

**BALDOR • RELIANCE**

---

# Customer information packet

## CEM3583T

1.5HP, 3500RPM, 3PH, 60HZ, 143TC, 0520M, TEFC

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	143TC
Frame Material	Iron
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	CSA EEV CURUSEEV 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
Current @ Voltage	3.800 A @ 230.0 V 4.000 A @ 208.0 V 1.900 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

## Part detail

Revision	T
Type	AC
Mech. spec.	05C052
Base	
Status	PRD/A
Elec. spec.	05WGX102
Layout	05LYC052
Eff. date	03-19-2024
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	05-21-2010

Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.9 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	L
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0520M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.04 IN
Power Factor	85
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
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	No Slinger
Speed	3500 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None

<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

**NP3441LUA**

<b>CAT.NO.</b>	CEM3583T						
<b>SPEC</b>	05C052X102G1						
<b>HP</b>	1.5						
<b>VOLTS</b>	230/460						
<b>AMPS</b>	3.8/1.9						
<b>RPM</b>	3500						
<b>FRAME</b>	143TC	<b>HZ</b>	60	<b>PH</b>	3		
<b>SF</b>	1.15	<b>CODE</b>	L	<b>DES</b>	B	<b>CLASS</b>	F
<b>NEMA NOM. EFF</b>	84	<b>PF</b>	85				
<b>RATING</b>	40C AMB-CONT						
<b>CC</b>	010A						
<b>ENCL</b>	TEFC	<b>SER</b>					
<b>DE</b>	6205	<b>ODE</b>	6203				
<b>VPWM INVERTER READY</b>							
<b>CT6-60H(10:1)VT3-60H(20:1</b>	50HZ 1.5HP 190/380V 4.6/2.3A						SF1.0

**AC Induction Motor Performance Data**

Record # 53119

Typical performance - not guaranteed values

<b>Winding:</b> 05WGX102-R008		<b>Type:</b> 0520M		<b>Enclosure:</b> TEFC	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	1.5	<b>Full Load Torque</b>	2.22 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	3.8/1.9	<b>Breakdown Torque</b>	9.49 LB-FT		
<b>R.P.M.</b>	3500	<b>Pull-up Torque</b>	3.61 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	7.35 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	L	<b>Starting Current</b>	17.9 A	
<b>Service Factor (S.F.)</b>		1.15	<b>No-load Current</b>	0.932 A	
<b>NEMA Nom. Eff.</b>	84 <b>Power Factor</b>	85	<b>Line-line Res. @ 25°C</b>	12.2 Ω	
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	43°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	50°C	
			<b>Locked-rotor Power Factor</b>	60.1	
			<b>Rotor inertia</b>	0.0553 LB-FT <sup>2</sup>	

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

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	45	67	79	85	89	90	87
<b>Efficiency</b>	72.3	82.2	84.4	84.8	84.3	82.8	84.5
<b>Speed</b>	3575	3551	3526	3498	3466	3433	3479
<b>Line amperes</b>	1.03	1.25	1.55	1.91	2.31	2.79	2.15

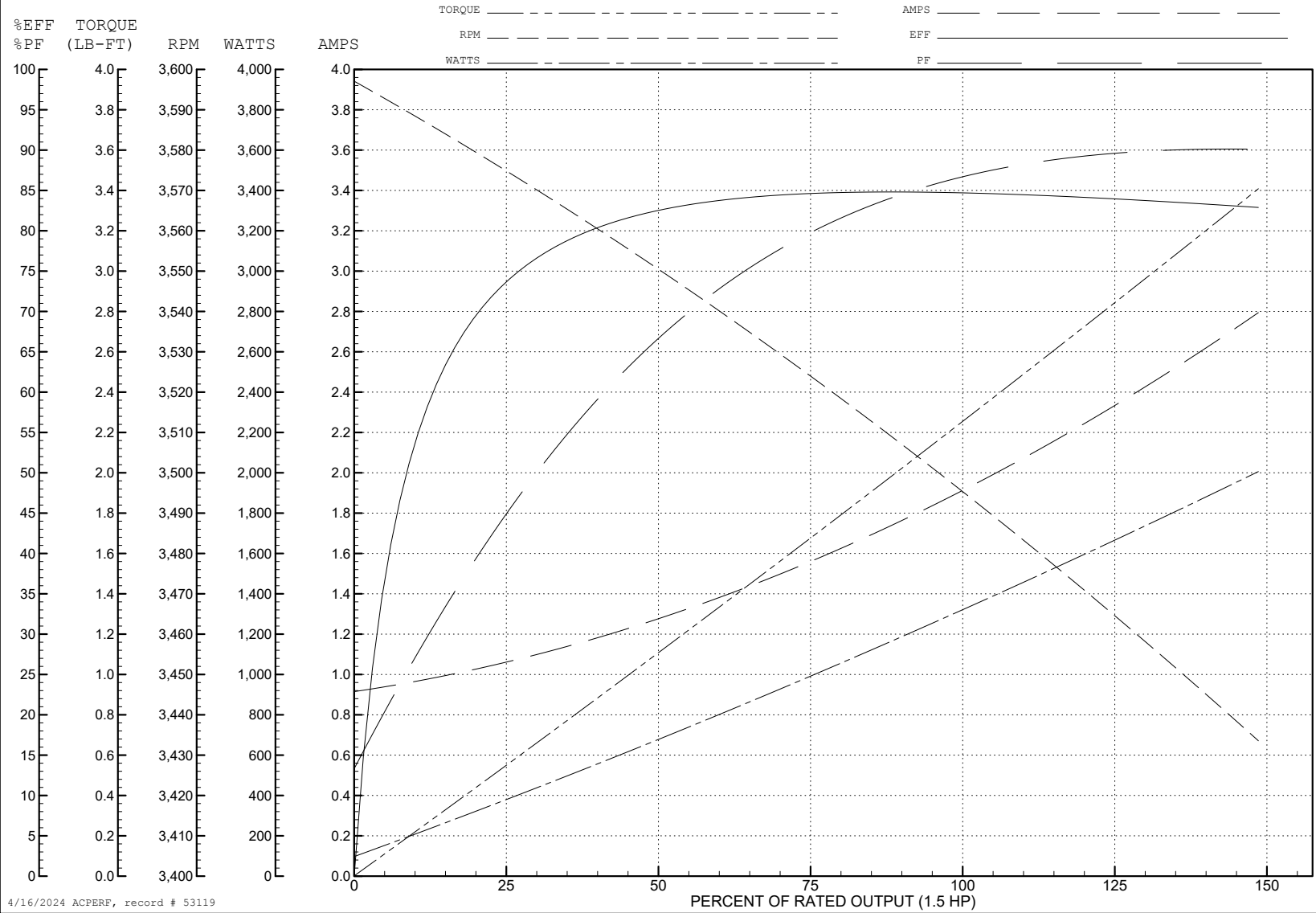
ABB Motors and Mechanical Inc.

WINDING # 05WGX102

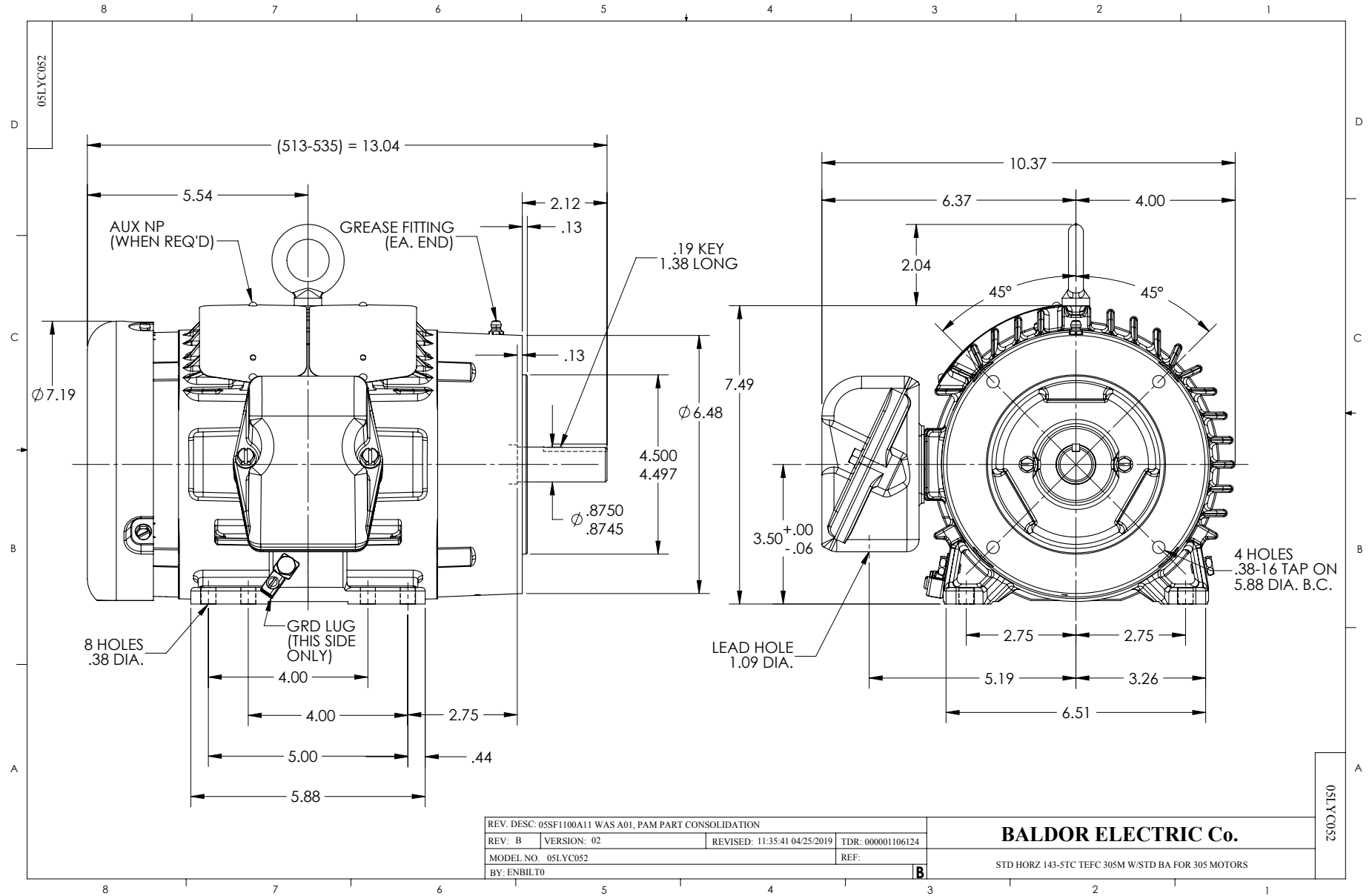
Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 3500 RPM 460 V 0520M

TORQUES (LB-FT): PO=9.49 PU=3.61 LR=7.35 LRA=17.9



4/16/2024 ACPERF, record # 53119

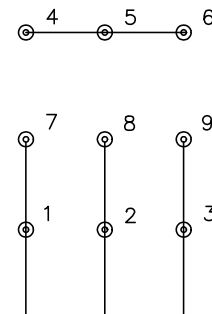




CD0005

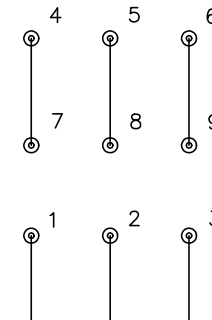


LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

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			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS