

ABB BALDOR RELIANCE III

Customer information packet

VEBM3615T-DI

5HP, 1750RPM, 3PH, 60HZ, 184TC, 3642M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	184TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	5.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	13.900 A @ 208.0 V 6.700 A @ 460.0 V 13.400 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Brake Mounting
Front Shaft Indicator	None

Part Detail

Revision	J
Type	AC
Mech. spec.	36Q900
Base	
Status	PRD/A
Elec. spec.	36WGS268
Layout	36LYQ900
Eff. date	05-01-2024
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	09-28-2016

Heater Indicator	No Heater
High Voltage Full Load Amps	6.7 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3642M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	23.09 IN
Power Factor	78
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1750 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor



Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1259L									
CAT.NO.	VEBM3615T-DI								
SPEC.	36Q900S268G1								
HP	5								
VOLTS	230/460								
AMP	13.4/6.7								
RPM	1750								
FRAME	184TC		HZ	60			PH	3	
SER.F.	1.15	CODE	J	DES	B	CL	F		
NEMA-NOM-EFF	89.5	PF	78						
RATING	40C AMB-CONT								
CC	010A								
DE	6206		ODE	6205					
ENCL	TEFC	SN							

Parts List

Part number	Description	Quantity
SA328043	SA 36Q900S268G1	1.000 ea
RA315966	RA 36Q900S268G1	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
36EP3306A04	FR ENDPLATE, MACH .281 FOR T-BOLT, W/O T	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
84XN3816J36	3/8-16X2-1/4 SOCK HD, BK OX	4.000 ea
HW2501D10	KEY, 3/16 SQ X 1.000	1.000 ea
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
35FH4005A32	IEC FH NO GRSR W/3 HOLES - PRIMED	1.000 ea
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	3.000 ea
HA1014A02SP	SPL SPACER FOR FAN COVER MTD ON BRAKE	3.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
36CB4516	750LIPPED CB LID - GALVANNEAL	1.000 ea
37GS1001SP	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
HW3200A01	3/8-16X3/4 EYEBOLT WELDED F/S	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.022 ga
HA3101A29	THRUBOLT- 1/4-20 X 13.000	4.000 ea

96BK0615	BRAKE-25 LB/FT,230/460,180/390,60/50HZ	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP1259L	ALUM SUPER-E UL CC NEMA PREMIUM A60	1.000 ea
37PA1067	PALLET PACK GROUP, PK1156A07, PK1900A06	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

AC Induction Motor Performance Data

Record # 35063

Typical performance - not guaranteed values

Winding: 36WGS268-R016			Type: 3642M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		5	Full Load Torque		14.9 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		13.4/6.7	Breakdown Torque		52.2 LB-FT		
R.P.M.		1750	Pull-up Torque		31.5 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		34.9 LB-FT	
NEMA Design Code		B	KVA Code	J	Starting Current		49.1 A
Service Factor (S.F.)		1.15	No-load Current		3.24 A		
NEMA Nom. Eff.		89.5	Power Factor	78	Line-line Res. @ 25°C		2.27 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		71°C
S.F. Amps					Temp. Rise @ S.F. Load		87°C
					Locked-rotor Power Factor		39.8
					Rotor inertia		0.391 LB-FT2

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	39	60	72	78	83	83	81
Efficiency	85	89.7	90.6	89.6	88.6	87	89
Speed	1789	1776	1762	1750	1733	1714	1740
Line amperes	3.55	4.31	5.43	6.65	7.94	9.64	7.42

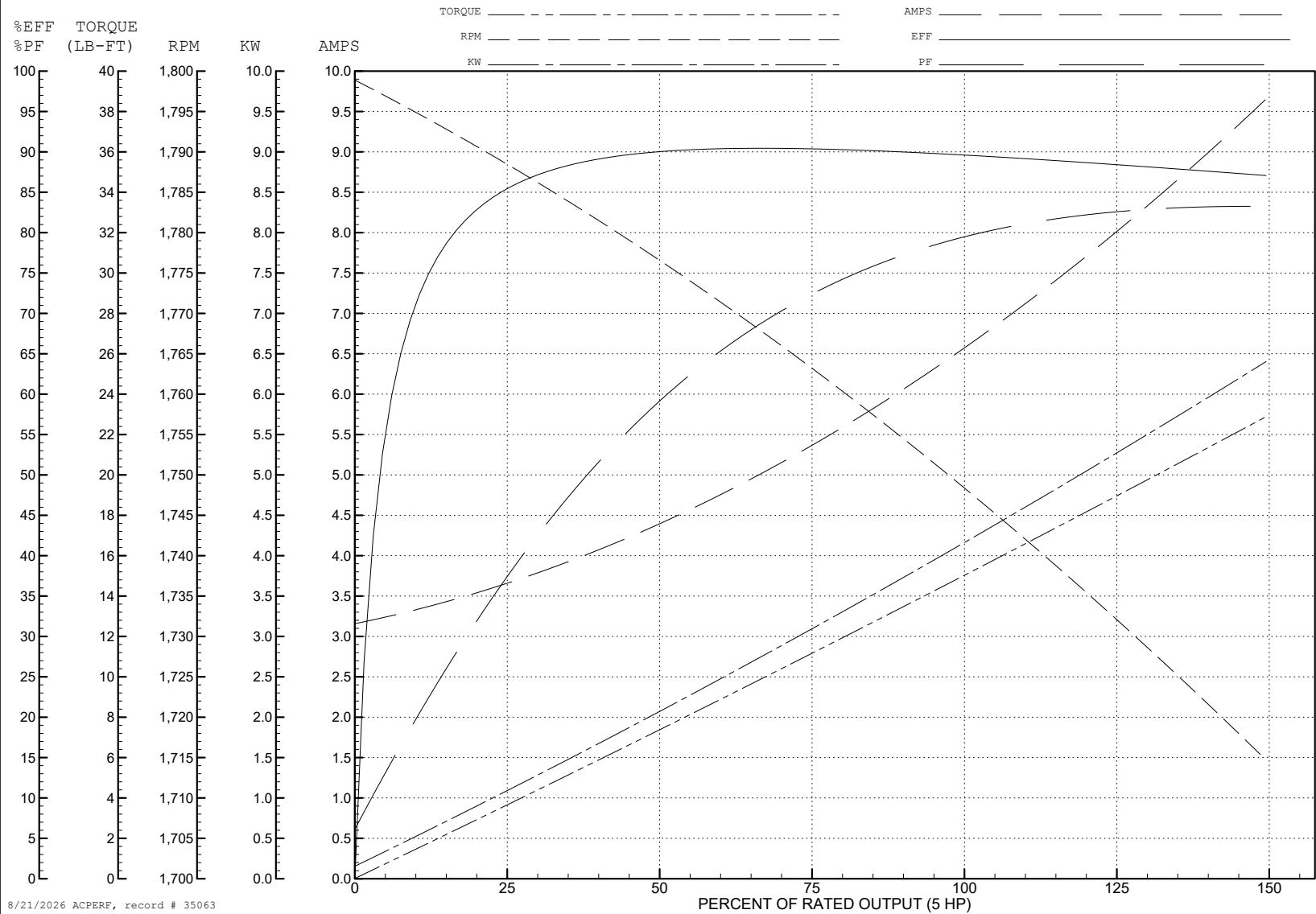
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WINDING # 36WGS268

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1750 RPM 460 V 3642M

TORQUES (LB-FT): PO=52.2 PU=31.5 LR=34.9 LRA=49.1



AC Induction Motor Performance Data

Record # 93277

Typical performance - not guaranteed values

Winding: 36WGS268-R016			Type: 3642M		Enclosure: TEFC		
Nameplate Data			230 V, 60 Hz: Low Voltage Connection				
Rated Output (HP)		5	Full Load Torque		14.9 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		13.4/6.7	Breakdown Torque		52.2 LB-FT		
R.P.M.		1750	Pull-up Torque		31.5 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		34.9 LB-FT	
NEMA Design Code		B	KVA Code	J	Starting Current		98.2 A
Service Factor (S.F.)		1.15	No-load Current		6.48 A		
NEMA Nom. Eff.		89.5	Power Factor	78	Line-line Res. @ 25°C		0.567 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		71°C	
S.F. Amps				Temp. Rise @ S.F. Load		86°C	
				Locked-rotor Power Factor		39.8	
				Rotor inertia		0.391 lb-ft²	

Load Characteristics 230 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	38	60	72	78	83	83	81
Efficiency	84.9	89.6	90.5	89.6	88.5	87	88.9
Speed	1789	1776	1762	1750	1733	1714	1740
Line amperes	7.1	8.62	10.86	13.3	15.88	19.28	14.8

ABB Motors and Mechanical Inc.

WINDING # 36WGS268

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1750 RPM 230 V 3642M

TORQUES (LB-FT) : PO=52.2 PU=31.5 LR=34.9 LRA=98.2

