

ABB BALDOR RELIANCE III

Customer information packet

VEDM3615T

5HP, 1750RPM, 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	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CCSA US CSA EEV NEMA PREMIUM 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
Constant Torque Speed Range	6
Current @ Voltage	6.700 A @ 460.0 V 13.900 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

Part Detail

Revision	H
Type	AC
Mech. spec.	36Q733
Base	
Status	PRD/A
Elec. spec.	36WGS268
Layout	36LYQ733
Eff. date	06-24-2021
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	04-21-2016

Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	6.7 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Exit	Ko Box
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	18.10 IN
Power Factor	78
Product Family	Dirty Duty Plus
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 Extension Location	Pulley End
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

NP3504											
CAT NO	VEDM3615T										
SPEC.	36Q733S268G1					ENCL	TEFC				
FRAME	184TC	HP	5								
VOLTS	230/460										
FLA	13.4/6.7				I.P.	56					
RPM	1750	RPM MAX				2700					
HZ	60	PH	3	CLASS		F					
SER.F.	1.15	DES	B	CC	010A						
NEMA-NOM-EFF	89.5										
RATING	40C AMB-CONT										
DE BRG	6206	ODE BRG				6205					
GREASE	POLYREX EM										
C HP FR	60	C HP TO		90							
CT HZ FROM	6	CT HZ TO		60	VT HZ FROM		6	VT HZ TO		60	
SER.NO	50C AT 1.0 SF										

AC Induction Motor Performance Data

Record # 55772

Typical performance - not guaranteed values

Winding: 36WGS268-R085			Type: 3642M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		5	Full Load Torque		14.9 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		13.4/6.7	Breakdown Torque		52.2 LB-FT		
R.P.M.		1750	Pull-up Torque		31.5 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		34.9 LB-FT	
NEMA Design Code		B	KVA Code	Starting Current		49.1 A	
Service Factor (S.F.)		1.15	No-load Current		3.24 A		
NEMA Nom. Eff.		89.5	Power Factor	Line-line Res. @ 25°C		2.31 Ω	
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		71°C
S.F. Amps					Temp. Rise @ S.F. Load		87°C
					Locked-rotor Power Factor		39.8
					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	39	60	72	78	83	83	81
Efficiency	84.9	89.7	90.3	89.8	88.8	87	89.2
Speed	1789.1	1776.2	1762.3	1749.7	1732.5	1714.3	1739
Line amperes	3.55	4.31	5.43	6.65	7.94	9.64	7.42

ABB Motors and Mechanical Inc.

WINDING # 36WGS268

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1750 RPM 460 V 3642M

TORQUES (LB-FT): PO=52.2 PU=31.5 LR=34.9 LRA=49.1





