



Customer information packet

CEM3154T

1.5HP, 1770RPM, 3PH, 60HZ, 145TC, 3524M, OPSB

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	1.500 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	CSA EEV NEMA PREMIUM 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	4.640 A @ 208.0 V 4.600 A @ 230.0 V 2.300 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

Part detail

Revision	C
Type	AC
Mech. spec.	35BB102
Base	
Status	PRD/A
Elec. spec.	35WGL955
Layout	35LYBB102
Eff. date	06-11-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	01-10-2022

Heater Indicator	No Heater
High Voltage Full Load Amps	2.3 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	M
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	4
Overall Length	11.62 IN
Power Factor	72
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 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.	CEM3154T									
SPEC.	35BB102L955G1									
HP	1.5									
VOLTS	230/460									
AMPS	4.6/2.3									
RPM	1770									
FRAME	145TC		HZ	60			PH	3		
SF	1.15		CODE	M	DES	B	CLASS	F		
NEMA NOM. EFF	86.5		PF	72						
RATING	40C AMB-CONT									
CC	010A									
ENCL	OPSB		SN							
DE	6205		ODE	6203						
VPWM INVERTER READY		SFA 5/2.5								
CT30-60(2:1) VT3-60(20:1)										
USABLE AT	1.5HP 190/380V 50HZ 5.2/2.6A							SF1.0		

AC Induction Motor Performance Data

Record # 95388

Typical performance - not guaranteed values

Winding: 35WGL955-R002			Type: 3524M		Enclosure: OPEN		
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		1.5		Full Load Torque		4.48 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		4.6/2.3		Breakdown Torque		18.8 LB-FT	
R.P.M.		1770		Pull-up Torque		9.6 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		12.6 LB-FT	
NEMA Design Code		B		KVA Code	M	Starting Current	19.7 A
Service Factor (S.F.)		1.15		No-load Current		1.51 A	
NEMA Nom. Eff.		86.5		Power Factor	72	Line-line Res. @ 25°C	11.8 Ω
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load	48°C
S.F. Amps		5/2.5		Temp. Rise @ S.F. Load		57°C	
				Locked-rotor Power Factor		58.4	
				Rotor inertia		0.173 lb-ft²	

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	31	49	63	72	78	81	76
Efficiency	75.1	83.5	86	86.5	85.8	84.8	86.1
Speed	1792	1785	1777	1769	1760	1750	1764
Line amperes	1.56	1.72	1.97	2.28	2.65	3.06	2.5

ABB Motors and Mechanical Inc.

WINDING # 35WGL955

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1770 RPM 460 V 3524M

TORQUES (LB-FT): PO=18.8 PU=9.6 LR=12.6 LRA=19.7





