ABB BALDOR RELIANCE

Customer information packet

VEM8005T

2HP, 1760RPM, 3PH, 60HZ, 145TC, 0526M, TEFC, F1
Class - None
Division - Not Applicable

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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							

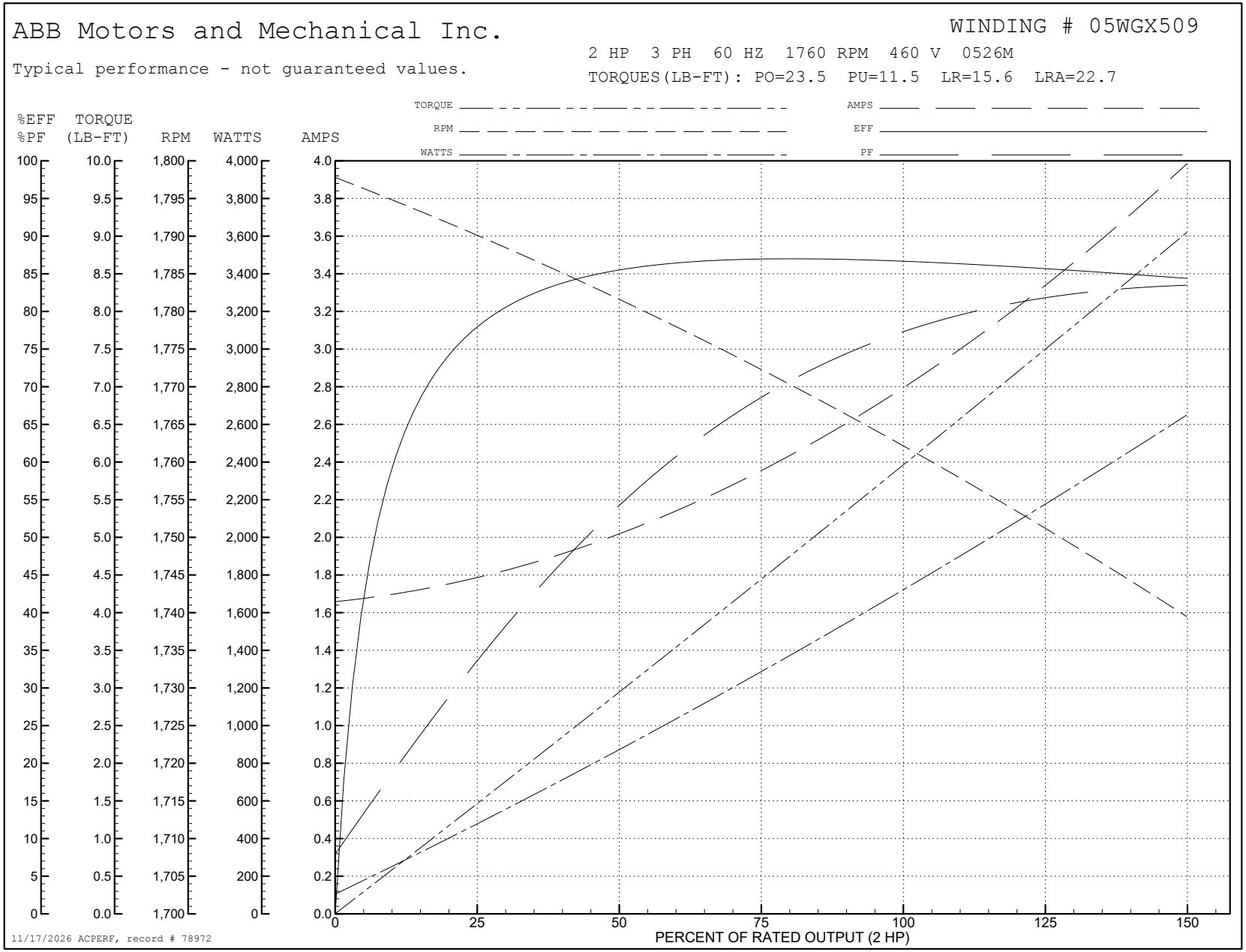
AC Induction Motor Performance Data
Record # 78972
Typical performance - not guaranteed values

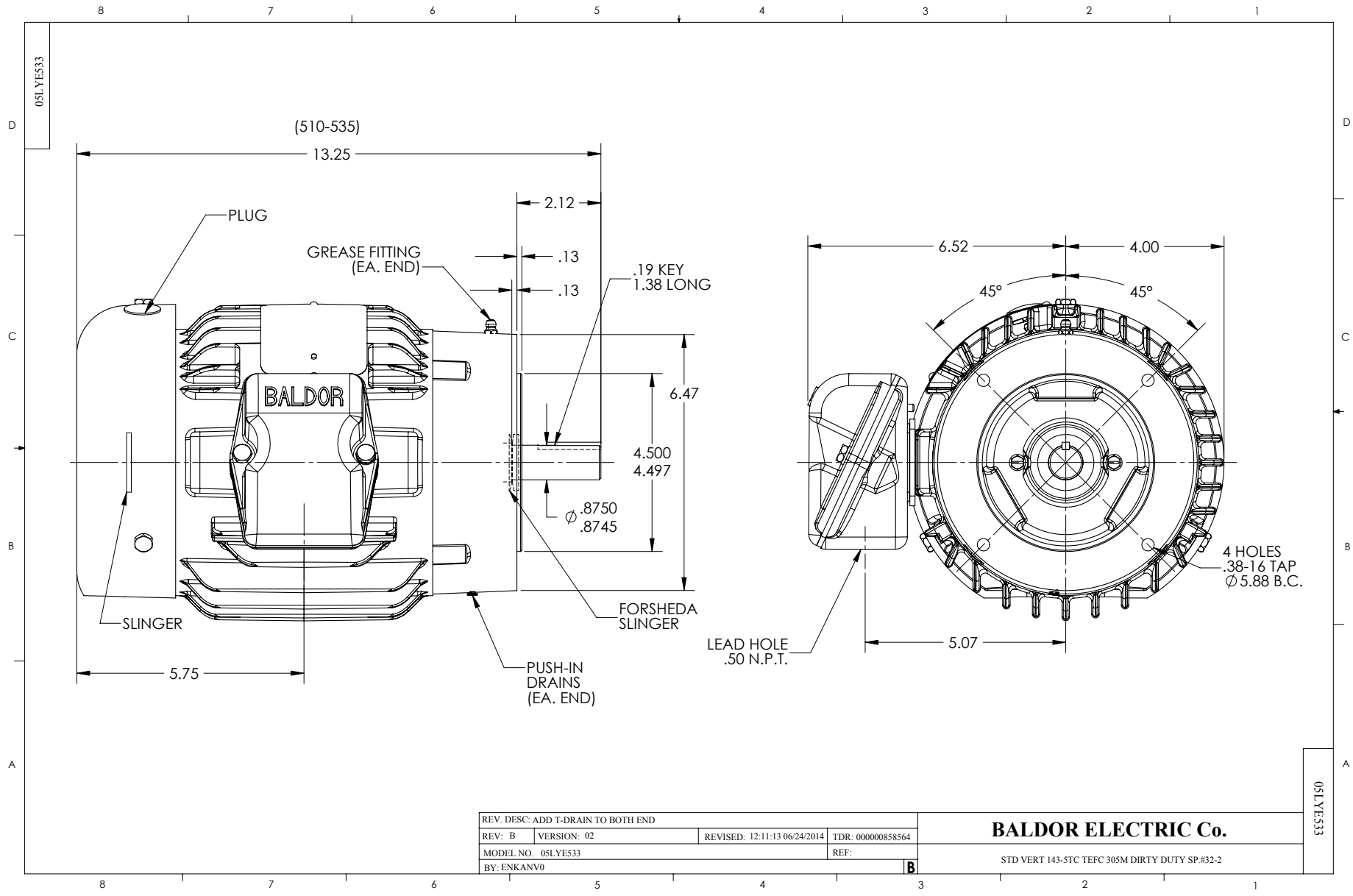
Winding: 05WGX509-R001	**Type:** 0526M	**Enclosure:** TEFC

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. @ 25ºC**	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

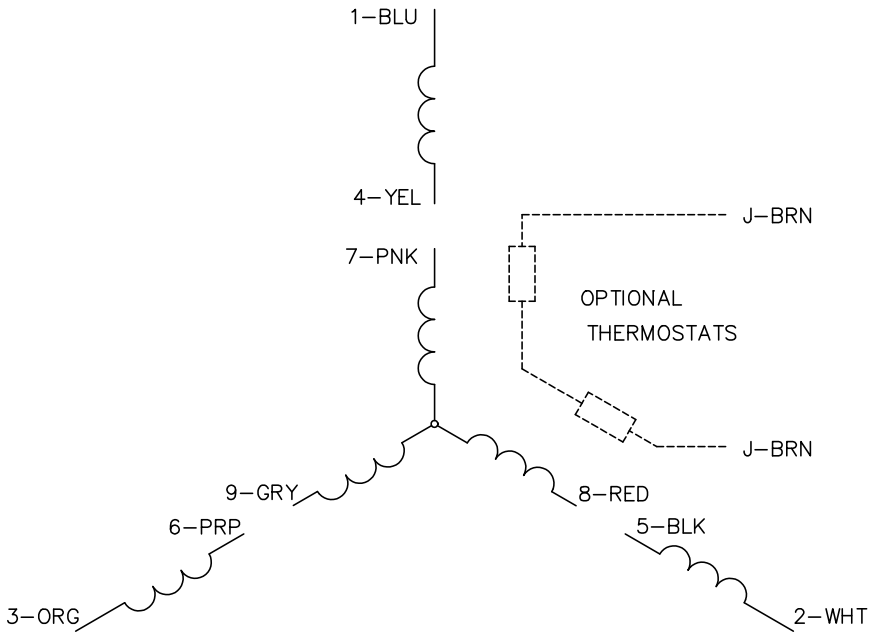
Load Characteristics 460 V, 60 Hz, 2 HP

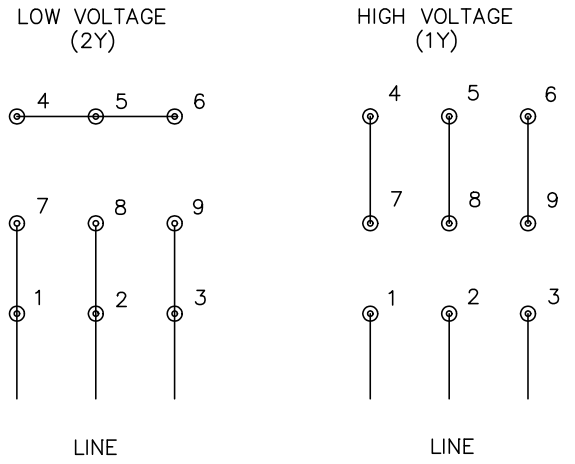
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	34	55	68	77	81	84	79
Efficiency	77.5	85.2	86.9	86.8	85.8	84.3	86.2
Speed	1789.9	1781.4	1772.2	1762.2	1751.3	1739.3	1756
Line amperes	1.75	1.99	2.37	2.83	3.36	3.96	3.15


ABB Motors and Mechanical Inc.
WINDING # 05WGX509
2 HP 3 PH 60 HZ 1760 RPM 460 V 0526M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=23.5 PU=11.5 LR=15.6 LRA=22.7
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (2 HP)
11/17/2026 ACPERF, record # 78972


05LYE533
(510-535)
13.25
2.12
PLUG
GREASE FITTING
(EA. END)
.13
.13
.19 KEY
1.38 LONG
BALDOR
6.47
4.500
4.497
∅.8750
.8745
SLINGER
FORSHEDA
SLINGER
5.75
PUSH-IN
DRAINS
(EA. END)
6.52
4.00
45°
45°
4 HOLES
.38-16 TAP
∅5.88 B.C.
LEAD HOLE
.50 N.P.T.
5.07
REV. DESC: ADD T-DRAIN TO BOTH END
REV: B
VERSION: 02
REVISED: 12:11:13 06/24/2014
TDR: 000000858564
MODEL NO. 05LYE533
REF:
BY: ENKANV0
B
BALDOR ELECTRIC Co.
STD VERT 143-5TC TEFC 305M DIRTY DUTY SP.#32-2
05LYE533

CD0005





NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS