

ABB BALDOR RELIANCE III

Customer information packet

VEBM3615T

5HP, 1755RPM, 3PH, 60HZ, 184TC, 3642M, 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	CSA CSA EEV NEMA PREMIUM UR
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	6.700 A @ 460.0 V 14.000 A @ 208.0 V 13.400 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

Part Detail

Revision	C
Type	AC
Mech. spec.	36E049
Base	
Status	PRD/A
Elec. spec.	36WGQ032
Layout	36LYE049
Eff. date	05-01-2024
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	12-04-2020

Heater Indicator	No Heater
High Voltage Full Load Amps	6.7 a
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	3642M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	23.06 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

NP1259L									
CAT.NO.	VEBM3615T								
SPEC.	36E049Q032G1								
HP	5								
VOLTS	230/460								
AMP	13.4/6.7								
RPM	1755								
FRAME	184TC		HZ	60			PH	3	
SER.F.	1.15	CODE	J	DES	B	CL	F		
NEMA-NOM-EFF	89.5	PF	78						
RATING	40C AMB-CONT								
CC	010A								
DE	6206		ODE	6205					
ENCL	TEFC	SN							

AC Induction Motor Performance Data

Record # 89917

Typical performance - not guaranteed values

Winding: 36WGQ032-R001			Type: 3642M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		5	Full Load Torque		15 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		13.4/6.7	Breakdown Torque		53.1 LB-FT		
R.P.M.		1755	Pull-up Torque		23.4 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		34.7 LB-FT	
NEMA Design Code		B	KVA Code	J	Starting Current		49.8 A
Service Factor (S.F.)		1.15	No-load Current		3.31 A		
NEMA Nom. Eff.		89.5	Power Factor	78	Line-line Res. @ 25°C		2.4 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		71°C
S.F. Amps					Temp. Rise @ S.F. Load		86°C
					Locked-rotor Power Factor		40.6635
					Rotor inertia		0.391 lb-ft²

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	38	60	72	79	82	84	81
Efficiency	83.8	88.9	89.8	89.5	88.4	86.8	88.8
Speed	1789	1778	1766	1753	1738	1722	1744
Line amperes	3.64	4.39	5.45	6.66	8.08	9.67	7.51

ABB Motors and Mechanical Inc.

WINDING # 36WQ032

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1755 RPM 460 V 3642M

TORQUES (LB-FT): PO=53.1 PU=23.4 LR=34.7 LRA=49.8





