

# ABB BALDOR RELIANCE III

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## Customer information packet

### CECP84316T-4

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

Class - CLI GP A,B,C,D

Division - Division II

**Specifications**

<b>Enclosure</b>	TEFC
<b>Frame</b>	365TC
<b>Frame Material</b>	Iron
<b>Frequency</b>	60.00 Hz
<b>Haz Area Class and Group</b>	CLI GP A,B,C,D
<b>Haz Area Division</b>	Division II
<b>Motor Letter Type</b>	Three Phase
<b>Output @ Frequency</b>	75.000 HP @ 60 HZ
<b>Phase</b>	3
<b>Synchronous Speed @ Frequency</b>	1800 RPM @ 60 HZ
<b>Voltage @ Frequency</b>	460.0 V @ 60 HZ
<b>Agency Approvals</b>	CCSAUSEEV NEMA PREMIUM NEMA_PREMIUM UR
<b>Ambient Temperature</b>	40 °C
<b>Auxiliary Box</b>	NO AUXILLARY BOX
<b>Base Indicator</b>	Rigid
<b>Bearing Grease Type</b>	Polyrex EM (-20F +300F)
<b>Constant Torque Speed Range</b>	15-60
<b>Current @ Voltage</b>	86.000 A @ 460.0 V
<b>Design Code</b>	B
<b>Drip Cover</b>	No Drip Cover
<b>Duty Rating</b>	CONT
<b>Efficiency @ 100% Load</b>	95.4 %
<b>Feedback Device</b>	NO FEEDBACK
<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	86.0 a
<b>Insulation Class</b>	F
<b>Inverter Code</b>	Inverter Ready
<b>KVA Code</b>	G
<b>Lifting Lugs</b>	Standard Lifting Lugs

**Part Detail**

<b>Revision</b>	G
<b>Type</b>	AC
<b>Mech. spec.</b>	
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	A36WG3963
<b>Layout</b>	617428-620
<b>Eff. date</b>	08-26-2024
<b>CD Diagram</b>	416820-036
<b>Poles</b>	04
<b>Leads</b>	3#4
<b>Proprietary</b>	False
<b>Created date</b>	04-26-2021

<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>	33.48 IN
<b>Power Factor</b>	86
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	C-Face
<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>	Phase Seq-Std Rot (CCWODE)
<b>Shaft Slinger Indicator</b>	No 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**

<b>NP4388</b>														
<b>CAT #</b>	CECP84316T-4					<b>FR</b>	365TC			<b>IP56</b>				
<b>SPEC</b>	A36-7814-3963					<b>ENCL</b>	TEFC			<b>DES</b>	B			
<b>HZ</b>	60	<b>PH</b>	3	<b>CL</b>	F	<b>HP</b>	75	<b>SF</b>	1.15	<b>PF</b>	86	<b>%</b>	<b>CODE</b>	G
<b>VOLTS</b>	460					<b>AMPS</b>	86							
<b>RPM</b>	1780		<b>MAX RPM</b>	2700		<b>SER</b>								
<b>NEMA NOM. EFF</b>	95.4	<b>%</b>	<b>RATING</b>	40C AMB-CONT										
<b>GUAR MIN. EFF</b>	94.5	<b>%</b>	<b>BRG DE</b>	6313			<b>BRG ODE</b>	6313						
<b>CL I DIV 2 GRPS A,B,C,D</b>	<b>CL I ZONE 2 GRPS</b>					<b>IIA,IIB,IIC</b>			<b>TEMP T</b>	3-200		<b>C</b>		
<b>CT HZ</b>	15-60		<b>VT HZ</b>	0-60										
<b>CHP HZ</b>	60-90		<b>INV TEMP CL</b>	200		<b>C</b>								
							<b>MTR WT</b>	993		<b>LBS</b>				

**NP4333**

<b>CAT #</b>	CECP84316T-4	<b>ROTOR BARS</b>	47
<b>SPEC</b>	A36-7814-3963	<b>STATOR SLOTS</b>	60
<b>SER</b>		<b>MAX CORR KVAR</b>	15.8
<b>GREASE</b>	POLYREX EM		
<b>ABMA DE BRG</b>	65BC03J30X	<b>ODE</b>	65BC03J30X

<b>SPACE HEATER LEADS H1-H2:</b>	<b>TIE LIKE NUMBERS</b>	<b>TOGETHER</b>		
<b>MAX. SPACE HEATER TEMP.</b>	<b>C</b>	<b>V</b>	<b>A</b>	<b>W</b>

AC induction motor performance data

Record #71698 - Typical performance - not guaranteed values

Winding	A36WG3963
Type	A3670M
Enclosure	TEFC

Nameplate data

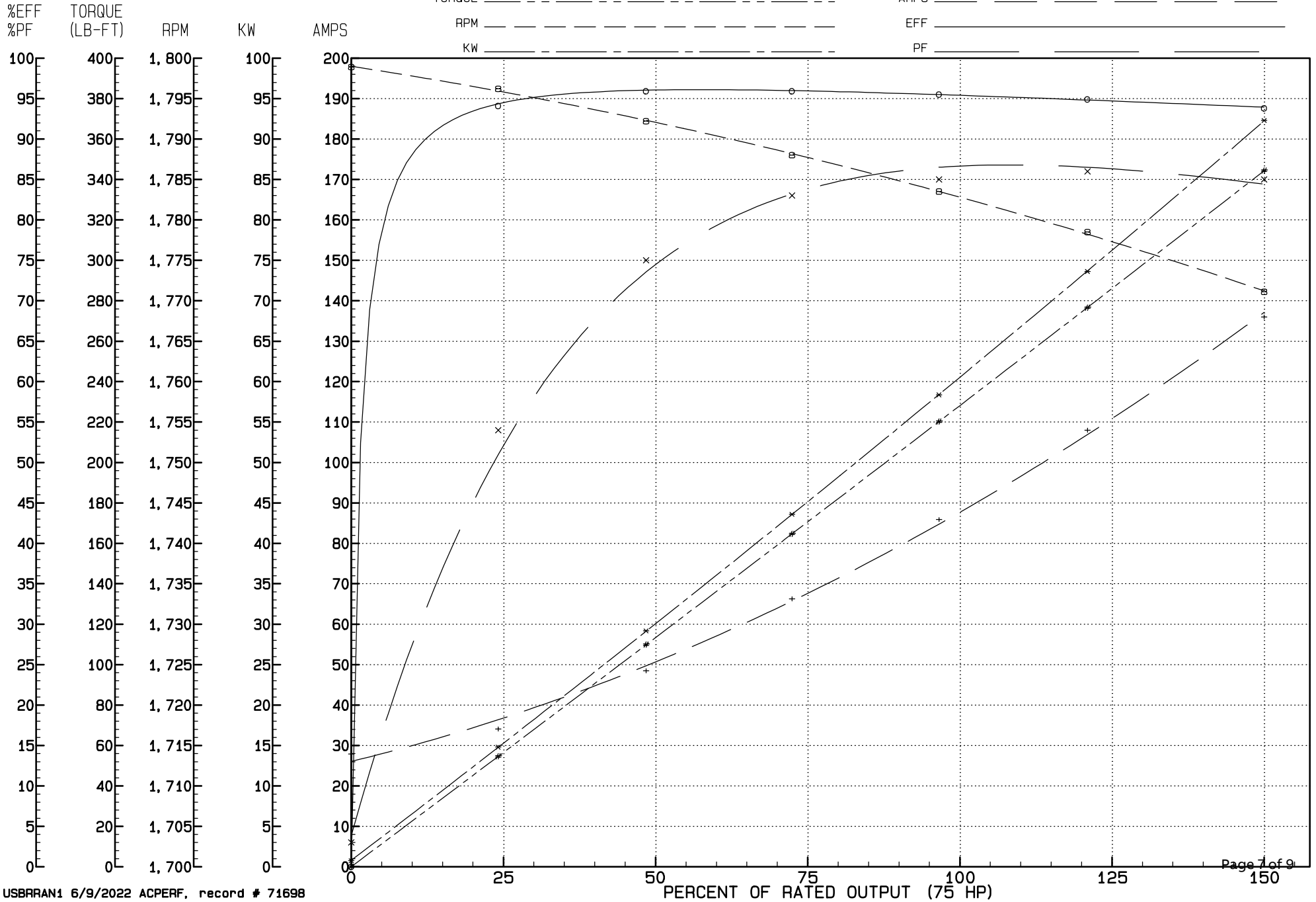
Rated Output			75
Volts			460
Full Load Amps			86
R.P.M.			1780
Hz	60	Phase	3
KVA Code			F
S.F.			1.15
NEMA Nom. Eff.	95	Power Factor	86
Duty			CONT
S.F. Amps			

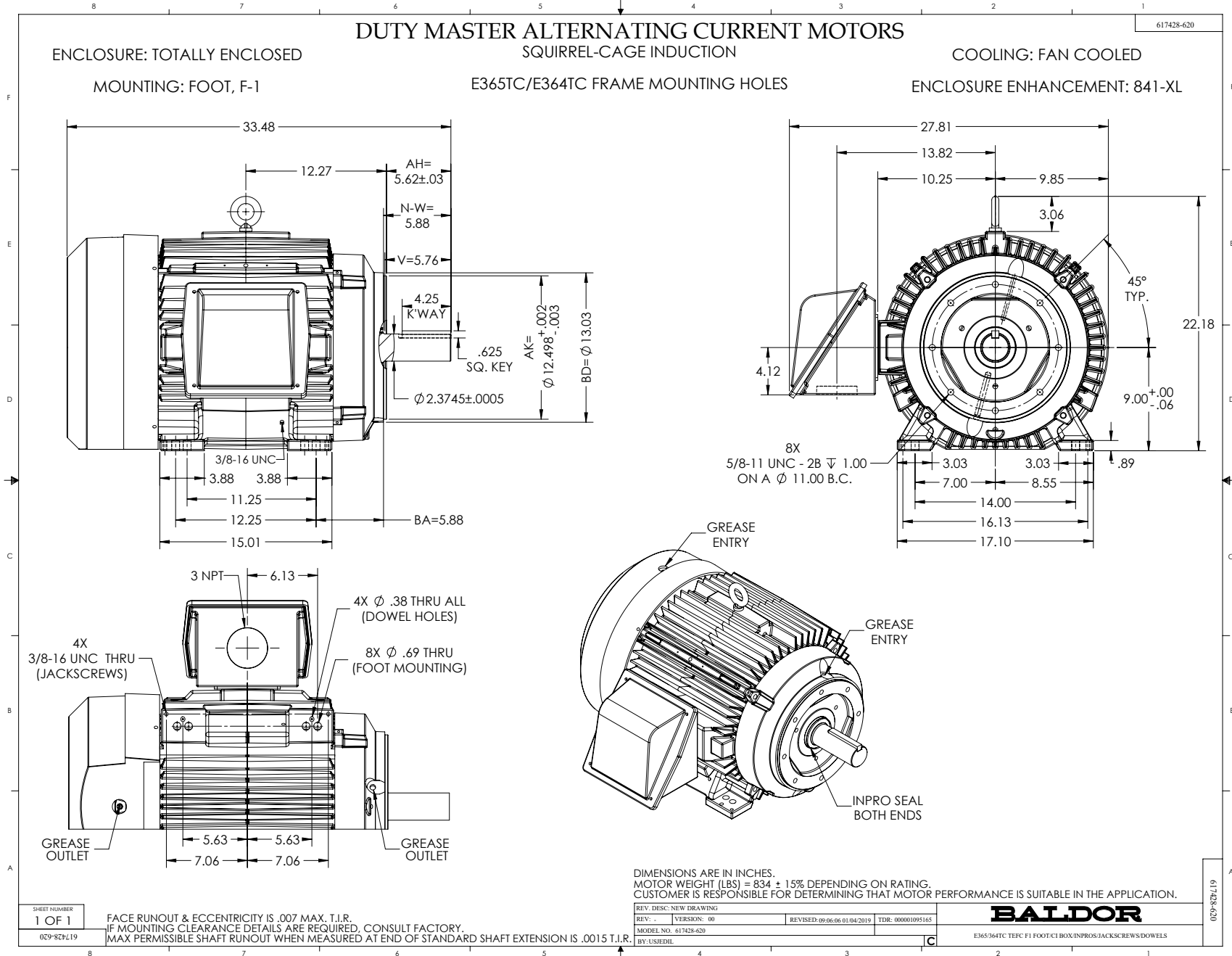
460 V, 60 Hz:  
Single Voltage Motor

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 <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 75 HP

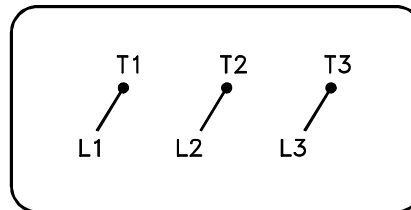
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	3	54	75	83	85	86	85	86
Efficiency	0	94.1	95.9	95.9	95.5	94.9	93.8	95.1
Speed	1798.9	1796.2	1792.2	1788	1783.5	1778.5	1771.1	1780
Line amperes	27.9	34.1	48.5	66.3	85.9	108	136	99.2





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