

ABB BALDOR RELIANCE III

Customer information packet

VM3546-57

1HP, 1440RPM, 3PH, 50HZ, 56C, 3517M, TEFC, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56C
Frame Material	Steel
Frequency	50.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	1.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	230.0 V @ 50 HZ 400.0 V @ 50 HZ
Agency Approvals	CSA CE 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	1.800 A @ 400.0 V 3.100 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	80.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	M
Type	AC
Mech. spec.	35A013
Base	
Status	NLA/A
Elec. spec.	35WGM807
Layout	35LYA013
Eff. date	10-28-2016
CD Diagram	CD0022
Poles	04
Leads	6#18
Proprietary	False
Created date	09-21-2011

High Voltage Full Load Amps	1.8 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3517M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.23 IN
Power Factor	76
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	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1440 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

NP2717L									
CAT NO	VM3546-57								
SPEC.	35A013M807H1								
HP	1					PH	3		
VOLTS	230/400								
AMP	3.1/1.8								
FRAME	56C		HZ		50		I.P.		54
SER.F.	1.15	CODE		K	DES		B	CL	F
NEMA-NOM-EFF	80							% (100%)	
PF	76								
RATING	40C AMB-CONT				CC				
DE BRG	6205			ODE		6203			
ENCL	TEFC	SN							
BLANK	IE2-78.5(75%)75.0(50%)								

AC Induction Motor Performance Data

Record # 35159

Typical performance - not guaranteed values

Winding: 35WGM807-R002			Type: 3518M		Enclosure: TEFC		
Nameplate Data			400 V, 50 Hz: High Voltage Connection				
Rated Output (HP)		1	Full Load Torque		3.62 LB-FT		
Volts		230/400	Start Configuration		direct on line		
Full Load Amps		3.1/1.8	Breakdown Torque		14.1 LB-FT		
R.P.M.		1440	Pull-up Torque		8.95 LB-FT		
Hz	50 Phase	3	Locked-rotor Torque		10.64 LB-FT		
NEMA Design Code		B	KVA Code		K	Starting Current	12.98 A
Service Factor (S.F.)		1.15	No-load Current		1.14 A		
NEMA Nom. Eff.		80	Power Factor		76	Line-line Res. @ 25°C	14.4 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		52°C		
S.F. Amps			Temp. Rise @ S.F. Load		60°C		
			Locked-rotor Power Factor		70.3		
			Rotor inertia		0.106 LB-FT2		

Load Characteristics 400 V, 50 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	35	52	66	74	80	83	80
Efficiency	67	76.7	80	80.6	78.9	76.5	79.5
Speed	1487	1474	1459	1443	1424	1401	1431
Line amperes	1.17	1.31	1.52	1.79	2.11	2.52	1.95

ABB Motors and Mechanical Inc.

WINDING # 35WGM807

Typical performance - not guaranteed values.

1 HP 3 PH 50 HZ 1440 RPM 400 V 3518M

TORQUES (LB-FT): PO=14.1 PU=8.95 LR=10.64 LRA=12.98



