

ABB BALDOR RELIANCE III

Customer information packet

CDRX32524T

50HP, 3560//2960RPM, 3PH, 60/50HZ, 326TSC, XP

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	326TSC
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	40.000 HP @ 50 HZ 50.000 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	56.000 A @ 460.0 V 54.000 A @ 380.0 V 122.000 A @ 208.0 V 112.000 A @ 230.0 V 108.000 A @ 190.0 V
Design Code	A
Drip Cover	No Drip Cover

Part Detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	12WGY587
Layout	12LYH659
Eff. date	11-05-2024
CD Diagram	CD0180
Poles	02
Leads	9#8
Proprietary	False
Created date	06-04-2019

Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	54.0 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1264M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	30.50 IN
Power Factor	89
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	3560 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.	12-0000-0743					INV.TYPE		PWM			
CAT.NO.	CDRX32524T					C HP FR	60	C HP TO	90		
HP	50//40					CT HZ FROM		6	CT HZ TO		60
VOLTS	230/460//190/380					VT HZ FROM		6	VT HZ TO		60
AMPS	112/56//108/54				MAG CUR	36/18					
RPM	3560//2960				MX RPM	5400					
HZ	60//50	PH	3	CL	F	NOM.EFF.		93			
SER.F.	1.00	DES	A	SL HZ	0.7	WK2	5.01				
FRAME	326TSC		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 # 66213

Typical performance - not guaranteed values

Winding: 12WGY587-R004		Type: 1264M	Enclosure: XPFC
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	50	Full Load Torque	74.1 LB-FT
Volts	230/460	Start Configuration	direct on line
Full Load Amps	112/56	Breakdown Torque	287 LB-FT
R.P.M.	3560	Pull-up Torque	107 LB-FT
Hz	60 Phase	Locked-rotor Torque	137 LB-FT
NEMA Design Code	A KVA Code	Starting Current	505 A
Service Factor (S.F.)	1	No-load Current	17.6 A
NEMA Nom. Eff.	93 Power Factor	Line-line Res. @ 25°C	0.08644 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	53°C
		Locked-rotor Power Factor	21.5
		Rotor inertia	4.98 LB-FT ²

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	58	79	86	90	90	91
Efficiency	91.5	94.3	94.8	94.6	94.1	93.5
Speed	3590	3580.8	3570.3	3560.2	3549.3	3538.6
Line amperes	22.4	31.8	43.5	55.6	69	82.4

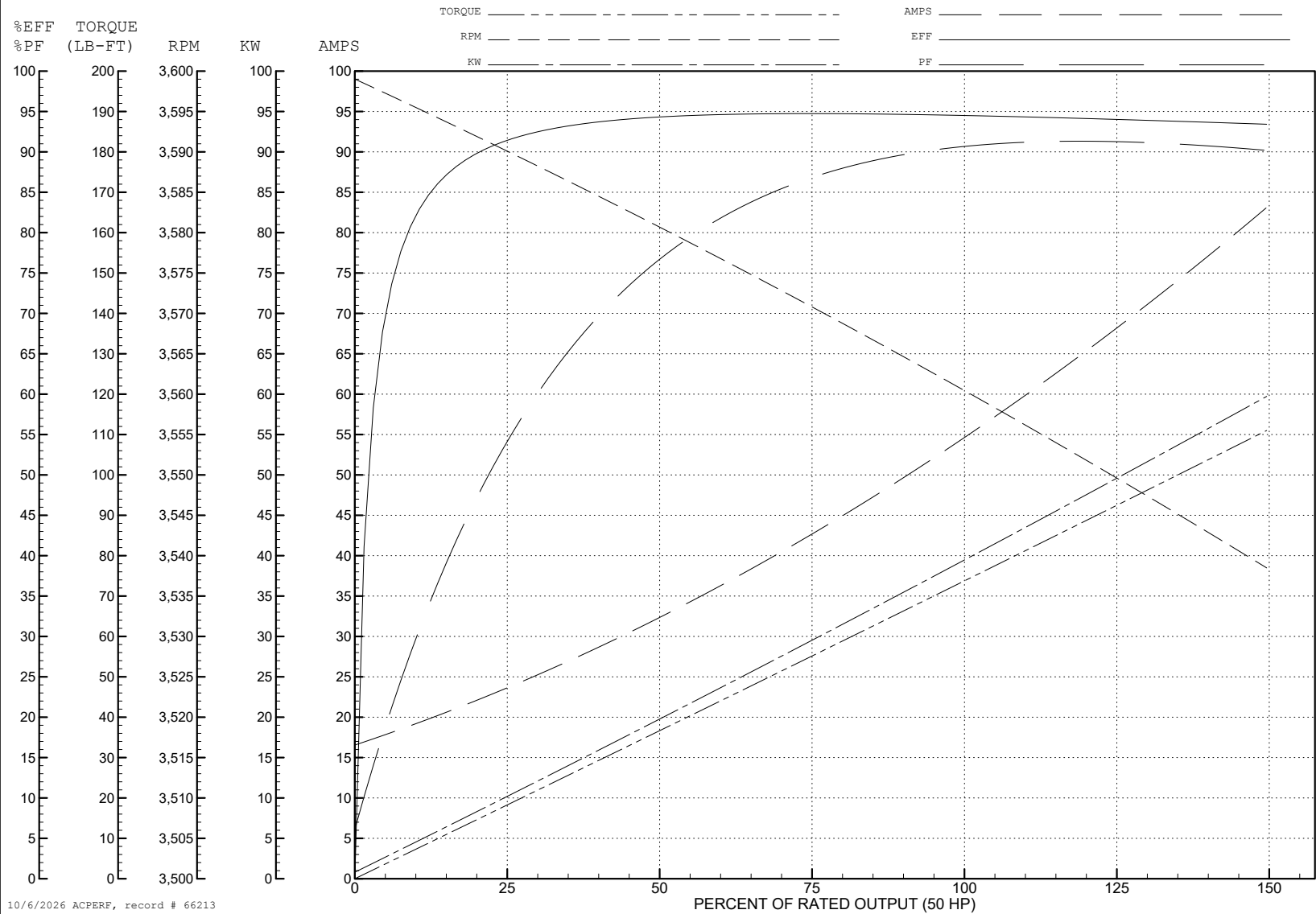
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WINDING # 12WGY587

Typical performance - not guaranteed values.

50 HP 3 PH 60 HZ 3560 RPM 460 V 1264M

TORQUES (LB-FT): PO=287 PU=107 LR=137 LRA=505



AC Induction Motor Performance Data

Record # 75687

Typical performance - not guaranteed values

Winding: 12WGY587-R003				Type: 1264M		Enclosure: XPFC	
Nameplate Data				380 V, 50 Hz: High Voltage Connection			
Rated Output (HP)		50//40		Full Load Torque		71.22 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		112/56//108/54		Breakdown Torque		278 LB-FT	
R.P.M.		3560//2960		Pull-up Torque		113 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		145 LB-FT	
NEMA Design Code		A	KVA Code	K	Starting Current		495 A
Service Factor (S.F.)		1		No-load Current		17.33 A	
NEMA Nom. Eff.		93	Power Factor	89	Line-line Res. @ 25°C		0.0846 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		49°C	
S.F. Amps				Temp. Rise @ S.F. Load		60°C	
				Locked-rotor Power Factor		24.1	
				Rotor inertia		4.98 LB-FT2	

Load Characteristics 380 V, 50 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	57	78	86	89	90	91
Efficiency	92.7	94.9	95	94.6	94	93.3
Speed	2991	2982	2972	2962	2952	2942
Line amperes	21.78	30.84	42.08	53.81	66.82	79.96

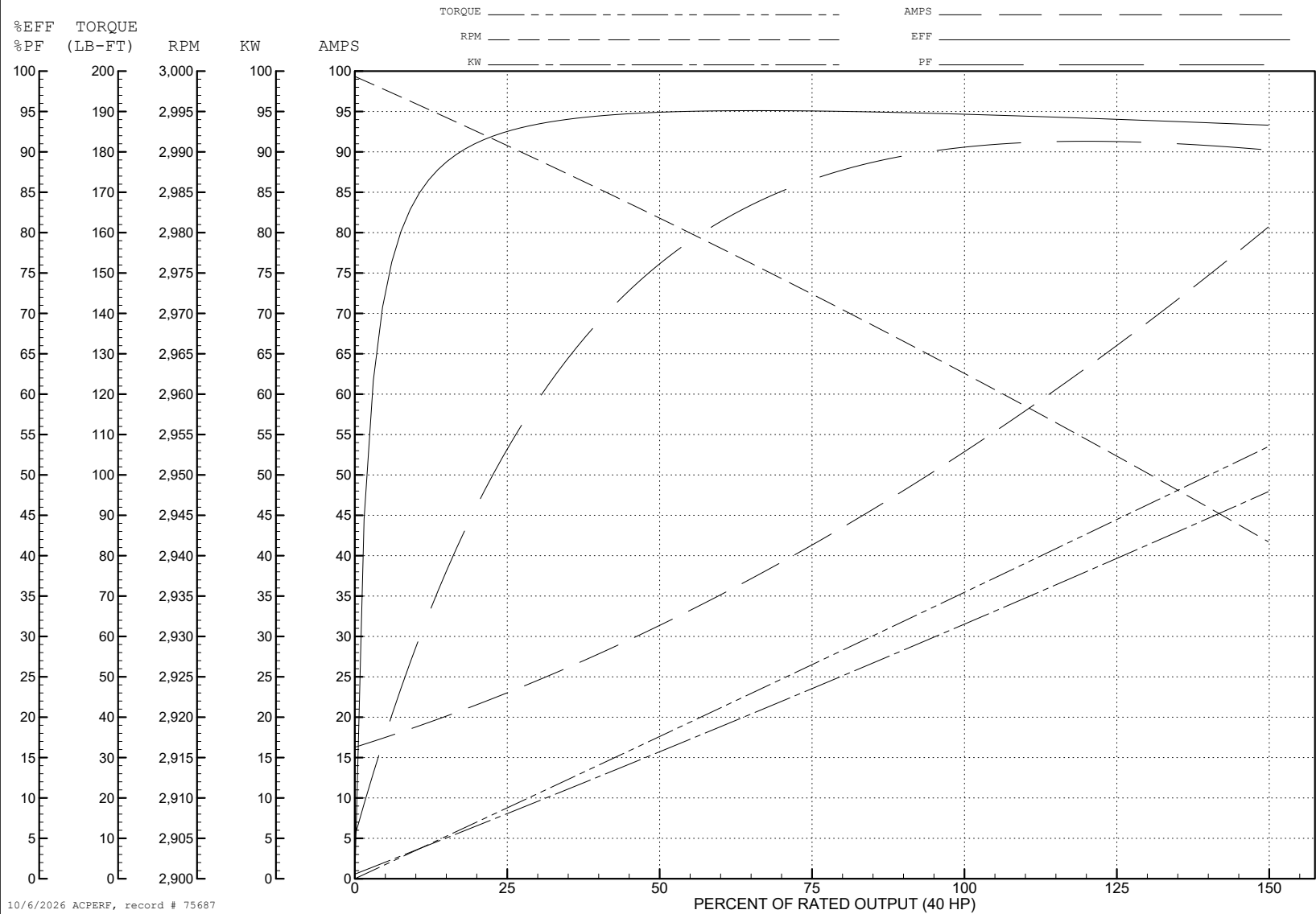
ABB Motors and Mechanical Inc.

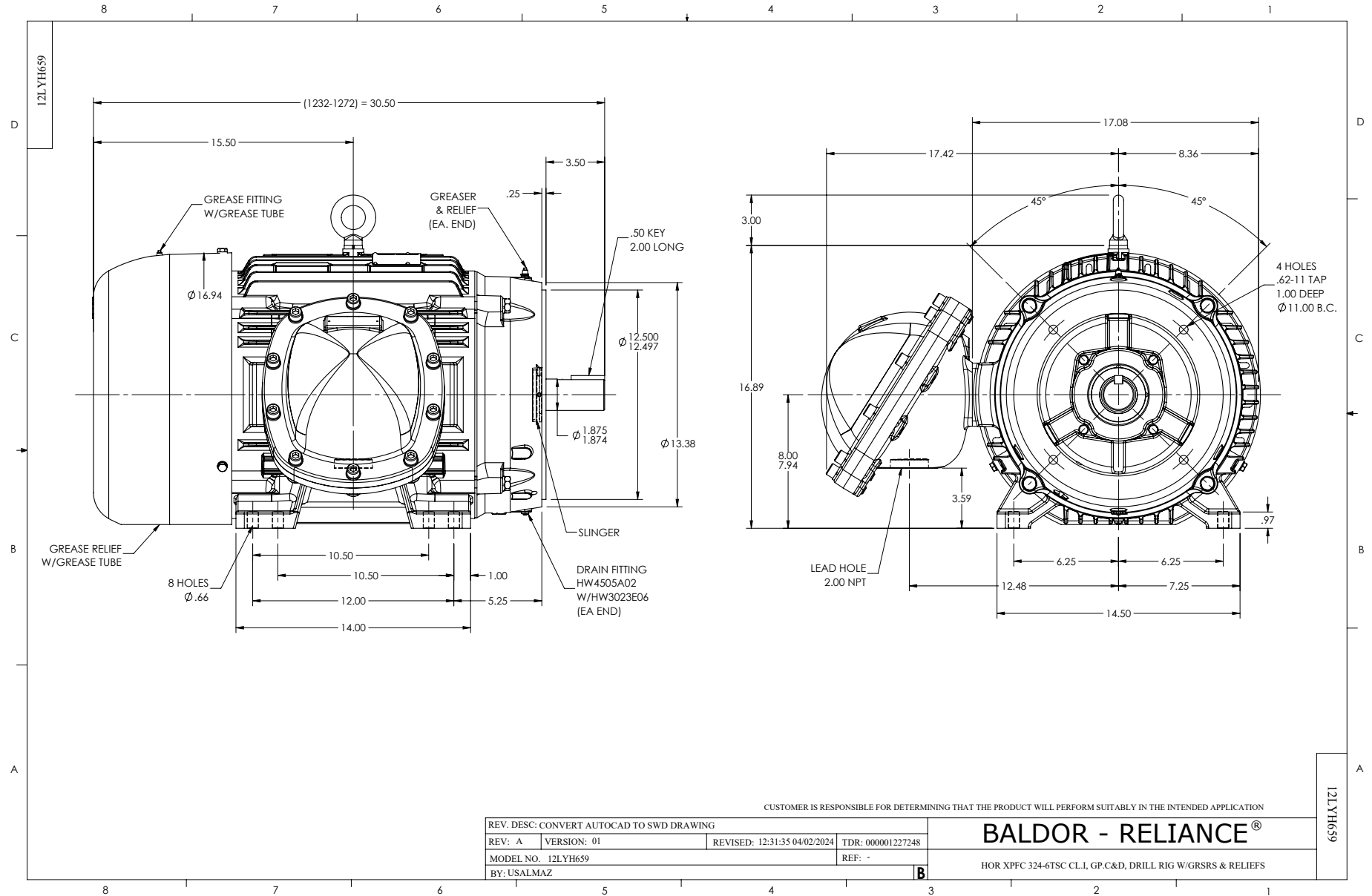
WINDING # 12WGY587

Typical performance - not guaranteed values.

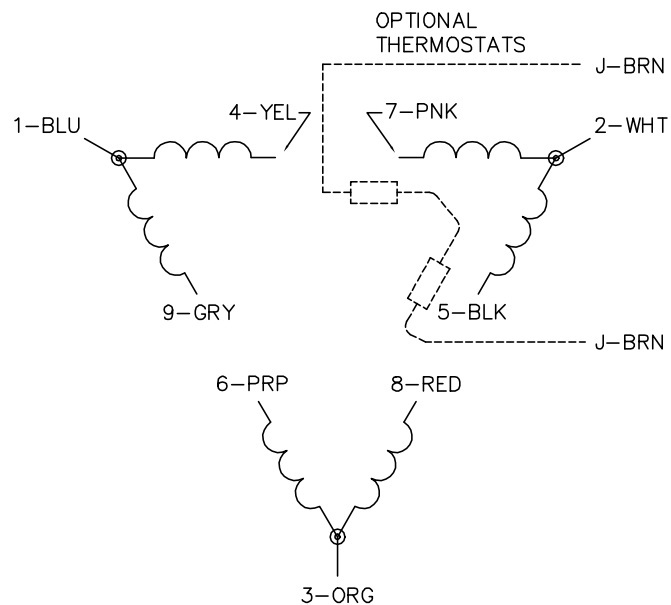
40 HP 3 PH 50 HZ 2962 RPM 380 V 1264M

TORQUES (LB-FT): PO=278 PU=113 LR=145 LRA=495

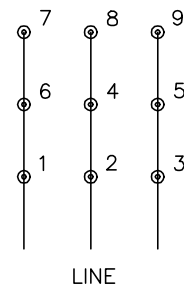




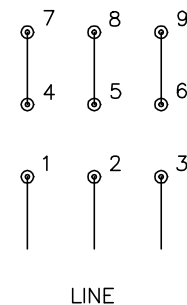
CD0180



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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