ABB BALDOR RELIANCE

Customer information packet

VDRX32544T

50HP, 1775//1475RPM, 3PH, 60/50HZ, 326TC, XPF
Class - CLI GP C,D
Division - Division I

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Specifications

Enclosure	XPFC
Frame	326TC
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	50.000 HP @ 60 HZ
	40.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 50 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
	190.0 V @ 50 HZ
	230.0 V @ 60 HZ
	380.0 V @ 50 HZ
Agency Approvals	UL
	CSA EEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	114.000 A @ 190.0 V
	118.000 A @ 230.0 V
	57.000 A @ 380.0 V
	59.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	Q
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	12WGY585
Layout	12LYE292
Eff. date	07-22-2025
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	06-06-2019

Efficiency @ 100% Load	94.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	57.0 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1276M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	32.00 IN
Power Factor	84
Product Family	Hazardous Location Motor
Pulley Face Code	C-Face
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	2.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1775 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.	12-0000-0767			**INV.TYPE**	PWM						
CAT.NO.	VDRX32544T			**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	118/59//114/57		**MAG CUR**	50/25							
RPM	1775//1475		**MX RPM**	2700							
HZ	60//50	**PH**	3	**CL**	F	**NOM.EFF.**	94.5				
SER.F.	1.00	**DES**	A	**SL HZ**	0.83	**WK2**	10.1				
FRAME	326TC	**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 # 60172
Typical performance - not guaranteed values

Winding: 12WGY585-R008	**Type:** 1276M	**Enclosure:** XPFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			50	**Full Load Torque**	148 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			118/59	**Breakdown Torque**	561 LB-FT
R.P.M.			1775	**Pull-up Torque**	236 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	279 LB-FT
NEMA Design Code	A	**KVA Code**	J	**Starting Current**	475 A
Service Factor (S.F.)			1	**No-load Current**	25 A
NEMA Nom. Eff.	94.5	**Power Factor**	84	**Line-line Res. @ 25ºC**	0.096885 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	56°C
				Locked-rotor Power Factor	26.4
				Rotor inertia	10.1 LB-FT2

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	46	68	78	84	85	87
Efficiency	90	93.7	94.6	94.7	94.4	93.9
Speed	1794	1789.1	1784.4	1779.2	1773.7	1767.4
Line amperes	28.6	36.9	47.3	59.1	72.4	86.3

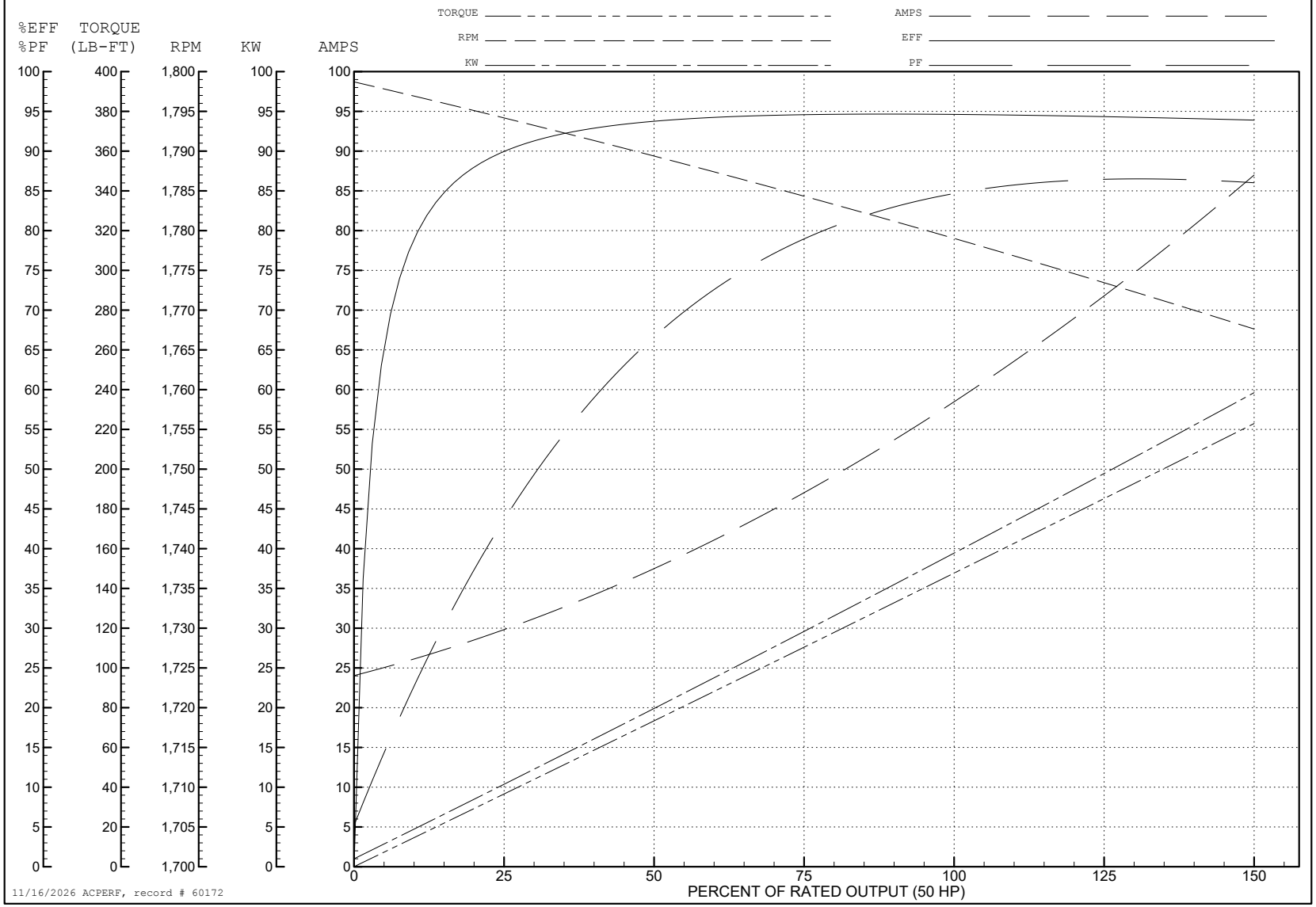
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WINDING # 12WGY585

50 HP 3 PH 60 HZ 1775 RPM 460 V 1276M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=561 PU=236 LR=279 LRA=475



AC Induction Motor Performance Data
Record # 74482
Typical performance - not guaranteed values

Winding: 12WGY585-R011	**Type:** 1276M	**Enclosure:** XPFC

Nameplate Data				**380 V, 50 Hz: High Voltage Connection**	
Rated Output (HP)			50//40	**Full Load Torque**	142 LB-FT
Volts			230/460//190/380	**Start Configuration**	direct on line
Full Load Amps			118/59//114/57	**Breakdown Torque**	544 LB-FT
R.P.M.			1775//1475	**Pull-up Torque**	248 LB-FT
Hz	60//50	**Phase**	3	**Locked-rotor Torque**	293 LB-FT
NEMA Design Code	A	**KVA Code**	J	**Starting Current**	465 A
Service Factor (S.F.)			1	**No-load Current**	24.51 A
NEMA Nom. Eff.	94.5	**Power Factor**	84	**Line-line Res. @ 25ºC**	0.0936 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	52°C
S.F. Amps				**Temp. Rise @ S.F. Load**	63°C
				Locked-rotor Power Factor	29.3
				Rotor inertia	10.1 LB-FT2

Load Characteristics 380 V, 50 Hz, 40 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	45	67	78	84	86	87
Efficiency	90.3	93.7	94.6	94.3	94.2	93.2
Speed	1494	1490	1485	1480	1475	1469
Line amperes	27.9	35.86	45.89	57.36	70.22	83.76

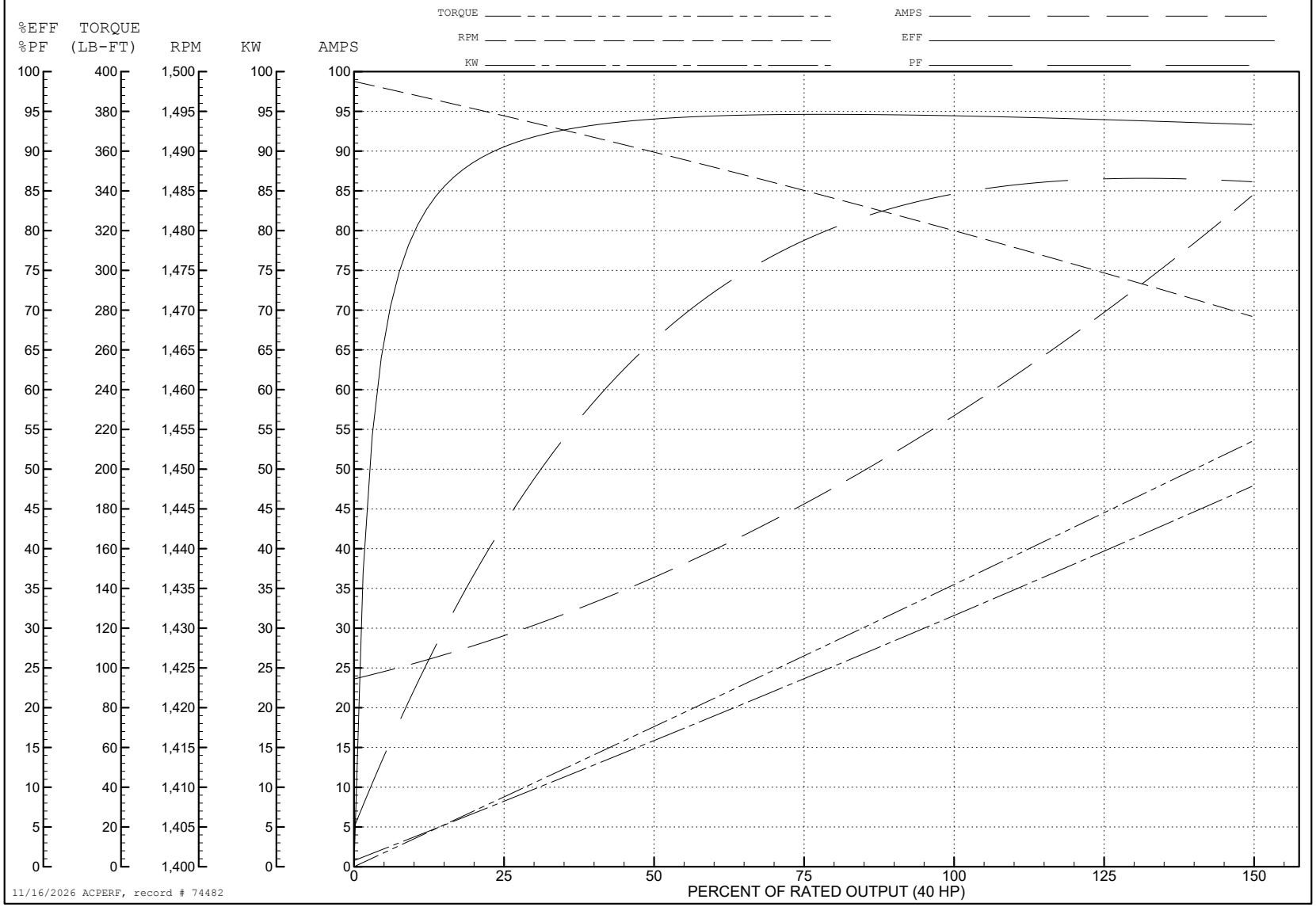
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WINDING # 12WGY585

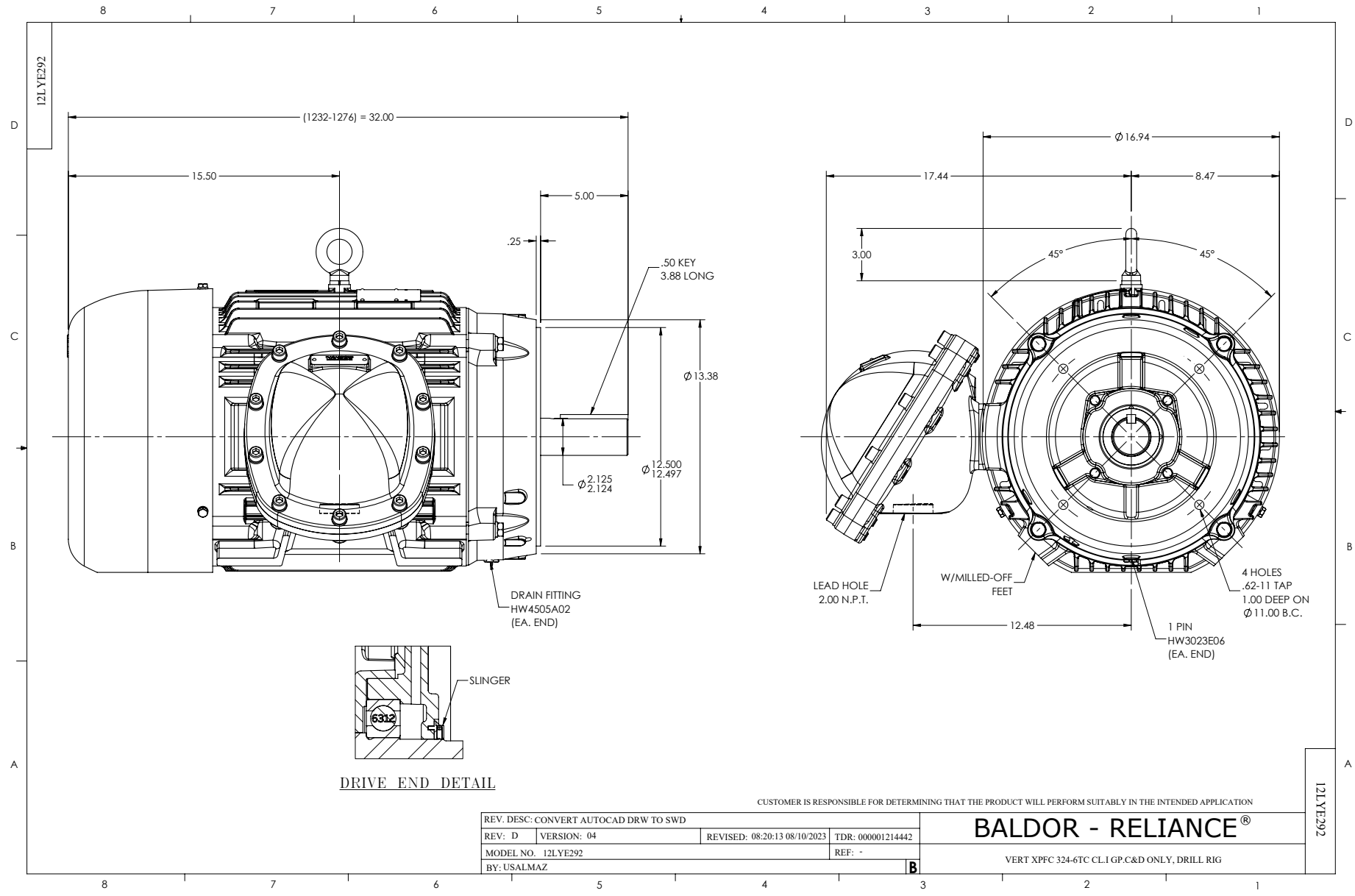
40 HP 3 PH 50 HZ 1480 RPM 380 V 1276M

TORQUES(LB-FT): PO=544 PU=248 LR=293 LRA=465

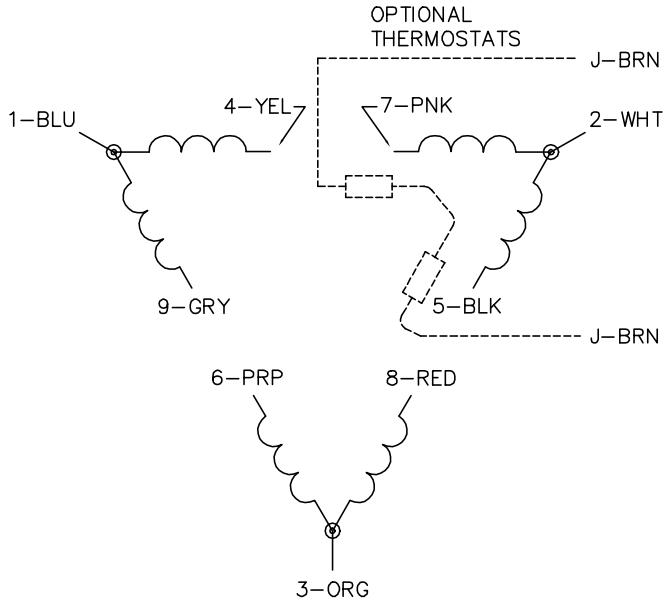
Typical performance - not guaranteed values.

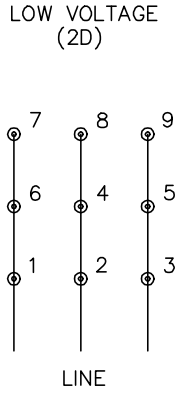


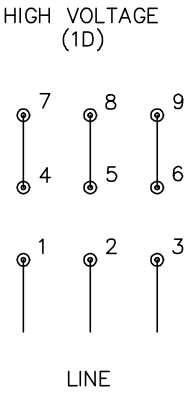
11/16/2026 ACPERF, record # 74482


12LYE292
(1232-1276) = 32.00
15.50
5.00
.25
.50 KEY
3.88 LONG
Ø13.38
Ø12.500
12.497
Ø2.125
2.124
DRAIN FITTING
HW4505A02
(EA. END)
Ø16.94
17.44
8.47
3.00
45°
45°
LEAD HOLE
2.00 N.P.T.
W/MILLED-OFF
FEET
4 HOLES
.62-11 TAP
1.00 DEEP ON
Ø11.00 B.C.
12.48
1 PIN
HW3023E06
(EA. END)
SLINGER
6312
DRIVE END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT AUTOCAD DRW TO SWD
REV: D
VERSION: 04
REVISED: 08:20:13 08/10/2023
TDR: 000001214442
MODEL NO. 12LYE292
REF: -
BY: USALMAZ
B
BALDOR - RELIANCE®
VERT XPFC 324-6TC CL.I GP.C&D ONLY, DRILL RIG
12LYE292

CD0180







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: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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