

ABB BALDOR RELIANCE III

Customer information packet

VLECP83665T-4

42M 4P TEFC VER 184LP CHEM PROC, SP#32-8

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	184LP
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	5.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM UR CSA
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	0-
Current @ Voltage	6.600 A @ 460.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Haz Area Temp Code	T3C

Part Detail

Revision	L
Type	AC
Mech. spec.	06J487
Base	
Status	PRD/A
Elec. spec.	06WGX203
Layout	06LYJ487
Eff. date	08-15-2025
CD Diagram	CD0006
Poles	04
Leads	3#16
Proprietary	False
Created date	03-27-2019

Heater Indicator	No Heater
High Voltage Full Load Amps	6.6 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	IP56
KVA Code	J
Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	3 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0642M
Mounting Arrangement	W6
Number of Poles	4
Overall Length	22.68 IN
Power Factor	79
Product Family	Chem Process S/P 32-8 IEEE 841
Pulley End Bearing Type	Ball
Pulley Face Code	P-Base
Pulley Shaft Indicator	P-Base Groove & Key
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1750 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP4328									
CAT.NO.	VLECP83665T-4								
SPEC.	06J487X203G1								
HP	5 TE				IP	56			
VOLTS	460								
AMPS	6.45								
R.P.M.	1750								
FRAME	184LP		HZ	60		PH	3		
SER.F.	1.15	CODE	J	DES.	B	CLASS	F		
RATING	40C AMB-CONT								
SN									
DE	6307		ODE	7305					
NEMA NOM. EFF.	89.5		P.F.	81					
GUAR. MIN. EFF.	87.5		CC	010A					
T. CODE	T3C		TEMP=	160					

NP3186					
SPEC.	06J487X203G1				
ABMA DE BRG	35BC03X30X				
ABMA ODE BRG	25BC03X30X				
GREASE	POLYREX EM				
MOTOR WEIGHT	115	ROTOR BARS	28	STATOR BARS	36
MAX. R.P.M.	2700	MAX. KVAR	1		
INV.TYPE	PWM				
T=	160				
CHP	60	TO	90		
CT	1.7	TO	60		
VT	-0	TO	60		
HTR-VOLTS	N/A	HTR-AMPS	N/A		
HTR-WATTS	N/A	MAX. SPACE HEATER TEMP.			N/A

AC Induction Motor Performance Data

Record # 117495

Typical performance - not guaranteed values

Winding: 06WGX203-R061			Type: 0642M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		5	Full Load Torque		15 LB-FT	
Volts		460	Start Configuration		direct on line	
Full Load Amps		6.45	Breakdown Torque		49.5 LB-FT	
R.P.M.		1750	Pull-up Torque		25.5 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque	31 LB-FT	
NEMA Design Code	B	KVA Code	J	Starting Current	44.7 A	
Service Factor (S.F.)		1.15	No-load Current		3.02 A	
NEMA Nom. Eff.	89.5	Power Factor	81	Line-line Res. @ 25°C	2.63 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		53°C	
S.F. Amps			Temp. Rise @ S.F. Load		66°C	
			Locked-rotor Power Factor		40.5	
			Rotor inertia		0.391 lb-ft²	

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	41	63	75	81	84	85	83
Efficiency	85.1	89.7	90.3	89.8	88.4	86.8	89
Speed	1789	1777	1765	1752	1737	1721	1743
Line amperes	3.35	4.14	5.21	6.45	7.91	9.47	7.33

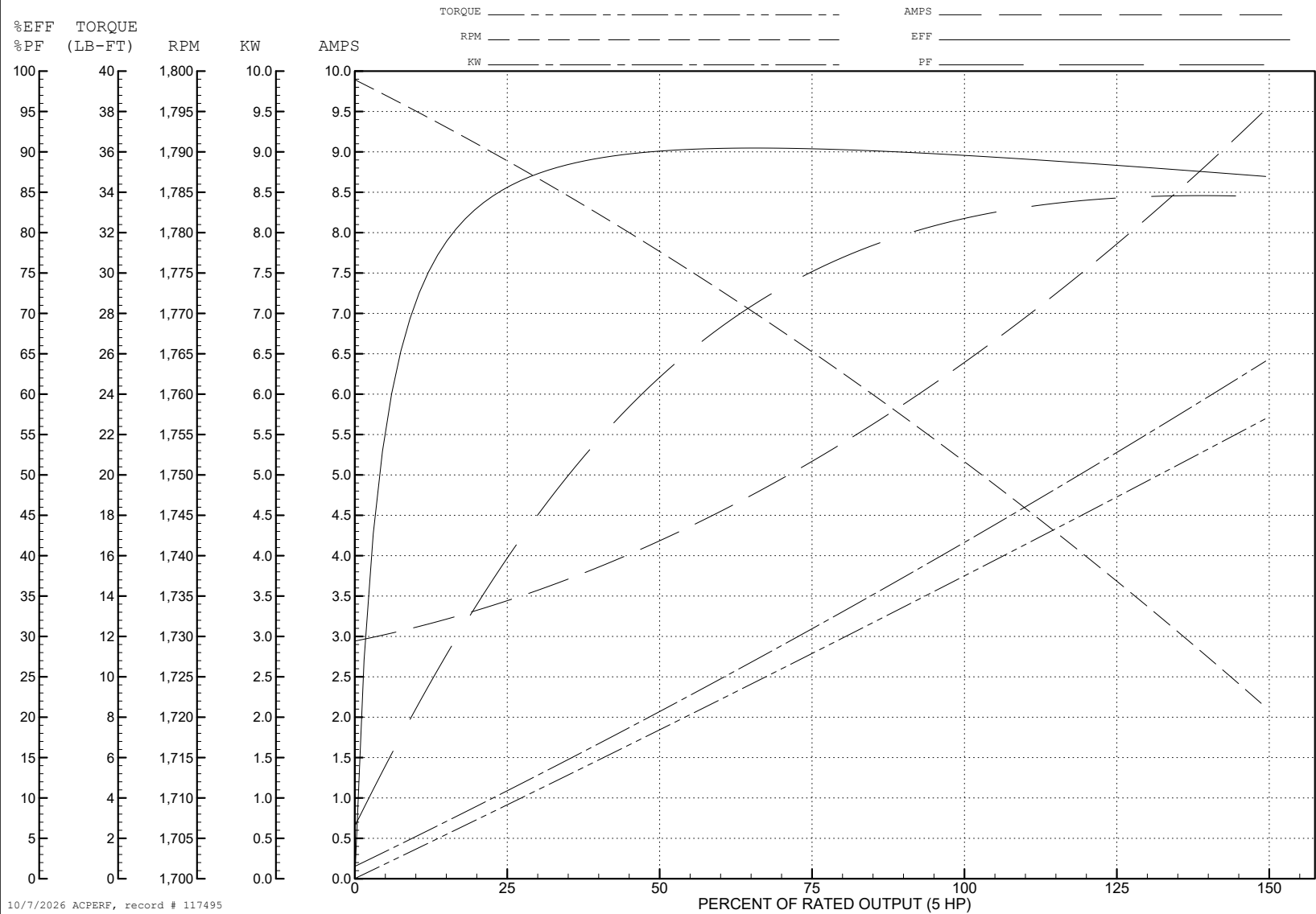
ABB Motors and Mechanical Inc.

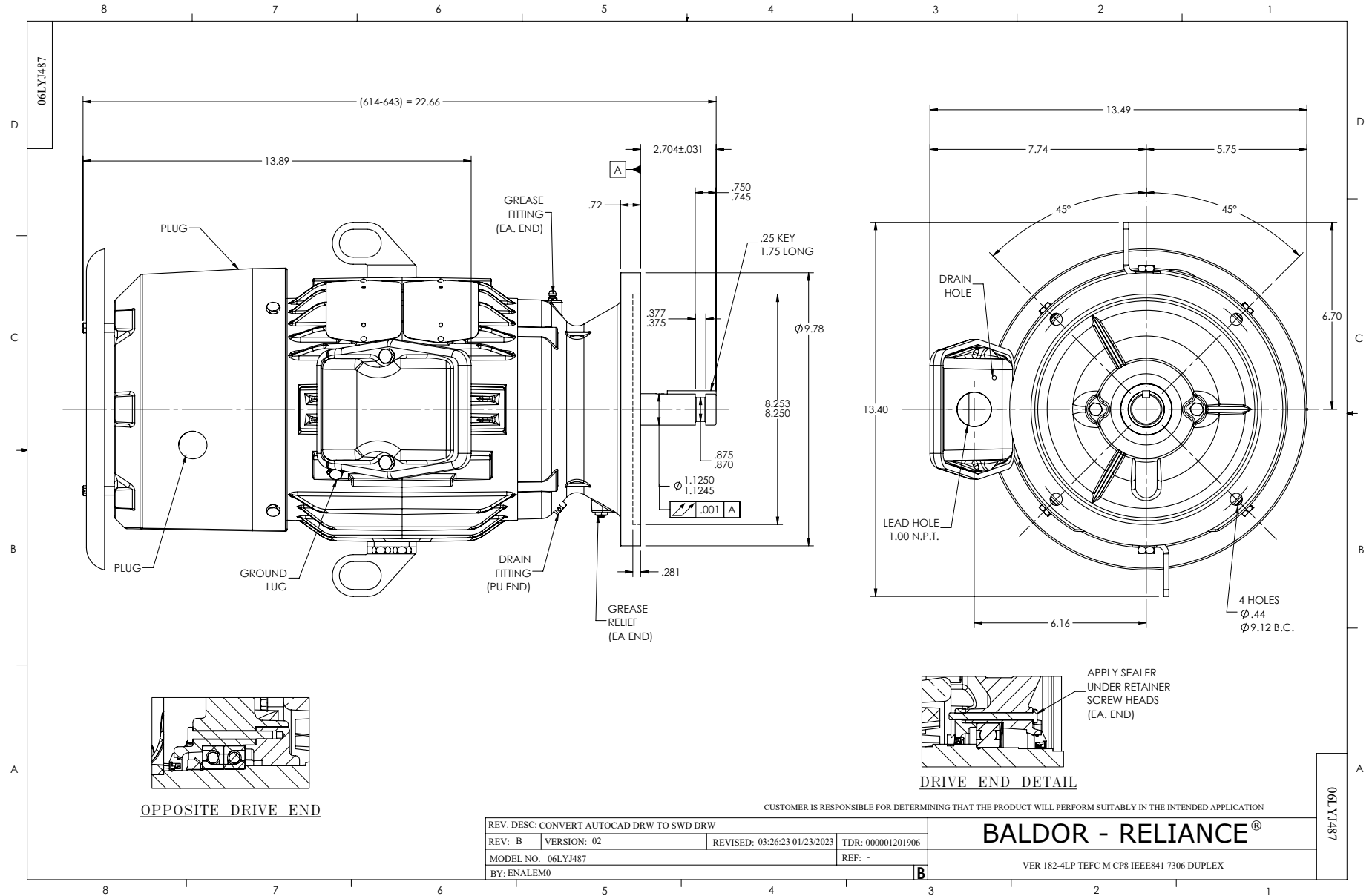
WINDING # 06WGX203

Typical performance - not guaranteed values.

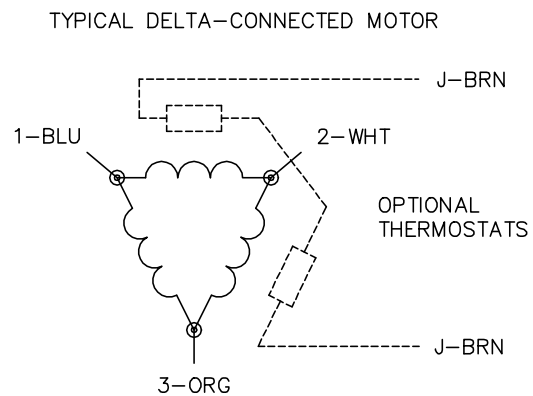
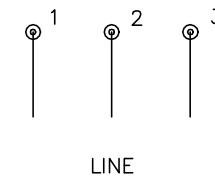
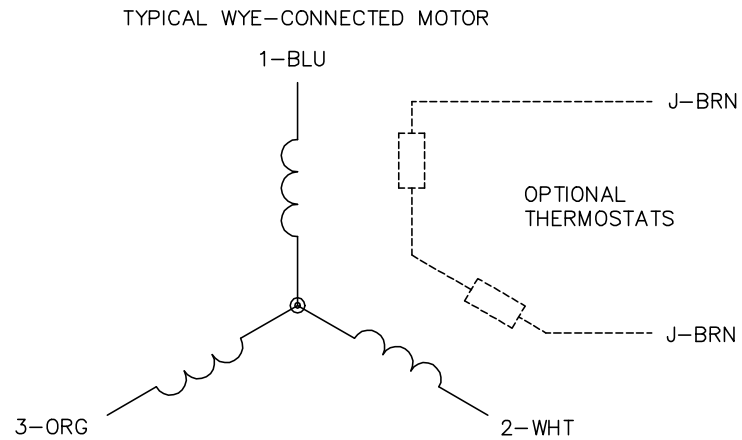
5 HP 3 PH 60 HZ 1750 RPM 460 V 0642M

TORQUES (LB-FT): PO=49.5 PU=25.5 LR=31 LRA=44.7





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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