

**BALDOR • RELIANCE**

---

# Customer information packet

## VECP83584T-4

1.5HP, 1770RPM, 3PH, 60HZ, 145TC, 0524M, TEFC

Class - CLI GP A,B,C,D

Division - Division II

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.

8/15/2024 1:27:27 AM

## Specifications

Enclosure	TEFC
Frame	145TC
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	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 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
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	1.3
Current @ Voltage	2.300 A @ 460.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
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.	05F161
Base	
Status	PRD/A
Elec. spec.	05WGX557
Layout	05LYF161
Eff. date	04-10-2023
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	03-11-2022

Heater Indicator	No Heater
High Voltage Full Load Amps	2.3 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	M
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Ring Terminals
Motor Standards	NEMA
Motor Type	0524M
Mounting Arrangement	W6
Number of Poles	4
Overall Length	14.56 IN
Power Factor	72
Product Family	Chem Process S/P 32-8 IEEE 841
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	No Slinger
Speed	1770 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**

<b>CAT.NO.</b>	VECP83584T-4					
<b>SPEC.</b>	05F161X557G1					
<b>HP</b>	1.5 TE	<b>IP</b>	56			
<b>VOLTS</b>	460					
<b>AMPS</b>	2.3					
<b>R.P.M.</b>	1770					
<b>FRAME</b>	145TC	<b>HZ</b>	60	<b>PH</b>	3	
<b>SER.F.</b>	1.15	<b>CODE</b>	M	<b>DES.</b>	B	<b>CLASS</b> F
<b>RATING</b>	40C AMB-CONT					
<b>SN</b>						
<b>DE</b>	6205	<b>ODE</b>	6205			
<b>NEMA NOM. EFF.</b>	86.5	<b>P.F.</b>	72			
<b>GUAR. MIN. EFF.</b>	84	<b>CC</b>	010A			
<b>T. CODE</b>	T4	<b>TEMP=</b>	135			

**NP3186**

<b>SPEC.</b>	05F161X557G1		
<b>ABMA DE BRG</b>	25BC02X30X		
<b>ABMA ODE BRG</b>	25BC02X30X		
<b>GREASE</b>	POLYREX EM		
<b>MOTOR WEIGHT</b>	75	<b>ROTOR BARS</b>	27
		<b>STATOR BARS</b>	36
<b>MAX. R.P.M.</b>	2700	<b>MAX. KVAR</b>	0.63
	SFA 2.3		
<b>INV.TYPE</b>	PWM		
<b>T=</b>	135		
<b>CHP</b>	60	<b>TO</b>	90
<b>CT</b>	1.3	<b>TO</b>	60
<b>VT</b>	-0	<b>TO</b>	60
<b>HTR-VOLTS</b>		<b>HTR-AMPS</b>	
<b>HTR-WATTS</b>		<b>MAX. SPACE HEATER TEMP.</b>	

**AC Induction Motor Performance Data**

Record # 95437

Typical performance - not guaranteed values

Winding: 05WGX557-R001		Type: 0524M	Enclosure: TEFC		
<b>Nameplate Data</b>			<b>460 V, 60 Hz: Single Voltage Motor</b>		
Rated Output (HP)	1.5	Full Load Torque	4.48 LB-FT		
Volts	460	Start Configuration	direct on line		
Full Load Amps	2.3	Breakdown Torque	18.8 LB-FT		
R.P.M.	1770	Pull-up Torque	9.6 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	12.6 LB-FT	
NEMA Design Code	B	KVA Code	M	Starting Current	19.7 A
Service Factor (S.F.)	1.15	No-load Current	1.51 A		
NEMA Nom. Eff.	86.5	Power Factor	72	Line-line Res. @ 25°C	11.8 Ω
Rating - Duty	40C	AMB-CONT	Temp. Rise @ Rated Load		48°C
S.F. Amps	2.5	Temp. Rise @ S.F. Load	57°C		
		Locked-rotor Power Factor	58.4		
		Rotor inertia	0.173 lb-ft <sup>2</sup>		

**Load Characteristics 460 V, 60 Hz, 1.5 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	31	49	63	72	78	81	76
Efficiency	75.1	83.5	86	86.5	85.8	84.8	86.1
Speed	1792	1785	1777	1769	1760	1750	1764
Line amperes	1.56	1.72	1.97	2.28	2.65	3.06	2.5

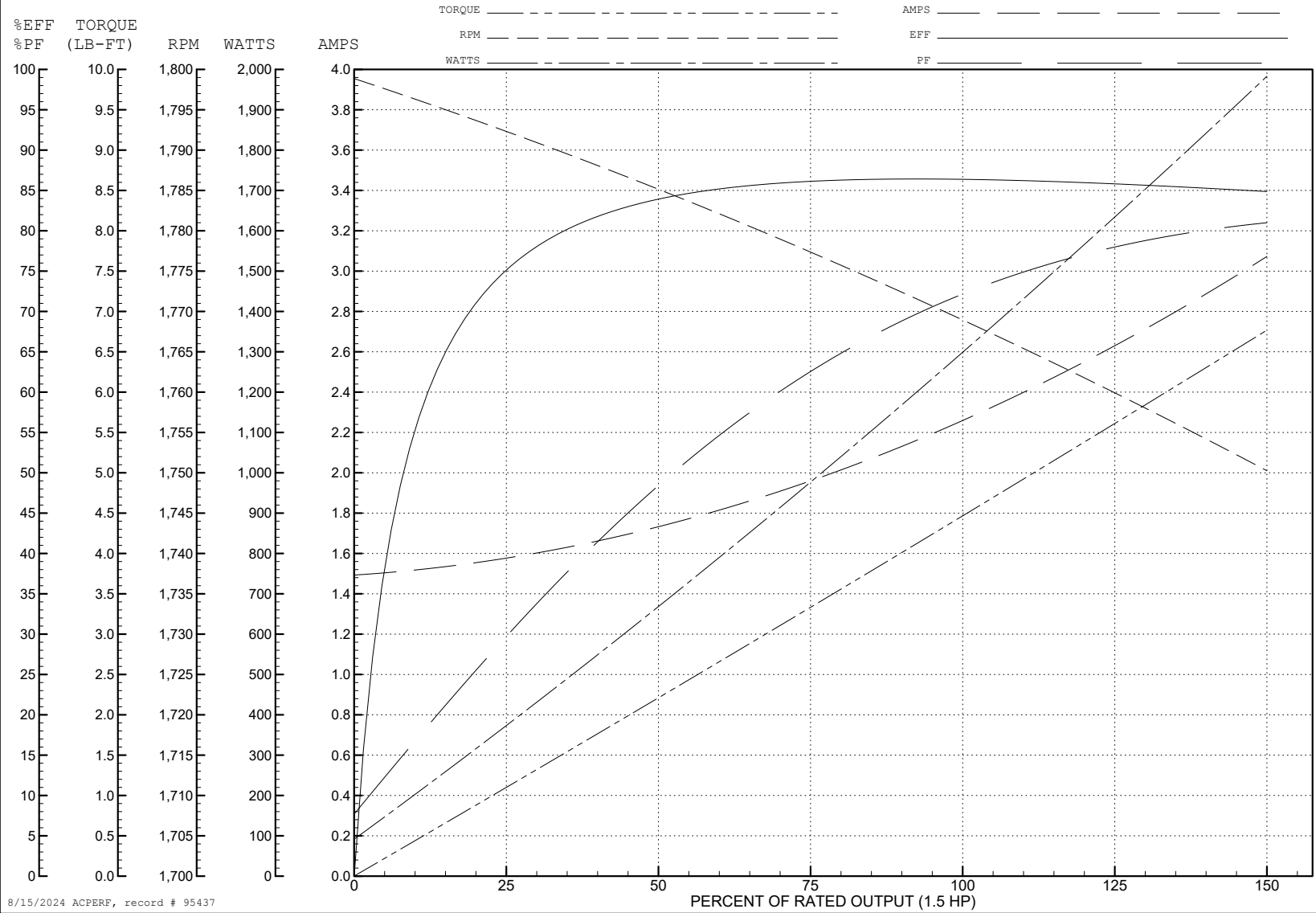
ABB Motors and Mechanical Inc.

WINDING # 05WGX557

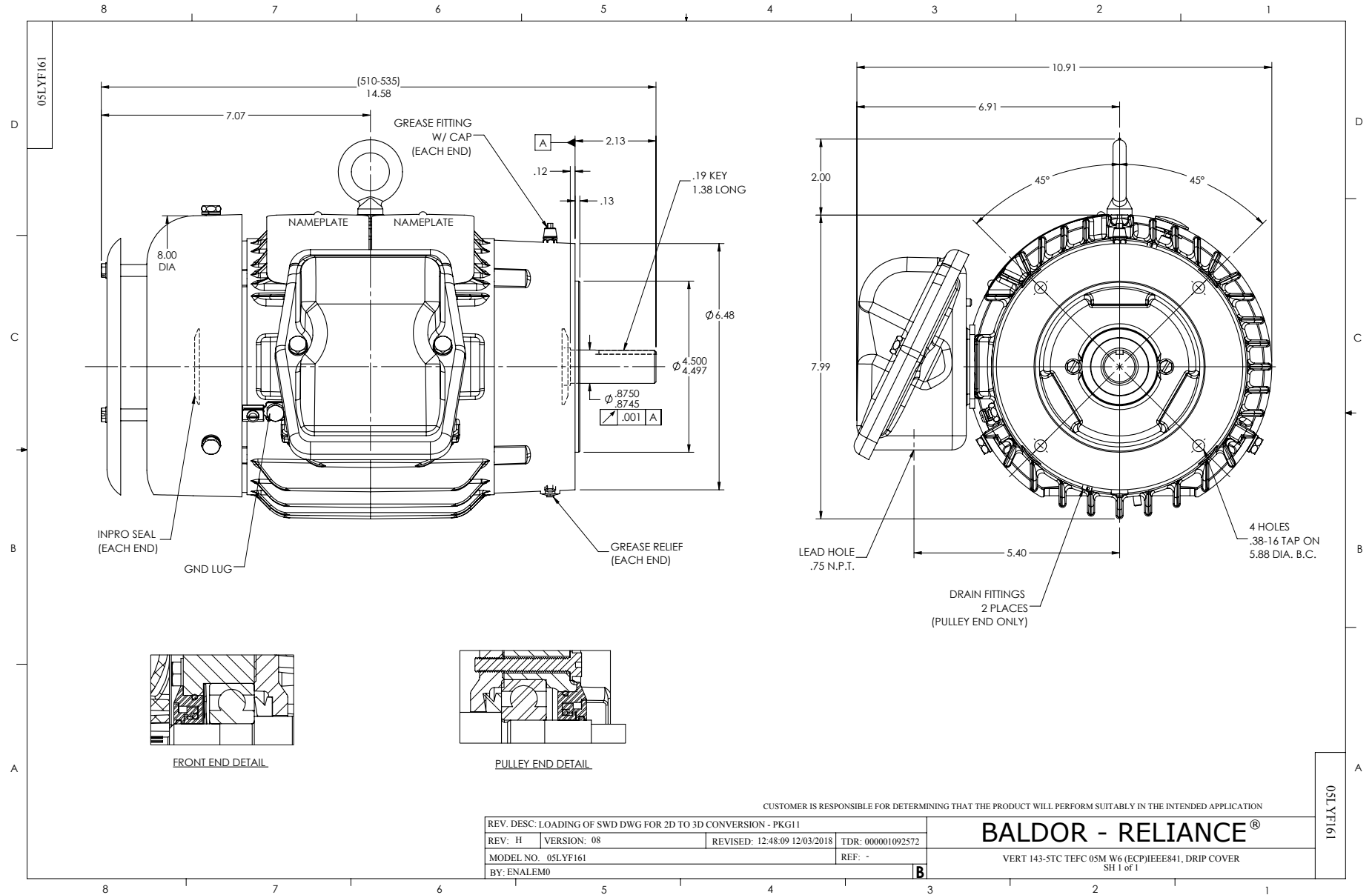
Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1770 RPM 460 V 0524M

TORQUES (LB-FT): PO=18.8 PU=9.6 LR=12.6 LRA=19.7



8/15/2024 ACPERF, record # 95437





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

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