

ABB BALDOR RELIANCE III

Customer information packet

ECP84316T-4

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

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	365T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	75.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSA US NEMA PREMIUM UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	15-60
Current @ Voltage	86.000 A @ 460.0 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
KVA Code	G
Lifting Lugs	No Lifting Lugs
Max Speed	2700 rpm

Part Detail

Revision	G
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG3963
Layout	617428-603
Eff. date	08-26-2024
CD Diagram	416820-036
Poles	04
Leads	3#4
Proprietary	False
Created date	04-26-2021

Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA
Motor Type	A36070M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	33.49 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	Phase Seq-Std Rot (CCWODE)
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

NP4388																		
CAT #	ECP84316T-4						FR	365T			IP56							
SPEC	A36-6000-3963						ENCL		TEFC		DES	B						
HZ	60	PH	3	CL	F	HP	75	SF	1.15	PF	86	%	CODE	G				
VOLTS	460					AMPS		86										
RPM	1780		MAX RPM			2700		SER										
NEMA NOM. EFF	95.4	%	RATING				40C AMB-CONT											
GUAR MIN. EFF	94.5	%	BRG DE				6313			BRG ODE		6313						
CL I DIV 2 GRPS A,B,C,D							CL I ZONE 2 GRPS				IIA,IIB,IIC			TEMP T		3-200	C	
CT HZ	15-60		VT HZ			0-60												
CHP HZ	60-90		INV TEMP CL					200	C									
								MTR WT		971	LBS							

NP4333									
CAT #		ECP84316T-4			ROTOR BARS		47		
SPEC		A36-6000-3963			STATOR SLOTS		60		
SER					MAX CORR KVAR		15.8		
GREASE		POLYREX EM							
ABMA DE BRG		65BC03J30X		ODE	65BC03J30X				
SPACE HEATER LEADS H1-H2:		TIE LIKE NUMBERS				TOGETHER			
MAX. SPACE HEATER TEMP.			C	V		A		W	

Parts List

Part number	Description	Quantity
SA392956	SA A36-6000-3963	1.000 ea
RA383562	RA A36-6000-3963	1.000 ea
NP4388	SS SUPER E INVERTER DUTY IEEE 841 MAIN N	1.000 ea
NP4333	SS SUPER-E SD IEEE 841 CLI DIV2 UR CSA C	1.000 ea
000692000JP	N/P	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
000692000VH	N/P (RELEASE 1000 PCS)	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
034530032BB	P/NIP 1/4X4" SCHED 40	1.000 ea
034530052AB	P/NIP 1/8X6-1/2 Zinc	1.000 ea
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
034630002AB	CPLG 1/4" PLATED	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
078559034A	+F/C A 078559001A - 360	1.000 ea
085922083BH	BRKT 360 085922072WCC KB	1.000 ea
410700004F	WSHR	1.000 ea
412118006A	DRAIN	1.000 ea
415028079E	INPRO SEAL,.625 WIDE,313 BRG	1.000 ea
415072001B	CLAMP	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
423709011C	WASHER	3.000 ea
702676001C	FAN 360	1.000 ea
032018012DK	HHCS 1/2-13X1-1/2 PLTD. 032018012DR	4.000 ea
032018024CK	HHCS 3/8-16X3 PLTD.	3.000 ea
034530020BB	P/NIP 1/4X2-1/2 PLATED	1.000 ea
034530032AB	P/NIP 1/8X4 PLATED	1.000 ea
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea

034630002AB	CPLG 1/4" PLATED	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
085922083BH	BRKT 360 085922072WCC KB	1.000 ea
412118006A	DRAIN	1.000 ea
415028079E	INPRO SEAL,.625 WIDE,313 BRG	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
423709011C	WASHER	3.000 ea
032018010CK	HHCS 3/8-16X1-1/4 PLTD. 032018010CR	4.000 ea
033512008LB	HHTTS 1/4-20X1 PLATED	4.000 ea
034000014AB	WSH ID.406 OD.812 TH.065	4.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
067053000B	GASK 320-400	1.000 ea
076708000BB	CONDUIT BOX-360	1.000 ea
076709000A	C/B Cover - 360	1.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
415039016A	TERBD, 360-400	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	4.000 ea
034180034HA	KEY 5/8X5/8X4-1/4 L	1.000 ea
MG1025N19	WILKO 778.50 BLUE GREEN - 55 GAL DRUMS	0.250 ga
421948051	LABEL, MYLAR	1.000 ea
14PA1000	PACKAGING 314 GROUP COMBINED PRINT	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
004824003CBY	WILKO PAINT 060.02 - ACTIVATOR	0.063 ga
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea

AC Induction Motor performance data

Record #71698 - Typical performance - not guaranteed values

Winding	A36WG3963
Type	A3670M
Enclosure	TEFC

Nameplate data

Rated Output			75
Volts			460
Full Load Amps			86
R.P.M.			1780
Hz	60	Phase	3
KVA Code			F
S.F.			1.15
NEMA Nom. Eff.	95	Power Factor	86
Duty			CONT
S.F. Amps			

460 V. 60 Hz:

Single Voltage Motor

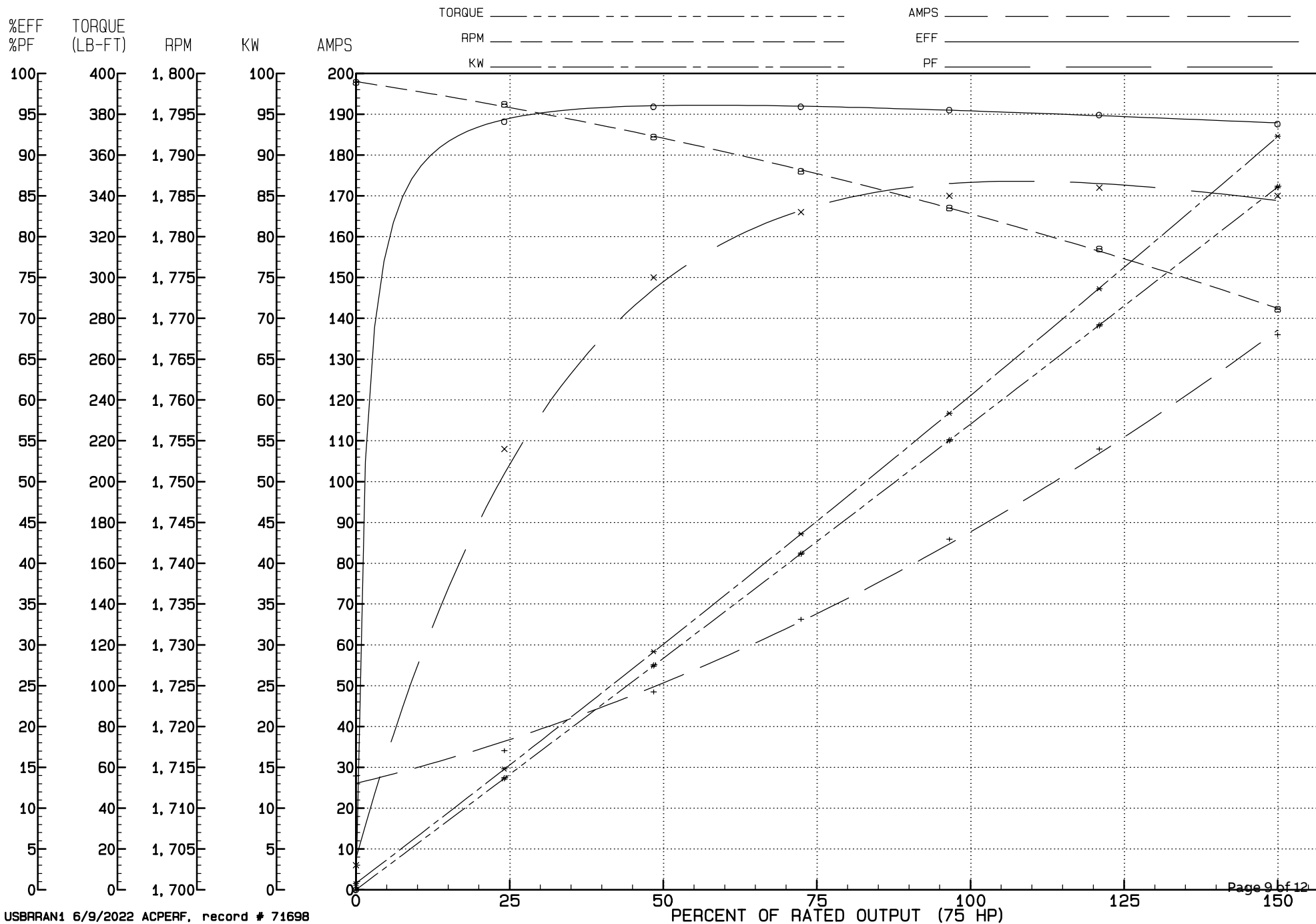
Full Load Torque	220.2 LB-FT
Start Configuration	direct on line
Breakdown Torque	542 LB-FT
Pull-up Torque	372 LB-FT
Locked-rotor Torque	445 LB-FT
Starting Current	541 A
No-load Current	27.9
Line-line Res. @ 25°C	0.082276 Ω
Temp. Rise @ Rated Load	55°C
Temp. Rise @ S.F. Load	69°C
Locked-rotor Power Factor	31.8
Rotor inertia	16.2 lb-ft ²

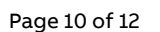
Load Characteristics 460 V, 60 Hz, 75 HP

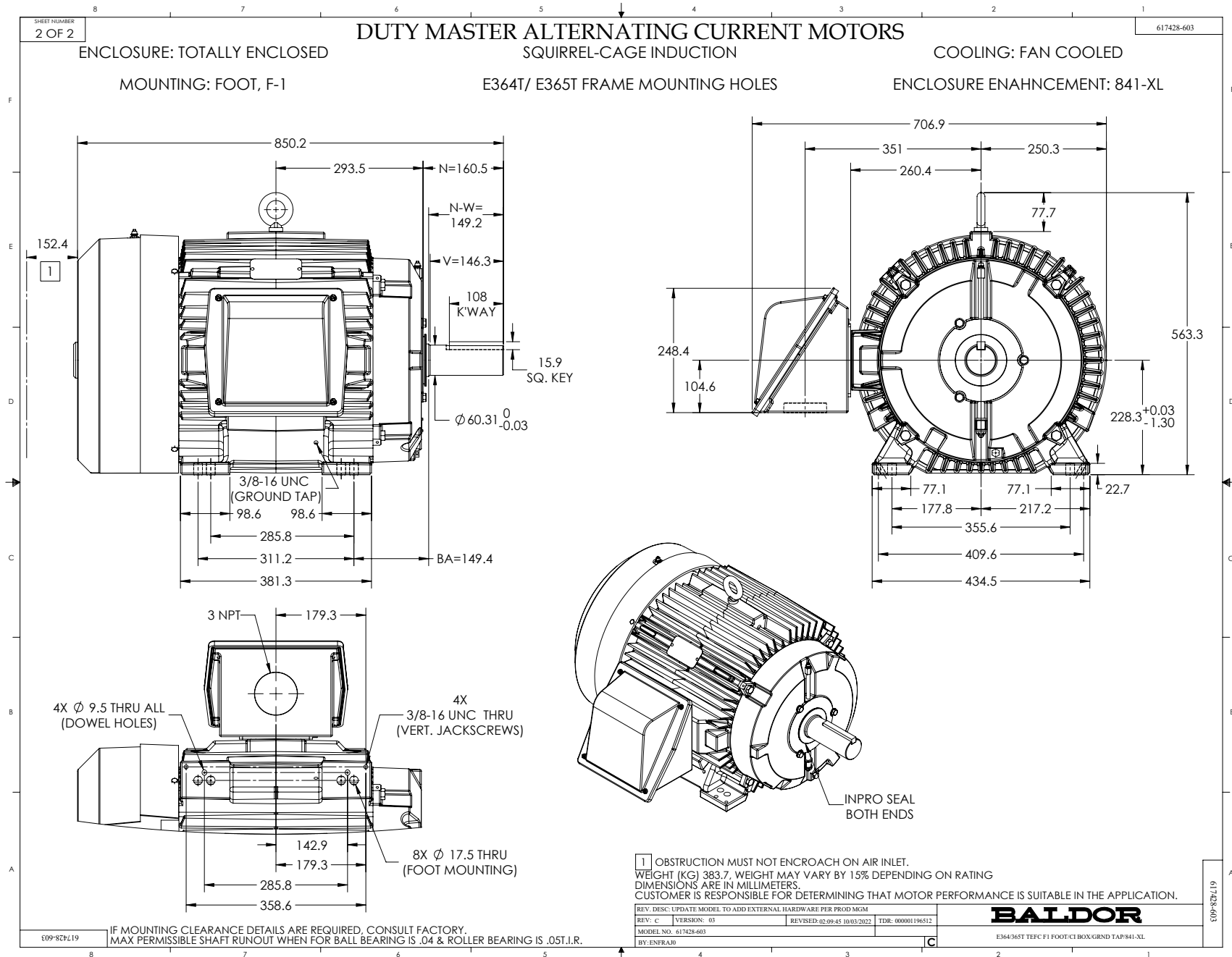
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	3	54	75	83	85	86	85	86
Efficiency	0	94.1	95.9	95.9	95.5	94.9	93.8	95.1
Speed	1798.9	1796.2	1792.2	1788	1783.5	1778.5	1771.1	1780
Line amperes	27.9	34.1	48.5	66.3	85.9	108	136	99.2

75 HP 3 PH 60 HZ 1780 RPM 460 V A3670M

TORQUES (LB-FT): PO=542.00 PU=372.00 LR=445.00 LRA=541.00

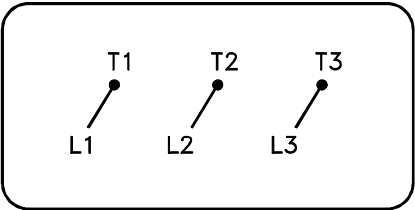






416820-036

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