

ABB BALDOR RELIANCE III

Customer information packet

VSPM3615T

5HP, 1755RPM, 3PH, 60HZ, 184TC, 3648M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
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	WEEE NEMA PREMIUM 4
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	13.200 A @ 230.0 V 6.600 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	6.6 a
Insulation Class	F

Part Detail

Revision	B
Type	AC
Mech. spec.	36P428
Base	
Status	PRD/A
Elec. spec.	36WGZ629
Layout	36LYP428
Eff. date	11-19-2025
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	01-03-2024

Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3648M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	18.48 IN
Power Factor	78
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 Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1755 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

NP4423A01A01L															
CAT #	VSPM3615T					WGT	101		LBS						
SPEC	36P428Z629					ENCL	TEFC								
SER #						CC	010A		IP	54					
HP	5			MAG CUR			6.4/3.2								
VOLTS	230/460					NEMA NOM. EFF					91				
AMPS	13.2/6.6					PF	78								
RATING	40C AMB-CONT														
RPM	1755					MAX RPM			2700						
FRAME	184TC		HZ	60		CODE		J		CLASS			F		
SER.F.	1.15		SF AMP	14.8/7.4					PH	3		DES	B		
DE	6206			ODE		6205									
LUBRICATION	POLYREX EM														
ID LOGO	INVERTER TYPE				VPWM		CHP	60		TO	90		1.5:1		
ID LOGO	WK2	0.447		CT	6		TO	60		10:1					
ID LOGO	SL HZ	1.5		VT	3		TO	60		20:1					
							QR								
YR															

AC Induction Motor Performance Data

Record # 99131

Typical performance - not guaranteed values

Winding: 36WGZ629-R001			Type: 3648M		Enclosure: TEFC			
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		13.2/6.6	Breakdown Torque		56.6 LB-FT			
R.P.M.		1755	Pull-up Torque		31.6 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		35.4 LB-FT		
NEMA Design Code		B	KVA Code	J	Starting Current		53.4 A	
Service Factor (S.F.)		1.15	No-load Current		3.26 A			
NEMA Nom. Eff.		91	Power Factor		78	Line-line Res. @ 25°C		2.0924 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		57°C	
S.F. Amps		14.8/7.4	Temp. Rise @ S.F. Load		70°C			
			Locked-rotor Power Factor		38.4			

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	39	60	72	79	82	84	81
Efficiency	85.9	90.6	91.4	91.1	90.3	89.1	90.6
Speed	1789.8	1780.2	1770.2	1758.9	1746.9	1733.6	1752
Line amperes	3.59	4.33	5.33	6.55	7.91	9.4	7.37

ABB Motors and Mechanical Inc.

WINDING # 36WGZ629

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1755 RPM 460 V 3648M

TORQUES (LB-FT) : PO=56.6 PU=31.6 LR=35.4 LRA=53.4





