

ABB BALDOR RELIANCE III

Customer information packet

VEM8005T

2HP, 1760RPM, 3PH, 60HZ, 145TC, 0526M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	145TC
Frame Material	Iron
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	G
Type	AC
Mech. spec.	05E533
Base	
Status	PRD/A
Elec. spec.	05WGX509
Layout	05LYE533
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	04
Leads	9#18 Y
Proprietary	False
Created date	01-10-2022

Heater Indicator	No Heater
High Voltage Full Load Amps	2.8 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	L
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	0526M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.25 IN
Power Factor	76
Product Family	Dirty Duty (Not For DC)
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	Shaft 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

NP1267									
CAT.NO.	VEM8005T								
SPEC.	05E533X509G1								
HP	2								
VOLTS	230/460								
AMP	5.6/2.8								
RPM	1760								
FRAME	145TC		HZ	60		PH		3	
SER.F.	1.15		CODE	L		DES	B		CL F
NEMA-NOM-EFF	86.5		PF	76					
RATING	40C AMB-CONT								
CC	010A								
DE	6205		ODE	6203					
ENCL	TEFC		SN						
	SFA 6.4/3.2								

AC Induction Motor Performance Data

Record # 78972

Typical performance - not guaranteed values

Winding: 05WGX509-R001			Type: 0526M		Enclosure: TEFC			
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		2		Full Load Torque		5.976 LB-FT		
Volts		230/460		Start Configuration		direct on line		
Full Load Amps		5.6/2.8		Breakdown Torque		23.5 LB-FT		
R.P.M.		1760		Pull-up Torque		11.5 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		15.6 LB-FT		
NEMA Design Code		B	KVA Code	L		Starting Current	22.7 A	
Service Factor (S.F.)		1.15		No-load Current		1.69 A		
NEMA Nom. Eff.		86.5	Power Factor	75	Line-line Res. @ 25°C		9.5456 Ω	
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		40°C
S.F. Amps						Temp. Rise @ S.F. Load		48°C
						Locked-rotor Power Factor		58.1

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	34	55	68	77	81	84	79
Efficiency	77.5	85.2	86.9	86.8	85.8	84.3	86.2
Speed	1789.9	1781.4	1772.2	1762.2	1751.3	1739.3	1756
Line amperes	1.75	1.99	2.37	2.83	3.36	3.96	3.15

ABB Motors and Mechanical Inc.

WINDING # 05WGX509

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 1760 RPM 460 V 0526M

TORQUES (LB-FT): PO=23.5 PU=11.5 LR=15.6 LRA=22.7





