ABB BALDOR RELIANCE

Customer information packet

IDNM3581T

1HP, 1770RPM, 3PH, 60HZ, 143TC, 0522M, TENV, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TENV
Frame	143TC
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	1.000 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
	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	3.200 A @ 230.0 V
	1.600 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.6 a
Insulation Class	H

Part Detail

Revision	G
Type	AC
Mech. spec.	05E534
Base	
Status	PRD/A
Elec. spec.	05WGX545
Layout	05LYE534
Eff. date	08-19-2026
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	03-11-2022

Inverter Code	Inverter Ready
KVA Code	N
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	6000 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0522M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	14.65 IN
Power Factor	68
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
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	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP4544L									
CAT.NO.	IDNM3581T								
SPEC.	05E534X545G1								
FRAME	143TC		**H.P.**	1					
VOLTS	230/460								
MAG. CUR.	2.14/1.07				**F.L. AMPS**	3.2/1.6			
R.P.M.	1770			**R.P.M. MAX**	6000				
HZ.	60	**PH.**	3	**CLASS**	H				
SER.F.	1.00	**DES.**	B	**SL HZ**	0.77				
NEMA NOM. EFF.	85.5	**WK2**	0.159						
BLOWER		**V**		**PH**		**HZ**		**AMPS**	
RATING	40C AMB-CONT			**ENCL**	TENV				
DE	6205	**ODE**	6203						
CC	010A	**SN**							
	1000:1 CT/VT								

Parts List

Part number	Description	Quantity
SA408876	SA 05E534X545G1	1.000 ea
RA400423	RA 05E534X545G1	1.000 ea
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
HW3201A05	3/8-16 EYEBOLT	1.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
10XN2520A06	1/4 20X3/8 HX HD CAP	2.000 ea
06CB3000	BALDOR CONDUIT BOX CAST	1.000 ea
06GS1000	GASKET,CONDUIT BOX	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
35EP1100B45	FRONT TENV 203 BRG W/GRSR & THRU-SHAFT E	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP1329A01	PU EP ENCL 143-5TC 205 BRG W/GRSR & STD	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
HA3100A28	THRUBOLT 10-32 X 8.187	4.000 ea
35FH4801G	THRU-SHAFT ENCODER COVER INV/VECTOR F1 &	1.000 ea
WD4129	1.50 X 1.50 GRAY SNAP IN PLUG PROMOULD #	2.000 ea
10XN2520A08	1/4-20X1/2 HEX HEAD CAP	4.000 ea
10XN2520A08	1/4-20X1/2 HEX HEAD CAP	1.000 ea
06CB3500	BALDOR CONDUIT BOX LID	1.000 ea
06GS1001	BALDOR CONDUIT BOX GASKET	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
MJ5004A05	#242-21 LOCTITE GENERAL PURPOSE MED. STR	0.005 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb

MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.022 ga
LC0145B01	CONNECTION LABEL	1.000 ea
NP4544L	ALUM INV UL EEV CC NEMA PREM W/ENCL	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

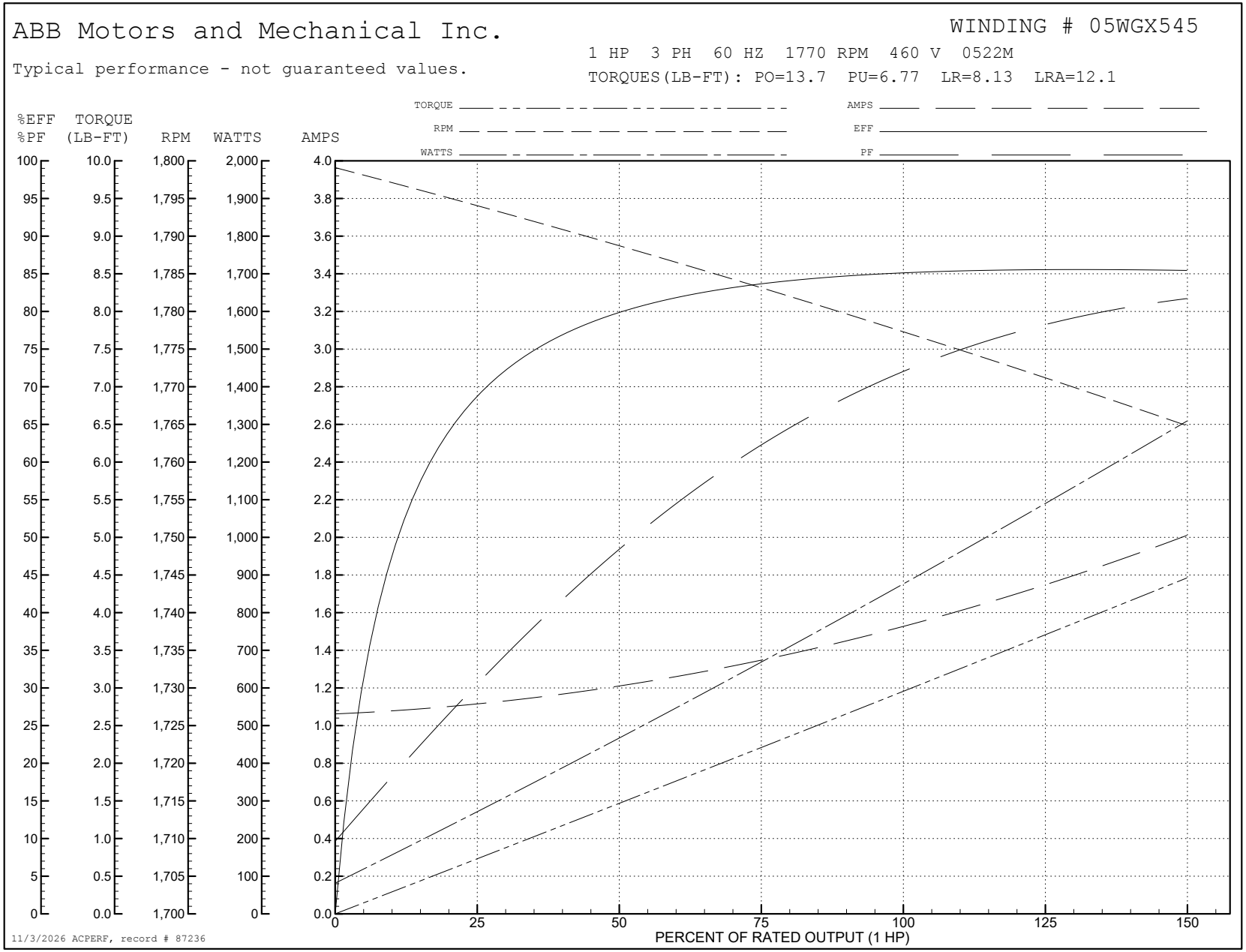
AC Induction Motor Performance Data
Record # 87236
Preliminary Data Sheet

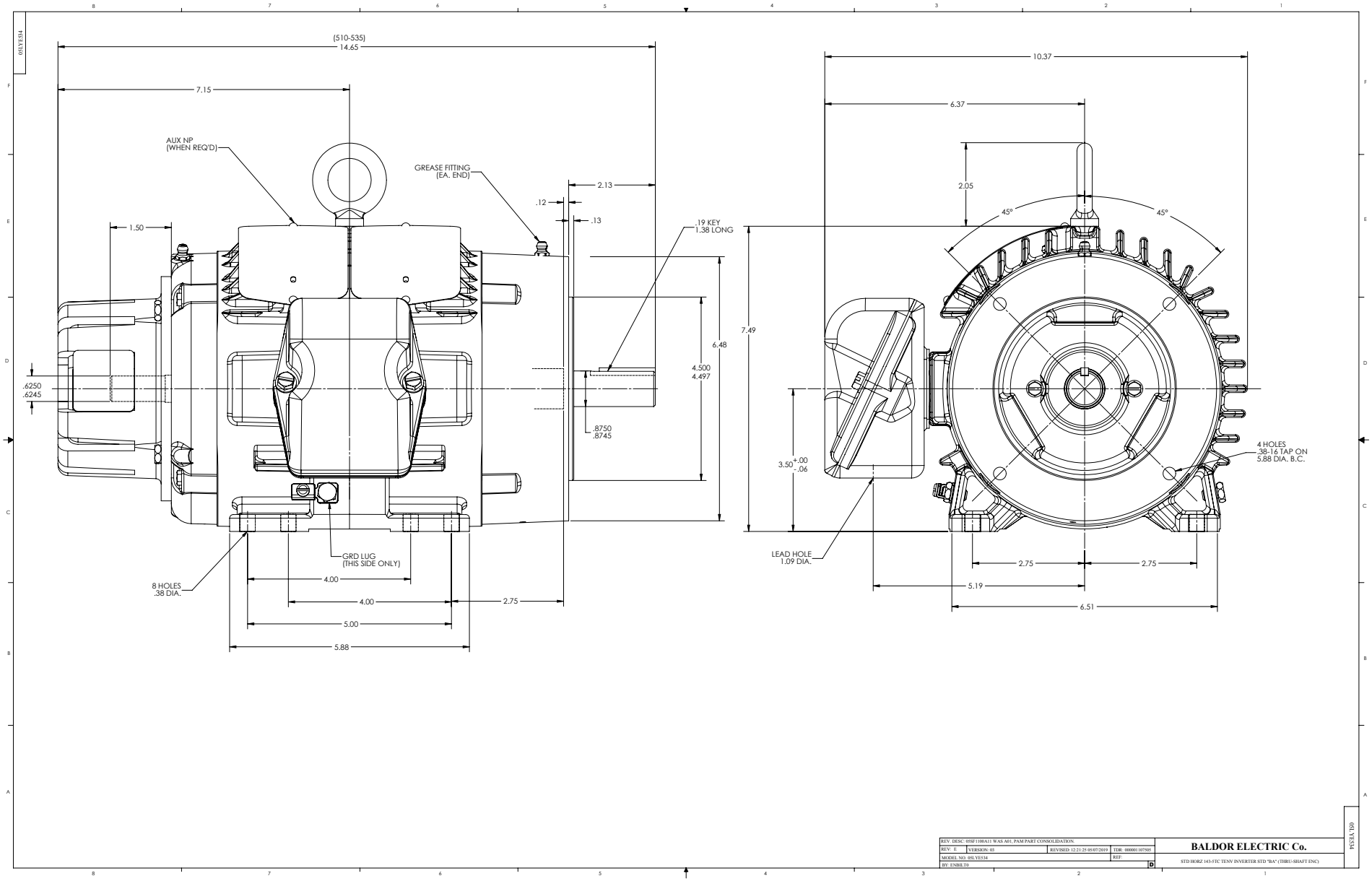
Winding: 05WGX545-R005	**Type:** 0522M	**Enclosure:** TENV

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1	**Full Load Torque**	2.97 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			3.2/1.6	**Breakdown Torque**	13.7 LB-FT
R.P.M.			1770	**Pull-up Torque**	6.77 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	8.13 LB-FT
NEMA Design Code	B	**KVA Code**	N	**Starting Current**	12.1 A
Service Factor (S.F.)			1	**No-load Current**	1.07 A
NEMA Nom. Eff.	85.5	**Power Factor**	68	**Line-line Res. @ 25ºC**	16.4 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	
				Locked-rotor Power Factor	61.4
				Rotor inertia	0.159 lb-ft²

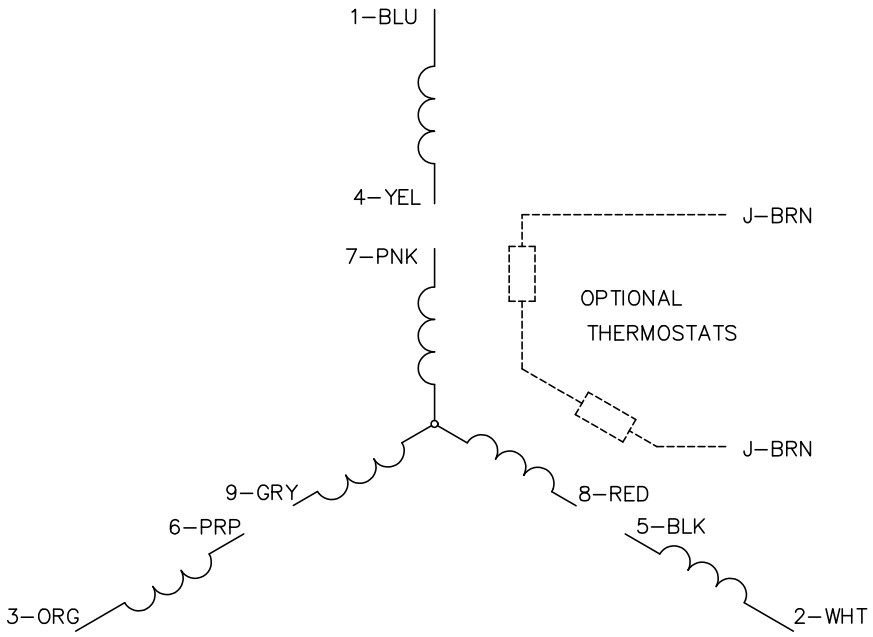
Load Characteristics 460 V, 60 Hz, 1 HP

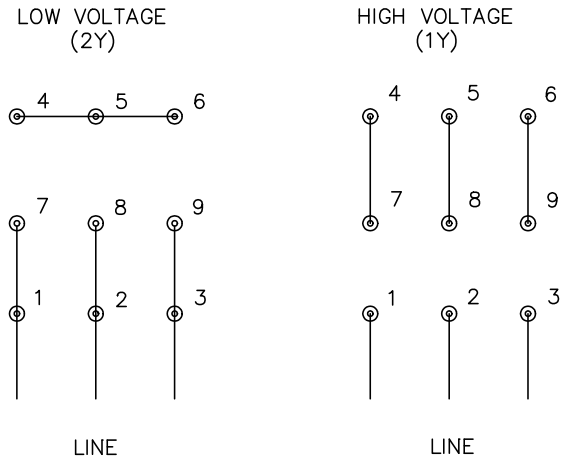
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	31	49	62	72	78	82
Efficiency	68.5	79.7	83.6	85.1	85.6	85.5
Speed	1794	1789	1783	1777	1771	1765
Line amperes	1.11	1.2	1.35	1.54	1.76	2


ABB Motors and Mechanical Inc.
WINDING # 05WGX545
1 HP 3 PH 60 HZ 1770 RPM 460 V 0522M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=13.7 PU=6.77 LR=8.13 LRA=12.1
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (1 HP)
11/3/2026 ACPERF, record # 87236


(510-535)
14.65
7.15
AUX NP
(WHEN REQ'D)
GREASE FITTING
(EA. END)
2.13
.12
.13
.19 KEY
1.38 LONG
1.50
6.48
4.500
4.497
.6250
.6245
.8750
.8745
GRD LUG
(THIS SIDE ONLY)
8 HOLES
.38 DIA.
4.00
4.00
2.75
5.00
5.88
10.37
6.37
2.05
45°
45°
7.49
3.50 +.00 -.06
4 HOLES
.38-16 TAP ON
5.88 DIA. B.C.
LEAD HOLE
1.09 DIA.
2.75
2.75
5.19
6.51
BALDOR ELECTRIC Co.
STD HORZ 143-5TC TENV INVERTER STD "BA" (THRU-SHAFT ENC)
05LYE534

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