

ABB BALDOR RELIANCE III

Customer information packet

CPX28326T

46M 2P XPFC HOR 286TSY TSTAT CP FEAT INV

Class - CLI GP C,D; CLII GP E,F,G

Division - Division I

Specifications

Enclosure	XPFC
Frame	286TSY
Frame Material	Iron
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	CLI GP C,D; CLII GP E,F,G
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	230.0 V @ 60 HZ 190.0 V @ 50 HZ 460.0 V @ 60 HZ 380.0 V @ 50 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.	10K316
Base	
Status	PRD/A
Elec. spec.	10WGZ035
Layout	10LYK316
Eff. date	11-05-2024
CD Diagram	CD0180
Poles	02
Leads	9#10
Proprietary	False
Created date	04-25-2019

Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
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	IP55
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	X1046M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	27.24 IN
Power Factor	90
Product Family	Hazardous Location Motor
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
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

Shaft Slinger Indicator	Shaft Slinger
Speed	2920 rpm 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

NP2033XPSLEV													
NO.							CC	010A					
S/N							TEMP CODE		T3C				
SPEC.	10K316Z035G1						INV.TYPE		PWM				
CAT.NO.	CPX28326T						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	286TSY		RATING		40C AMB-CONT								
BLANK	55C AMB @ 1.00 SF, 60C RISE												
	1.15SF ON SINEWAVE						NEMA MG-1 PT.5,IP55						

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

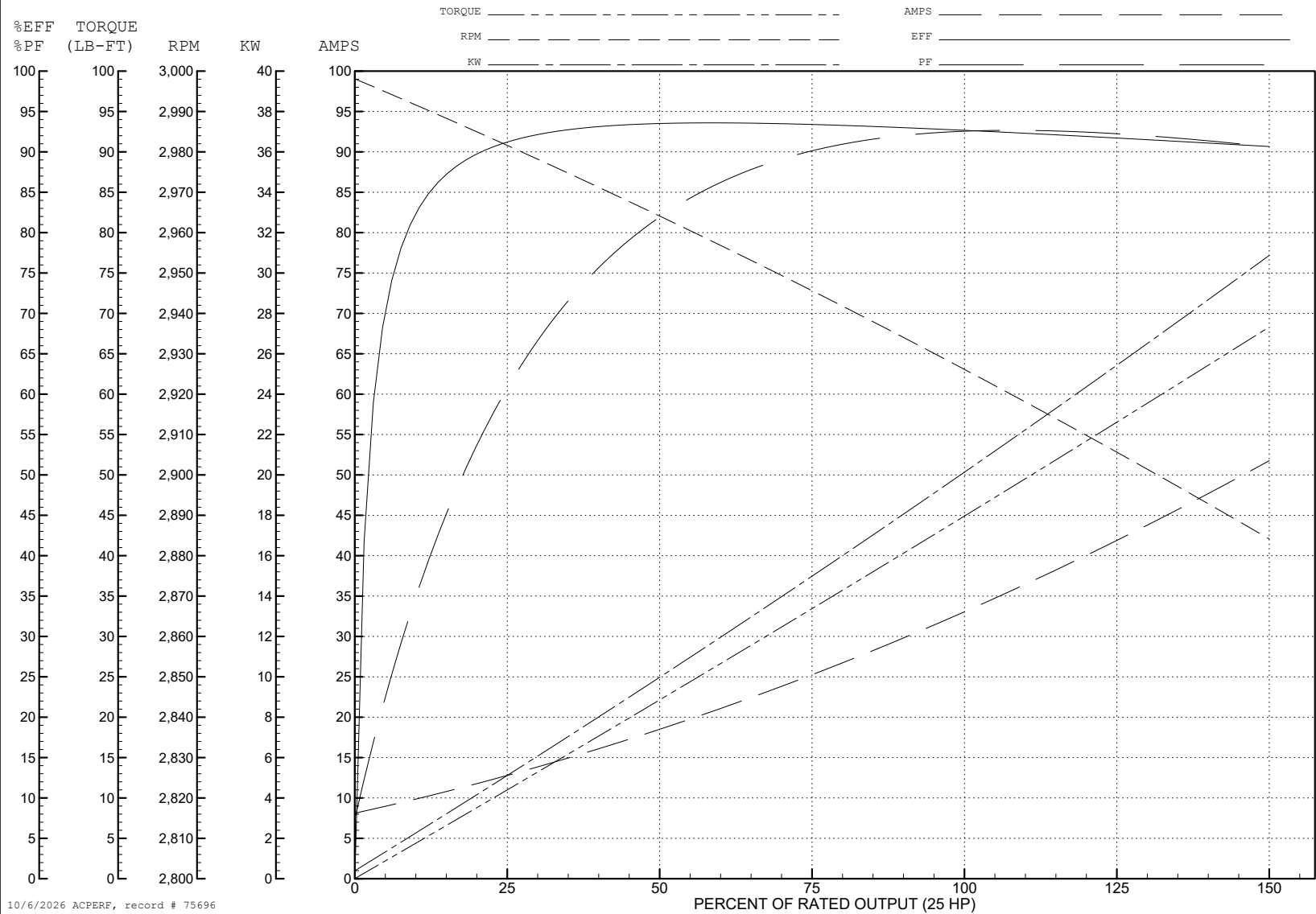
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WINDING # 10WGZ035

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-FT ²

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

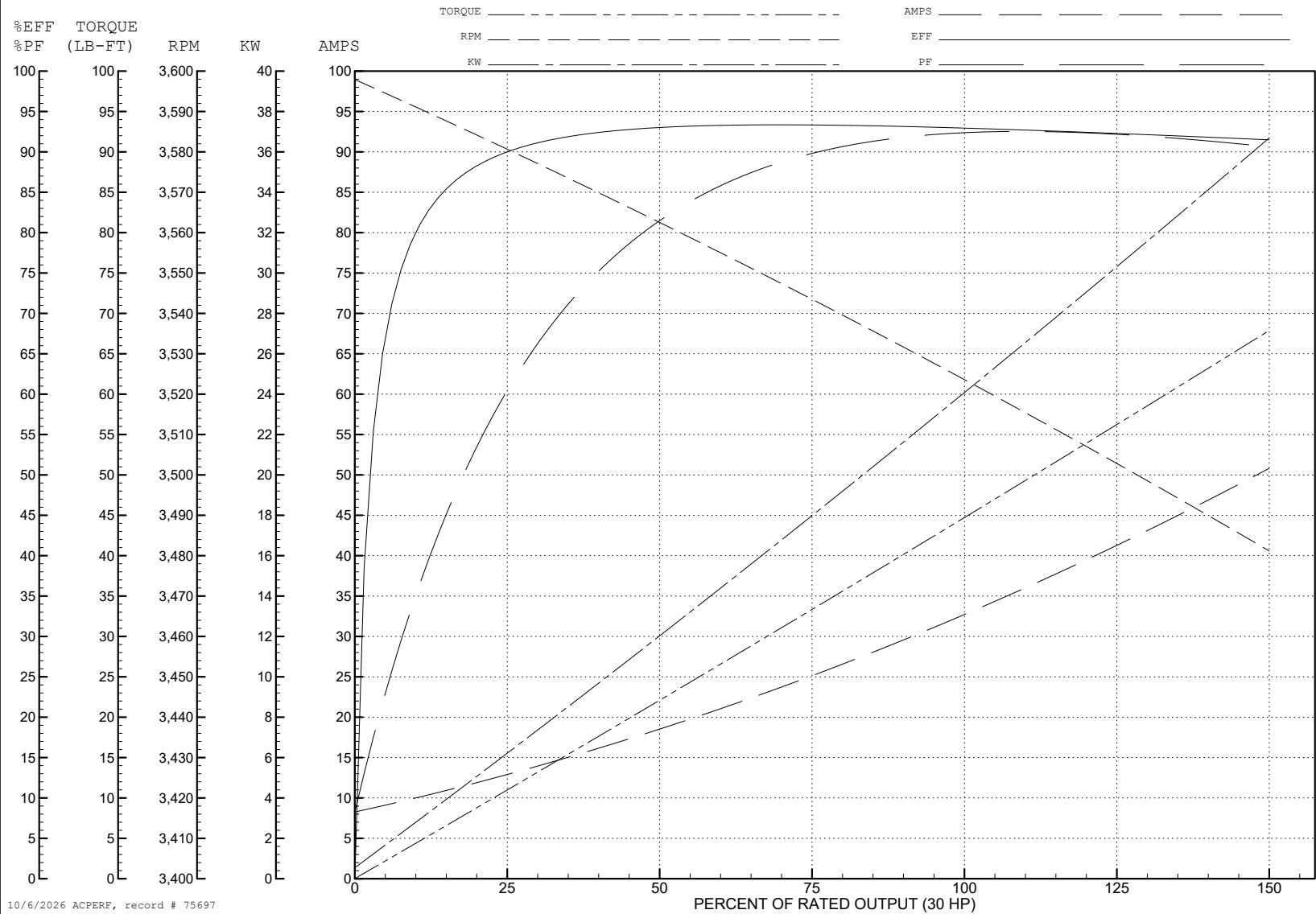
ABB Motors and Mechanical Inc.

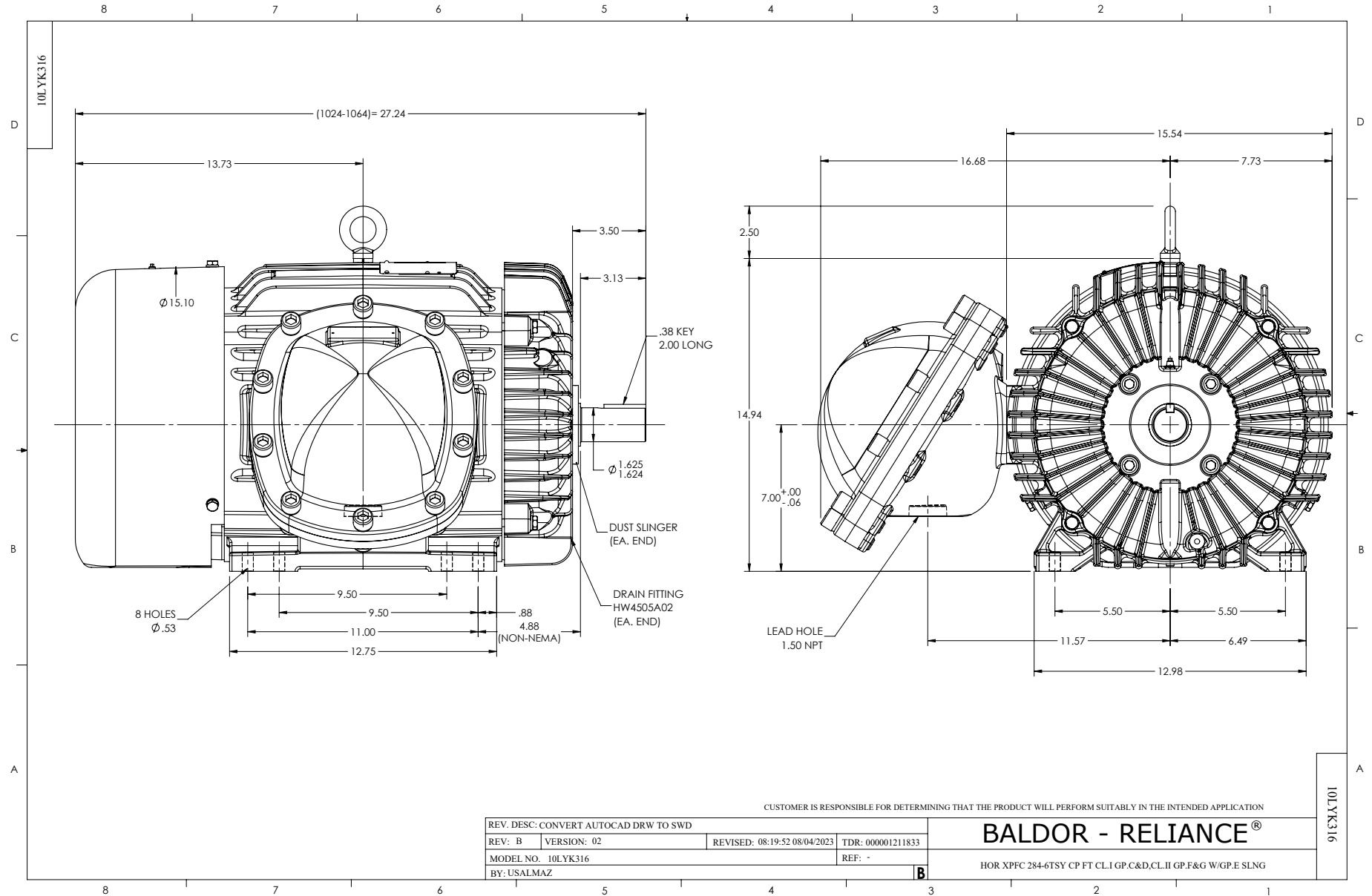
WINDING # 10WGZ035

Typical performance - not guaranteed values.

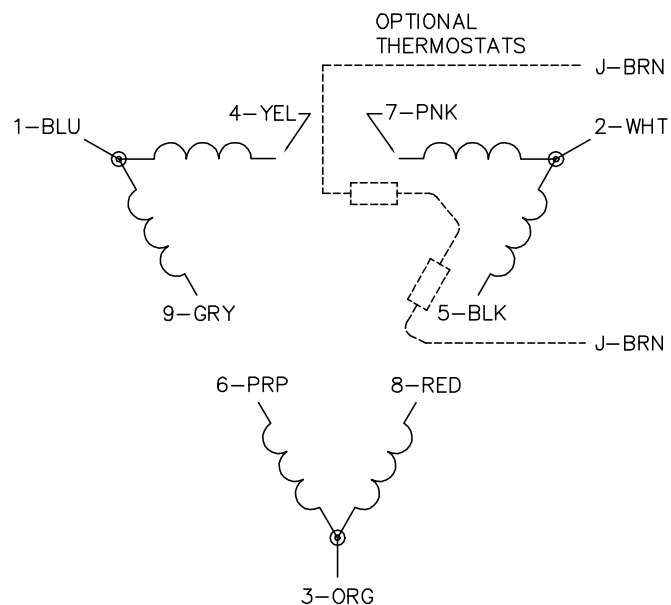
30 HP 3 PH 60 HZ 3525 RPM 460 V 1046M

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

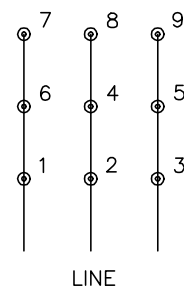




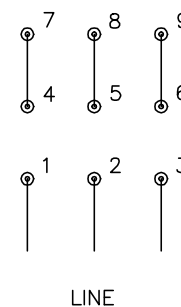
CD0180



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.

CD0180

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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