ABB BALDOR RELIANCE

Customer information packet

VECP3580-4

1HP, 3450RPM, 3PH, 60HZ, 56C, 0516M, TEFC, F1, N
Class - CLI GP A,B,C,D
Division - Division II

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Specifications

Enclosure	TEFC
Frame	56C
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	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CSA EEV
	NEMA PREMIUM
	NEMA_PREMIUM
	UR
	CCSA US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	1.400 A @ 460.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	X
Type	AC
Mech. spec.	05F005
Base	
Status	PRD/A
Elec. spec.	05WGW234
Layout	05LYF005
Eff. date	06-13-2022
CD Diagram	CD0006
Poles	02
Leads	3#18
Proprietary	False
Created date	02-20-2011

Front Shaft Indicator	None
Haz Area Temp Code	T4
Heater Indicator	No Heater
High Voltage Full Load Amps	1.4 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 Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0516M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	14.50 IN
Power Factor	82
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.25
Shaft Diameter	0.625 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

NP3258								
CAT.NO.	VECP3580-4							
SPEC.	05F005W234G1							
HP	1 TE							
VOLTS	460							
AMP	1.4							
RPM	3450							
FRAME	56C	**HZ**	60		**PH**	3		
SER.F.	1.25	**CODE**	L	**DES**	B	**CL**	F	
RATING	40C AMB-CONT							
SN								
DE	6205	**ODE**	6205					
NEMA-NOM-EFF	84	**PF**	82					
G.MIN.EFF	81.5	**CC**	010A					
T. CODE	T4	**T=**	135					

NP3261					
SPEC.	05F005W234G1				
D.E. BRG.	25BC02XP30X				
O.D.E. BRG.	25BC02XP30X				
GREASE	POLYREX EM				
RPM MAX	5400	**MAX. KVAR**	0.19		
BLANK	SFA 1.6				
INV.TYPE	PWM				
T=	135				
C HP FR	60	**C HP TO**	90		
CT HZ FROM	6	**CT HZ TO**	60		
VT HZ FROM	3	**VT HZ TO**	60		
HTR-VOLTS		**HTR-AMPS**			
HTR-WATTS		**MAX. SPACE HEATER TEMP.**			

AC Induction Motor Performance Data
Record # 47145
Typical performance - not guaranteed values

Winding: 05WGW234-R019	**Type:** 0516M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			1	**Full Load Torque**	1.5 LB-FT
Volts			460	**Start Configuration**	direct on line
Full Load Amps			1.4	**Breakdown Torque**	6.5 LB-FT
R.P.M.			3450	**Pull-up Torque**	4.8 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	5.7 LB-FT
NEMA Design Code	B	**KVA Code**	L	**Starting Current**	12.1 A
Service Factor (S.F.)			1.25	**No-load Current**	0.68 A
NEMA Nom. Eff.	84	**Power Factor**	82	**Line-line Res. @ 25ºC**	15.1 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	32°C
S.F. Amps			1.6	**Temp. Rise @ S.F. Load**	40°C
				Rotor inertia	0.0442 LB-FT2

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	44	65	77	84	87	89	87
Efficiency	70.5	80.5	83.6	84.6	84.4	83.7	84.4
Speed	3567	3539	3510	3479	3446	3410	3446
Line amperes	0.75	0.9	1.09	1.33	1.56	1.88	1.56

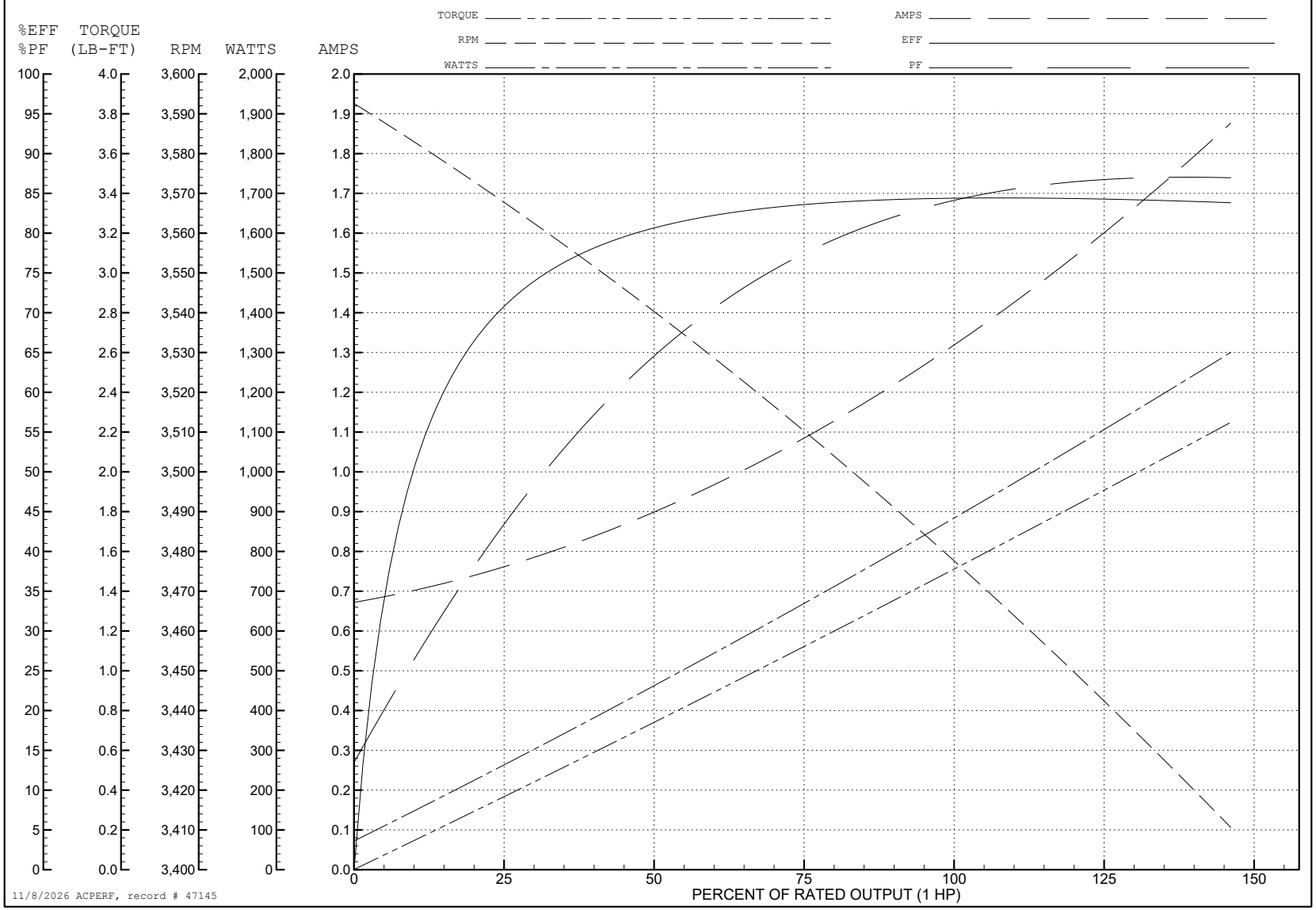
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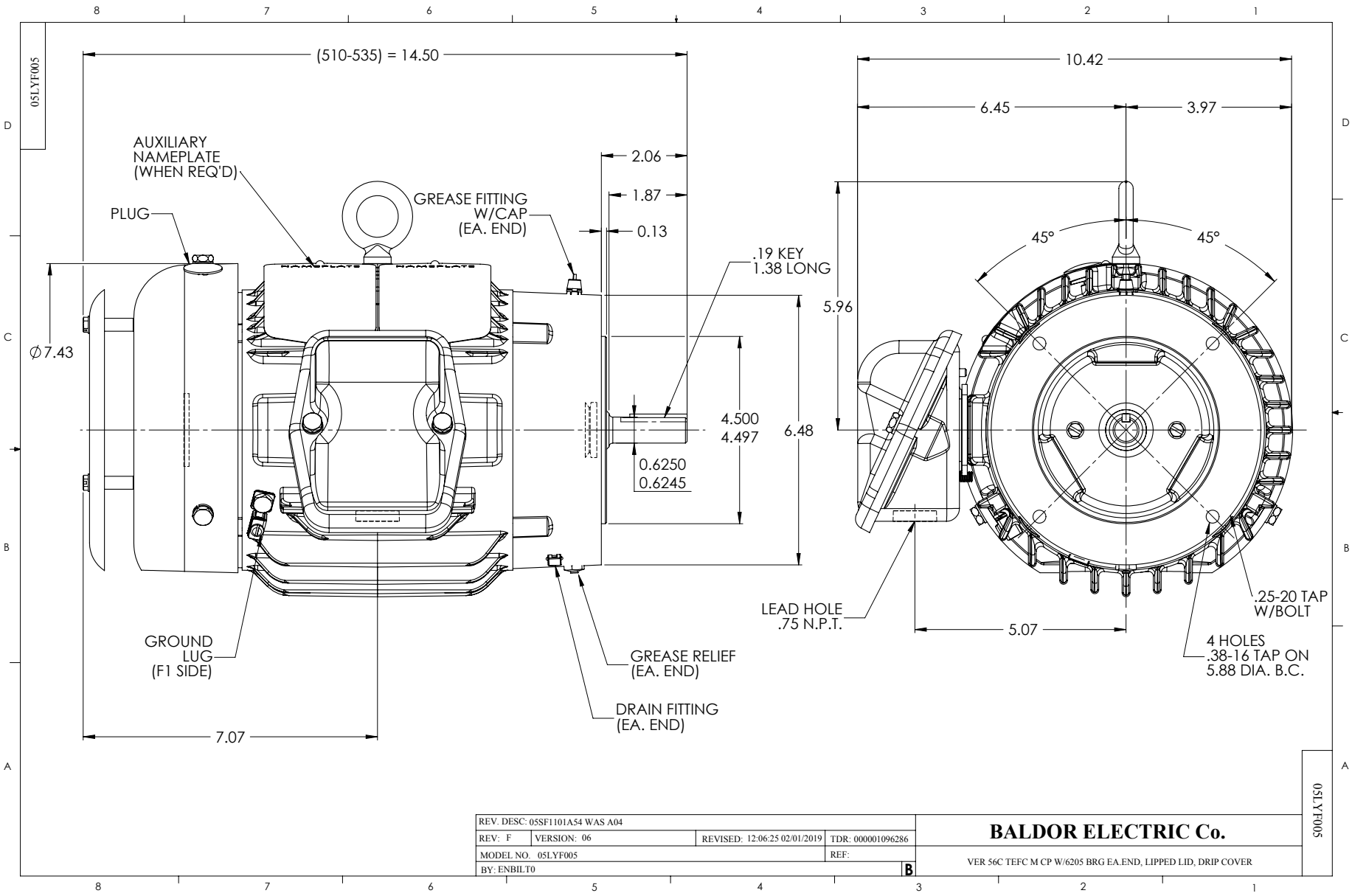
WINDING # 05WGW234

1 HP 3 PH 60 HZ 3450 RPM 460 V 0516M

Typical performance - not guaranteed values.

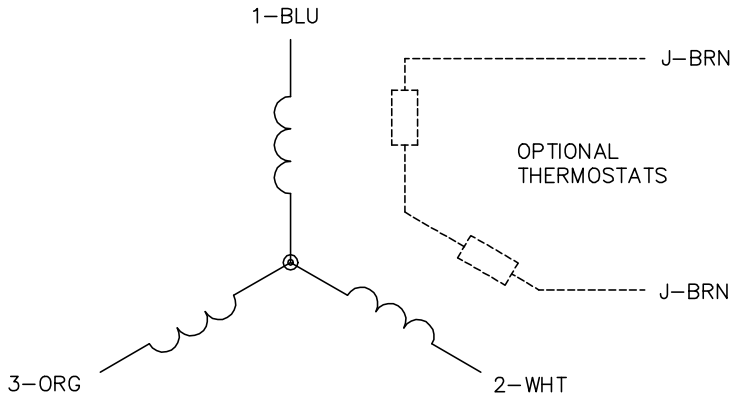
TORQUES(LB-FT): PO=6.5 PU=4.8 LR=5.7 LRA=12.1

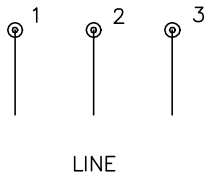



05LYF005
(510-535) = 14.50
AUXILIARY NAMEPLATE (WHEN REQ'D)
PLUG
GREASE FITTING W/CAP (EA. END)
2.06
1.87
0.13
.19 KEY 1.38 LONG
∅7.43
4.500
4.497
6.48
0.6250
0.6245
GROUND LUG (F1 SIDE)
GREASE RELIEF (EA. END)
DRAIN FITTING (EA. END)
7.07
10.42
6.45
3.97
45°
45°
5.96
LEAD HOLE .75 N.P.T.
5.07
.25-20 TAP W/BOLT
4 HOLES .38-16 TAP ON 5.88 DIA. B.C.
REV. DESC: 05SF1101A54 WAS A04
REV: F
VERSION: 06
REVISED: 12:06:25 02/01/2019
TDR: 000001096286
MODEL NO. 05LYF005
REF:
BY: ENBILT0
B
BALDOR ELECTRIC Co.
VER 56C TEFC M CP W/6205 BRG EA.END, LIPPED LID, DRIP COVER
05LYF005

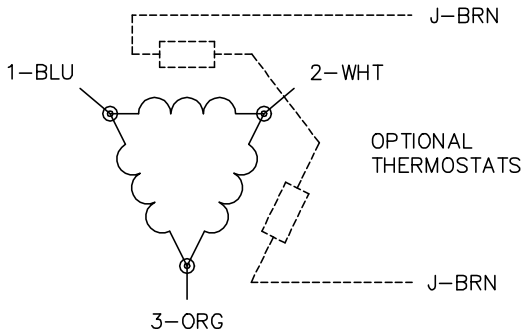
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



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			BALDOR - RELIANCE®
REV. LTR: E	VERSION: 01	TDR: 000001099922	
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0	3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED
MTL: –			SH 1 of 1