

ABB BALDOR RELIANCE III

Customer information packet

VZDNM3538

.5HP, 1760RPM, 3PH, 60HZ, 56C, 3518M, TENV, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	56C
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	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	UR CSA
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	.820 A @ 460.0 V 1.640 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	82.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.8 a
Insulation Class	H

Part Detail

Revision	B
Type	AC
Mech. spec.	35E6691
Base	
Status	PRD/A
Elec. spec.	35WGK584
Layout	35LYE6691
Eff. date	08-05-2026
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	05-13-2025

Inverter Code	Inverter Duty
KVA Code	P
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	600 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3518M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.84 IN
Power Factor	69
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	0.625 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1760 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3304L									
CAT NO	VZDNM3538								
SPEC.	35E6691K584Z1								
FRAME	56C			HP	.5 TE				
VOLTS	230/460								
MAG CUR	1.2/.6			FLA		1.64/.82			
RPM	1760		RPM MAX		6000				
HZ	60	PH	3	CLASS		H			
SER.F.	1.00			SL HZ		1.33			
NEMA-NOM-EFF	82.5		WK2		0.13				
RATING	40C AMB-CONT								
DE BRG	6205		ODE BRG		6203				
CC	SER.NO								
	1000:1 CT 1.5:1 CHP								
	1.15 SF ON SINEWAVE								

AC Induction Motor Performance Data

Record # 110039

Typical performance - not guaranteed values

Winding: 35WGK584-R005			Type: 3518M		Enclosure: TENV			
Nameplate Data			460 V, 60 Hz: High Voltage Connection					
Rated Output (HP)		.5	Full Load Torque		1.49 LB-FT			
Volts		230/460	Start Configuration		direct on line			
Full Load Amps		1.64/.82	Breakdown Torque		7.9 LB-FT			
R.P.M.		1760	Pull-up Torque		4.7 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		5.4 LB-FT		
NEMA Design Code		B	KVA Code	P	Starting Current		8.1 A	
Service Factor (S.F.)		1	No-load Current		0.6 A			
NEMA Nom. Eff.		82.5	Power Factor		69	Line-line Res. @ 25°C		32.5 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		15°C	
					Locked-rotor Power Factor		70.6	
					Rotor inertia		0.13 lb-ft²	

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	30	46	59	69	75	80
Efficiency	66.6	77.8	82.1	83.1	83.5	82.7
Speed	1790	1781	1773	1763	1754	1743
Line amperes	0.62	0.67	0.73	0.82	0.94	1.06

ABB Motors and Mechanical Inc.

WINDING # 35WGK584

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1760 RPM 460 V 3518M

TORQUES (LB-FT): PO=7.9 PU=4.7 LR=5.4 LRA=8.1





