

ABB BALDOR RELIANCE III

Customer information packet

CBXMN050542

0.5HP, 1770RPM, 3PH, 60HZ, 56C, 3512M, XPNV, F1

Class - CLI GP D; CLII GP F,G

Division - Division I

Specifications

Enclosure	XPNV
Frame	56C
Frame Material	Steel
Frequency	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 @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 208.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	UL CSA EEV
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	.900 A @ 460.0 V 1.800 A @ 230.0 V 1.900 A @ 208.0 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
Haz Area Temp Code	T3C

Part Detail

Revision	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGG155
Layout	35LYU641
Eff. date	03-08-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	10-28-2021

Heater Indicator	No Heater
High Voltage Full Load Amps	0.9 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3512M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.44 IN
Power Factor	62
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1770 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.	35-0000-1383						INV.TYPE	PWM					
CAT.NO.	CBXMN050542						C HP FR	60	C HP TO	90			
HP	.5						CT HZ FROM	6	CT HZ TO	60			
VOLTS	208-230/460						VT HZ FROM	6	VT HZ TO	60			
AMPS	1.9-1.8/0.9				MAG CUR		1.3-1.6/0.8						
RPM	1770				MX RPM		2700						
HZ	60	PH	3	CL	H	NOM.EFF.	80						
SER.F.	1.00	DES	B	SL HZ	1	WK2	0.087						
FRAME	56C	RATING		40C AMB-CONT									
	1.15 SF ON SINE WAVE												
	75C RISE												

AC Induction Motor Performance Data

Record # 87252

Preliminary Data Sheet

Winding: 35WGG155-R031			Type: 3512M		Enclosure: XPNV		
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		1.8/.9	Breakdown Torque		6.28 LB-FT		
R.P.M.		1770	Pull-up Torque		3.26 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque		4.04 LB-FT		
NEMA Design Code		B	KVA Code		M	Starting Current	6.71 A
Service Factor (S.F.)		1.25	No-load Current		0.792 A		
NEMA Nom. Eff.		80	Power Factor		65	Line-line Res. @ 25°C	43.2 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		58°C
S.F. Amps		2/1	Temp. Rise @ S.F. Load		68°C		
			Locked-rotor Power Factor		70.8		
			Rotor inertia		0.0866 lb-ft²		

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	27	41	52	62	69	75	69
Efficiency	56.5	70.7	76.5	78.9	80	80	80
Speed	1792	1786	1779	1771	1763	1755	1763
Line amperes	0.795	0.827	0.889	0.966	1.06	1.18	1.06

ABB Motors and Mechanical Inc.

WINDING # 35WGG155

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1770 RPM 460 V 3512M

TORQUES (LB-FT): PO=6.28 PU=3.26 LR=4.04 LRA=6.71





