



Customer information packet

CEM3120T-G

1.5HP, 3490RPM, 3PH, 60HZ, 143TC, 3518M, OPSB

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	143TC
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	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA 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	4.000 A @ 230.0 V 2.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	2.0 a

Part detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGM761
Layout	35LY-000-271
Eff. date	06-11-2024
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	03-09-2020

Insulation Class	H
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3518M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.62 IN
Power Factor	83
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	3490 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.	CEM3120T-G								
SPEC.	35-0000836								
HP	1.5								
VOLTS	230/460								
AMPS	4/2								
RPM	3490								
FRAME	143TC		HZ	60		PH	3		
SF	1.15	CODE	L	DES	B	CLASS	H		
NEMA NOM. EFF	84	PF	83						
RATING	40C AMB-CONT								
CC	010A								
ENCL	OPSB	SN							
DE	6205		ODE	6203					
VPWM INVERTER READY									
CT30-60(2:1) VT3-60(20:1)									
USABLE AT	50HZ 1.5HP 190/380V 4.6/2.3A						SF1.0		

AC Induction Motor Performance Data

Record # 53128

Typical performance - not guaranteed values

Winding: 35WGM761-R009			Type: 3518M		Enclosure: OPSB		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		1.5	Full Load Torque		2.26 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		4/2	Breakdown Torque		9.32 LB-FT		
R.P.M.		3490	Pull-up Torque		4.18 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		6.79 LB-FT	
NEMA Design Code		B	KVA Code	L	Starting Current		17.2 A
Service Factor (S.F.)		1.15	No-load Current		1.05 A		
NEMA Nom. Eff.		84	Power Factor	83	Line-line Res. @ 25°C		12.7 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		24°C
S.F. Amps					Temp. Rise @ S.F. Load		28°C
					Locked-rotor Power Factor		64
					Rotor inertia		0.0493 LB-FT2

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	43	64	77	83	87	89	85
Efficiency	73.9	82.4	85.1	85.1	84.3	83.1	84.6
Speed	3574	3550	3524	3496	3465	3430	3477
Line amperes	1.14	1.35	1.63	1.99	2.41	2.84	2.24

ABB Motors and Mechanical Inc.

WINDING # 35WGM761

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 3490 RPM 460 V 3518M

TORQUES (LB-FT): PO=9.32 PU=4.18 LR=6.79 LRA=17.2





