

ABB BALDOR RELIANCE III

Customer information packet

CDRX28324T

30HP, 3520//2920RPM, 3PH, 60/50HZ, 286TSC, XP

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	286TSC
Frame Material	Iron
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	25.000 HP @ 50 HZ 30.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	380.0 V @ 50 HZ 230.0 V @ 60 HZ 190.0 V @ 50 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV UL
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	6
Current @ Voltage	72.000 A @ 208.0 V 68.000 A @ 190.0 V 66.000 A @ 230.0 V 34.000 A @ 380.0 V 33.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover

Part Detail

Revision	G
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	10WGZ035
Layout	10LYG898
Eff. date	11-05-2024
CD Diagram	CD0180
Poles	02
Leads	9#10
Proprietary	False
Created date	06-04-2019

Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	33.0 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1046M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	27.23 IN
Power Factor	90
Product Family	Hazardous Location Motor
Pulley Face Code	C-Face
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	3520 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1401XPSLEV													
NO.							CC	010A					
S/N							TEMP CODE	T3C					
SPEC.	10-0000-0834						INV.TYPE	PWM					
CAT.NO.	CDRX28324T						C HP FR	60	C HP TO	90			
HP	30//25						CT HZ FROM	6	CT HZ TO	60			
VOLTS	230/460//190/380						VT HZ FROM	6	VT HZ TO	60			
AMPS	66/33//68/34						MAG CUR	18/9					
RPM	3520//2920						MX RPM	5400					
HZ	60//50	PH	3	CL	F	NOM.EFF.	91.7						
SER.F.	1.00	DES	B	SL HZ	1.3	WK2	1.98						
FRAME	286TSC	RATING	40C AMB-CONT										
	55C AMB @ 1.0 SF, 60C RISE												
	1.15SF ON SINEWAVE						NEMA MG-1 PT.5,IP55						

Parts List

Part number	Description	Quantity
SA370308	SA 10-0000-0834	1.000 ea
RA359953	RA 10-0000-0834	1.000 ea
LC0181	CONNECTION LABEL	1.000 ea
NP1401XPSLEV	SS XP INV UL CSA-EEV CC CL-I GP-C&D	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1081C	ALUM XP CAUTION LABEL (COL PLANT ONLY-	1.000 ea
14PA2000	PKGP, CTN ID 42X34X25, STD BASE	1.000 ea
10FH1008A05P	310 FAN HOUSING X-PROOF MACH. W/EPOXY PR	1.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	3.000 ea
10XN3118K12	5/16-18 X .75 GRADE 5, ZINC PLATED	3.000 ea
09FN3001B02	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.130 lb
HA3050A03	3/8-16 X 2.25" GRADE 8 BOLT	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HA2066A02	ALUM SLINGER 309 BRG DRILL RIG MOTOR)	1.000 ea
80XN1032J06	10-32 X 3/8 SET SCREW, HEX SOC, CUP PT	2.000 ea
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 ea
HA4017A03	.125 X 1.75 GREASE EXT (F/S)	1.000 ea
HA4017A06	/125 X 3.00 GREASER EXT. (F/S)	1.000 ea
HW4019A01	PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW4505A02	BREATHER/DRAIN-EXP PROOF-.250-18 PTF AIS	1.000 ea
HW3023E06	.125 X .625 SPIRAL SPRING PIN	1.000 ea
10EP1710A09P	FACE MTD. EP MACH XPFC W/HW4505A02 W/PRI	1.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HA3050A03	3/8-16 X 2.25" GRADE 8 BOLT	4.000 ea

HA2067A01	ALUM SLINGER 311 BRG DRILL RIG MOTOR	1.000 ea
80XN1032J06	10-32 X 3/8 SET SCREW, HEX SOC, CUP PT	2.000 ea
10XN2520K40	1/4-20 X 2-1/2 HEX HD CAPSCREW, GRADE 5, Z	4.000 ea
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
HW4505A02	BREATHING/DRAIN-EXP PROOF-.250-18 PTF AIS	1.000 ea
HW3023E06	.125 X .625 SPIRAL SPRING PIN	1.000 ea
10EP1701A57LP5	FR ENDPLATE, MACH PRIMED & PAINTED	1.000 ea
12CB1003A02P	KOBX, MACH 1.50 NPT GROUP C MTRS ,EPOXY	1.000 ea
10XN3118K24	5/16-18 X 1.50" HEX HD, GRADE 5	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
WD1000B19	TERMINAL BURNDY L250HP	1.000 ea
10XN3816K08	3/8-16 X .50 HEX HD CAP SCREW GRADE 5	1.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	1.000 ea
12CB1502A01P	CONDUIT BOX LID MACH. GROUP C MTRS	1.000 ea
84XN5013J32	SOCKET HD.CAP SCR,1/2-13 X 2"LG,ALLOY ST	10.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT, .879 OD, .509 I	10.000 ea
MG1025G29	WILKOFAS, 789.229, DARK CHARCOAL GRAY	0.125 ga
HW2501G17	KEY, 3/8 SQ X 1.875	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

AC Induction Motor Performance Data

Record # 75696

Typical performance - not guaranteed values

Winding: 10WGZ035-R005			Type: 1046M		Enclosure: XPFC			
Nameplate Data				380 V, 50 Hz: High Voltage Connection				
Rated Output (HP)		30//25		Full Load Torque		44.55 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		66/33//68/34		Breakdown Torque		164 LB-FT		
R.P.M.		3520//2920		Pull-up Torque		64.66 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		85.07 LB-FT	
NEMA Design Code		B		KVA Code	G	Starting Current		219 A
Service Factor (S.F.)		1		No-load Current		8.71 A		
NEMA Nom. Eff.		91.7	Power Factor		90	Line-line Res. @ 25°C		0.239 Ω
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		59°C
						Locked-rotor Power Factor		26.5
						Rotor inertia		1.97 LB-FT2

Load Characteristics 380 V, 50 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	64	83	89	91	92	91
Efficiency	90.9	93.3	93.5	92.5	91.9	90.6
Speed	2981	2963	2946	2927	2907	2883
Line amperes	11.87	18.29	25.38	33.31	42.09	51.47

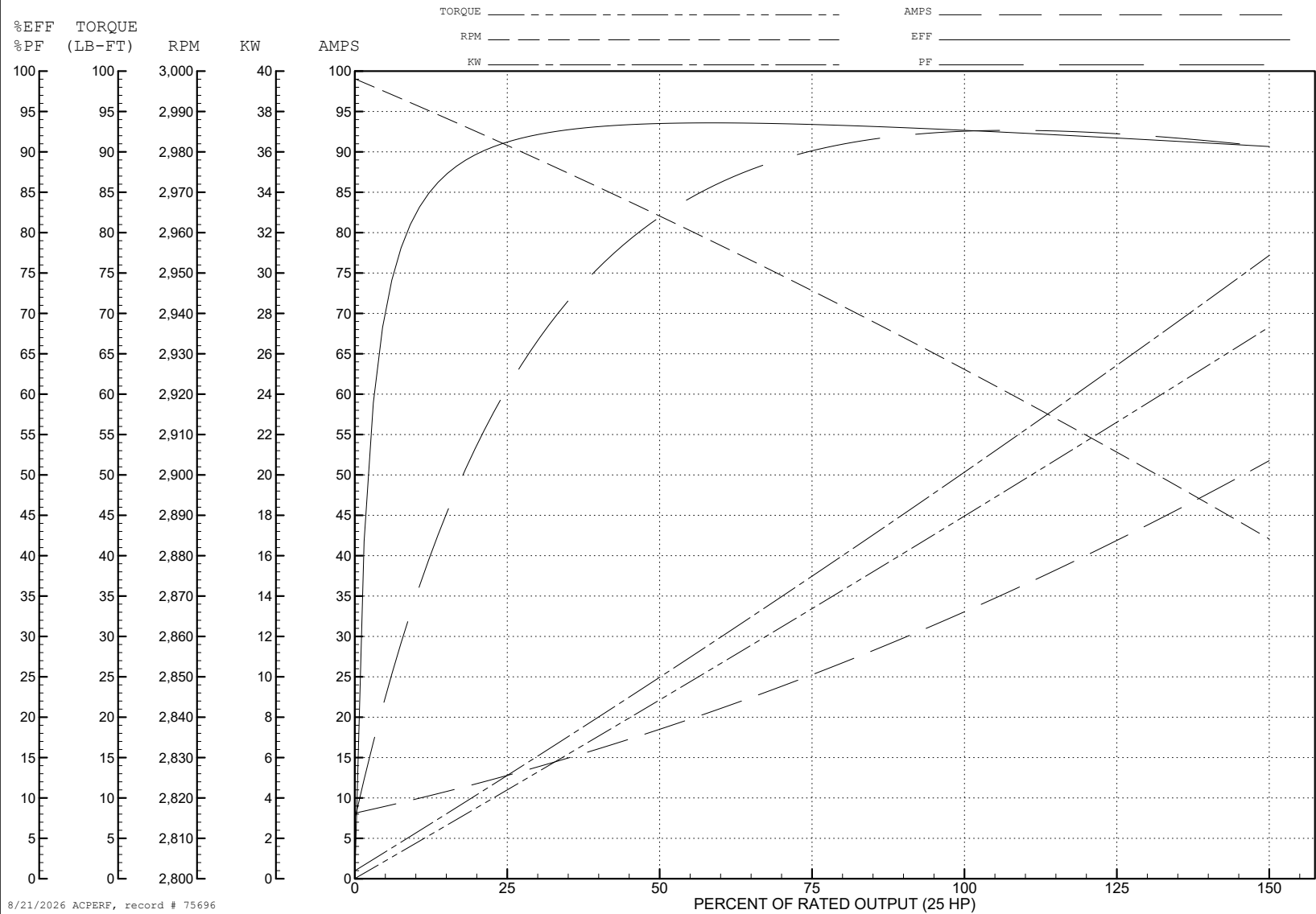
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WINDING # 10WGZ035

Typical performance - not guaranteed values.

25 HP 3 PH 50 HZ 2927 RPM 380 V 1046M

TORQUES (LB-FT): PO=164 PU=64.66 LR=85.07 LRA=219



AC Induction Motor Performance Data

Record # 75697

Typical performance - not guaranteed values

Winding: 10WGZ035-R005			Type: 1046M		Enclosure: XPFC			
Nameplate Data					460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		30//25		Full Load Torque		44.4 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		66/33//68/34		Breakdown Torque		169 LB-FT		
R.P.M.		3520//2920		Pull-up Torque		60.8 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		80 LB-FT	
NEMA Design Code		B		KVA Code	G	Starting Current		223 A
Service Factor (S.F.)		1		No-load Current		8.85 A		
NEMA Nom. Eff.		91.7	Power Factor		90	Line-line Res. @ 25°C		0.239 Ω
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		58°C
						Locked-rotor Power Factor		23.5
						Rotor inertia		1.97 LB-FT2

Load Characteristics 460 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	64	83	89	91	92	91
Efficiency	89.6	92.9	93.5	92.7	92.4	91.4
Speed	3580	3561	3544	3525	3504	3480
Line amperes	12	18.3	25.2	33	41.5	50.5

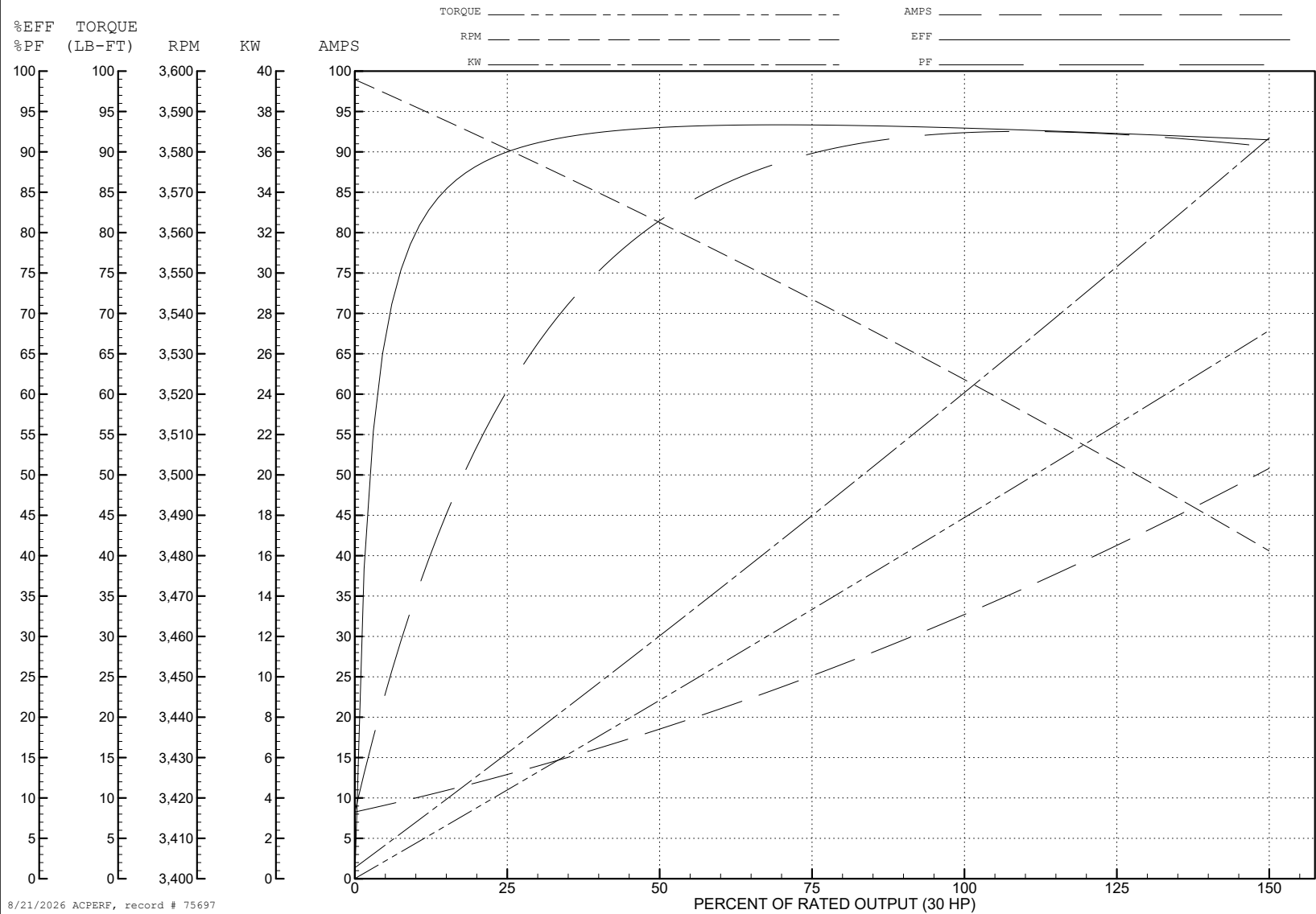
ABB Motors and Mechanical Inc.

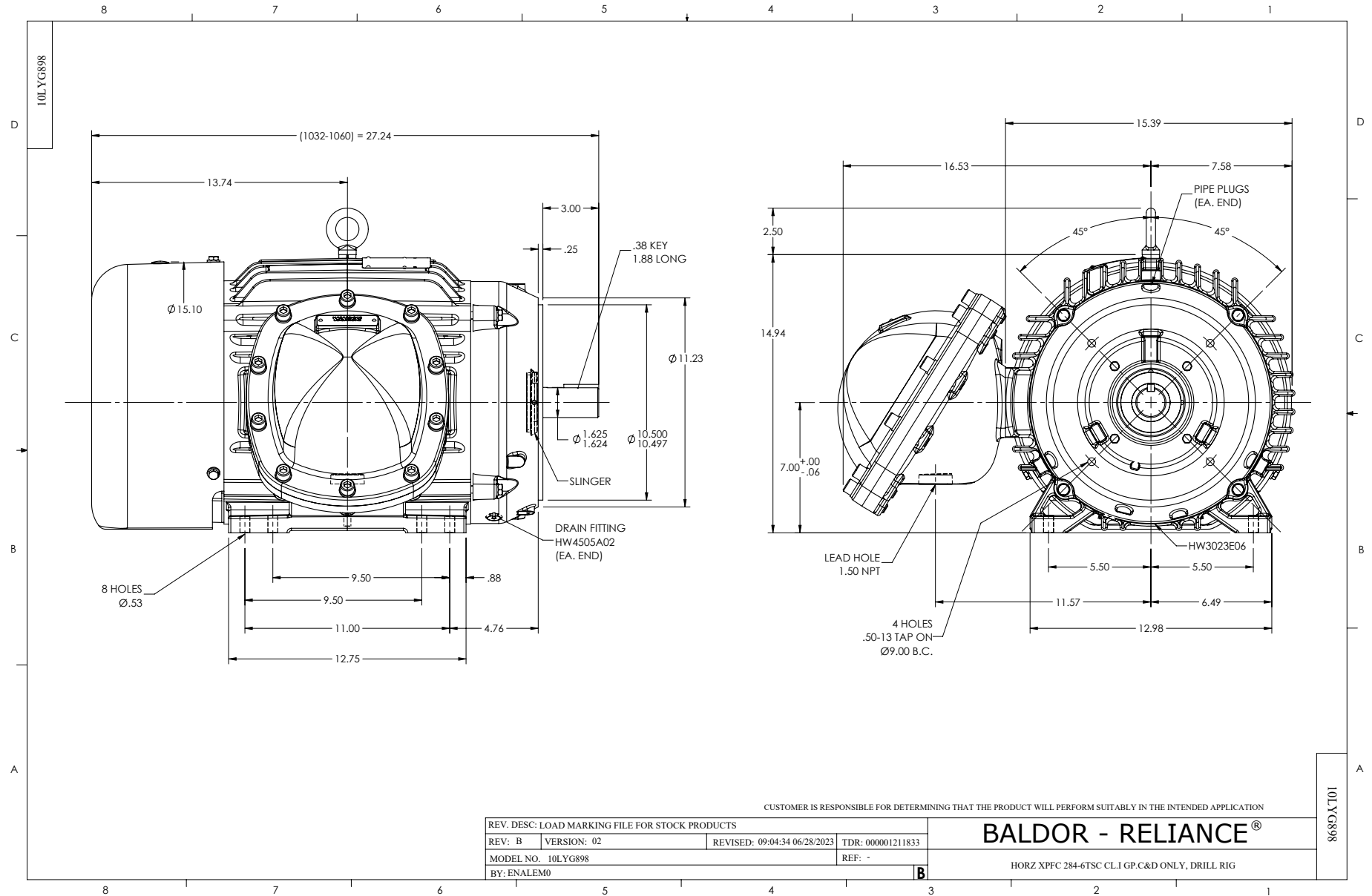
WINDING # 10WGZ035

Typical performance - not guaranteed values.

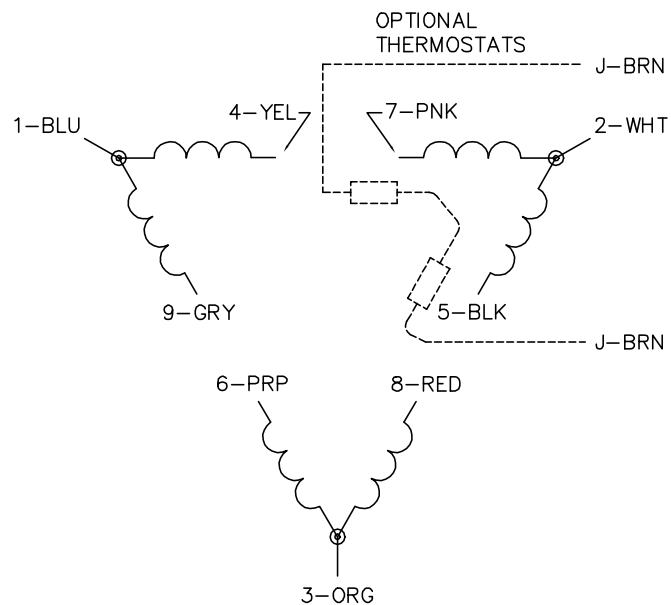
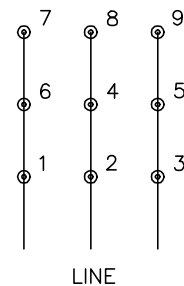
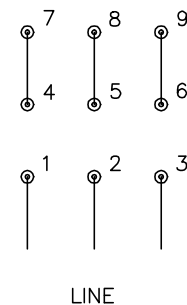
30 HP 3 PH 60 HZ 3525 RPM 460 V 1046M

TORQUES (LB-FT): PO=169 PU=60.8 LR=80 LRA=223





CD0180


 LOW VOLTAGE
(2D)

 HIGH VOLTAGE
(1D)

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: ADD CLASS CONN00000007

REV. LTR: D

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\148

REVISED: 10: 25: 29 02/19/2019

BY: ENBRIRO

MTL: -


BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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CD0180