

ABB BALDOR RELIANCE III

Customer information packet

VECP3583T-4

1.5HP, 3450RPM, 3PH, 60HZ, 143TC, 0524M, TEFC

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	143TC
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	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	2.000 A @ 460.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	AA
Type	AC
Mech. spec.	05F006
Base	
Status	PRD/A
Elec. spec.	05WGW176
Layout	05LYF006
Eff. date	04-15-2026
CD Diagram	CD0006
Poles	02
Leads	3#18
Proprietary	False
Created date	02-20-2011

Haz Area Temp Code	T4
Heater Indicator	No Heater
High Voltage Full Load Amps	2.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	M
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	0524M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	14.57 IN
Power Factor	83
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	1.15
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.	VECP3583T-4								
SPEC.	05F006W176G1								
HP	1.5 TE								
VOLTS	460								
AMP	2								
RPM	3450								
FRAME	143TC	HZ	60		PH		3		
SER.F.	1.15	CODE	M	DES	B	CL		F	
RATING	40C AMB-CONT								
SN									
DE	6205	ODE		6205					
NEMA-NOM-EFF	85.5	PF	83						
G.MIN.EFF	82.5	CC	010A						
T. CODE	T4	T=	135						

NP3261			
SPEC.	05F006W176G1		
D.E. BRG.	25BC02XP30X		
O.D.E. BRG.	25BC02XP30X		
GREASE	POLYREX EM		
RPM MAX	5400	MAX. KVAR	0.25
BLANK			
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 # 47131

Typical performance - not guaranteed values

Winding: 05WGW176-R028			Type: 0524M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		1.5	Full Load Torque		2.3 LB-FT		
Volts		460	Start Configuration		direct on line		
Full Load Amps		2	Breakdown Torque		10.8 LB-FT		
R.P.M.		3450	Pull-up Torque		8.1 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		10.2 LB-FT	
NEMA Design Code		B	KVA Code	M	Starting Current		20.1 A
Service Factor (S.F.)		1.15	No-load Current		0.88 A		
NEMA Nom. Eff.		85.5	Power Factor	83	Line-line Res. @ 25°C		8.38 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		32°C
S.F. Amps					Temp. Rise @ S.F. Load		37°C
					Locked-rotor Power Factor		50.3
					Rotor inertia		0.0664 LB-FT2

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	49	69	80	84	87	90	85
Efficiency	71.9	81.3	84.5	85.5	85.1	84	85.2
Speed	3569	3545	3521	3496	3468	3439	3479
Line amperes	1.03	1.29	1.6	2	2.4	2.8	2.25

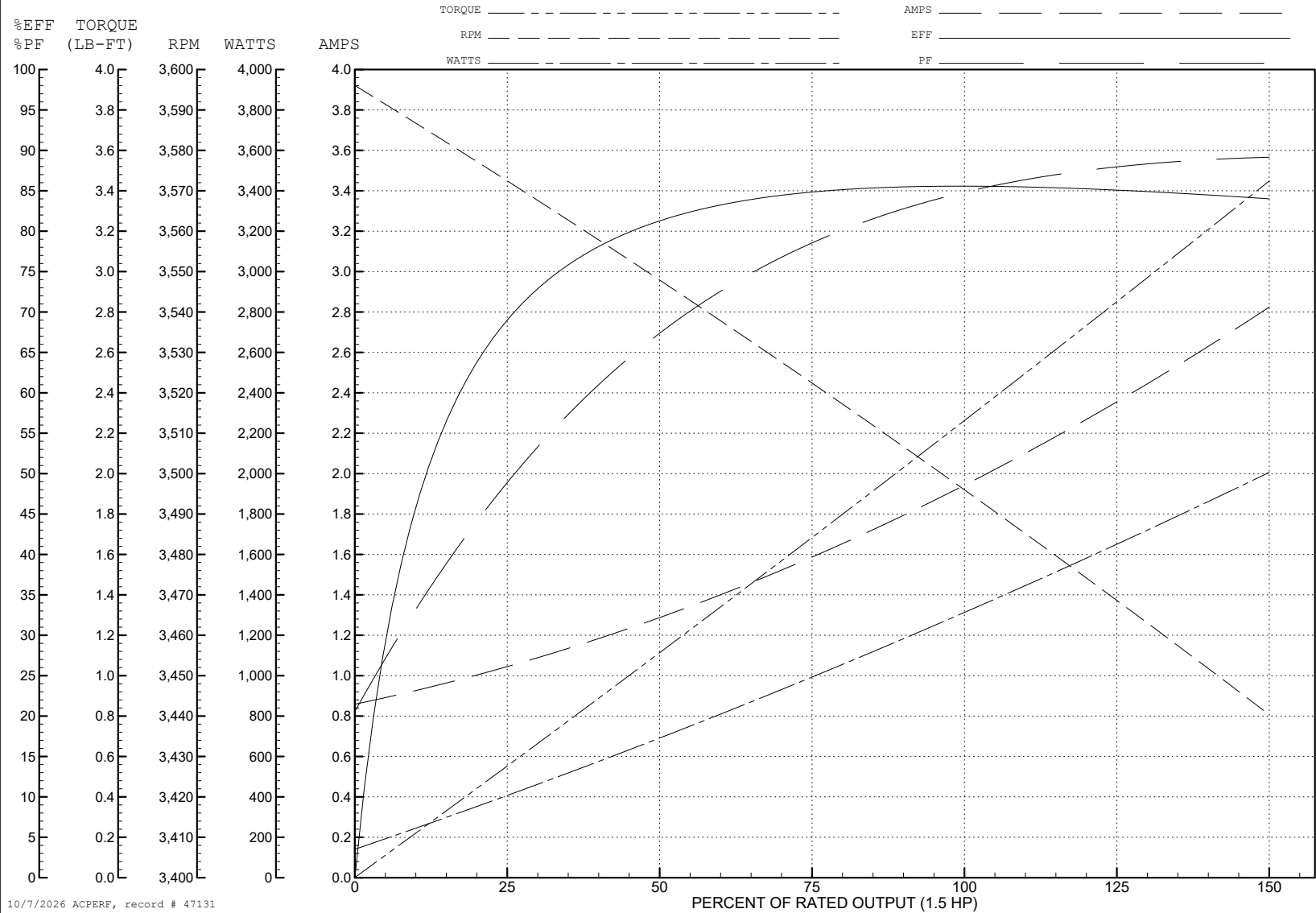
ABB Motors and Mechanical Inc.

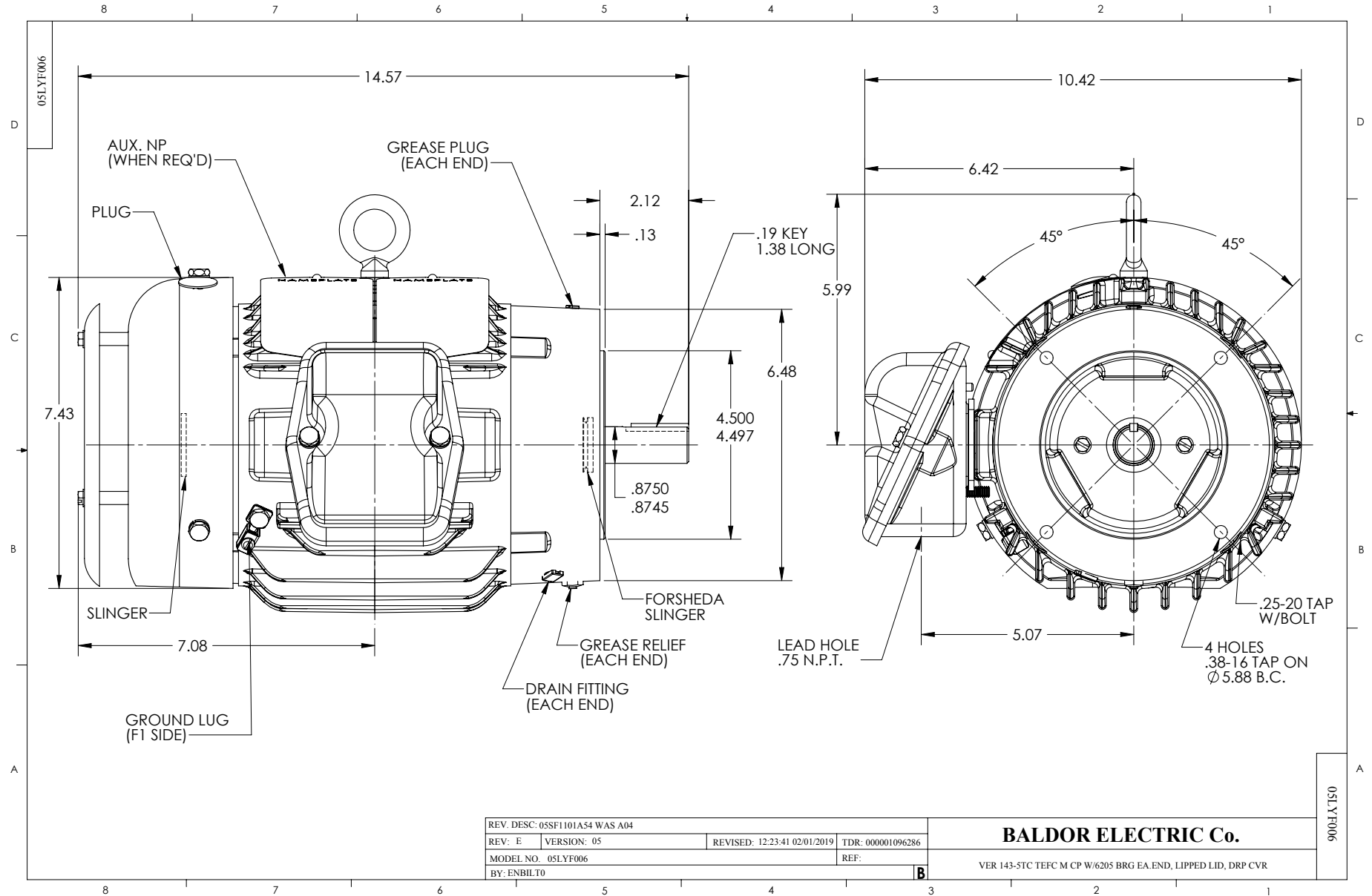
WINDING # 05WGW176

Typical performance - not guaranteed values.

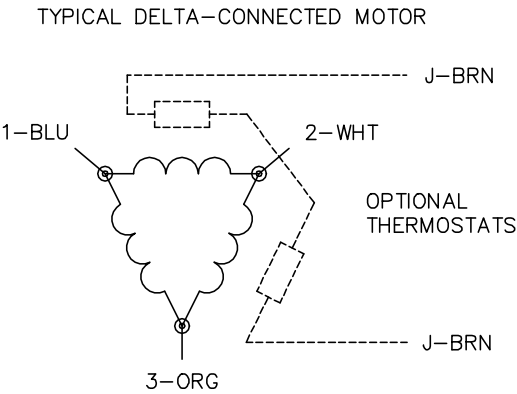
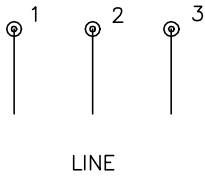
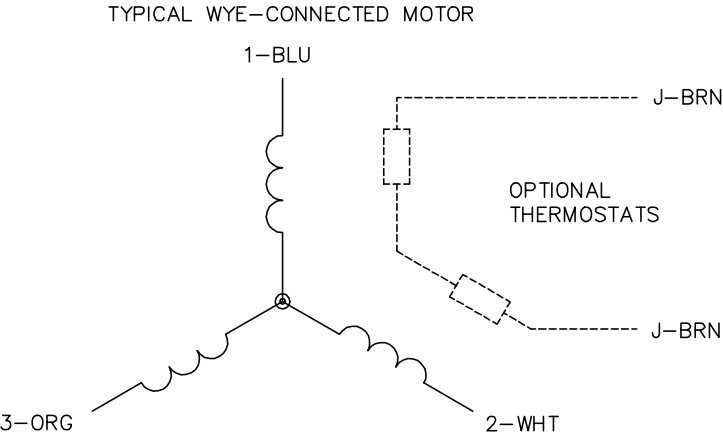
1.5 HP 3 PH 60 HZ 3450 RPM 460 V 0524M

TORQUES (LB-FT): PO=10.8 PU=8.1 LR=10.2 LRA=20.1





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

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