

ABB BALDOR RELIANCE III

Customer information packet

CEM3156T-G

1HP, 1170RPM, 3PH, 60HZ, 145TC, 3526M, OPSB, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	145TC
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	1200 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV 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
Current @ Voltage	1.500 A @ 460.0 V 3.000 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	1.5 a

Part Detail

Revision	F
Type	AC
Mech. spec.	35E2907
Base	
Status	PRD/A
Elec. spec.	35WGG019
Layout	35LY-000-271
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	06
Leads	9#18
Proprietary	False
Created date	02-23-2023

Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3524M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	12.12 IN
Power Factor	67
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1170 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

NP3553LUA									
CAT.NO.	CEM3156T-G								
SPEC.	35E2907G019								
HP	1								
VOLTS	230/460								
AMPS	3/1.5								
RPM	1170								
FRAME	145TC		HZ	60		PH	3		
SF	1.15	CODE	J	DES	B	CLASS	H		
NEMA NOM. EFF	82.5	PF	67						
RATING	40C AMB-CONT								
CC									
ENCL	OPSB	SN							
DE	6205		ODE	6203					
VPWM INVERTER READY		SFA 3.7/1.85							
CT30-60(2:1) VT3-60(20:1)									
USABLE AT	50HZ 1HP 190/380V 4/2A								SF1.0

AC Induction Motor Performance Data

Record # 53337

Typical performance - not guaranteed values

Winding: 35WGM850-R016			Type: 3524M		Enclosure: OPSB	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		1	Full Load Torque			4.5 LB-FT
Volts		230/460	Start Configuration			direct on line
Full Load Amps		3.6/1.8	Breakdown Torque			14 LB-FT
R.P.M.		1155	Pull-up Torque			9.71 LB-FT
Hz	60	Phase	3	Locked-rotor Torque		10.2 LB-FT
NEMA Design Code	B	KVA Code	J	Starting Current		9.83 A
Service Factor (S.F.)		1.15	No-load Current			1.16 A
NEMA Nom. Eff.	82.5	Power Factor	64	Line-line Res. @ 25°C		16.2 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load			34°C
S.F. Amps			Temp. Rise @ S.F. Load			41°C
			Locked-rotor Power Factor			41.9
			Rotor inertia			0.143 LB-FT2

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	27	44	56	64	70	73	68
Efficiency	70.8	80.3	82.9	82.8	81.8	80	82.2
Speed	1189	1179	1169	1156	1142	1126	1148
Line amperes	1.21	1.33	1.51	1.76	2.04	2.38	1.93

ABB Motors and Mechanical Inc.

WINDING # 35WGM850

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1155 RPM 460 V 3524M

TORQUES (LB-FT): PO=14 PU=9.71 LR=10.2 LRA=9.83







