

ABB BALDOR RELIANCE III

Customer information packet

VEM3305T

3HP, 1165RPM, 3PH, 60HZ, 213TC, 3734M, ODP, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	ODP
Frame	213TC
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	3.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM NEMA PREMIUM (OLD LOGO)
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	9.000 A @ 230.0 V 9.400 A @ 208.0 V 4.500 A @ 460.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	88.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	P
Type	AC
Mech. spec.	37K446
Base	
Status	PRD/A
Elec. spec.	37WGR333
Layout	37LYK446
Eff. date	04-06-2026
CD Diagram	CD0005
Poles	06
Leads	9#14 Y
Proprietary	False
Created date	04-29-2015

Heater Indicator	No Heater
High Voltage Full Load Amps	4.5 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3734M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	18.91 IN
Power Factor	71
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1165 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

NP1259LUA											
CAT.NO.	VEM3305T										
SPEC.	37K446R333G1										
HP	3										
VOLTS	230/460										
AMPS	9/4.5										
R.P.M.	1165										
FRAME	213TC		HZ		60		PH		3		
SER.F.	1.15	CODE	K	DES	B	CLASS		F			
NEMA NOM. EFF.	88.5	P.F.		71							
RATING	40C AMB-CONT										
CC	010A										
DE	6307		ODE		6206						
ENCL	ODP	SN									
USABLE AT	50HZ 3HP 190/380V 10.6/5.3A										SF

Parts List

Part number	Description	Quantity
SA299801	SA 37K446R333G1	1.000 ea
RA286829	RA 37K446R333G1	1.000 ea
HW3200A01	3/8-16X3/4 EYEBOLT WELDED F/S	1.000 ea
37CB3006	37 CB CASTING W/1.38 LEAD HOLE @ 6:00	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
37EP3203A01	A00 W/FH MTG	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
37EP3400A02	FACE MT EP-OPEN-307 BRG-213-215TC W/BAFF	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
37AD2000A01	BAFFLE PLATE, STAMPED PLATED	1.000 ea
60XW0632A06	6-32 X 3/8 TORX HEAD SCREW TAPTITE II	4.000 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
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
37FH4000A05SP	DRIP COVER, W/ PRIMER	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
37CB4516	LIPPED LID FOR 37 FRAME NEC KOBX	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501F21	KEY, 5/16 SQ X 2.375	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.028 ga
HA3104A14	THRUBOLT- 5/16-18 X12.125(OHIO)	4.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP1259LUA	ALUM SUPER-E UL CC NEMA PREMIUM "USABLE	1.000 ea
37PA1074	PALLET PACK GRP, PRINT BOX PK1026A06	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 # 49691

Typical performance - not guaranteed values

Winding: 37WGR333-R005			Type: 3734M		Enclosure: OPSB	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		3	Full Load Torque		13.59 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		9/4.5	Breakdown Torque		46.48 LB-FT	
R.P.M.		1165	Pull-up Torque		21.64 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque	35.84 LB-FT	
NEMA Design Code	B	KVA Code	K	Starting Current	31.11 A	
Service Factor (S.F.)		1.15	No-load Current		2.38 A	
NEMA Nom. Eff.	88.5	Power Factor	71	Line-line Res. @ 25°C	3.48 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		20°C	
S.F. Amps			Temp. Rise @ S.F. Load		24°C	
			Locked-rotor Power Factor		25.2	
			Rotor inertia		0.846 LB-FT2	

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	34	53	64	71	74	76	73
Efficiency	82.9	88.4	89.4	88.9	88	86.1	88.4
Speed	1192	1185	1177	1168	1158	1147	1161
Line amperes	2.57	3.06	3.73	4.49	5.41	6.45	5.04

ABB Motors and Mechanical Inc.

WINDING # 37WGR333

Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 1165 RPM 460 V 3734M

TORQUES (LB-FT) : PO=46.48 PU=21.64 LR=35.84 LRA=31.11





