

ABB BALDOR RELIANCE III

Customer information packet

VEM3218T

5HP, 1750RPM, 3PH, 60HZ, 184TC, 3636M, ODP, N

Class - None

Division - Not Applicable

Specifications

Enclosure	ODP
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	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	14.000 A @ 208.0 V 14.000 A @ 230.0 V 7.000 A @ 460.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	7.0 a

Part Detail

Revision	-
Type	AC
Mech. spec.	36Q489
Base	
Status	PRD/A
Elec. spec.	36WGZ657
Layout	36LYQ489
Eff. date	11-14-2025
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	11-05-2025

Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3636M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	18.04 IN
Power Factor	80
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	1.125 IN
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

NP3553LUA											
CAT.NO.	VEM3218T										
SPEC.	36Q489Z657										
HP	5										
VOLTS	230/460										
AMPS	14/7										
RPM	1750										
FRAME	184TC	HZ		60			PH		3		
SF	1.15	CODE		J	DES		B	CLASS		F	
NEMA NOM. EFF	89.5	PF		80							
RATING	40C AMB-CONT										
CC	010A										
ENCL	ODP	SN									
DE	6206	ODE		6205							
VPWM INVERTER READY	SFA 15.0/7.5										
CT30-60(2:1) VT3-60(20:1)											
USABLE AT	50HZ 5HP 190/380V 15.6/7.8A										SF1.0

AC Induction Motor Performance Data

Record # 115738

Typical performance - not guaranteed values

Winding: 36WGZ657-R001			Type: 3636M		Enclosure: OPSB	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		5	Full Load Torque		14.97 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		14/7	Breakdown Torque		58.2 LB-FT	
R.P.M.		1750	Pull-up Torque		27 LB-FT	
Hz	60	Phase	Locked-rotor Torque		32.1 LB-FT	
NEMA Design Code	B	KVA Code	Starting Current		47.8 A	
Service Factor (S.F.)		1.15	No-load Current		3.47 A	
NEMA Nom. Eff.	89.5	Power Factor	Line-line Res. @ 25°C		2.6406 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		41°C	
S.F. Amps			Temp. Rise @ S.F. Load		50°C	
			Locked-rotor Power Factor		42.5	
			Rotor inertia		0.335 lb-ft²	

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	37	58	70	77	81	83	79
Efficiency	84.7	89.8	90.7	90.3	89.3	87.9	89.7
Speed	1789	1778.9	1767.9	1755.9	1742.6	1728.3	1748
Line amperes	3.79	4.51	5.52	6.73	8.12	9.65	7.56

ABB Motors and Mechanical Inc.

WINDING # 36WGZ657

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1750 RPM 460 V 3636M

TORQUES (LB-FT): PO=58.2 PU=27 LR=32.1 LRA=47.8



