

ABB BALDOR RELIANCE III

Customer information packet

CDM3539

.5HP, 1140RPM, 3PH, 60HZ, 56C, 3428M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
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	1200 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	UR CCSA US
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	1.300 A @ 460.0 V 2.600 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	72.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	L
Type	AC
Mech. spec.	34M811
Base	
Status	PRD/A
Elec. spec.	34WGW012
Layout	34LYM811
Eff. date	12-01-2025
CD Diagram	CD0005
Poles	06
Leads	9#18
Proprietary	False
Created date	04-20-2016

High Voltage Full Load Amps	1.3 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	1800 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3428M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	12.85 IN
Power Factor	51
Product Family	Dirty Duty Plus
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1140 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

NP3659									
CAT.NO.	CDM3539								
SPEC.	34M811W012G1					ENCL		TEFC	
FRAME	56C		H.P.		.5				
VOLTS	230/460								
AMPS	2.6/1.3					IP		56	
R.P.M.	1140								
HZ.	60		PH.		3		CLASS		F
SER.F.	1.25		DES.		B		CC		
NEMA NOM. EFF.	72								
RATING	40C AMB-CONT								
DE	6203		ODE		6203				
GREASE	POLYREX EM								
SN									
	50C AT 1.0SF								
	SFA 2.8/1.4								

AC Induction Motor Performance Data

Record # 55849

Typical performance - not guaranteed values

Winding: 34WGW012-R037				Type: 3428M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		.5		Full Load Torque		2.32 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		2.6/1.3		Breakdown Torque		11.4 LB-FT	
R.P.M.		1140		Pull-up Torque		9.67 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		10.4 LB-FT	
NEMA Design Code		B	KVA Code	N	Starting Current		7.42 A
Service Factor (S.F.)		1.25		No-load Current		1.09 A	
NEMA Nom. Eff.		72	Power Factor	51	Line-line Res. @ 25°C		21.3 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		54°C	
S.F. Amps		2.8/1.4		Temp. Rise @ S.F. Load		61°C	
				Locked-rotor Power Factor		55.5	
				Rotor inertia		0.0665 LB-FT2	

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	21	32	41	50	58	63	58
Efficiency	50.4	64.8	70.3	73.1	73.5	72.1	73.5
Speed	1188	1176	1162	1148	1131	1110	1131
Line amperes	1.11	1.15	1.21	1.29	1.4	1.53	1.4

ABB Motors and Mechanical Inc.

WINDING # 34GW012

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1140 RPM 460 V 3428M

TORQUES (LB-FT): PO=11.4 PU=9.67 LR=10.4 LRA=7.42





