

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

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



