

ABB BALDOR RELIANCE III

Customer information packet

EDM3546

1HP, 1770RPM, 3PH, 60HZ, 56, 3520M, TEFC, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56
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	1.000 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	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	3.200 A @ 230.0 V 3.200 A @ 208.0 V 1.600 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated

Part Detail

Revision	G
Type	AC
Mech. spec.	35E4313
Base	
Status	PRD/A
Elec. spec.	35WGG004
Layout	35LYE4313
Eff. date	09-08-2026
CD Diagram	CD0005
Poles	04
Leads	9#18 Y
Proprietary	False
Created date	01-10-2022

Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.6 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Max Speed	2700 rpm
Motor Finish	CLEAR COAT
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.29 IN
Power Factor	69
Product Family	Dirty Duty Plus
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 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	EDM3546										
SPEC.	35E4313G004G1					ENCL	TEFC				
FRAME	56	HP		1							
VOLTS	230/460										
FLA	3.2/1.6			I.P.		56					
RPM	1770	RPM MAX			2700						
HZ	60	PH	3	CLASS		F					
SER.F.	1.15	DES	B	CC	010A						
NEMA-NOM-EFF	85.5										
RATING	40C AMB-CONT										
DE BRG	6205	ODE BRG			6203						
GREASE	POLYREX EM										
INV.TYPE		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	SFA 3.4/1.7										

AC Induction Motor Performance Data

Record # 91625

Typical performance - not guaranteed values

Winding: 35WGG004-R001			Type: 3520M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		1	Full Load Torque		2.982 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		3.2/1.6	Breakdown Torque		14.6 LB-FT	
R.P.M.		1770	Pull-up Torque		7.57 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque	9.17 LB-FT	
NEMA Design Code	B	KVA Code	N	Starting Current	14.6 A	
Service Factor (S.F.)		1.15	No-load Current		1.2 A	
NEMA Nom. Eff.	85.5	Power Factor	69	Line-line Res. @ 25°C	16.049 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		36°C	
S.F. Amps		3.4/1.7	Temp. Rise @ S.F. Load		41°C	
			Locked-rotor Power Factor		61.549	
			Rotor inertia		0.144 lb-ft²	

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	29	45	58	67	73	78	71
Efficiency	71.1	81.2	84.7	85.8	86	85.6	85.9
Speed	1794	1787.3	1781.1	1774.3	1767.4	1759.4	1770
Line amperes	1.22	1.31	1.46	1.64	1.86	2.11	1.77

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WINDING # 35WGG004

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1770 RPM 460 V 3520M

TORQUES (LB-FT): PO=14.6 PU=7.57 LR=9.17 LRA=14.6





