

# ABB BALDOR RELIANCE III

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## Customer information packet

### CEM4314T

60HP, 1780RPM, 3PH, 60HZ, 364TC, A3658M, TEFC

Class - None

Division - Not Applicable

**Specifications**

<b>Enclosure</b>	TEFC
<b>Frame</b>	364TC
<b>Frame Material</b>	Iron
<b>Frequency</b>	60.00 Hz
<b>Haz Area Class and Group</b>	None
<b>Haz Area Division</b>	Not Applicable
<b>Motor Letter Type</b>	Three Phase
<b>Output @ Frequency</b>	60.000 HP @ 60 HZ
<b>Phase</b>	3
<b>Synchronous Speed @ Frequency</b>	1800 RPM @ 60 HZ
<b>Voltage @ Frequency</b>	230.0 V @ 60 HZ 460.0 V @ 60 HZ
<b>Agency Approvals</b>	CCSAUSEEV CURUSEEV NEMA PREMIUM NEMA PREMIUM (OLD LOGO)
<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>Current @ Voltage</b>	70.000 A @ 460.0 V 152.000 A @ 208.0 V 140.000 A @ 230.0 V
<b>Design Code</b>	B
<b>Drip Cover</b>	No Drip Cover
<b>Duty Rating</b>	CONT
<b>Efficiency @ 100% Load</b>	95.0 %
<b>Feedback Device</b>	NO FEEDBACK
<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	70.0 a
<b>Insulation Class</b>	F
<b>Inverter Code</b>	Inverter Ready

**Part Detail**

<b>Revision</b>	U
<b>Type</b>	AC
<b>Mech. spec.</b>	
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	A36WG4075
<b>Layout</b>	617428-019
<b>Eff. date</b>	02-13-2025
<b>CD Diagram</b>	CD0180
<b>Poles</b>	04
<b>Leads</b>	3#4,6#6
<b>Proprietary</b>	False
<b>Created date</b>	10-19-2010

<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>	A3658M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	33.44 IN
<b>Power Factor</b>	84
<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>	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**

**NP3979LUA**

<b>CAT #</b>	CEM4314T		<b>SER</b>			<b>CC</b>	010A						
<b>SPEC</b>	P36G4663		<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	140/70	1780	60	G	1.15	B	84 %	95 %				
	-							%	%				
<b>PH</b>	3	<b>CL</b>	F	<b>MAX CORR KVAR</b>	15								
<b>BRG</b>	<b>DE</b>	6313	<b>ODE</b>	6313	<b>ENCL</b>	TEFC	<b>FR</b>	364TC	54				
<b>GREASE</b>	POLYREX EM			<b>MTR WT</b>	854	<b>LBS</b>							
<b>USABLE AT</b>	50HZ 50HP 190/380V 138/69A				<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												

AC induction motor performance data

Record #72794 - Typical performance - not guaranteed values

Winding	A36WG4075
Type	A3658M
Enclosure	TEFC

Nameplate data

Rated Output			60
Volts			230/460
Full Load Amps			140/70
R.P.M.			1780
Hz	60	Phase	3
KVA Code			G
S.F.			1.15
NEMA Nom. Eff.	95	Power Factor	84
Duty			CONT
S.F. Amps			

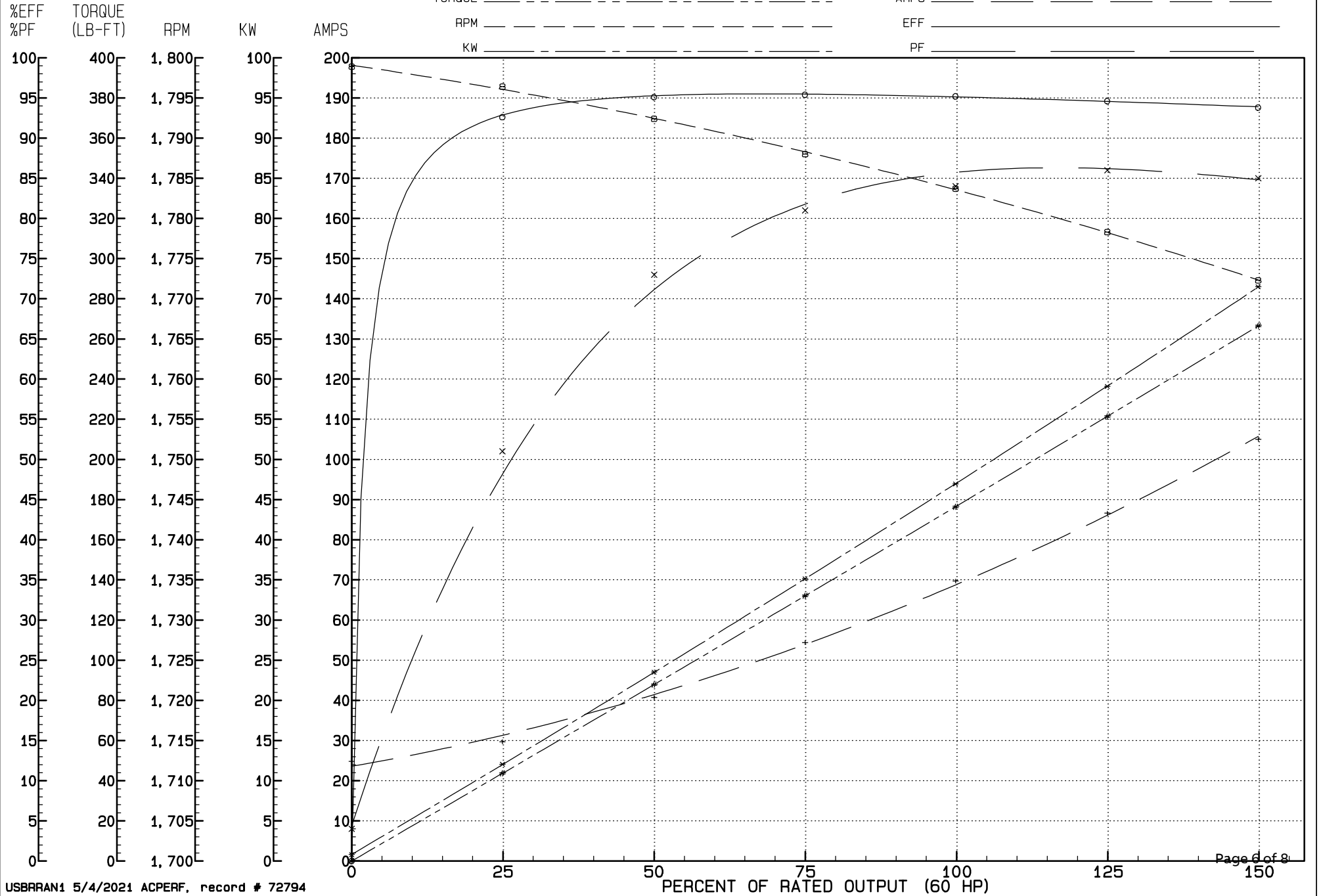
460 V, 60 Hz:

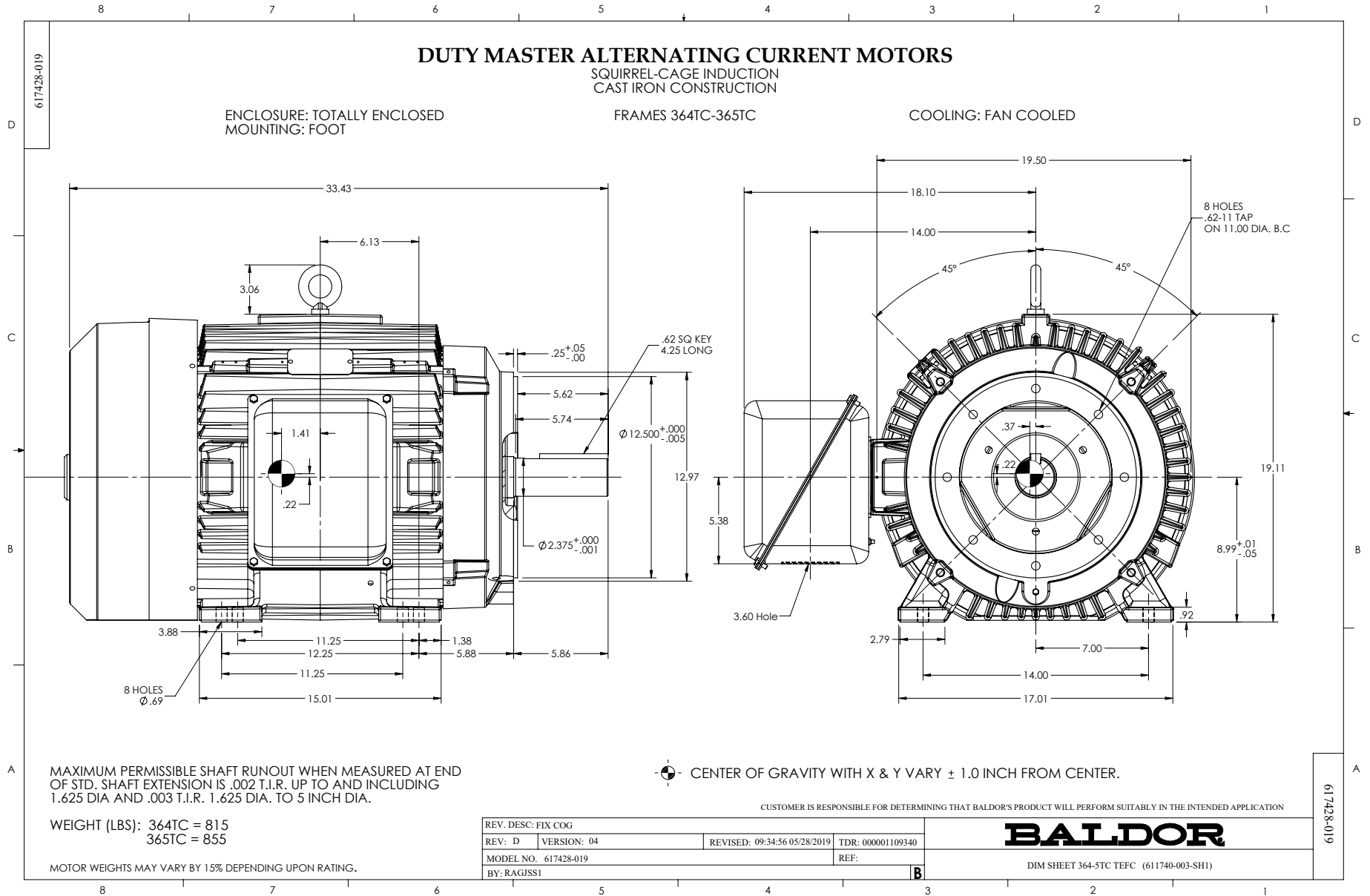
High Voltage Connection

Full Load Torque	176.4 LB-FT
Start Configuration	direct on line
Breakdown Torque	422 LB-FT
Pull-up Torque	276 LB-FT
Locked-rotor Torque	352 LB-FT
Starting Current	462 A
No-load Current	24.8
Line-line Res. @ 25°C	0.10816 Ω
Temp. Rise @ Rated Load	56°C
Temp. Rise @ S.F. Load	70°C
Locked-rotor Power Factor	32.3
Rotor inertia	0

Load Characteristics 460 V, 60 Hz, 60 HP

% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	4	51	73	81	84	86	85	85
Efficiency	0	92.6	95.1	95.4	95.2	94.6	93.8	94.8
Speed	1798.9	1796.4	1792.4	1788	1783.7	1778.3	1772.3	1780
Line amperes	24.8	29.7	40.7	54.4	69.7	86.6	105	79.8

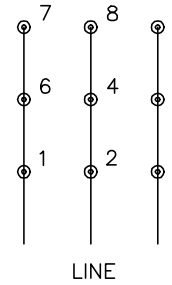




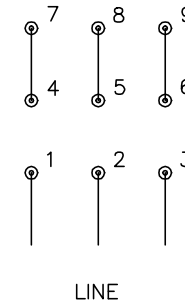
CD0180



LOW VOLTAGE  
(2D)



HIGH VOLTAGE  
(1D)



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0180

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10:25:29 02/19/2019	BY: ENBRIRO
MTL: -	© □	

**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

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