

ABB BALDOR RELIANCE III

Customer information packet

EMVM3709D

5.5KW, 3450RPM, 3PH, 60HZ, D132D, 3646M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	D132D
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	5.500 KW @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV CE
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	16.600 A @ 230.0 V 18.200 A @ 208.0 V 8.300 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Frame Prefix	D
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	H
Type	AC
Mech. spec.	36N539
Base	
Status	PRD/A
Elec. spec.	36WGR455
Layout	36LYN539
Eff. date	08-04-2025
CD Diagram	CD0005
Poles	02
Leads	9#16
Proprietary	False
Created date	05-12-2015

Heater Indicator	No Heater
High Voltage Full Load Amps	8.3 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	IEC
Motor Type	3646M
Mounting Arrangement	B5
Number of Poles	2
Overall Length	20.47 IN
Power Factor	91
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	D-Flange
Pulley Shaft Indicator	Tapped & Key
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.497 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3450 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

NP2672L									
CAT.NO.	EMVM3709D								
SPEC.	36N539R455G1								
IEC FRAME	D132D		KW		5.5				
VOLTS	230/460								
AMP	16.6/8.3								
RPM	3450				ENCL			TEFC	
HZ	60		PH		3		CL		F
SER.F.	1.15		DES		A		CODE		M
NEMA-NOM-EFF	89.5	I.P.		54					
RATING	40C AMB-CONT								
CC	010A	USABLE AT 208V							N/A
DE	6208	ODE		6205					
SER. #									

AC Induction Motor Performance Data

Record # 57409

Typical performance - not guaranteed values

Winding: 36WGR455-R004				Type: 3646M		Enclosure: TEFC		
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (KW)		5.5		Full Load Torque		11.1 LB-FT		
Volts		230/460		Start Configuration		direct on line		
Full Load Amps		16.6/8.3		Breakdown Torque		53.4 LB-FT		
R.P.M.		3450		Pull-up Torque		35 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		50.3 LB-FT		
NEMA Design Code		A	KVA Code	M		Starting Current		103 A
Service Factor (S.F.)		1.15		No-load Current		2.62 A		
NEMA Nom. Eff.		89.5	Power Factor	91		Line-line Res. @ 25°C		1.28 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		37°C		
S.F. Amps				Temp. Rise @ S.F. Load		45°C		
				Locked-rotor Power Factor		44.7		
				Rotor inertia		0.205 LB-FT2		

Load Characteristics 460 V, 60 Hz, 5.5 KW

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	60	81	89	92	93	93	93
Efficiency	86.4	90.9	91.4	91	90.4	88.8	90.6
Speed	3572	3545	3516	3487	3455	3422	3468
Line amperes	3.29	4.71	6.41	8.29	10.3	12.5	9.5

ABB Motors and Mechanical Inc.

WINDING # 36WGR455

Typical performance - not guaranteed values.

5.5 KW 3 PH 60 HZ 3450 RPM 460 V 3646M

TORQUES (LB-FT): PO=53.4 PU=35 LR=50.3 LRA=103





