

ABB BALDOR RELIANCE III

Customer information packet

VLECP83663T-4

42M 2P 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	3600 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	6
Current @ Voltage	5.700 A @ 460.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	88.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Haz Area Temp Code	T3

Part Detail

Revision	L
Type	AC
Mech. spec.	06J487
Base	
Status	PRD/A
Elec. spec.	06WGX822
Layout	06LYJ487
Eff. date	12-17-2025
CD Diagram	CD0006
Poles	02
Leads	3#16
Proprietary	False
Created date	03-27-2019

Heater Indicator	No Heater
High Voltage Full Load Amps	5.7 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	5400 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	2
Overall Length	22.68 IN
Power Factor	94
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	3440 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.	VLECP83663T-4								
SPEC.	06J487X822G1								
HP	5 TE				IP	56			
VOLTS	460								
AMPS	5.7								
R.P.M.	3440								
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.	88.5		P.F.		94				
GUAR. MIN. EFF.	86.5		CC		010A				
T. CODE	T3		TEMP=		160				

NP3186

SPEC.	06J487X822G1				
ABMA DE BRG	35BC03X30X				
ABMA ODE BRG					
GREASE	POLYREX EM				
MOTOR WEIGHT	123	ROTOR BARS	28	STATOR BARS	36
MAX. R.P.M.	5400	MAX. KVAR	0.15		
INV.TYPE	PWM				
T=	160				
CHP	60	TO	90		
CT	6	TO	60		
VT	3	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 # 59642

Typical performance - not guaranteed values

Winding: 06WGX822-R001			Type: 0642M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		5	Full Load Torque		7.76 LB-FT	
Volts		460	Start Configuration		direct on line	
Full Load Amps		5.7	Breakdown Torque		33.5 LB-FT	
R.P.M.		3440	Pull-up Torque		13.4 LB-FT	
Hz		60	Phase		3	
NEMA Design Code		B	KVA Code		J	
Service Factor (S.F.)		1.15	No-load Current		1.07 A	
NEMA Nom. Eff.		88.5	Power Factor		94	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		51°C
S.F. Amps				Temp. Rise @ S.F. Load		65°C
				Locked-rotor Power Factor		41.5
				Rotor inertia		0.188 lb-ft²

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	78	90	93	94	93	97	93
Efficiency	90	92	90	89	86	84	87.4
Speed	3559	3523	3481	3439	3384	3327	3406
Line amperes	1.8	2.92	4.25	5.68	7.33	8.75	6.67

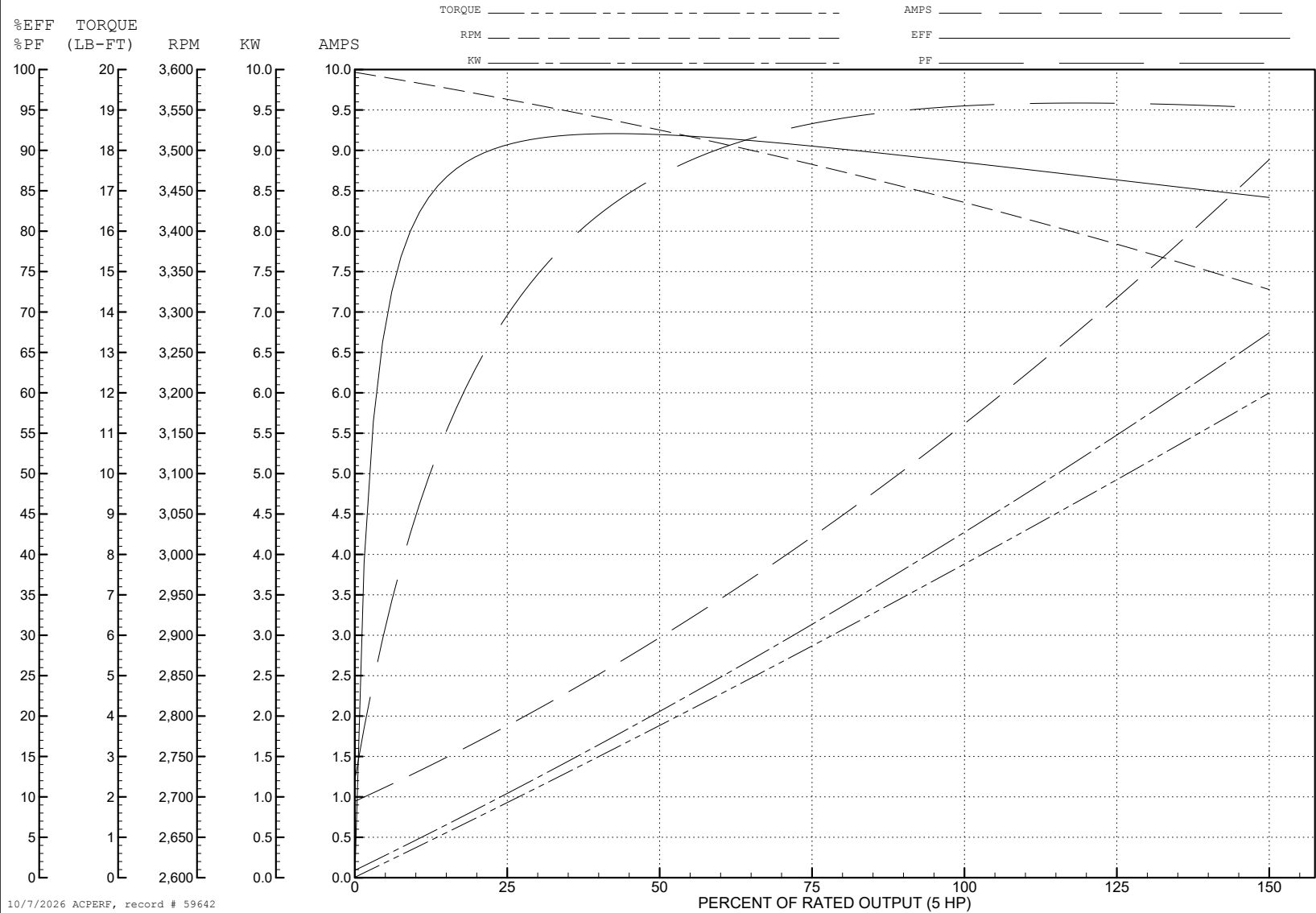
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WINDING # 06WGX822

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 3440 RPM 460 V 0642M

TORQUES (LB-FT): PO=33.5 PU=13.4 LR=22.9 LRA=45.4



AC Induction Motor Performance Data

Record # 59648

Typical performance - not guaranteed values

Winding: 06WGX822-R001			Type: 0642M		Enclosure: TEFC			
Nameplate Data			368 V, 60 Hz: Single Voltage Motor					
Rated Output (HP)		5	Full Load Torque		7.99 LB-FT			
Volts		460	Start Configuration		direct on line			
Full Load Amps		5.7	Breakdown Torque		21.34 LB-FT			
R.P.M.		3440	Pull-up Torque		8.58 LB-FT			
Hz		60	Phase		3	Locked-rotor Torque	14.61 LB-FT	
NEMA Design Code		B	KVA Code		J	Starting Current		36.32 A
Service Factor (S.F.)		1.15	No-load Current		0.871 A			
NEMA Nom. Eff.		88.5	Power Factor		94	Line-line Res. @ 25°C		2.61 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		62°C		
S.F. Amps				Temp. Rise @ S.F. Load		86°C		
				Locked-rotor Power Factor		41.5		
				Rotor inertia		0.188 lb-ft²		

Load Characteristics 368 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	88	93	94	94	91	90	92
Efficiency	91.7	91	88.4	85.1	80.5	73.9	82.6
Speed	3539	3483	3415	3339	3233	3065	3277
Line amperes	1.98	3.54	5.38	7.46	10.11	13.35	9.04

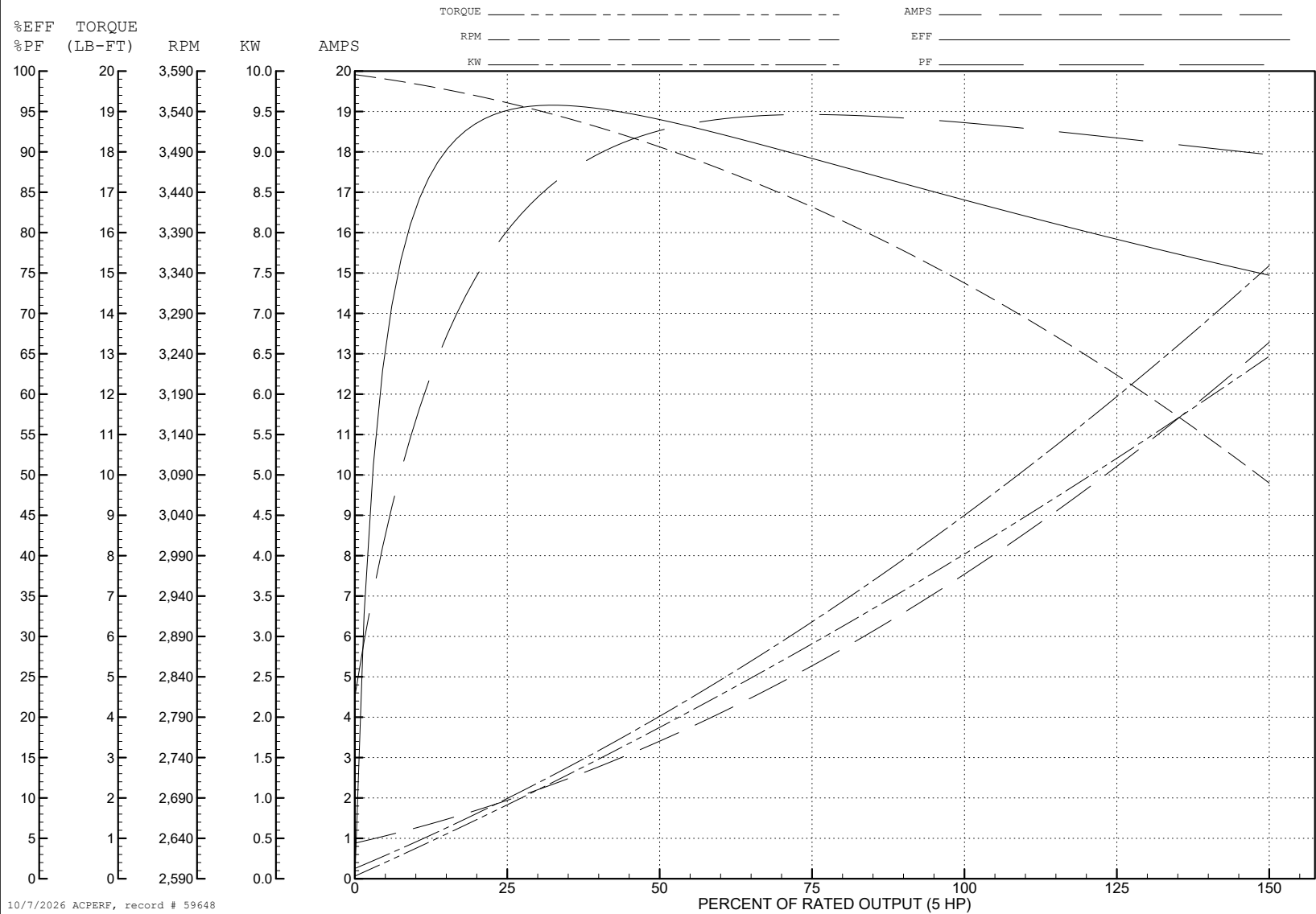
ABB Motors and Mechanical Inc.

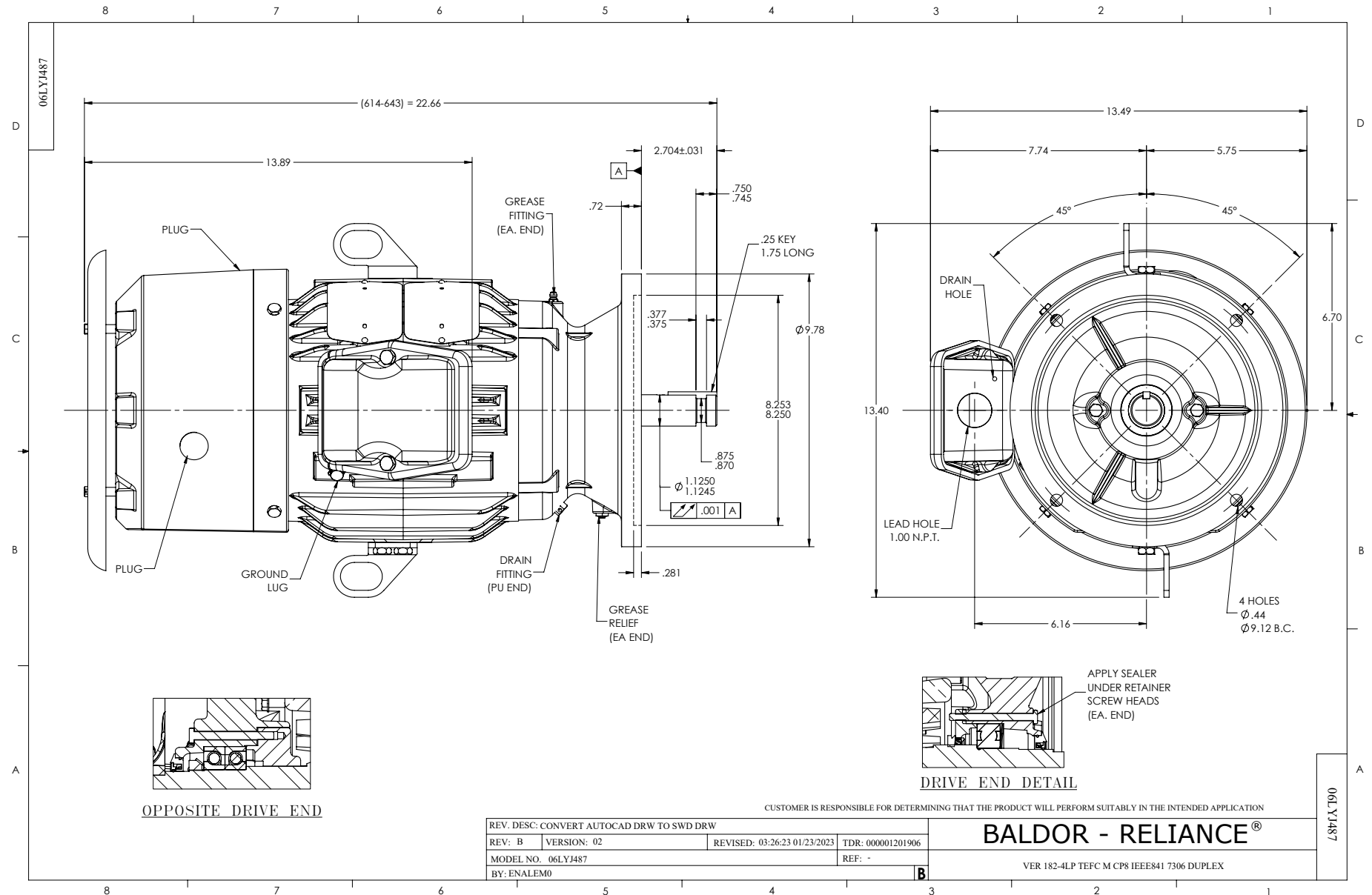
WINDING # 06WGX822

Typical performance - not guaranteed values.

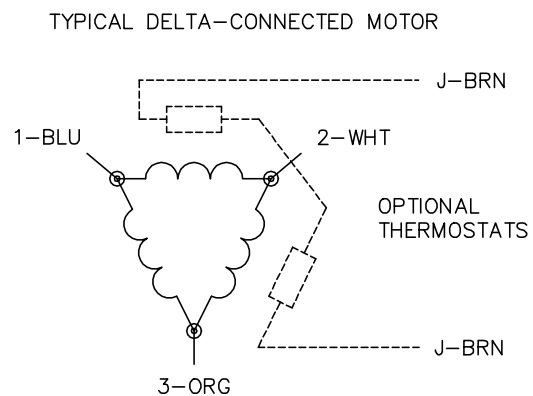
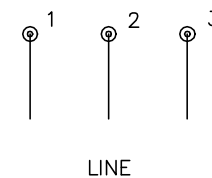
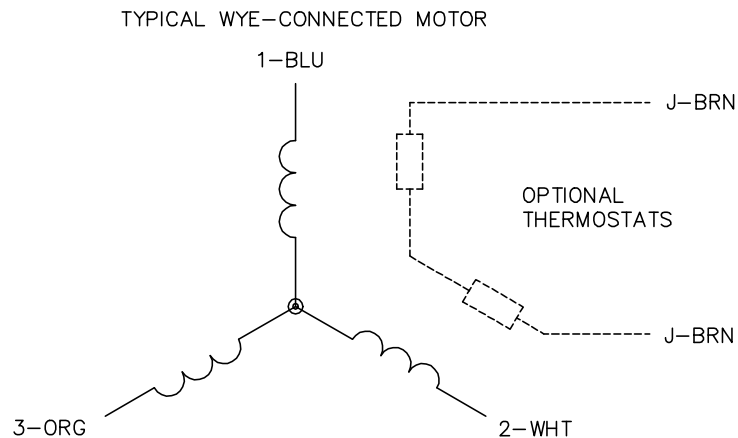
5 HP 3 PH 60 HZ 3440 RPM 368 V 0642M

TORQUES (LB-FT): PO=21.34 PU=8.58 LR=14.61 LRA=36.32





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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