

BALDOR® • RELIANCE 

Product Information Packet

CEM3581T-5

1HP,1760RPM,3PH,60HZ,143TC,0519M,TEFC,F1

Part Detail							
Revision:	K	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	05WGX127	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	05C052	Layout:	05LYC052	Poles:	04	Created Date:	08-03-2010
Base:	RG	Eff. Date:	06-26-2019	Leads:	3#18		

Specs			
Catalog Number:	CEM3581T-5	Inverter Code:	Inverter Ready
Enclosure:	TEFC	KVA Code:	L
Frame:	143TC	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Iron	Locked Bearing Indicator:	Locked Bearing
Output @ Frequency:	1.000 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	3 @ 18 AWG
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	575.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	0518M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	71
	CSA EEV	Product Family:	General Purpose
	UR	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	C-Face
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	Rigid	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	RoHS Status:	ROHS COMPLIANT
Blower:	None	Shaft Extension Location:	Pulley End
Current @ Voltage:	1.200 A @ 575.0 V	Shaft Ground Indicator:	No Shaft Grounding

Design Code:	B	Shaft Rotation:	Reversible
Drip Cover:	No Drip Cover	Shaft Slinger Indicator:	No Slinger
Duty Rating:	CONT	Speed Code:	Single Speed
Electrically Isolated Bearing:	Not Electrically Isolated	Motor Standards:	NEMA
Feedback Device:	NO FEEDBACK	Starting Method:	Direct on line
Front Face Code:	Standard	Thermal Device - Bearing:	None
Front Shaft Indicator:	None	Thermal Device - Winding:	None
Heater Indicator:	No Heater	Vibration Sensor Indicator:	No Vibration Sensor
Insulation Class:	F	Winding Thermal 1:	None
		Winding Thermal 2:	None

Nameplate NP3441L										
CAT.NO.	CEM3581T-5									
SPEC.	05C052X127G1									
HP	1									
VOLTS	575									
AMP	1.2									
RPM	1760									
FRAME	143TC				HZ	60			PH	3
SER.F.	1.15		CODE	L	DES	B		CL	F	
NEMA-NOM-EFF	85.5		PF	71						
RATING	40C AMB-CONT									
CC	010A				USABLE AT 208V					
DE	6205				ODE	6203				
ENCL	TEFC		SN							
VPWM INVERTER READY										
CT6-60H(10:1)VT3-60H(20:1)										

Parts List		
Part Number	Description	Quantity
SA200812	SA 05C052X127G1	1.000 EA
RA188123	RA 05C052X127G1	1.000 EA
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	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	SCREW, HEX SER SLT HD, ZN, 1/4-20 X .75	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
35EP1100A02	FR ENDPLATE, TEFC W/GREASER	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
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
35FH4005A02	IEC FH W/GREASER - W/PRIMER	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
06CB3500	BALDOR CONDUIT BOX LID	1.000 EA
06GS1001	BALDOR CONDUIT BOX GASKET	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
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
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.022 GA
LB1119N	WARNING LABEL	1.000 EA
LC0006	CONNECTION LABEL	1.000 EA
NP3441L	ALUM SUPER-E VPWM INVERTER READY UL	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA

AC Induction Motor Performance Data

Record # 32077

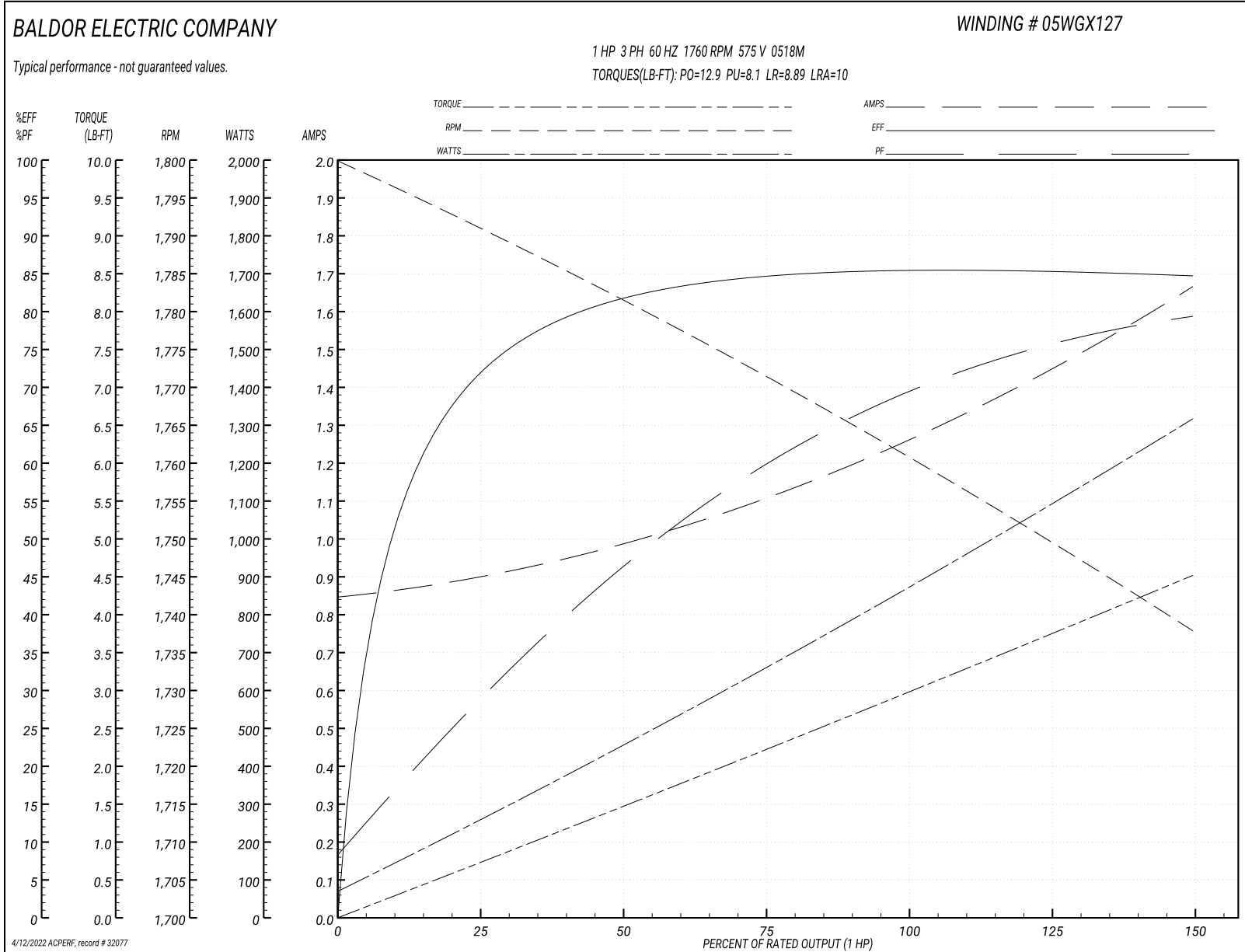
Typical performance - not guaranteed values

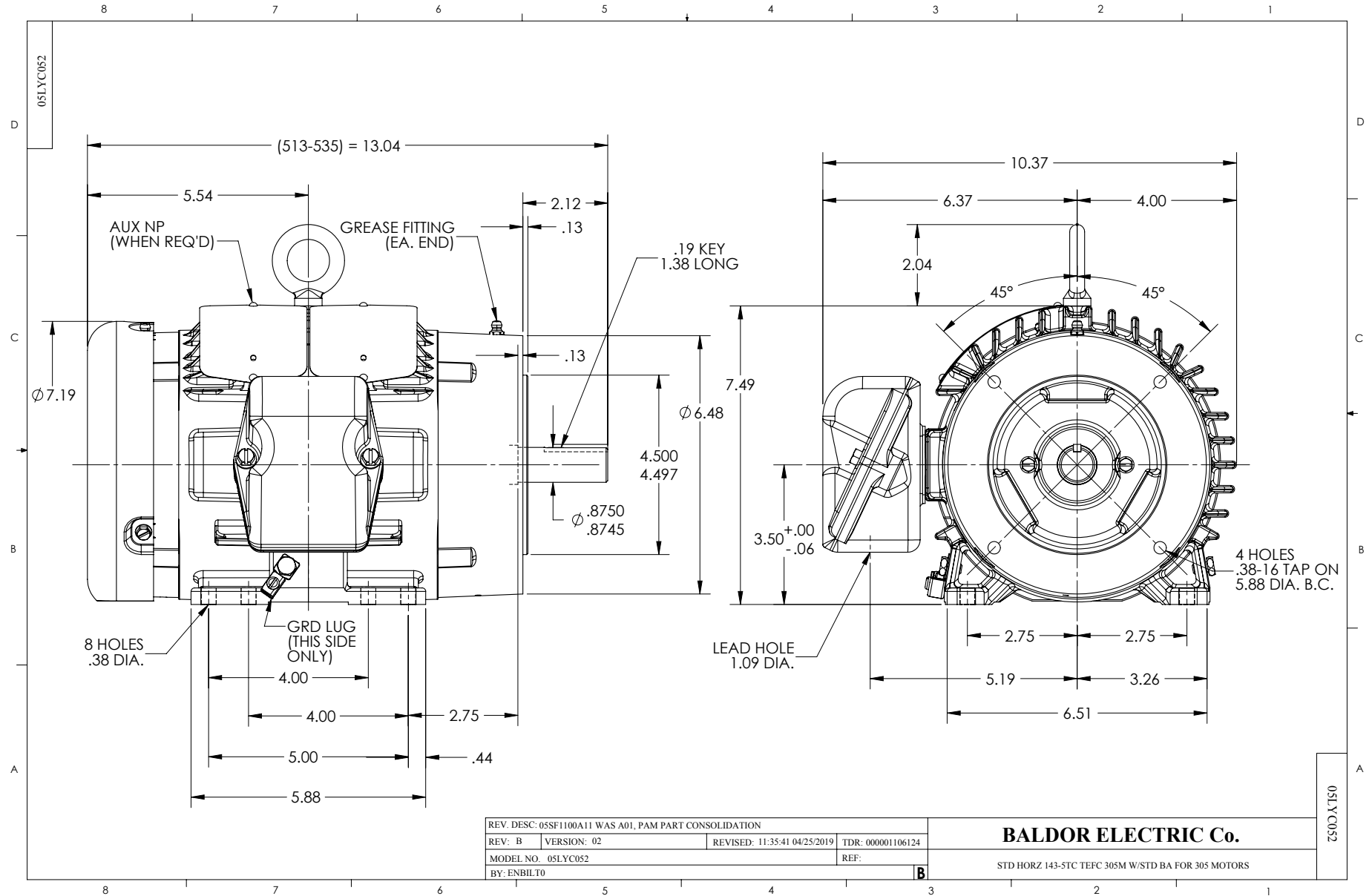
Winding: 05WGX127-R001		Type: 0518M		Enclosure: TEFC	
Nameplate Data			575 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)	1	Full Load Torque	2.98 LB-FT		
Volts	575	Start Configuration	direct on line		
Full Load Amps	1.2	Breakdown Torque	12.9 LB-FT		
R.P.M.	1760	Pull-up Torque	8.1 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque	8.89 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	10 A
Service Factor (S.F.)	1.15	No-load Current	0.853 A		
NEMA Nom. Eff.	85.5	Power Factor	71	Line-line Res. @ 25°C	24.2 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	30°C	
S.F. Amps			Temp. Rise @ S.F. Load	35°C	
			Locked-rotor Power Factor	54.9	
			Rotor inertia	0.106 LB-FT ²	

Load Characteristics 575 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	29	47	59	69	75	80	75
Efficiency	71.6	81.4	84.8	85.6	85.3	84.7	85.5
Speed	1791	1781	1772	1761	1749	1738	1754
Line amperes	0.891	0.985	1.11	1.26	1.46	1.66	1.35

Performance Graph at 575V, 60Hz, 1.0HP Typical performance - Not guaranteed values





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
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MTL: -		

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

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