

ABB BALDOR RELIANCE III

Customer information packet

VPECP4314T

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

Class - None

Division - Division II

Specifications

Enclosure	TEFC
Frame	364VP
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	60.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	10-60
Current @ Voltage	140.000 A @ 230.0 V 152.000 A @ 208.0 V 70.000 A @ 460.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.0 %
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	70.0 a
Insulation Class	F
Inverter Code	Inverter Ready

Part Detail

Revision	H
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A36WG4075
Layout	616555-992
Eff. date	02-13-2025
CD Diagram	CD0180
Poles	04
Leads	3#4,6#6
Proprietary	False
Created date	06-06-2019

IP Rating	IP55
KVA Code	G
Lifting Lugs	Vertical Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA
Motor Type	A3658M
Mounting Arrangement	V1
Number of Poles	4
Overall Length	37.25 IN
Power Factor	84
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	P-Base
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Ground Indicator	No 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

Nameplate

NP4033LUA																									
CAT #		VPECP4314T				SER				CC		010A													
SPEC		A36-6173-4075				RATING		40C AMB-CONT																	
HZ		VOLTS		AMPS		RPM		HP		CODE		SF		DES		PF		NEMA NOM. EFF							
60		230/460		140/70		1780		60		G		1.15		B		84		% 95 %							
																% %									
PH		3		CL F		MAX RPM		2700		MAX CORR KVAR		15													
BRG		DE		6313		ODE		7310		ENCL		TEFC		FR		364VP		IP 55							
GREASE		POLYREX EM								MTR WT		910		LBS											
CL I DIV 2 GRPS A,B,C,D				CL I ZONE 2 GRPS				IIA,IIB,IIC				TEMP T		200		C									
INV READY		CT		15-60		HZ		4:1		VT		3-60		HZ		20:1		CHP		60-90		HZ		1.5:1	
INV TEMP CL		200		C		USABLE AT		50HZ 50HP 190/380V 138/69A								SF1.0									

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

REVIEW

**ABB BALDOR
RELIANCE III**

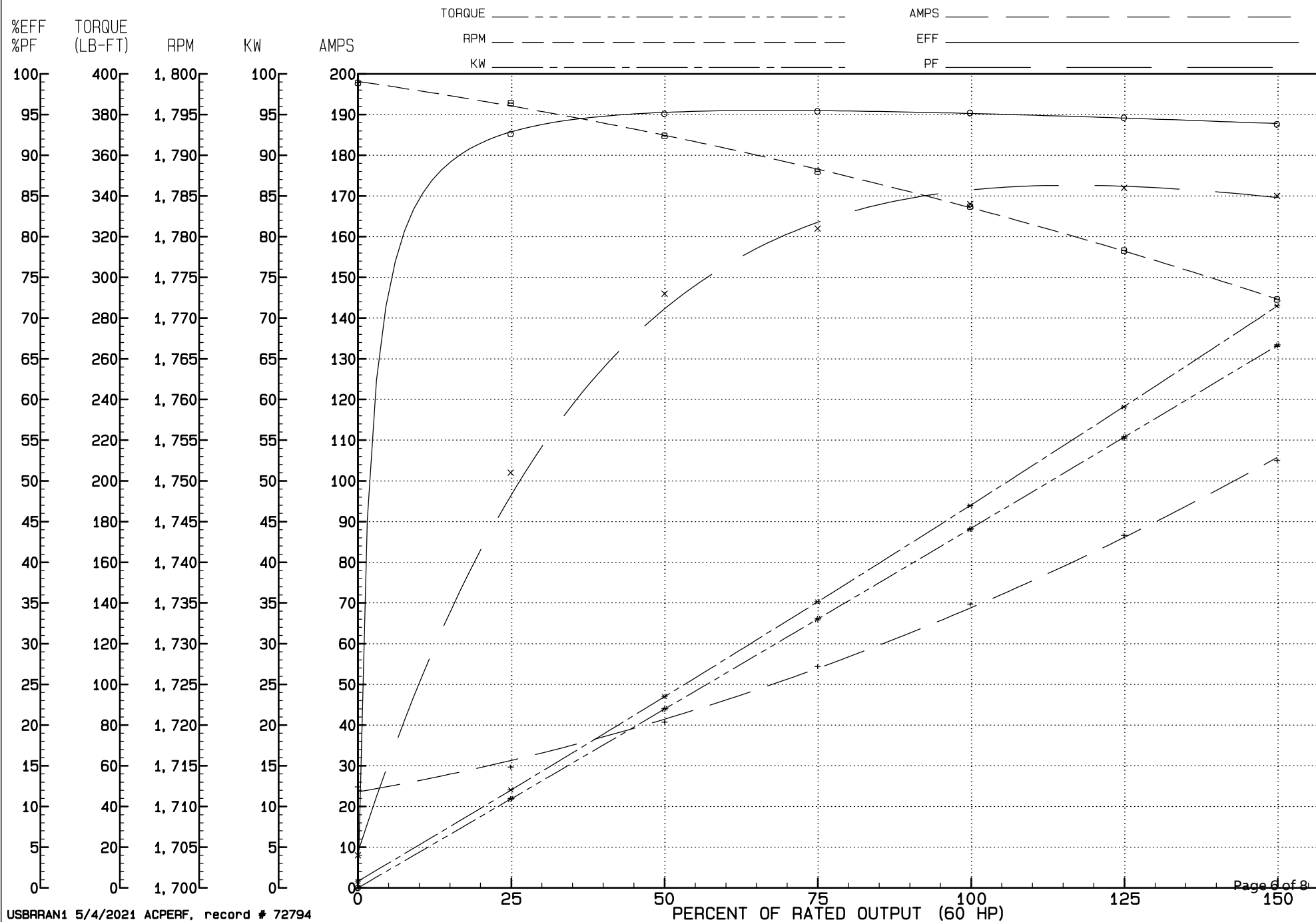
CUSTOMER INFORMATION PACKET

VPEC4314T - 60HP, 1780RPM, 3PH, 60HZ, 364VP, A3658M, TEFC

WINDING # A36WG4075

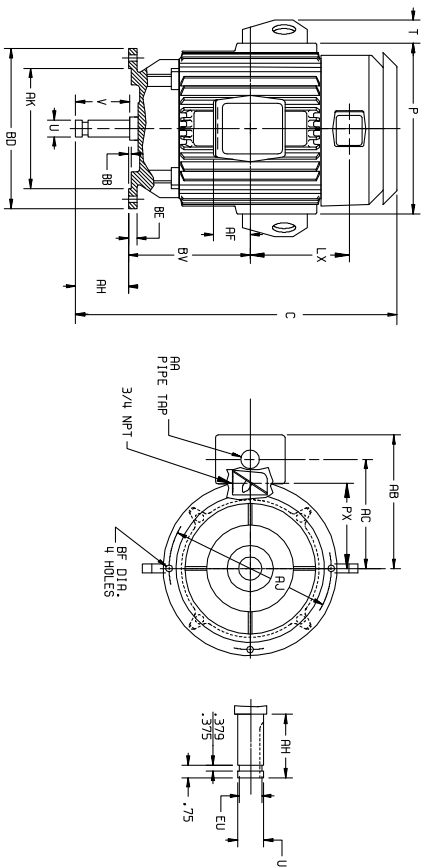
60 HP 3 PH 60 HZ 1780 RPM 460 V A3658M

TORQUES (LB-FT): PO=422.00 PU=276.00 LR=352.00 LRA=462.00



DUTY MASTER ALTERNATING CURRENT MOTORS

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: NEMA VP API THRUST DESIGN - SOLID SHAFT
SQUIREL-CAGE INDUCTION
CAST IRON CONSTRUCTION
COOLING: FAN COOLED
FRAMES 250VP THRU 440VP



FRAME		CAST IRON TERMINAL BOX												(4)	
FRAME	P	T	AA	AB	AC	AF	BB	BD	BE	BF	AJ	AK	RECOM. BOLT	LX	PX
254VP-256VP	14.00	2.25	1-1/4	10.81	8.61	2.50	.19	10.00	.62	.44	9.12	8.250	3/8 X 1.50	6.31	10.50
284VP-286VP	15.50	2.25	1-1/2	12.62	10.19	3.00	.19	10.00	.69	.44	9.12	8.250	3/8 X 1.50	6.88	11.00
324VP-326VP	17.38	2.25	2	15.44	11.69	3.62	.25	16.50	.88	.69	14.75	13.500	5/8 X 2.00	8.00	12.00
364VP-365VP	20.25	2.25	3	18.00	13.81	4.12	.25	16.50	.88	.69	14.75	13.500	5/8 X 2.00	8.38	13.00
404VP-405VP	22.62	2.50	3	19.25	15.06	4.12	.25	16.50	.94	.69	14.75	13.500	5/8 X 2.00	9.62	14.75
444VP-445VP	25.25	2.50	3	22.19	17.44	6.00	.25	16.50	1.06	.69	14.75	13.500	5/8 X 2.25	11.12	15.56

FRAME SIZE	C	BV	AH(6)	SHAFT AND KEY				WEIGHT (LB.)
				V	W(2)	EU(5)	SO	
254VP	28.10	9.44	2.750	2.75	1.1250	.875	.250	330
256VP	28.10	9.44	2.750	2.75	1.1250	.875	.250	330
284VP	30.66	10.44	2.750	2.75	1.1250	.875	.250	475
286VP	30.66	10.44	2.750	2.75	1.1250	.875	.250	475
324VP	34.60	11.75	4.500	4.50	1.6250	1.250	.375	610
326VP	34.60	11.75	4.500	4.50	1.6250	1.250	.375	610
364VP	37.45	12.75	4.500	4.50	1.6250	1.250	.375	860
365VP	37.45	12.75	4.500	4.50	1.6250	1.250	.375	860
404VP	41.75	14.62	4.500	4.50	1.6250	1.250	.375	1310
405VP	41.75	14.62	4.500	4.50	1.6250	1.250	.375	1310
444VP	47.57	17.50	4.500	4.50	2.125	1.750	.500	1880
445VP	47.57	17.50	4.500	4.50	2.125	1.750	.500	1880

- (1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE.
- (2) "U" VARIES UP TO 2.125 DIA. +.0000, -.0005
2.125 AND LARGER +.000, -.001.
- (3) MOTOR WEIGHTS MAY VARY BY 15% DEPENDING UPON RATING.
- (4) "AK" VARIES 250VP - 280VP +.003, -.000
320VP - 440VP +.005, -.000
- (5) "EU" VARIES +.000, -.005
- (6) "AH" VARIES +.030, -.030
- (7) AUXILIARY CONDUIT BOX SUPPLIED ONLY WHEN SPECIFIED.
- IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF SHAFT EXTENSION IS .001 MAX. T.I.R.
FACE RUNOUT AND 250VP - 440VP .004 MAX. T.I.R.
ECCENTRICITY

FRAME- TYPE- CERTIFIED FOR-
ORDER- ITEM- HP- RPM- PH- HZ VOLTS-
SALES ORDER- APPROVED BY- DATE

266-955919

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

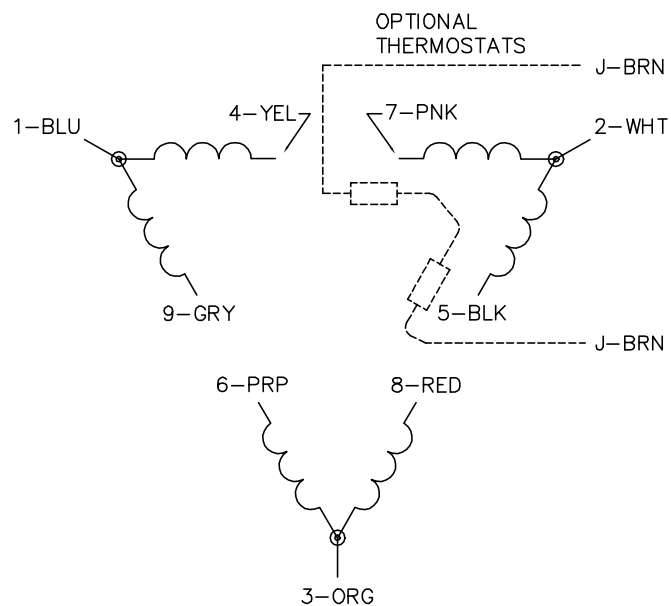
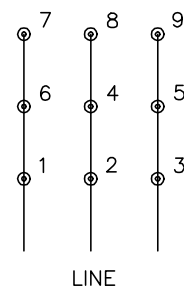
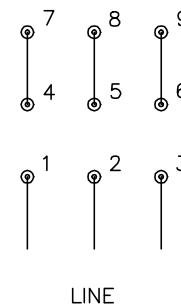
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BALDOR

DIM SHT 250-440VP TEFC API THRUST DESIGN CAST IRON CBOX

SH 1 of 1

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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