



Customer information packet

VEM3157T

2HP, 1760RPM, 3PH, 60HZ, 145TC, 3528M, ODP, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	ODP
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	2.000 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	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	5.800 A @ 208.0 V 5.600 A @ 230.0 V 2.800 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	E
Type	AC
Mech. spec.	35Z413
Base	
Status	PRD/A
Elec. spec.	35WGG073
Layout	35LYZ413
Eff. date	09-19-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	02-21-2023

Heater Indicator	No Heater
High Voltage Full Load Amps	2.8 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	K
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	3528M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.25 IN
Power Factor	77
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	1760 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.	VEM3157T								
SPEC.	35Z413G073G1								
HP	2								
VOLTS	230/460								
AMPS	5.6/2.8								
RPM	1760								
FRAME	145TC		HZ	60			PH	3	
SF	1.15	CODE	K	DES	B	CLASS	F		
NEMA NOM. EFF	86.5	PF	77						
RATING	40C AMB-CONT								
CC	010A								
ENCL	ODP	SN							
DE	6205		ODE	6203					
VPWM INVERTER READY	SFA 6.3/3.15								
CT30-60(2:1) VT3-60(20:1)									
USABLE AT	2HP 50HZ 190/380V 6.6/3.3A							SF1.0	

AC Induction Motor Performance Data

Record # 81963

Typical performance - not guaranteed values

Winding: 35WGG073-R009			Type: 3528M	Enclosure: OPEN			
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		2	Full Load Torque		5.99 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		5.6/2.8	Breakdown Torque		20.5 LB-FT		
R.P.M.		1760	Pull-up Torque		13.8 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		15 LB-FT	
NEMA Design Code		B	KVA Code	L	Starting Current		22.5 A
Service Factor (S.F.)		1.15		No-load Current		1.62 A	
NEMA Nom. Eff.		86.5	Power Factor	74	Line-line Res. @ 25°C		9.54 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		64°C	
S.F. Amps				Temp. Rise @ S.F. Load		77°C	
				Locked-rotor Power Factor		57.9	
				Rotor inertia		0.202 lb-ft²	

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	35	55	68	76	81	84	83
Efficiency	78.2	85.3	86.8	86.5	85.4	83.6	86.3
Speed	1791	1782	1771	1760	1748	1734	1758
Line amperes	1.71	1.97	2.34	2.82	3.36	3.97	3.02

ABB Motors and Mechanical Inc.

WINDING # 35WGG073

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 1760 RPM 460 V 3528M

TORQUES (LB-FT): PO=20.5 PU=13.8 LR=15 LRA=22.5





