

ABB BALDOR RELIANCE III

Customer information packet

CDRX28264T

20HP, 1180//980RPM, 3PH, 60/50HZ, 286TC, XPFC

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	286TC
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	15.000 HP @ 50 HZ 20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 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	54.000 A @ 208.0 V 50.000 A @ 230.0 V 46.000 A @ 190.0 V 25.000 A @ 460.0 V 23.000 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover

Part Detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	10WGZ033
Layout	10LY-000-133
Eff. date	11-22-2024
CD Diagram	CD0180
Poles	06
Leads	9#10
Proprietary	False
Created date	05-31-2019

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	23.0 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	1800 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1056M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	28.61 IN
Power Factor	78
Product Family	Hazardous Location Motor
Pulley Face Code	C-Face
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1180 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.	10-0000-0832						INV.TYPE	PWM				
CAT.NO.	CDRX28264T						C HP FR	60	C HP TO	90		
HP	20//15						CT HZ FROM	6	CT HZ TO	60		
VOLTS	230/460//190/380						VT HZ FROM	6	VT HZ TO	60		
AMPS	50/25//46/23						MAG CUR	21.4/10.7				
RPM	1180//980						MX RPM	1800				
HZ	60//50	PH	3	CL	F	NOM.EFF.	91.7					
SER.F.	1.00	DES	B	SL HZ	1	WK2	6.86					
FRAME	286TC	RATING		40C AMB-CONT								
	55C AMB @ 1.0 SF, 60C RISE											
	1.15SF ON SINEWAVE						NEMA MG-1 PT.5,IP55					

AC Induction Motor Performance Data

Record # 75701

Typical performance - not guaranteed values

Winding: 10WGZ033-R002				Type: 1056M		Enclosure: XPFC	
Nameplate Data				380 V, 50 Hz: High Voltage Connection			
Rated Output (HP)		20//15		Full Load Torque		80.4 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		50/25//46/23		Breakdown Torque		234 LB-FT	
R.P.M.		1180//980		Pull-up Torque		97.19 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		139 LB-FT	
NEMA Design Code		B	KVA Code	G	Starting Current		142 A
Service Factor (S.F.)		1		No-load Current		10.54 A	
NEMA Nom. Eff.		91.7	Power Factor	78	Line-line Res. @ 25°C		0.501 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		45°C	
S.F. Amps				Temp. Rise @ S.F. Load		56°C	
				Locked-rotor Power Factor		33.7	
				Rotor inertia		6.86 LB-FT2	

Load Characteristics 380 V, 50 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	41	63	74	79	81	82
Efficiency	87.9	91.8	92.6	92.3	90.8	90.9
Speed	995	991	986	982	977	971
Line amperes	11.71	14.83	18.7	23.4	28.65	34.75

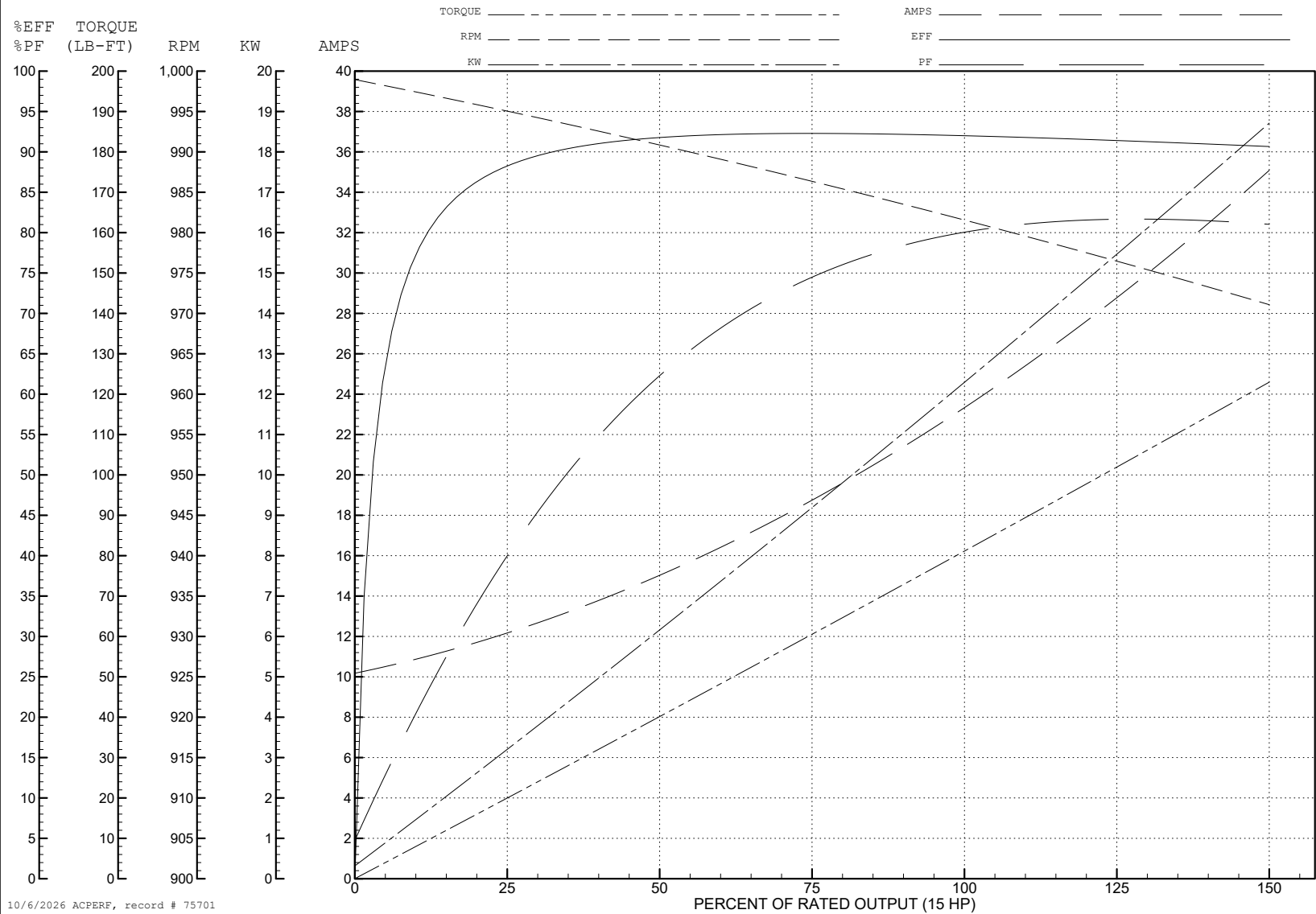
ABB Motors and Mechanical Inc.

WINDING # 10WGZ033

Typical performance - not guaranteed values.

15 HP 3 PH 50 HZ 982 RPM 380 V 1056M

TORQUES (LB-FT) : PO=234 PU=97.19 LR=139 LRA=142



AC Induction Motor Performance Data

Record # 75702

Typical performance - not guaranteed values

Winding: 10WGZ033-R002				Type: 1056M		Enclosure: XPFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		20//15		Full Load Torque		89.2 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		50/25//46/23		Breakdown Torque		243 LB-FT	
R.P.M.		1180//980		Pull-up Torque		94 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		134 LB-FT	
NEMA Design Code		B	KVA Code	G	Starting Current		146 A
Service Factor (S.F.)		1		No-load Current		10.7 A	
NEMA Nom. Eff.		91.7	Power Factor	78	Line-line Res. @ 25°C		0.501 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		51°C	
S.F. Amps				Temp. Rise @ S.F. Load		63°C	
				Locked-rotor Power Factor		30.3	
				Rotor inertia		6.86 LB-FT2	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	44	66	76	80	81	81
Efficiency	88.4	92.2	93.1	92.7	91.3	91.2
Speed	1194	1190	1185	1180	1174	1168
Line amperes	12.1	15.7	20.1	25.4	31.3	38.2

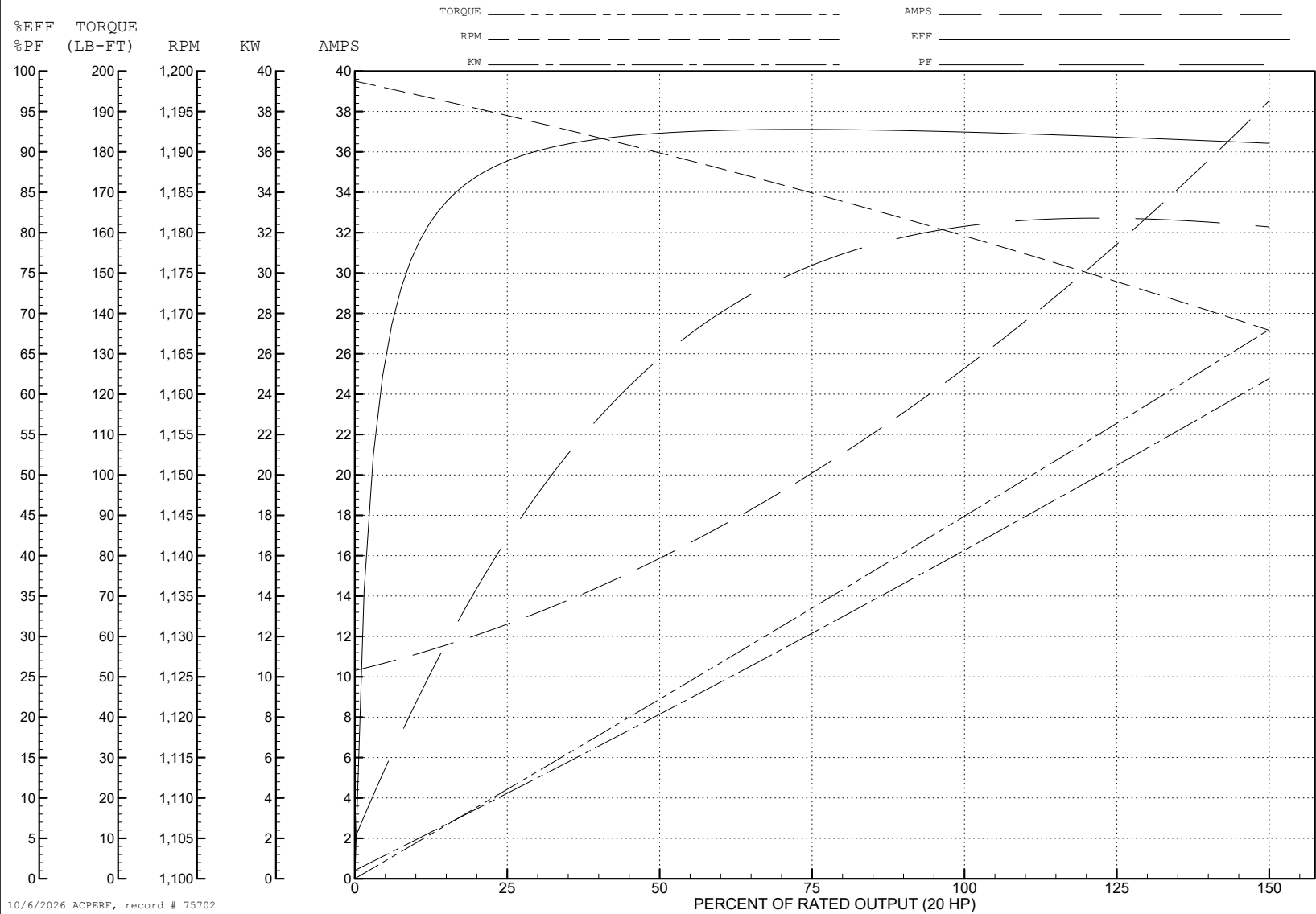
ABB Motors and Mechanical Inc.

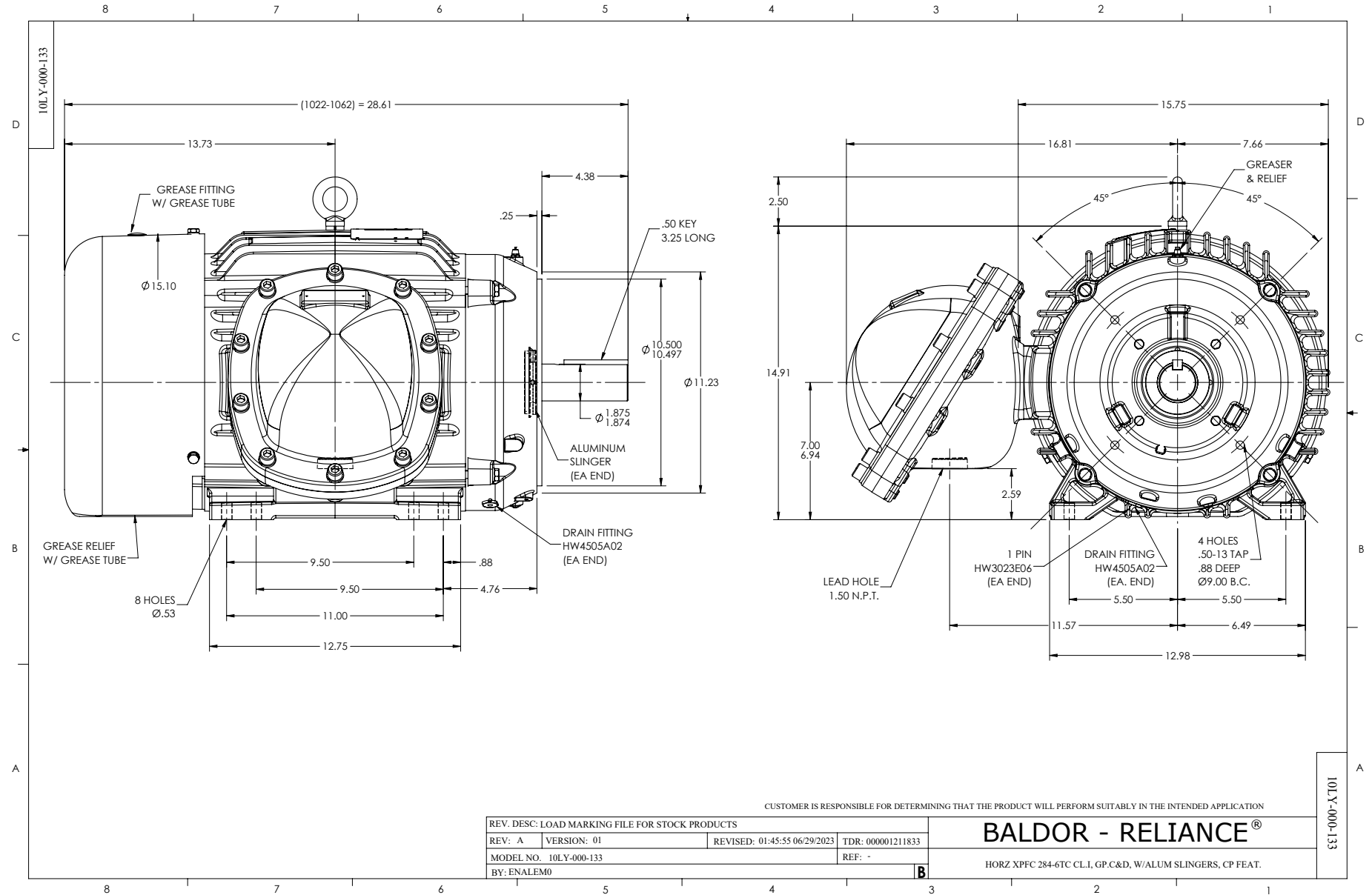
WINDING # 10WGZ033

Typical performance - not guaranteed values.

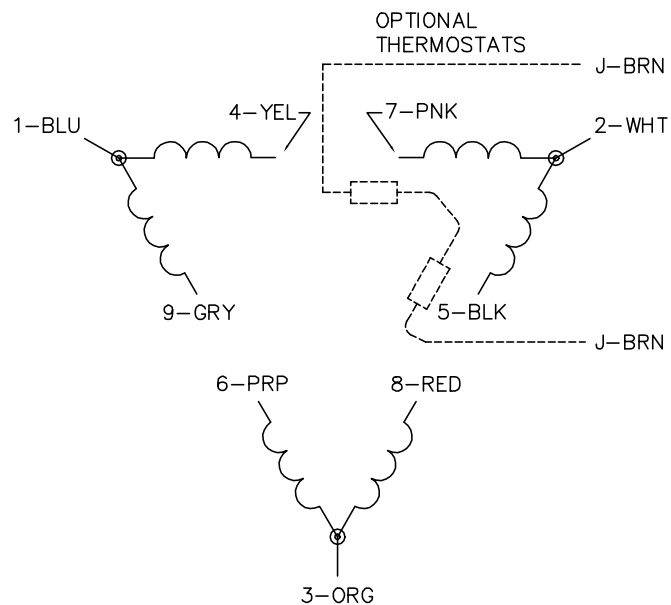
20 HP 3 PH 60 HZ 1180 RPM 460 V 1056M

TORQUES (LB-FT): PO=243 PU=94 LR=134 LRA=146

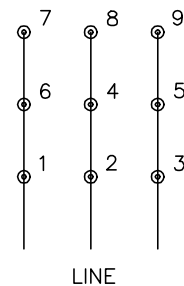




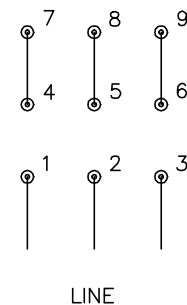
CD0180



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

SH 1 of 1

CD0180