

ABB BALDOR RELIANCE III

Customer information packet

VEM3312T

10HP, 3500RPM, 3PH, 60HZ, 213TC, 3728M, 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	10.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	208.0 V @ 60 HZ 230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM
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	26.000 A @ 208.0 V 24.000 A @ 230.0 V 12.000 A @ 460.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	90.2 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	C
Type	AC
Mech. spec.	37K446
Base	
Status	PRD/A
Elec. spec.	37WGL866
Layout	37LYK446
Eff. date	06-11-2024
CD Diagram	CD0005
Poles	02
Leads	9#14
Proprietary	False
Created date	02-02-2021

High Voltage Full Load Amps	12.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3728M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	18.91 IN
Power Factor	85
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 Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3500 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

NP3553LUA									
CAT.NO.	VEM3312T								
SPEC.	37K446L866G1								
HP	10								
VOLTS	208-230/460								
AMPS	26-24/12								
RPM	3500								
FRAME	213TC		HZ	60			PH	3	
SF	1.15	CODE	H	DES	B	CLASS	F		
NEMA NOM. EFF	90.2	PF	85						
RATING	40C AMB-CONT								
CC	010A								
ENCL	ODP	SN							
DE	6307		ODE	6206					
VPWM INVERTER READY									
CT30-60(2:1) VT3-60(20:1)									
USABLE AT	50HZ 10HP 190/380V 28.4/14.2A								SF1.0

AC Induction Motor Performance Data

Record # 85554

Preliminary Data Sheet

Winding: 37WGL866-R001			Type: 3728M		Enclosure: OPSB	
Nameplate Data				460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)		10		Full Load Torque		15 LB-FT
Volts		208-230/460		Start Configuration		direct on line
Full Load Amps		25.6-24/12		Breakdown Torque		50.8 LB-FT
R.P.M.		3475		Pull-up Torque		23.7 LB-FT
Hz		60 Phase		Locked-rotor Torque		29 LB-FT
NEMA Design Code		B KVA Code		Starting Current		81.5 A
Service Factor (S.F.)		1.15		No-load Current		4.72 A
NEMA Nom. Eff.		89.5 Power Factor		Line-line Res. @ 25°C		0.991 Ω
Rating - Duty		50C AMB-CONT		Temp. Rise @ Rated Load		33°C
S.F. Amps		30.0-27.6/13.8		Temp. Rise @ S.F. Load		41°C
				Locked-rotor Power Factor		39.9
				Rotor inertia		0.255 lb-ft²

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	49	71	81	85	87	88	87
Efficiency	85	90	90.8	90.3	89.2	87.8	89.6
Speed	3576	3552	3527	3499	3469	3436	3479
Line amperes	5.5	7.27	9.53	12.1	15	18.2	13.8

ABB Motors and Mechanical Inc.

WINDING # 37WGL866

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 3475 RPM 460 V 3728M

TORQUES (LB-FT): PO=50.8 PU=23.7 LR=29 LRA=81.5





