

ABB BALDOR RELIANCE III

Customer information packet

VESSWDM3615T

5HP, 1750RPM, 3PH, 60HZ, 184TC, 3646M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	184TC
Frame Material	Stainless 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
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	13.000 A @ 230.0 V 13.600 A @ 208.0 V 6.500 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
Heater Indicator	No Heater
High Voltage Full Load Amps	6.5 a
Insulation Class	F

Part Detail

Revision	K
Type	AC
Mech. spec.	36L747
Base	
Status	PRD/A
Elec. spec.	36WGS719
Layout	36LYL747
Eff. date	07-15-2026
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	02-27-2015

Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	No 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	18.32 IN
Power Factor	81
Product Family	Wash Down All Stainless Steel
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

NP1953B01											
CAT.NO.	VESSWDM3615T										
SPEC.	36L747S719G3										
HP	5										
VOLTS	230/460										
AMP	13/6.5										
RPM	1750										
FRAME	184TC			HZ	60			PH		3	
SER.F.	1.15		CODE	J	DES	B		CLASS		F	
NEMA-NOM-EFF	89.5		PF	81							
RATING	40C AMB-CONT										
CC	010A			USABLE AT 208V				N/A			
DE	6206		ODE	6205							
ENCL	TEFC	SN									
	4:1CT 20:1VT										

AC Induction Motor Performance Data

Record # 36851

Typical performance - not guaranteed values

Winding: 36WGS719-R001			Type: 3646M		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		13/6.5	Breakdown Torque		49.7 LB-FT			
R.P.M.		1750	Pull-up Torque		27.7 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		32.3 LB-FT		
NEMA Design Code		B	KVA Code	J	Starting Current		48.3 A	
Service Factor (S.F.)		1.15		No-load Current		2.91 A		
NEMA Nom. Eff.		89.5	Power Factor		81	Line-line Res. @ 25°C		2.3457 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		87°C		
S.F. Amps				Temp. Rise @ S.F. Load		109°C		

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	64	75	81	83	84	82
Efficiency	86.3	90.3	90.6	89.8	88.4	86.5	89
Speed	1788.5	1776.4	1763.2	1748.5	1732.5	1714.2	1739
Line amperes	3.26	4.07	5.17	6.44	7.96	9.65	7.35

ABB Motors and Mechanical Inc.

WINDING # 36WGS719

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1750 RPM 460 V 3646M

TORQUES (LB-FT) : PO=49.7 PU=27.7 LR=32.3 LRA=48.3





