

BALDOR® • RELIANCE 

Product Information Packet

VEM3613T

5HP,3470RPM,3PH,60HZ,184TC,3630M,TEFC,F1

Part Detail							
Revision:	B	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	36WGQ043	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	36A003	Layout:	36LYA003	Poles:	02	Created Date:	12-15-2020
Base:	N	Eff. Date:	06-16-2021	Leads:	9#16		

Specs			
Catalog Number:	VEM3613T	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Inverter Ready
Frame:	184TC	IP Rating:	NONE
Frame Material:	Steel	KVA Code:	L
Output @ Frequency:	5.000 HP @ 60 HZ	Lifting Lugs:	No Lifting Lugs
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 16 AWG
	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
XP Class and Group:	None	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	3630M
Agency Approvals:	CSA	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	91
	UR	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	C-Face
Base Indicator:	No Mounting	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	RoHS Status:	ROHS COMPLIANT

Current @ Voltage:	11.600 A @ 230.0 V	Shaft Extension Location:	Pulley End
	12.800 A @ 208.0 V	Shaft Ground Indicator:	No Shaft Grounding
	5.800 A @ 460.0 V	Shaft Rotation:	Reversible
Design Code:	A	Shaft Slinger Indicator:	No Slinger
Drip Cover:	No Drip Cover	Speed Code:	Single Speed
Duty Rating:	CONT	Motor Standards:	NEMA
Electrically Isolated Bearing:	Not Electrically Isolated	Starting Method:	Direct on line
Feedback Device:	NO FEEDBACK	Thermal Device - Bearing:	None
Front Face Code:	Standard	Thermal Device - Winding:	None
Front Shaft Indicator:	None	Vibration Sensor Indicator:	No Vibration Sensor
Heater Indicator:	No Heater	Winding Thermal 1:	None
		Winding Thermal 2:	None

Nameplate NP3441LUA

CAT.NO.	VEM3613T				
SPEC	36A003Q043G1				
HP	5				
VOLTS	230/460				
AMPS	11.6/5.8				
RPM	3470				
FRAME	184TC	HZ	60	PH	3
SF	1.15	CODE	L	DES	A
NEMA NOM. EFF	88.5	PF	91	CLASS	F
RATING	40C AMB-CONT				
CC	010A	USABLE AT 208V			12.8
ENCL	TEFC	SER			
DE	6206	ODE	6205		
VPWM INVERTER READY					
CT6-60H(10:1)VT3-60H(20:1					
	50HZ 5HP 190/380V 14.2/7.1A				SF1.0

Parts List		
Part Number	Description	Quantity
SA388741	SA 36A003Q043G1	1.000 EA
RA379102	RA 36A003Q043G1	1.000 EA
34FN3002B02	EXTERNAL FAN, PLASTIC, .905/.907 HUB W/	1.000 EA
36CB3004	36 CB CASTING W/1.09 DIA LEAD HOLE @ 6:0	1.000 EA
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	1.000 EA
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 EA
36EP3104A01	FREP MACH ASSEMBLY FOR ROUTING	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 EA
36EP3301A23	PUEP ASSEMBLY FOR ROUTING PURPOSES	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
10XN2520A28	1/4-20X 1 3/4 HEX HD	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
36FH4009A102	IEC FH GREASER PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
36CB4516	750LIPPED CB LID - GALVANNEAL	1.000 EA
37GS1001	GASKET, CONDUIT BOX LID, .06 THICK LEXID	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA
HW2501E16	KEY, 1/4 SQ X 1.750	1.000 EA
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA

Parts List (continued)		
Part Number	Description	Quantity
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
HA3101A25	THRUBOLT 1/4-20 X 11.000 OHIO ROD	4.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.022 GA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3441LUA	ALUM SUPER-E VPWM INV READY UL CSA-EEV C	1.000 EA
36PA1001	PKG GRP, PRINT PK1017A06	1.000 EA
PK3082	STYROFOAM CRADLE	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA

AC Induction Motor Performance Data

Record # 85858

Preliminary Data Sheet

Winding: 36WGQ043-RXXX		Type: 3630M	Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	5	Full Load Torque	7.57 LB-FT	
Volts	230/460	Start Configuration	direct on line	
Full Load Amps	11.6/5.8	Breakdown Torque	35.2 LB-FT	
R.P.M.	3470	Pull-up Torque	25.1 LB-FT	
Hz	60 Phase	Locked-rotor Torque	28.6 LB-FT	
NEMA Design Code	A KVA Code	Starting Current	58.9 A	
Service Factor (S.F.)	1.15	No-load Current	1.75 A	
NEMA Nom. Eff.	88.5 Power Factor	Line-line Res. @ 25°C	2.57 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	76°C	
S.F. Amps	13.4/6.7	Temp. Rise @ S.F. Load	102°C	
		Locked-rotor Power Factor	65.7	
		Rotor inertia	0.134 lb-ft ²	

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	62	81	88	92	93	94	93
Efficiency	85.6	89.6	89.7	88.7	87.1	85.1	87.8
Speed	3570	3540	3505	3469	3430	3385	3436
Line amperes	2.26	3.25	4.48	5.81	7.28	8.92	6.68

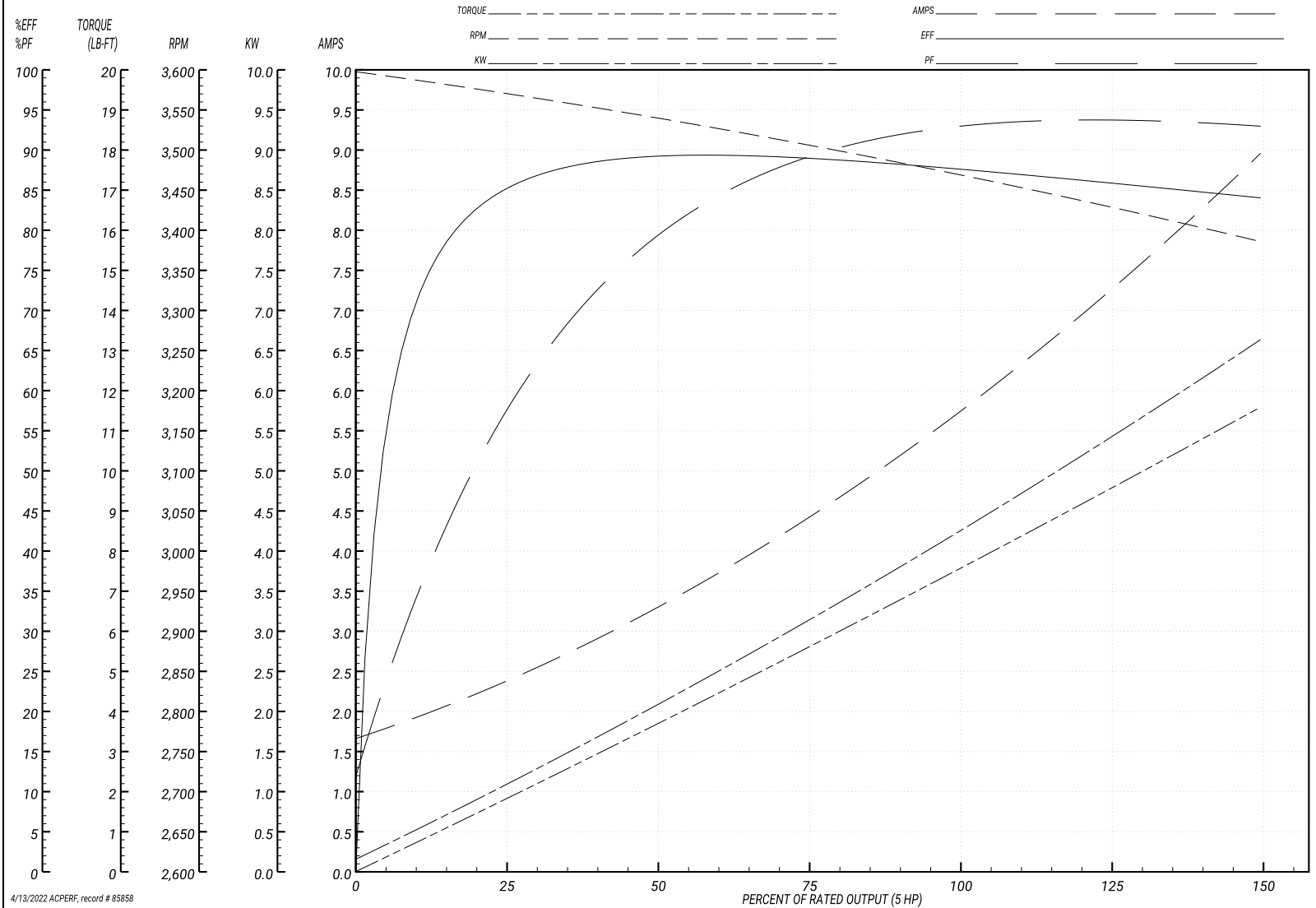
Performance Graph at 460V, 60Hz, 5.0HP Typical performance - Not guaranteed values

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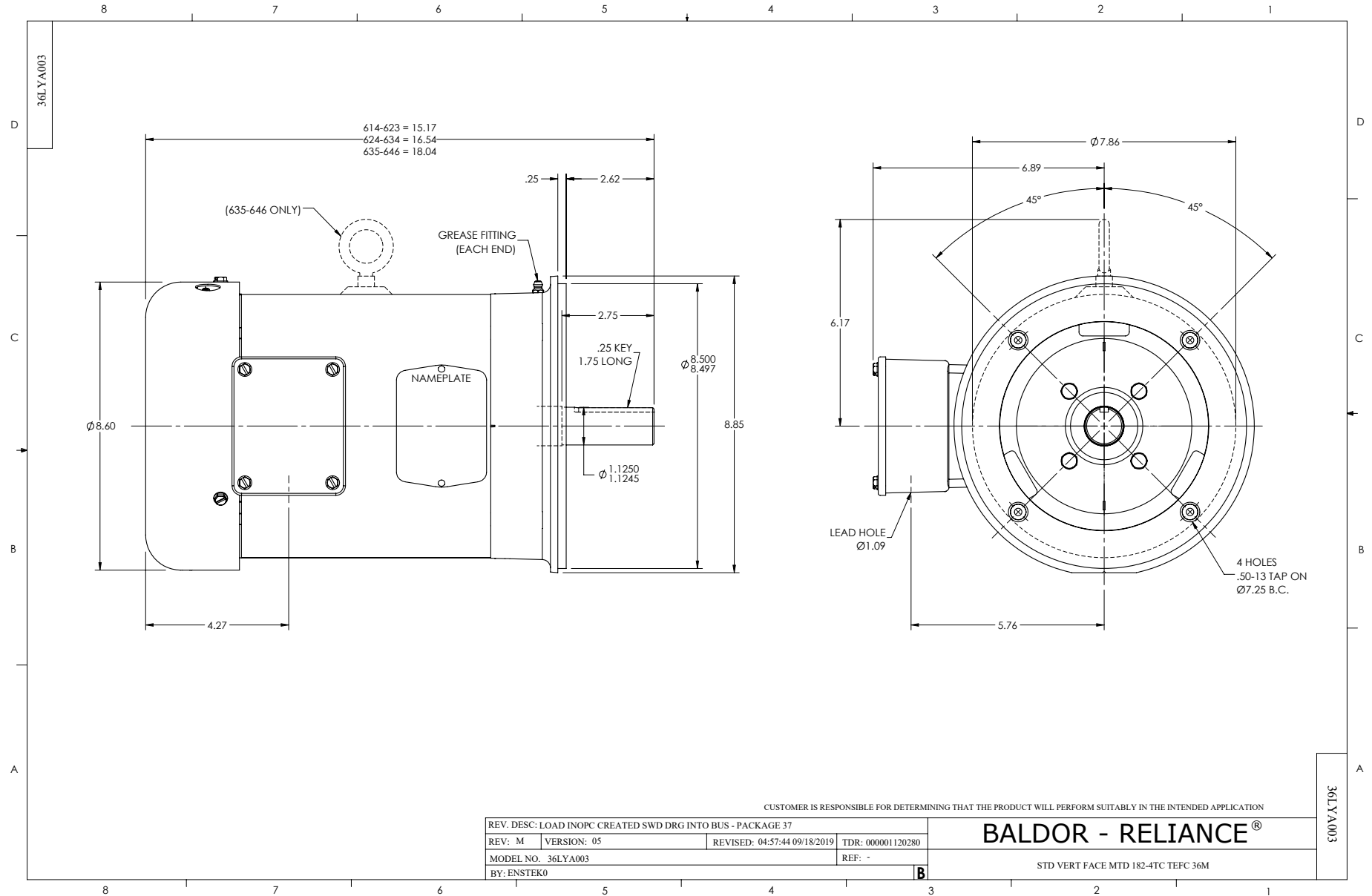
WINDING # 36WGQ043

Typical performance - not guaranteed values.

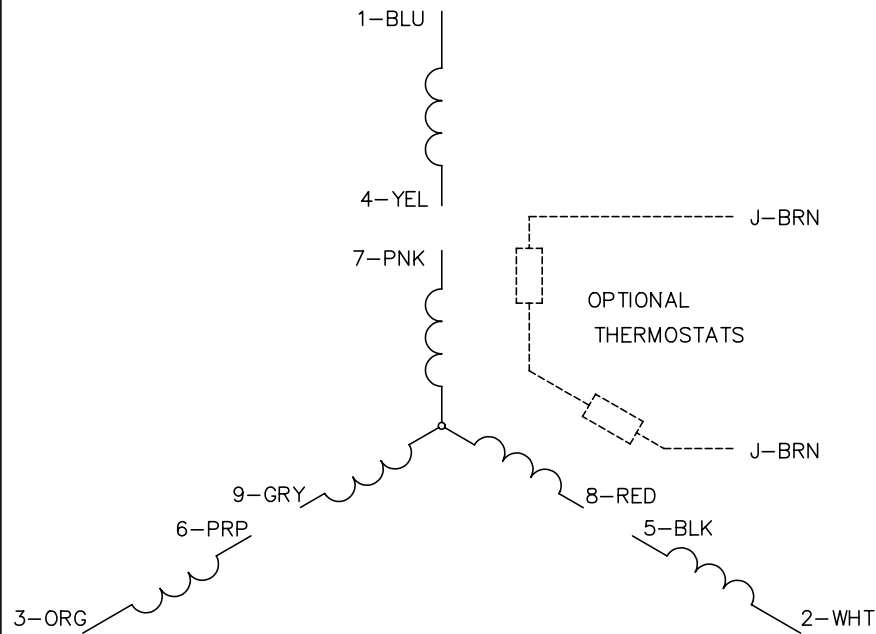
5 HP 3 PH 60 HZ 3470 RPM 460 V 3630M
 TORQUES(LB-FT): PO=35.2 PU=25.1 LR=28.6 LRA=58.9



4/13/2022 ACPERF, record # 85858



CD0005



LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
90000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005