

ABB BALDOR RELIANCE III

Customer information packet

ECP64103TR-4

25HP, 1770RPM, 3PH, 60HZ, 284T, 1056M, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	284T
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	25.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSA US CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Mobilith SHC220, HC9455
Blower	None
Constant Torque Speed Range	1.0
Current @ Voltage	30.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	M
Type	AC
Mech. spec.	10J448
Base	
Status	PRD/A
Elec. spec.	10WGZ580
Layout	10LYJ448
Eff. date	09-29-2025
CD Diagram	CD0006
Poles	04
Leads	3#10
Proprietary	False
Created date	01-11-2017

Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	30.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	F
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 @ 10 AWG
Motor Lead Termination	Ring Terminals
Motor Standards	NEMA
Motor Type	1056M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	28.01 IN
Power Factor	85
Product Family	Chem Process S/P 32-8 IEEE 841
Pulley End Bearing Type	Roller
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 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

NP4367																		
CAT.NO.	ECP64103TR-4				CUST. P/N								ENCL	TEFC				
SPEC.	10J448Z580G1				CC	010A	FRAME	284T		SER.NO.								
HP	25				CLASS		F	HZ	60	ODE BRG		6311	DE BRG		NU311			
R.P.M.	1770	MAX. R.P.M.		2700		PH.		3	DES.		B	ABMA DE BRG			55RU03X30X			
VOLTS	460				CODE		F	ABMA ODE BRG				55BC03X30X						
AMPS	30				MOTOR WT.				461		LUBRICATION		MOBIL SHC 222					
RATING	40C AMB-CONT				MAX. KVAR				5.9		BLANK		AIR COOLED HEAT					
NEMA NOM. EFF.	93.6	# OF ROTOR BARS			40		SER.F.		1.15		IP	56	EXCHANGER					
GUAR.MIN.EFF	92.4	# OF STATOR SLOTS			48		P.F.		85		1.0 S.F. ON		PWM					
TEMP CODE	T3C		INVERTER TEMP CODE:TEMP=						180									
TEMP =	160	CHP	60	TO	90													
CT	1.0	TO	60															
VOLTS		AMPS			WATTS			MAX. SPACE HEATER TEMP.							VT	O	TO	60

Parts List

Part number	Description	Quantity
SA332441	SA 10J448Z580G1	1.000 ea
RA320526	RA 10J448Z580G1	1.000 ea
09FN3001C02	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
10XN2520K06	1/4-20 X 3/8" HX HD SCREWGRADE 5, ZINC P	1.000 ea
10CB1000A09P	KOBX, MACH W/1.50 NPT & PRIMER	1.000 ea
09GS1010	GASKET, DWG, LEADWIRE SEPERATOR	1.000 ea
10XN3118K16	5/16-18 X 1' GRADE #5, STL, ZINC PLATE	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
10CB1503P	CONDUIT BOX LIPPED, CAST W/EPOXY PRIMER	1.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
10XN2520K06	1/4-20 X 3/8" HX HD SCREWGRADE 5, ZINC P	1.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HA4017A02	.125X2.50 GREASER EXTENS.F/S	2.000 ea
HW4019A01	PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING	1.000 ea
HW4601A53	INPRO/SEAL VBXX FOR 311 BEARING/310 FRAM	1.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 ea
HW4600G54	DOME SLINGER, 7.125 OD X 1.870/1.810 ID	1.000 ea
10EP1110A123P	MACH'D W/EPOXY PRIMER	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HW4601A53	INPRO/SEAL VBXX FOR 311 BEARING/310 FRAM	1.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 ea
WD4100A08	HEYCO #2783 DOME PLUG DP-2000(CUSTOME	1.000 ea
10XN3118K16	5/16-18 X 1' GRADE #5, STL, ZINC PLATE	3.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	3.000 ea
14GS1003	GASKET CONDUIT BOX LID, NEOP	1.000 ea

10XN2520K16	1/4-20 X 1" HX HD SCRW GRADE 5, ZINC P	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
MJ5004A59	ADHESIVE LOCTITE #401 MSC #88545264	0.010 ea
HW2501H28	KEY, 1/2 SQ X 3.250	1.000 ea
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.025 ea
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.033 ea
WD1000B49	T&B C73,RING TERMINAL 10-12 AWG 3/8 STUD	3.000 ea
10EP1110A139LP5	FR ENDPLATE, MACH W/EPOXY & MG1025L14	1.000 ea
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HA4002A03	#304 S.S. DRAIN FITTING, .125 NPT (.44 H	1.000 ea
MJ1000B28	GREASE, MOBIL SHC POLYREX 222	0.130 lb
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 qt
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4002A03	#304 S.S. DRAIN FITTING, .125 NPT (.44 H	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
10FH1007A70LP5	FAN COVER, MACH W/2.00 BORE,EPOXY PRIMER	1.000 ea
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN 8	0.070 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0006	CONNECTION LABEL	1.000 ea
NP4367	2gd	1.000 ea
12PA1000	PACKAGING GROUP PRINT PK1024A07	1.000 ea
10PA1086	SHAFT TENSIONER 2X4 5-1/4 LEG 4-3/4 OPEN	1.000 ea
10XN5013K48	1/2-13 X 3.00 HEX HD GRADE 5	1.000 ea
HW1000A50	1/2 SAE FLAT WASHERS	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

AC Induction Motor Performance Data

Record # 61560

Typical performance - not guaranteed values

Winding: 10WGZ580-R001			Type: 1056M	Enclosure: TEFC			
Nameplate Data			460 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		25	Full Load Torque		74.31 LB-FT		
Volts		460	Start Configuration		direct on line		
Full Load Amps		30	Breakdown Torque		197 LB-FT		
R.P.M.		1770	Pull-up Torque		91.4 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		115 LB-FT	
NEMA Design Code		B	KVA Code	F	Starting Current		173 A
Service Factor (S.F.)		1.15	No-load Current		10.4 A		
NEMA Nom. Eff.		93.6	Power Factor	85	Line-line Res. @ 25°C		0.29877 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		54°C
S.F. Amps					Temp. Rise @ S.F. Load		67°C
					Locked-rotor Power Factor		30.3
					Rotor inertia		4.46 lb-ft²

Load Characteristics 460 V, 60 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	51	73	81	85	86	86	86
Efficiency	91	93.8	94.1	93.7	92.9	91.8	93.2
Speed	1792.8	1785.5	1778.9	1770.7	1762.4	1751.5	1766
Line amperes	12.5	17	22.9	29.5	36.5	44.7	33.7

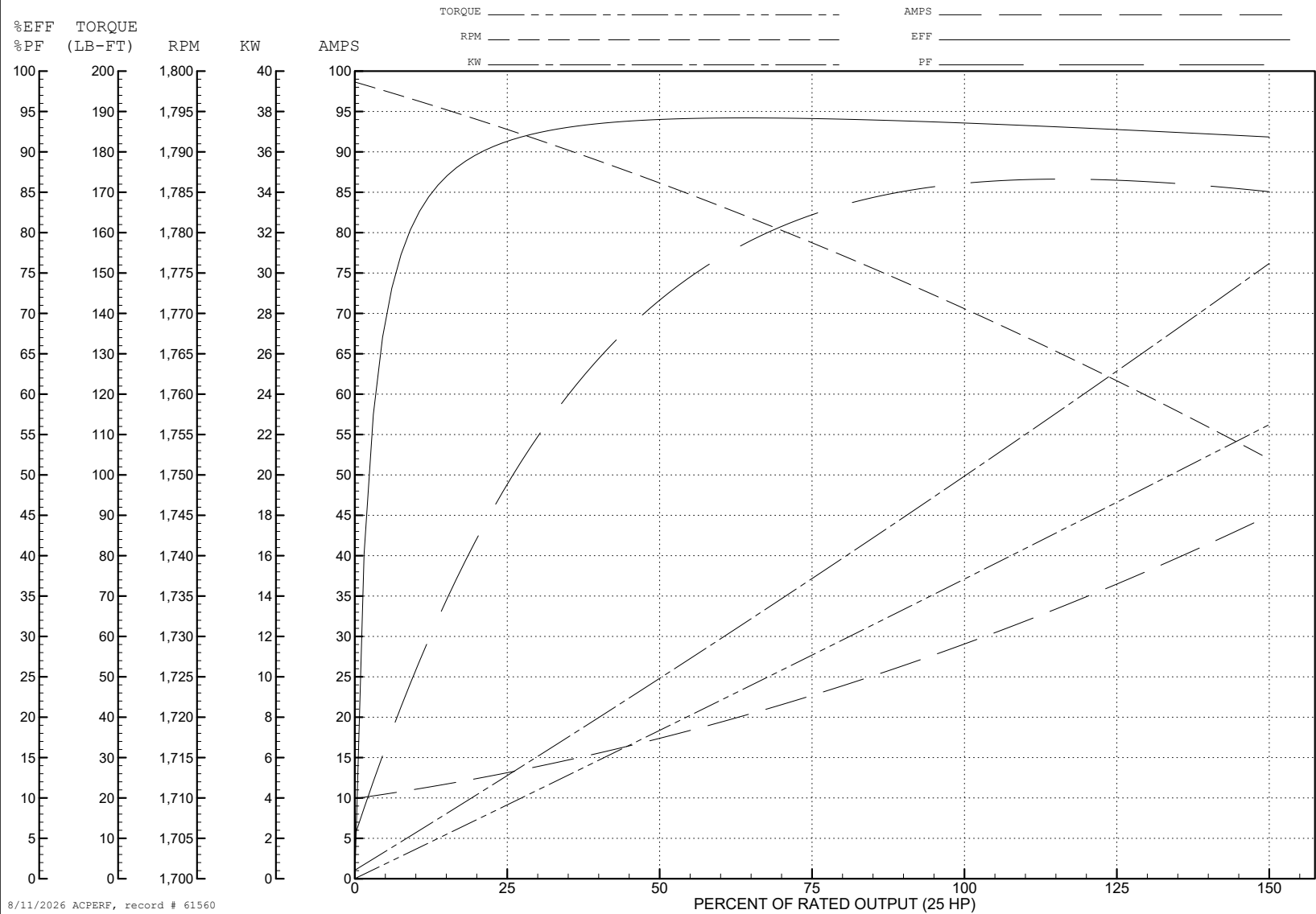
ABB Motors and Mechanical Inc.

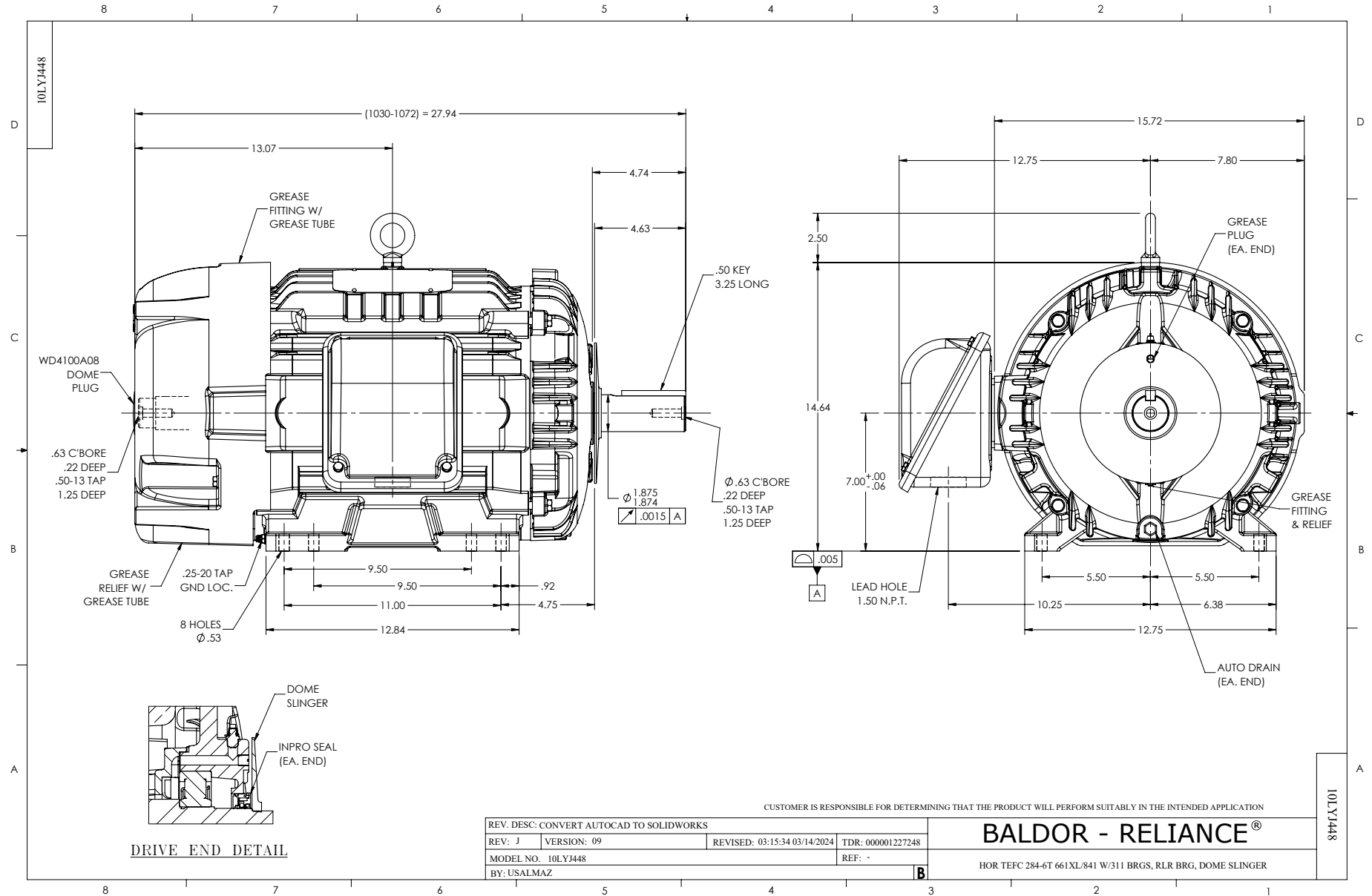
WINDING # 10WGZ580

Typical performance - not guaranteed values.

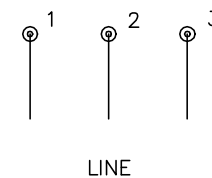
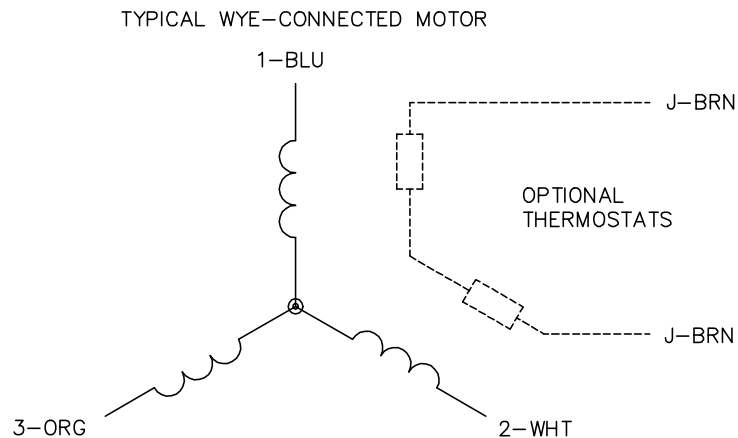
25 HP 3 PH 60 HZ 1770 RPM 460 V 1056M

TORQUES (LB-FT): PO=197 PU=91.4 LR=115 LRA=173





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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