEED CURRENT CURVES

BALDOR • RELIANCE

A36WG4078

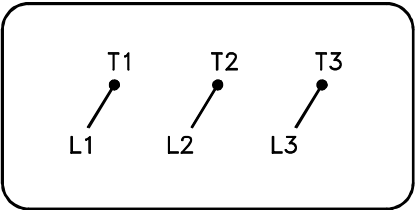
75HP 575V 60HZ





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