

BALDOR • RELIANCE

Customer information packet

CECP83583T-4

1.5HP, 3450RPM, 3PH, 60HZ, 143, TC, 0524M, TEFC

Class - CLI GP A,B,C,D

Division - Division II

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Specifications

Enclosure	TEFC
Frame	143TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSA US CSA CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	1.7
Current @ Voltage	2.000 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 Face Code	Standard

Part detail

Revision	AX
Type	AC
Mech. spec.	05E943
Base	
Status	PRD/A
Elec. spec.	05WGW176
Layout	05LYE943
Eff. date	12-30-2024
CD Diagram	CD0006
Poles	02
Leads	3#18 15" LEAD LENGTH,0#0 Dbl Dip & Bake,0#0 Phase InsulaY
Proprietary	False
Created date	11-22-2005

Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	2.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	M
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	@ 0 AWG 3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0524M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.38 IN
Power Factor	83
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	1.15
Shaft Diameter	0.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3450 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.	CECP83583T-4								
SPEC.	05E943W176								
HP	1.5 TE			IP	56				
VOLTS	460								
AMPS	2								
R.P.M.	3450								
FRAME	143TC	HZ	60	PH	3				
SER.F.	1.15	CODE	M	DES.	B	CLASS	F		
RATING	40C AMB-CONT								
SN									
DE	6205	ODE	6205						
NEMA NOM. EFF.	85.5	P.F.	83						
GUAR. MIN. EFF.	82.5	CC	010A						
T. CODE	T3C	TEMP=	160						

NP3186

SPEC.	05E943W176		
ABMA DE BRG	25BC02X30X		
ABMA ODE BRG	25BC02X30X		
GREASE	POLYREX EM		
MOTOR WEIGHT	71	ROTOR BARS	20
		STATOR BARS	24
MAX. R.P.M.	5400	MAX. KVAR	.25
INV.TYPE	PWM		
T=	160		
CHP	60	TO	90
CT	1.7	TO	60
VT	-0	TO	60
HTR-VOLTS	N/A	HTR-AMPS	N/A
HTR-WATTS		MAX. SPACE HEATER TEMP.	N/A

AC Induction Motor Performance Data

Record # 92447

Typical performance - not guaranteed values

Winding: 05WGW176-R028		Type: 0524M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)	1.5	Full Load Torque	2.236 LB-FT		
Volts	460	Start Configuration	direct on line		
Full Load Amps	2	Breakdown Torque	11.1 LB-FT		
R.P.M.	3450	Pull-up Torque	7.77 LB-FT		
Hz	60	Locked-rotor Torque	9.67 LB-FT		
NEMA Design Code	B	Starting Current	20 A		
Service Factor (S.F.)	1.15	No-load Current	0.905 A		
NEMA Nom. Eff.	85.5	Line-line Res. @ 25°C	8.4759 Ω		
Rating - Duty	40C	Temp. Rise @ Rated Load	34°C		
S.F. Amps	AMB-CONT	Temp. Rise @ S.F. Load	38°C		
		Locked-rotor Power Factor	50.3		

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	46	67	78	84	88	90	86
Efficiency	74.4	83.4	86	85.5	86.2	85.4	85.9
Speed	3573.7	3552.1	3528.4	3504	3477.8	3449.4	3488
Line amperes	1.02	1.25	1.57	1.92	2.31	2.75	2.15

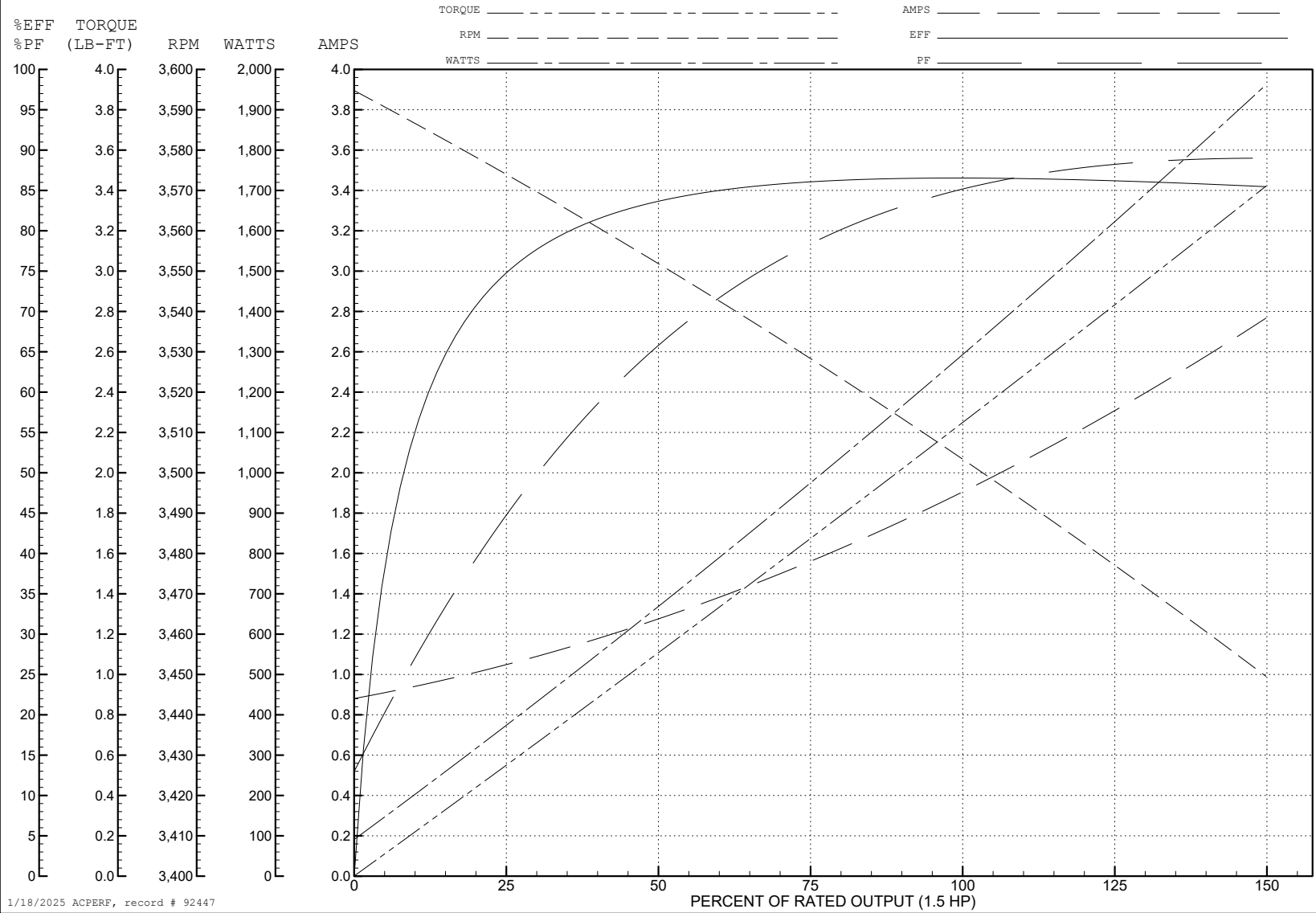
ABB Motors and Mechanical Inc.

WINDING # 05WGW176

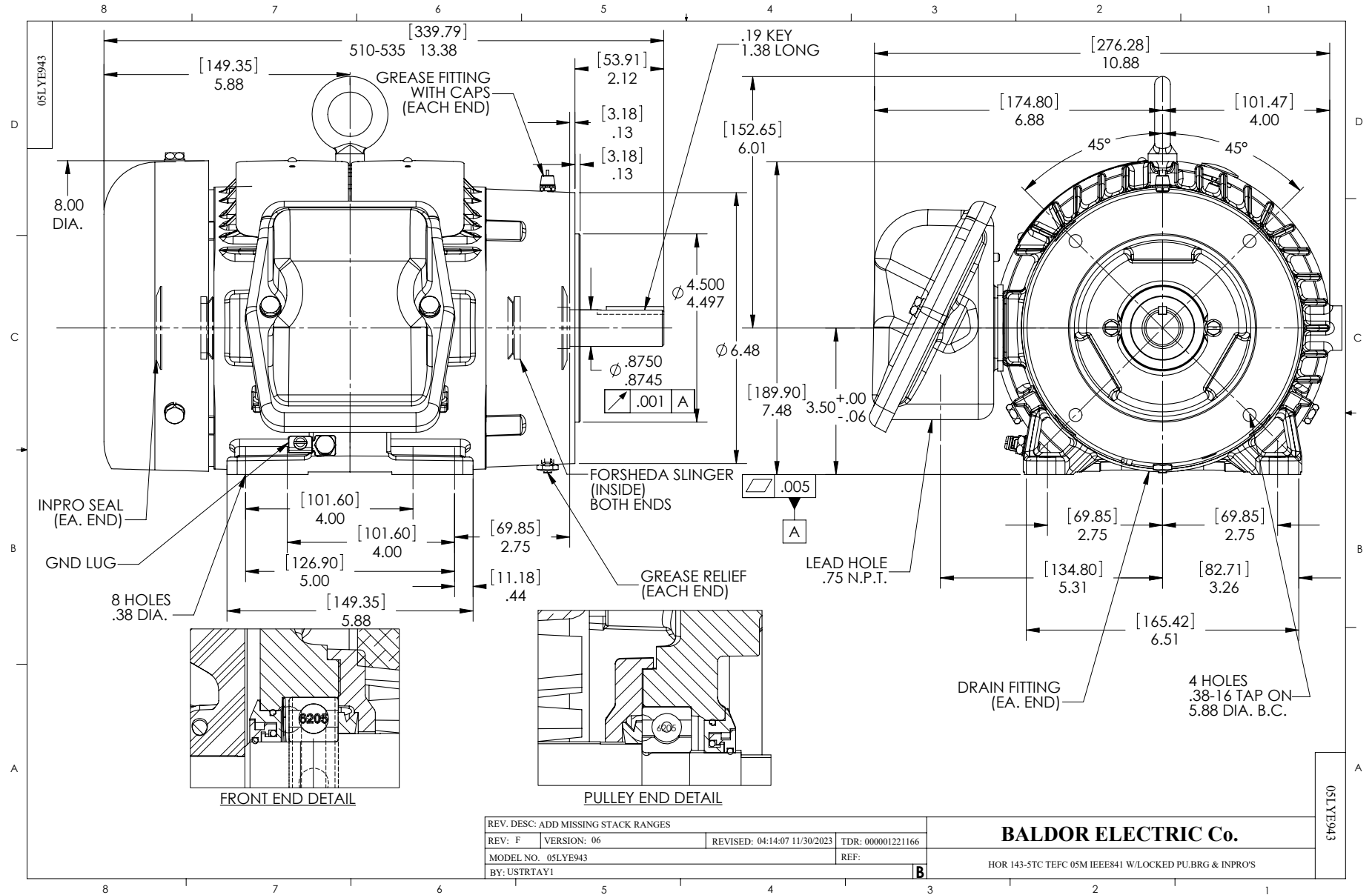
1.5 HP 3 PH 60 HZ 3450 RPM 460 V 0524M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=11.1 PU=7.77 LR=9.67 LRA=20



1/18/2025 ACPERF, record # 92447



CD0006



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.

CD0006

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REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIRO
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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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