

ABB BALDOR RELIANCE III

Customer information packet

VEM3212T

5HP, 3450RPM, 3PH, 60HZ, 182TC, 3544M, OPEN, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPEN
Frame	182TC
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	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM CURUSEEV
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	12.000 A @ 230.0 V 13.000 A @ 208.0 V 6.000 A @ 460.0 V
Design Code	A
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	Q
Type	AC
Mech. spec.	35Z323
Base	
Status	PRD/A
Elec. spec.	35WGL285
Layout	35LYZ323
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	02
Leads	9#16
Proprietary	False
Created date	04-28-2015

High Voltage Full Load Amps	6.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	M
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	3544M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	16.54 IN
Power Factor	89
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	3450 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.	VEM3212T								
SPEC.	35Z323L285G1								
HP	5								
VOLTS	230/460								
AMPS	12/6								
RPM	3450								
FRAME	182TC		HZ	60			PH	3	
SF	1.15	CODE	M	DES	A	CLASS	F		
NEMA NOM. EFF	86.5	PF	89						
RATING	40C AMB-CONT								
CC	010A								
ENCL	OPEN	SN							
DE	6206		ODE	6203					
VPWM INVERTER READY									
CT30-60(2:1) VT3-60(20:1)									
USABLE AT	50HZ 5HP 190/380V 14.6/7.3A							SF1.0	

AC Induction Motor Performance Data

Record # 53122

Typical performance - not guaranteed values

Winding: 35WGL285-R002				Type: 3544M		Enclosure: OPEN	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		5		Full Load Torque		7.66 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		12/6		Breakdown Torque		36.4 LB-FT	
R.P.M.		3450		Pull-up Torque		23.2 LB-FT	
Hz		60 Phase		Locked-rotor Torque		33.8 LB-FT	
NEMA Design Code		A KVA Code		Starting Current		64.8 A	
Service Factor (S.F.)		1.15		No-load Current		2.07 A	
NEMA Nom. Eff.		86.5 Power Factor		Line-line Res. @ 25°C		2.41 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		49°C	
S.F. Amps				Temp. Rise @ S.F. Load		59°C	
				Locked-rotor Power Factor		44.6	
				Rotor inertia		0.122 LB-FT2	

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	58	77	85	89	90	92	90
Efficiency	83.2	87.9	88.6	88.2	86.5	84.7	87.2
Speed	3563	3532	3499	3462	3422	3379	3438
Line amperes	2.54	3.52	4.7	6.03	7.52	9.08	6.92

ABB Motors and Mechanical Inc.

WINDING # 35WGL285

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 3450 RPM 460 V 3544M

TORQUES (LB-FT) : PO=36.4 PU=23.2 LR=33.8 LRA=64.8





