

ABB BALDOR RELIANCE III

Customer information packet

ECP83665T-4

5HP, 1750RPM, 3PH, 60HZ, 184T, 0641M, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	184T
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 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	1.7
Current @ Voltage	6.450 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	AH
Type	AC
Mech. spec.	06H759
Base	
Status	PRD/A
Elec. spec.	06WGX203
Layout	06LYH759
Eff. date	10-01-2025
CD Diagram	CD0006
Poles	04
Leads	3#16
Proprietary	False
Created date	04-04-2012

Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	6.5 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 16 AWG
Motor Lead Termination	Ring Terminals
Motor Standards	NEMA
Motor Type	0642M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.93 IN
Power Factor	81
Product Family	Chem Process S/P 32-8 IEEE 841
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1750 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

NP4328									
CAT.NO.	ECP83665T-4								
SPEC.	06H759X203G2								
HP	5 TE				IP	56			
VOLTS	460								
AMPS	6.45								
R.P.M.	1750								
FRAME	184T		HZ		60		PH	3	
SER.F.	1.15	CODE	J	DES.	B	CLASS		F	
RATING	40C AMB-CONT								
SN									
DE	6206		ODE		6206				
NEMA NOM. EFF.	89.5		P.F.		81				
GUAR. MIN. EFF.	87.5		CC	010A					
T. CODE	T3C		TEMP=		160				

NP3186									
SPEC.	06H759X203G2								
ABMA DE BRG	30BC02X30X								
ABMA ODE BRG	30BC02X30X								
GREASE	POLYREX EM								
MOTOR WEIGHT	127	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 # 47020

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		6.6	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	44.65 A	
Service Factor (S.F.)		1.15	No-load Current		3.02 A	
NEMA Nom. Eff.	89.5	Power Factor	79	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		65°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	81
Efficiency	85.2	89.8	90.4	89.8	88.4	86.9	88.7
Speed	1789	1777	1765	1752	1737	1721	1739
Line amperes	3.35	4.14	5.21	6.45	7.91	9.47	7.52

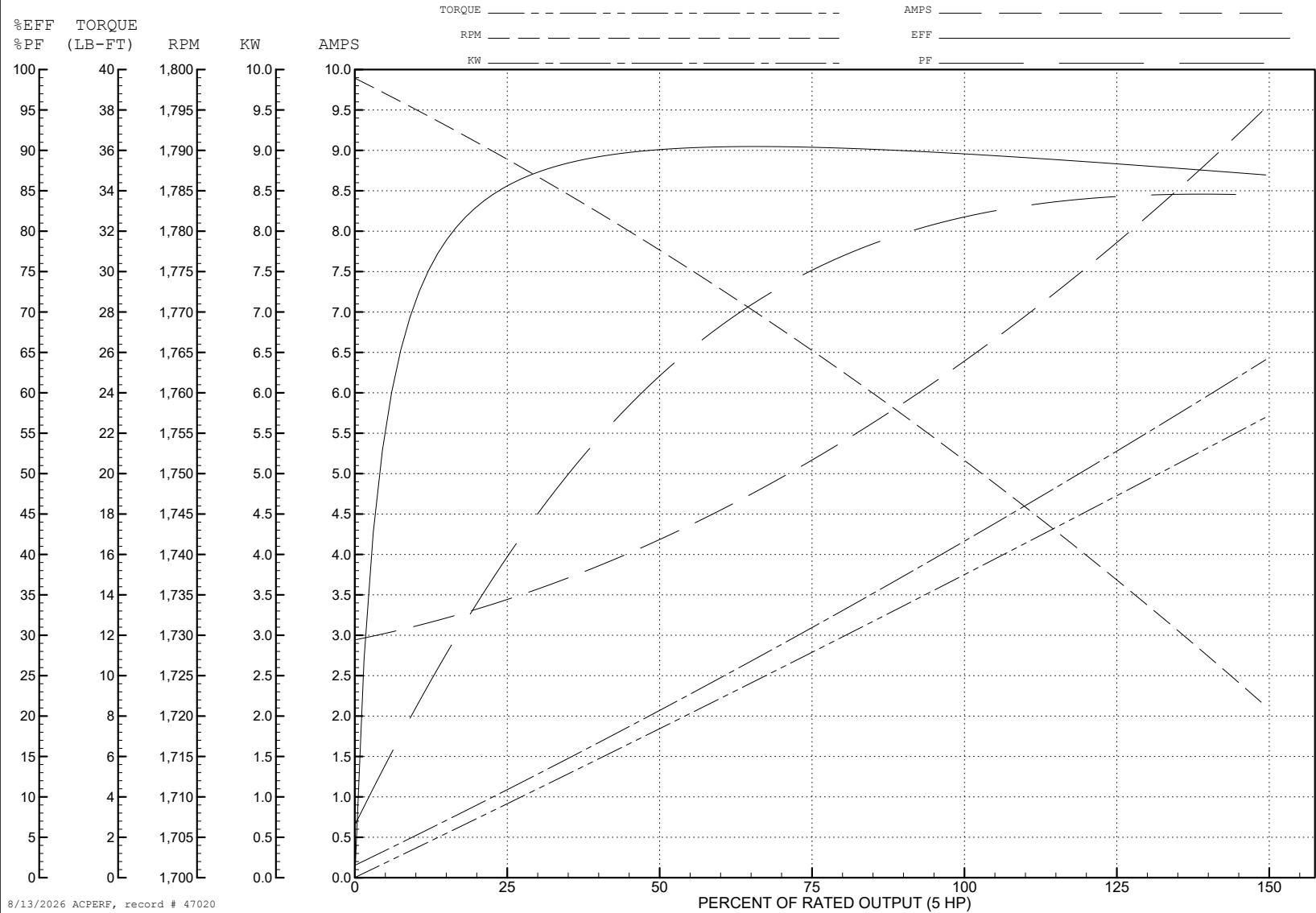
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WINDING # 06WGX203

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=44.65



AC Induction Motor Performance Data

Record # 116644

Typical performance - not guaranteed values

Winding: 06WGX203-R061			Type: 0642M		Enclosure: TEFC	
Nameplate Data			368 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		5	Full Load Torque		15.46 LB-FT	
Volts		460	Start Configuration		direct on line	
Full Load Amps		6.45	Breakdown Torque		21 LB-FT	
R.P.M.		1750	Pull-up Torque		10.6 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		12.9 LB-FT
NEMA Design Code	B	KVA Code	J	Starting Current		29.6 A
Service Factor (S.F.)		1.15	No-load Current		1.71 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		95°C	
S.F. Amps			Temp. Rise @ S.F. Load		129°C	
			Locked-rotor Power Factor		40.5	
			Rotor inertia		0.391 lb-ft²	

Load Characteristics 368 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	63	75	75	73	70	64	71
Efficiency	89.5	90.5	88.3	85.1	80.7	74	82.5
Speed	1779	1755	1728	1696	1654	1589	1671
Line amperes	2.49	4.27	6.59	9.46	12.92	18.55	11.5

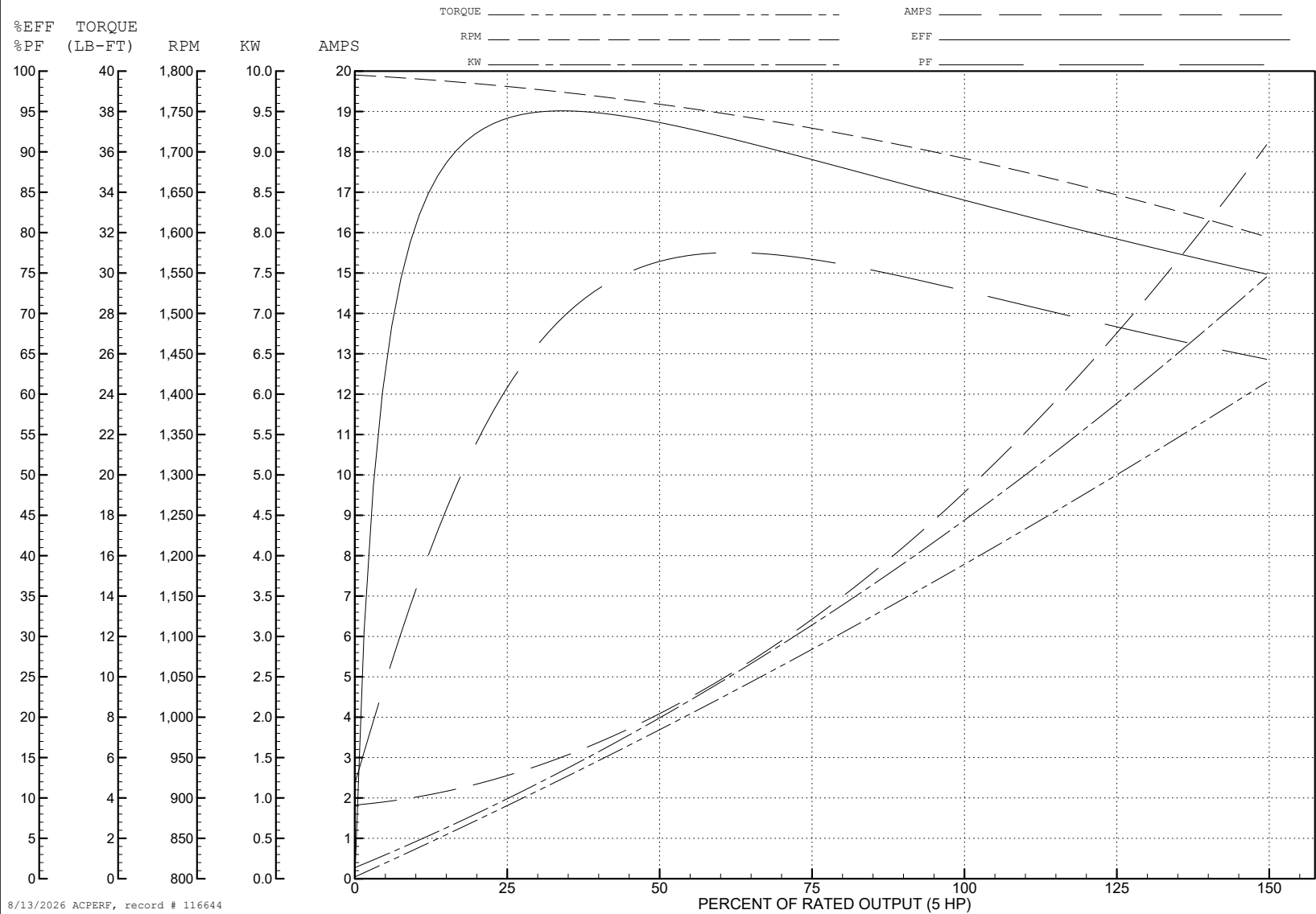
ABB Motors and Mechanical Inc.

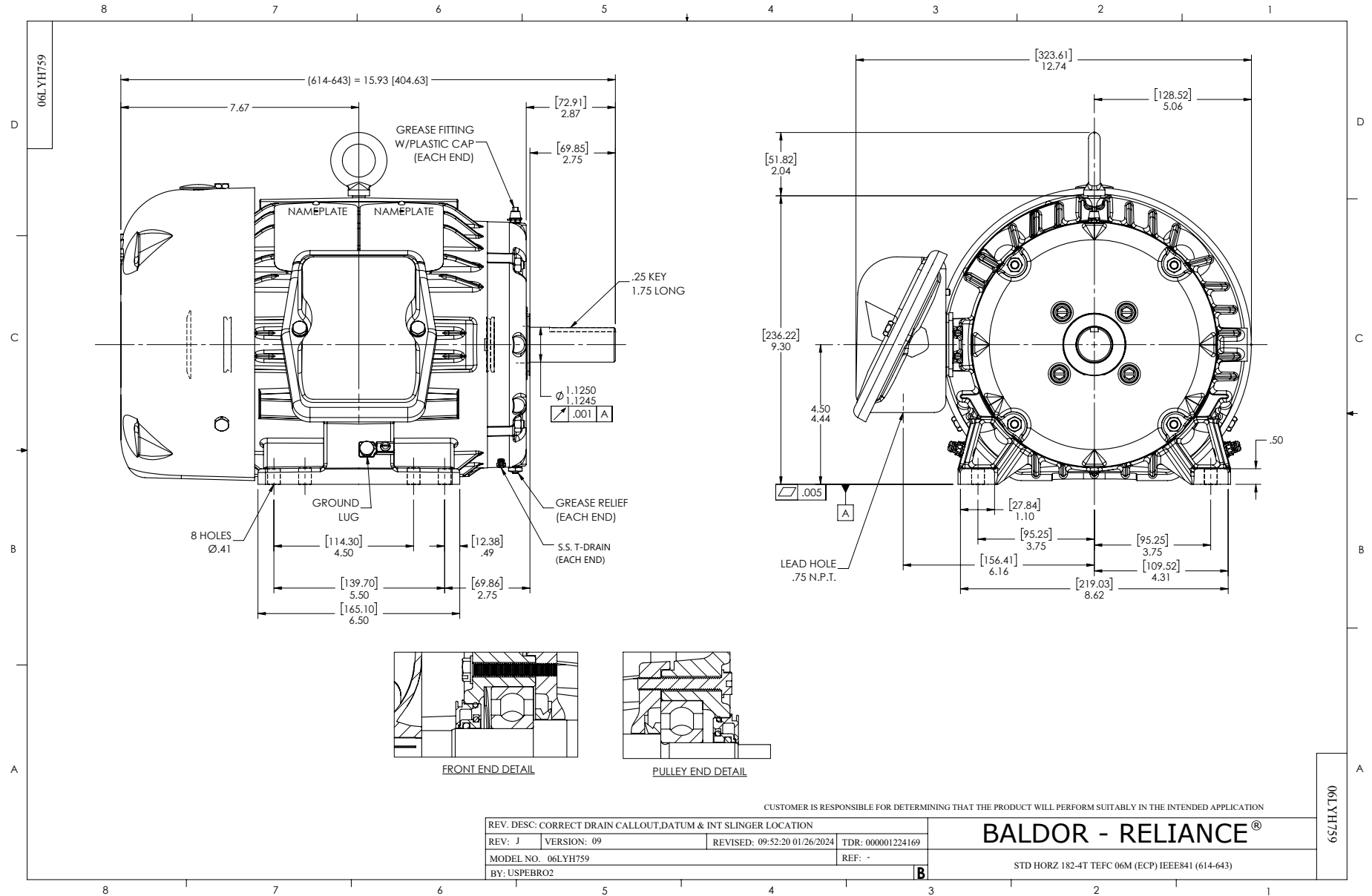
WINDING # 06WGX203

Typical performance - not guaranteed values.

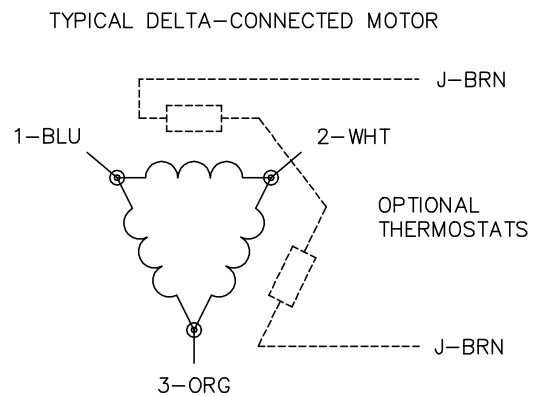
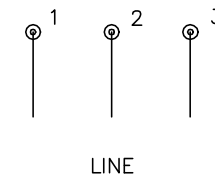
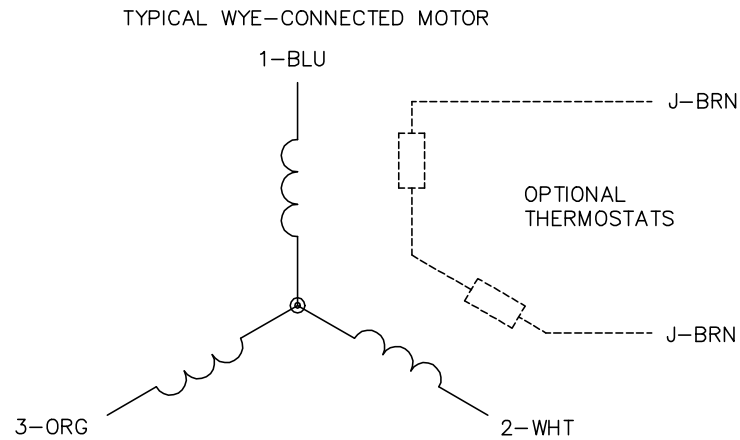
5 HP 3 PH 60 HZ 1750 RPM 368 V 0642M

TORQUES (LB-FT): PO=21 PU=10.6 LR=12.9 LRA=29.6





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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