



Customer information packet

CECP83580T-4

1HP, 3500RPM, 3PH, 60HZ, 143TC, 0514M, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	143TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CL I GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSA US CSA EEV NEMA PREMIUM 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
Constant Torque Speed Range	1.7
Current @ Voltage	1.650 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	77.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Haz Area Temp Code	T4

Part detail

Revision	B
Type	AC
Mech. spec.	05E943
Base	
Status	PRD/A
Elec. spec.	05WGX522
Layout	05LYE943
Eff. date	12-30-2024
CD Diagram	CD0006
Poles	02
Leads	3#18
Proprietary	False
Created date	03-25-2022

Heater Indicator	No Heater
High Voltage Full Load Amps	1.7 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	L
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0514M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.38 IN
Power Factor	78
Product Family	Chem Process S/P 32-8 IEEE 841
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.25
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3500 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

NP4328									
CAT.NO.	CECP83580T-4								
SPEC.	05E943X522G1								
HP	1 TE			IP	56				
VOLTS	460								
AMPS	1.65								
R.P.M.	3500								
FRAME	143TC		HZ		60		PH	3	
SER.F.	1.25	CODE	L	DES.	B	CLASS		F	
RATING	40C AMB-CONT								
SN									
DE	6205		ODE		6205				
NEMA NOM. EFF.	77		P.F.		78				
GUAR. MIN. EFF.	74		CC		010A				
T. CODE	T4		TEMP=		135				

NP3186

SPEC.	05E943X522G1				
ABMA DE BRG	25BC02X30X				
ABMA ODE BRG	25BC02X30X				
GREASE	POLYREX EM				
MOTOR WEIGHT	63	ROTOR BARS	20	STATOR BARS	24
MAX. R.P.M.	5400	MAX. KVAR	0.41		
	SFA 1.88				
INV.TYPE	PWM				
T=	135				
CHP	60	TO	90		
CT	1.7	TO	60		
VT	-0	TO	60		
HTR-VOLTS	N/A	HTR-AMPS	N/A		
HTR-WATTS	N/A	MAX. SPACE HEATER TEMP.			N/A

AC Induction Motor Performance Data

Record # 91487

Typical performance - not guaranteed values

Winding: 05WGX522-R001			Type: 0514M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		1	Full Load Torque		1.5031 LB-FT		
Volts		460	Start Configuration		direct on line		
Full Load Amps		1.5	Breakdown Torque		6.4882 LB-FT		
R.P.M.		3500	Pull-up Torque		15.1 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		4.241 LB-FT	
NEMA Design Code		B	KVA Code	L	Starting Current		11.6507 A
Service Factor (S.F.)		1.25	No-load Current		1.1026 A		
NEMA Nom. Eff.		77	Power Factor	74	Line-line Res. @ 25°C		18.4 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		35°C	
S.F. Amps		1.8	Temp. Rise @ S.F. Load		42°C		
				Locked-rotor Power Factor		66.3262	
				Rotor inertia		0.0387 lb-ft²	

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	38.2337	54.3923	66.2507	74.5256	80.1108	83.8765	80
Efficiency	53.0159	67.4833	73.5821	77	77.6584	77.9077	77.7
Speed	3568.338	3547.098	3524.598	3500.477	3474.737	3447.016	3475
Line amperes	1.1624	1.2778	1.4414	1.6462	1.8836	2.1498	1.88

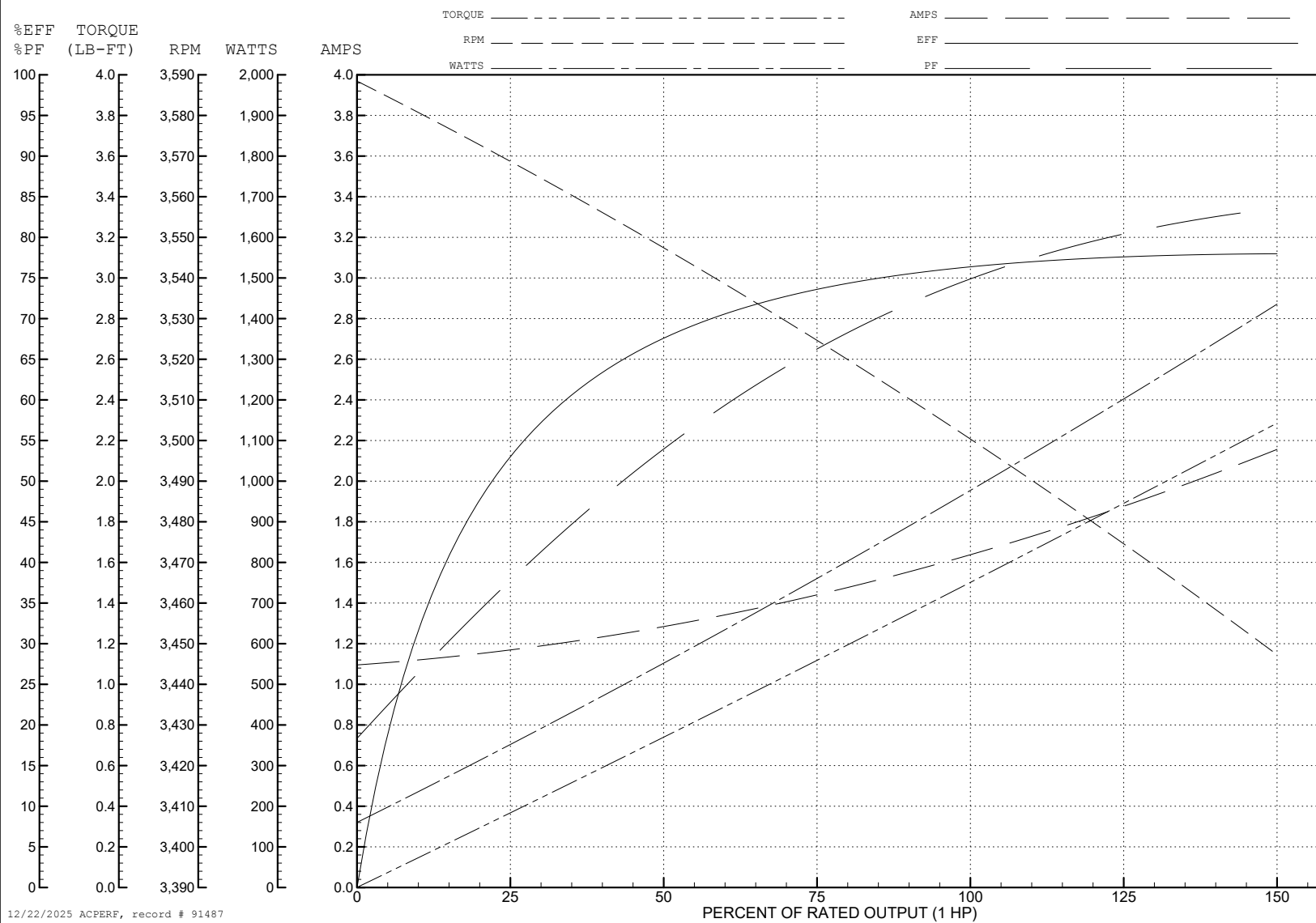
ABB Motors and Mechanical Inc.

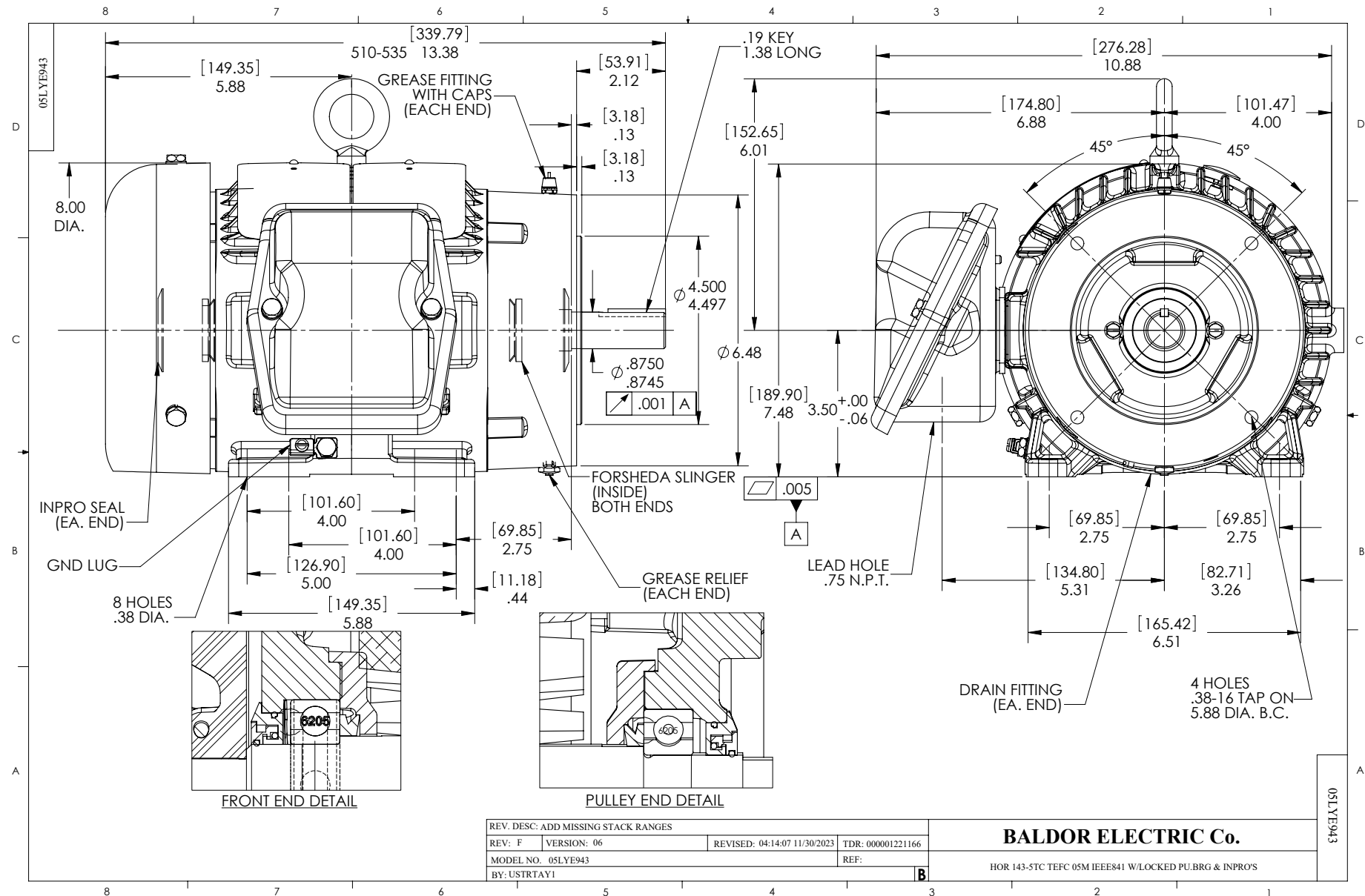
WINDING # 05WGX522

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 3500 RPM 460 V 0514M

TORQUES (LB-FT): PO=6.4882 PU=15.1 LR=4.241 LRA=11.6507





CD0006

TYPICAL WYE-CONNECTED MOTOR

1-BLU

J-BRN

OPTIONAL THERMOSTATS

J-BRN

3-ORG

2-WHT

TYPICAL DELTA-CONNECTED MOTOR

1-BLU

J-BRN

2-WHT

OPTIONAL THERMOSTATS

J-BRN

3-ORG

1

2

3

LINE

NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.

2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.

3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.

4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.

5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10: 24: 49 02/19/2019

BY: ENBRIRO

MTL: —

BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1

CD0006

05WGW234: Electrical Design

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