

ABB BALDOR RELIANCE III

Customer information packet

VEWDM3651T

3HP, 1760RPM, 3PH, 60HZ, 145TC, 3646M, TENV, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	145TC
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	3.000 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	CSA CSA EEV 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	8.200 A @ 230.0 V 8.600 A @ 208.0 V 4.100 A @ 460.0 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 Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	K
Type	AC
Mech. spec.	36Q446
Base	
Status	PRD/A
Elec. spec.	36WGR412
Layout	36LYQ446
Eff. date	07-31-2024
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	02-27-2015

Heater Indicator	No Heater
High Voltage Full Load Amps	4.1 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	L
Lifting Lugs	Standard 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	3646M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.63 IN
Power Factor	75
Product Family	Wash Down
Pulley End Bearing Type	Sealed Bearing
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	Shaft Slinger
Speed	1760 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

NP1669L											
CAT.NO.	VEWDM3651T										
SPEC.	36Q446R412G1										
HP	3										
VOLTS	230/460										
AMP	8.2/4.1										
RPM	1760										
FRAME	145TC		HZ	60				PH	3		
SER.F.	1.15	CODE	L	DES	B	CLASS		F			
NEMA-NOM-EFF	89.5	PF	75								
RATING	40C AMB-CONT										
CC	010A										
DE	6206		ODE	6205							
ENCL	TENV	SN									
BLANK											

AC Induction Motor Performance Data

Record # 57338

Typical performance - not guaranteed values

Winding: 36WGR412-R003			Type: 3646M		Enclosure: TENV	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		3	Full Load Torque		9.02 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		8.2/4.1	Breakdown Torque		37.7 LB-FT	
R.P.M.		1760	Pull-up Torque		19.8 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		23.3 LB-FT	
NEMA Design Code		B KVA Code	Starting Current		36.3 A	
Service Factor (S.F.)		1.15	No-load Current		2.28 A	
NEMA Nom. Eff.		89.5 Power Factor	Line-line Res. @ 25°C		2.97 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		57°C	
S.F. Amps			Temp. Rise @ S.F. Load		67°C	
			Locked-rotor Power Factor		38.8	
			Rotor inertia		0.428 LB-FT2	

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	35	56	68	75	80	82	78
Efficiency	82.3	88.4	90.2	90.5	90.1	89.4	90.3
Speed	1791	1783	1774	1765	1755	1743	1759
Line amperes	2.48	2.88	3.46	4.16	4.93	5.78	4.62

ABB Motors and Mechanical Inc.

WINDING # 36WGR412

Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 1760 RPM 460 V 3646M

TORQUES (LB-FT): PO=37.7 PU=19.8 LR=23.3 LRA=36.3





