

ABB BALDOR RELIANCE III

Customer information packet

CBXMN050742

.75//.5HP, 1765//1470RPM, 3PH, 60//50HZ, 56C

Class - CLI GP D; CLII GP F,G

Division - Division I

Specifications

Enclosure	XPNV
Frame	56C
Frame Material	Steel
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	CLI GP D; CLII GP F,G
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	.500 HP @ 50 HZ .750 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	380.0 V @ 50 HZ 230.0 V @ 60 HZ 190.0 V @ 50 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV UL CSA
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	2.420 A @ 230.0 V 2.400 A @ 208.0 V 2.160 A @ 190.0 V 1.210 A @ 460.0 V 1.080 A @ 380.0 V
Design Code	B

Part Detail

Revision	D
Type	AC
Mech. spec.	35U641
Base	
Status	PRD/A
Elec. spec.	35WGG069
Layout	35LYU641
Eff. date	03-12-2025
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	02-23-2023

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
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	1.1 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	X3514M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.19 IN
Power Factor	74
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1470 rpm
	1765 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

NP0887XPSL												
NO.							CC					
S/N							TEMP CODE	T3C				
SPEC.	35U641G069						INV.TYPE	PWM				
CAT.NO.	CBXMN050742						C HP FR	60	C HP TO	90		
HP	.75//.5						CT HZ FROM	6	CT HZ TO	60		
VOLTS	230/460//190/380						VT HZ FROM	6	VT HZ TO	60		
AMPS	2.42/1.21//2.16/1.08						MAG CUR	-				
RPM	1765//1470						MX RPM	2700				
HZ	60//50	PH	3	CL	F	NOM.EFF.	82.5					
SER.F.	1.00	DES	B	SL HZ	1.2	WK2	0.101					
FRAME	56C	RATING		40C AMB-CONT								
	MAG CUR 1.7/.85//1.66/.83											
	1.15 SF ON SINE WAVE											

AC Induction Motor Performance Data

Record # 36545

Typical performance - not guaranteed values

Winding: 35WGP559-R005			Type: 3518M		Enclosure: TENV			
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		.75		Full Load Torque		2.27 LB-FT		
Volts		208-230/460		Start Configuration		direct on line		
Full Load Amps		2.4-2.2/1.1		Breakdown Torque		10.4 LB-FT		
R.P.M.		1740		Pull-up Torque		6.64 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		7.43 LB-FT		
NEMA Design Code		B	KVA Code	M		Starting Current	9.74 A	
Service Factor (S.F.)		1.15		No-load Current		0.647 A		
NEMA Nom. Eff.		82.5	Power Factor	78	Line-line Res. @ 25°C		22.2 Ω	
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		78°C
S.F. Amps						Temp. Rise @ S.F. Load		91°C
						Locked-rotor Power Factor		64.1
						Rotor inertia		0.106 LB-FT2

Load Characteristics 460 V, 60 Hz, 0.75 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	35	56	70	78	84	87	82
Efficiency	71.6	81.3	83.4	83.1	81.8	80.4	82.5
Speed	1787	1773	1758	1742	1727	1708	1734
Line amperes	0.686	0.783	0.916	1.09	1.27	1.5	1.19

ABB Motors and Mechanical Inc.

WINDING # 35WGP559

0.75 HP 3 PH 60 HZ 1740 RPM 460 V 3518M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=10.4 PU=6.64 LR=7.43 LRA=9.74





