ABB BALDOR RELIANCE

Customer information packet

ECP3580T-4

1HP, 3450RPM, 3PH, 60HZ, 143T, 0516M, TEFC, F1
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.
11/11/2026 8:14:47 PM

Specifications

Enclosure	TEFC
Frame	143T
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	Rigid
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	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	AR
Type	AC
Mech. spec.	05F008
Base	
Status	PRD/A
Elec. spec.	05WGW234
Layout	05LYF008
Eff. date	08-05-2026
CD Diagram	CD0006
Poles	02
Leads	3#18
Proprietary	False
Created date	07-17-2008

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	No 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	12.88 IN
Power Factor	82
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.25
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

NP3258									
CAT.NO.	ECP3580T-4								
SPEC.	05F008W234G1								
HP	1 TE								
VOLTS	460								
AMP	1.4								
RPM	3450								
FRAME	143T	**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.	05F008W234G1		
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.**	

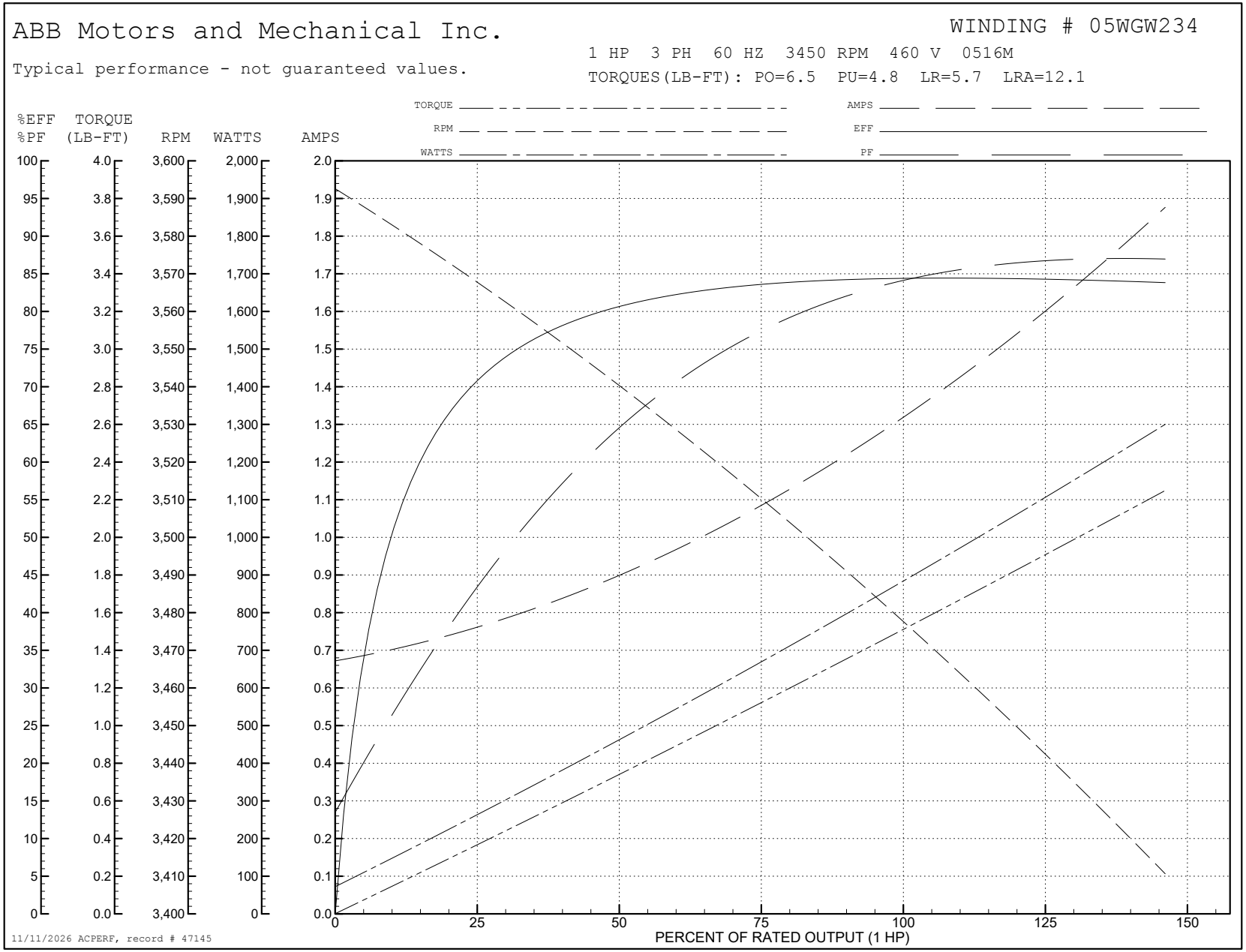
AC Induction Motor Performance Data
Record # 47145
Typical performance - not guaranteed values

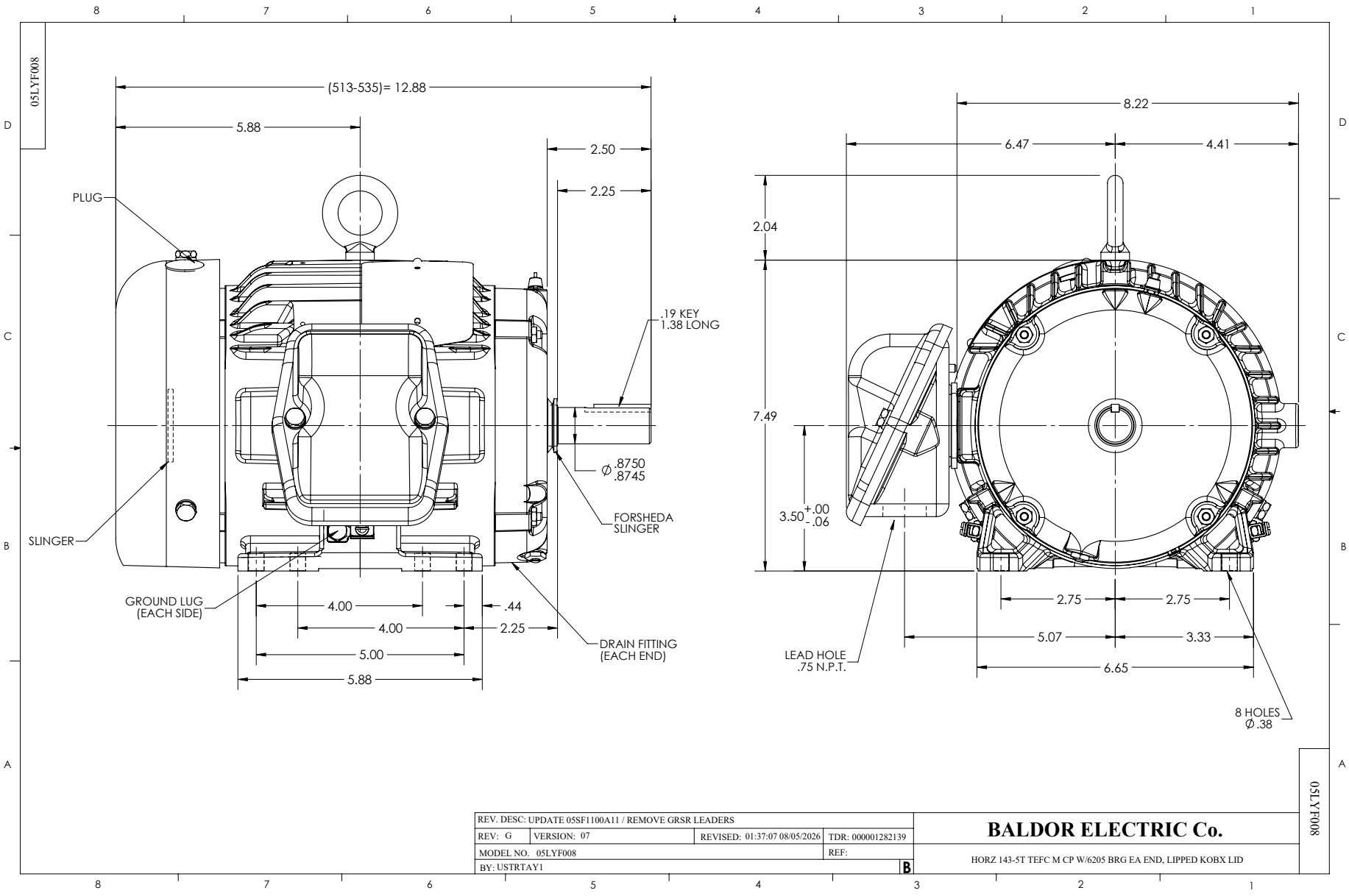
Winding: 05WGW234-R019	**Type:** 0516M	**Enclosure:** TEFC

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

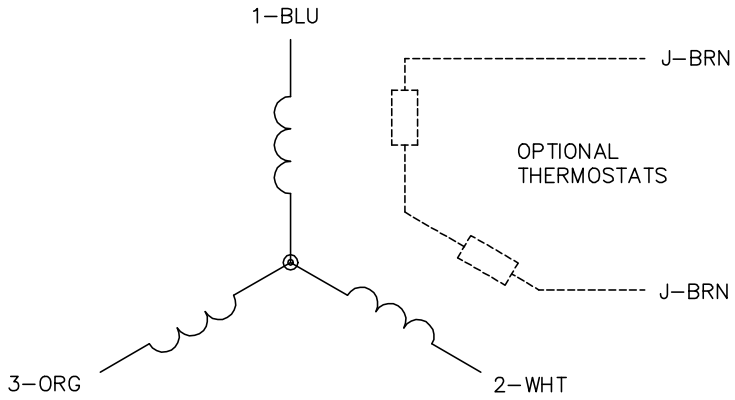
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	44	65	77	84	87	89	87
Efficiency	70.5	80.5	83.6	84.6	84.4	83.7	84.4
Speed	3567	3539	3510	3479	3446	3410	3446
Line amperes	0.75	0.9	1.09	1.33	1.56	1.88	1.56

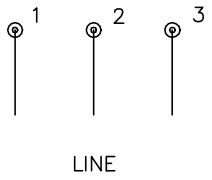

ABB Motors and Mechanical Inc.
WINDING # 05WGW234
Typical performance - not guaranteed values.
1 HP 3 PH 60 HZ 3450 RPM 460 V 0516M
TORQUES(LB-FT): PO=6.5 PU=4.8 LR=5.7 LRA=12.1
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (1 HP)
11/11/2026 ACPERF, record # 47145


05LYF008
(513-535)= 12.88
5.88
2.50
2.25
PLUG
.19 KEY
1.38 LONG
Ø .8750
.8745
FORSHEDA
SLINGER
SLINGER
GROUND LUG
(EACH SIDE)
4.00
.44
4.00
2.25
5.00
5.88
DRAIN FITTING
(EACH END)
8.22
6.47
4.41
2.04
7.49
3.50 +.00 -.06
2.75
2.75
5.07
3.33
6.65
LEAD HOLE
.75 N.P.T.
8 HOLES
Ø .38
REV. DESC: UPDATE 05SF1100A11 / REMOVE GRSR LEADERS
REV: G
VERSION: 07
REVISED: 01:37:07 08/05/2026
TDR: 000001282139
MODEL NO. 05LYF008
REF:
BY: USTRTAY1
B
BALDOR ELECTRIC Co.
HORZ 143-5T TEFC M CP W/6205 BRG EA END, LIPPED KOBX LID
05LYF008

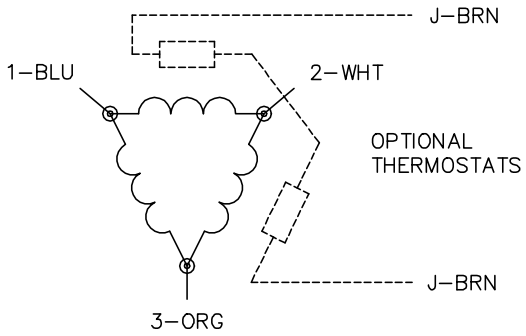
CD0006

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		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

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

SH 1 of 1