

**BALDOR® • RELIANCE™**

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# Customer information packet

## CEM4316T

75HP, 1780RPM, 3PH, 60HZ, 365TC, 1482M, TEFC

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	365TC
Frame Material	Iron
Frequency	60.00 Hz
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
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	CCSAUSEEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	87.000 A @ 460.0 V 189.000 A @ 208.0 V 174.000 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	87.0 a
Insulation Class	F
Inverter Code	Inverter Ready

## Part detail

Revision	-
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4148
Layout	617428-019
Eff. date	11-17-2021
CD Diagram	416820-002
Poles	04
Leads	3#4,6#6
Proprietary	False
Created date	11-08-2021

<b>KVA Code</b>	G
<b>Lifting Lugs</b>	No Lifting Lugs
<b>Max Speed</b>	2700 rpm
<b>Motor Lead Quantity/Wire Size</b>	3 @ 4 AWG
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	A36070M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	33.44 IN
<b>Power Factor</b>	86
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	P-Base
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	2.375 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	Shaft Slinger
<b>Speed</b>	1780 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None

**Nameplate**

**NP3979LUA**

<b>CAT #</b>	CEM4316T		<b>SER</b>			<b>CC</b>	010A						
<b>SPEC</b>	A36-0002-4148		<b>RATING</b>	40C AMB-CONT									
<b>HZ</b>	<b>VOLTS</b>		<b>AMPS</b>	<b>RPM</b>	<b>HP</b>	<b>CODE</b>	<b>SF</b>	<b>DES</b>	<b>PF</b>	<b>NEMA NOM. EFF</b>			
60	230/460		174/87	1780	75	G	1.15	B	86 %	95.4 %			
	-								%		%		
<b>PH</b>	3	<b>CL</b>	F	<b>MAX CORR KVAR</b>	16	<b>USABLE AT 208V</b>	189	<b>A</b>					
<b>BRG</b>	<b>DE</b>	6313	<b>ODE</b>	6313	<b>ENCL</b>	TEFC	<b>FR</b>	365TC	54				
<b>GREASE</b>	POLYREX EM				<b>MTR WT</b>	907	<b>LBS</b>						
<b>USABLE AT</b>	50HZ 60HP 190/380V 168/84A				<b>SF1.0</b>								
<b>INVERTER DUTY</b>	<b>CT</b>	15-60	<b>HZ</b>	4:1	<b>VT</b>	3-60	<b>HZ</b>	20:1	<b>CHP</b>	60-90	<b>HZ</b>	1.5:1	<b>1.0 SF VPWM</b>
<b>MAX RPM</b>	2700	SFA 198/99											

## AC induction motor performance data

Record #83645 - Typical performance - not guaranteed values

Winding	A36WG4148
Type	A36070M
Enclosure	TEFC

## Nameplate data

Rated Output			75
Volts			230/460
Full Load Amps			174/87
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 LB-FT
Start Configuration	direct on line
Breakdown Torque	487 LB-FT
Pull-up Torque	350 LB-FT
Locked-rotor Torque	420 LB-FT
Starting Current	542 A
No-load Current	28.17
Line-line Res. @ 25°C	0.0948 $\Omega$
Temp. Rise @ Rated Load	56°C
Temp. Rise @ S.F. Load	71°C
Locked-rotor Power Factor	35.7
Rotor inertia	16.2 lb-ft <sup>2</sup>

## Load Characteristics 460 V, 60 Hz, 75 HP

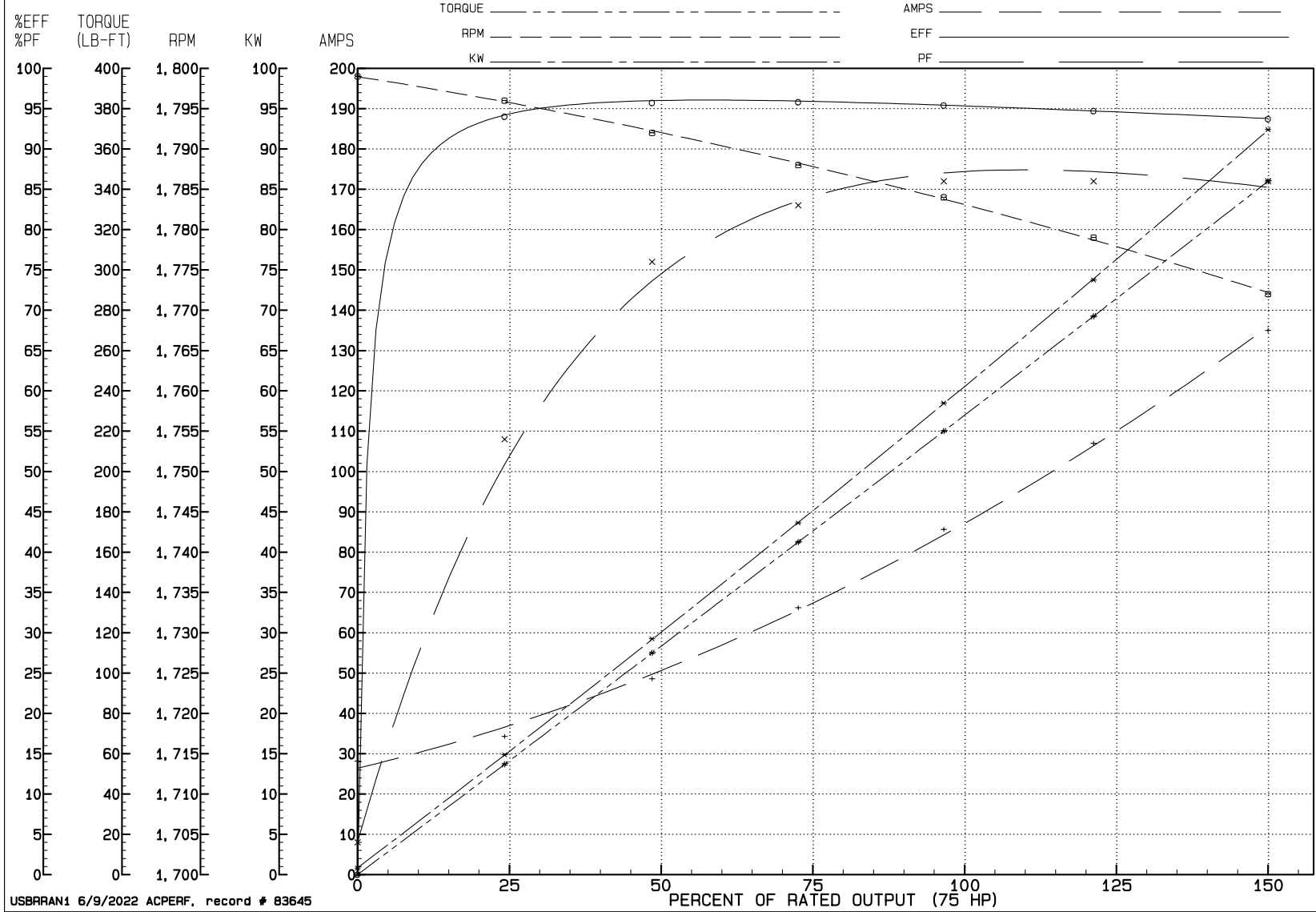
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	4	54	76	83	86	86	86	86
Efficiency	0	94	95.7	95.8	95.4	94.7	93.7	94.8
Speed	1799	1796	1792	1788	1784	1779	1772	1779
Line amperes	28.17	34.3	48.59	66.19	85.65	107	135	99.2

# REVIEW

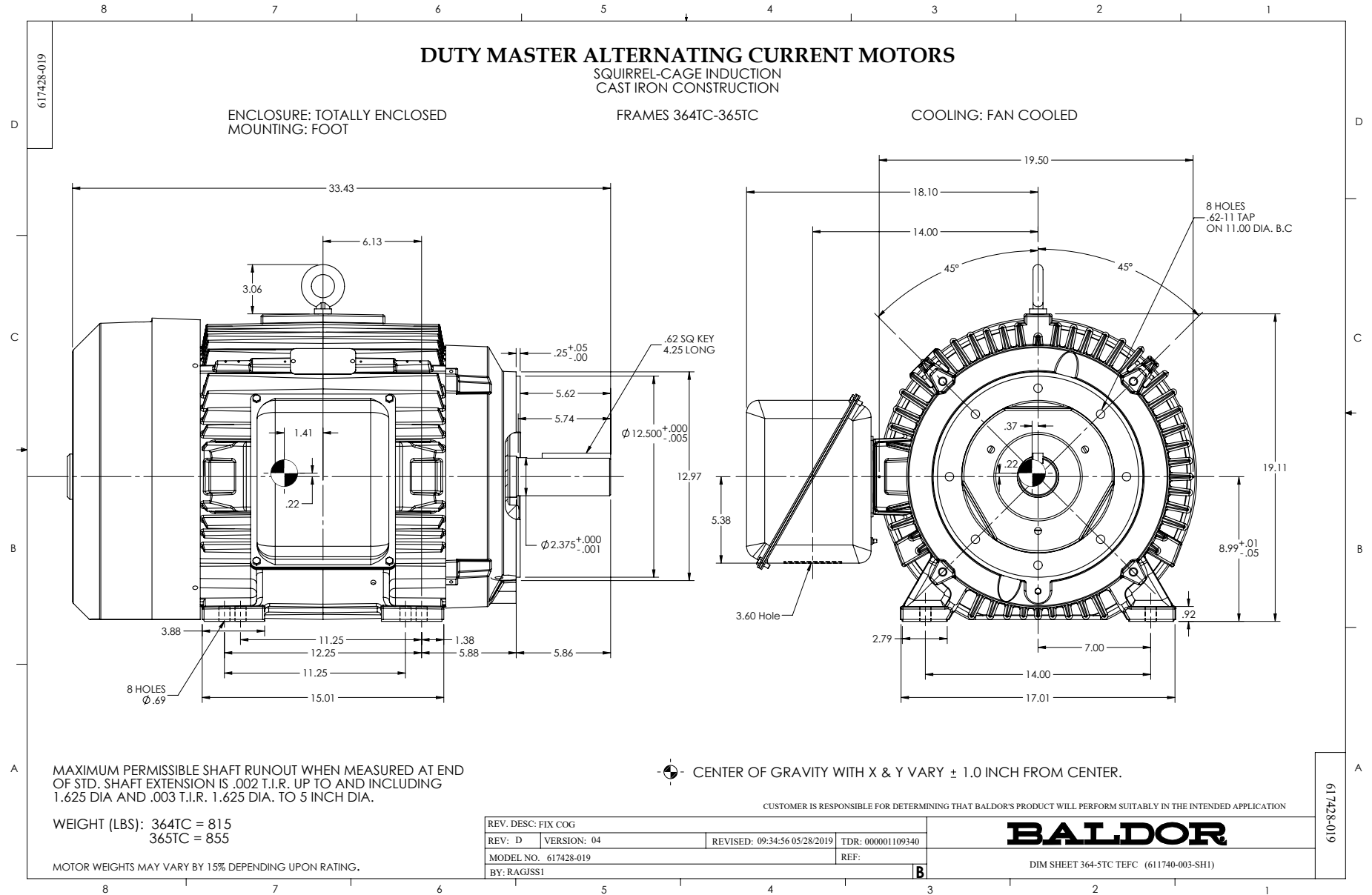
WINDING # A36WG4148

75 HP 3 PH 60 HZ 1780 RPM 460 V A36070M

TORQUES (LB-FT): PO=487.00 PU=350.00 LR=420.00 LRA=542.00



USBRRAN1 6/9/2022 ACPERF, record # 83645



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
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CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED

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