Customer information packet

VDRX25244T

20HP, 1770//1470RPM, 3PH, 60/50HZ, 256TC, XPF
Class - CLI GP C,D
Division - Division I

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Specifications

Enclosure	XPFC
Frame	256TC
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	1800 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
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	52.000 A @ 208.0 V 48.000 A @ 230.0 V 44.000 A @ 190.0 V 24.000 A @ 460.0 V 22.000 A @ 380.0 V
Design Code	A
Drip Cover	No Drip Cover

Part detail

Revision	K
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	09WGT459
Layout	09LYF525
Eff. date	02-14-2024
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	06-06-2019

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	22.0 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	0960M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	26.00 IN
Power Factor	83
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	1770 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.	09-0000-1467						**INV.TYPE**	PWM				
CAT.NO.	VDRX25244T						**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	48/24//44/22				**MAG CUR**	20.8/10.4						
RPM	1770//1470				**MX RPM**	2700						
HZ	60//50	**PH**	3	**CL**	F	**NOM.EFF.**	93					
SER.F.	1.00	**DES**	A	**SL HZ**	1	**WK2**	2.62					
FRAME	256TC	**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 # 68068
Typical performance - not guaranteed values

Winding: 09WGT459-R009 **Type:** 0960M **Enclosure:** XPFC

Nameplate Data			
Rated Output (HP)			20
Volts			230/460
Full Load Amps			48/24
R.P.M.			1770
Hz	60	**Phase**	3
NEMA Design Code	A	**KVA Code**	J
Service Factor (S.F.)			1
NEMA Nom. Eff.	93	**Power Factor**	83
Rating - Duty			40C AMB-CONT

460 V, 60 Hz: High Voltage Connection	
Full Load Torque	59.27 LB-FT
Start Configuration	direct on line
Breakdown Torque	232 LB-FT
Pull-up Torque	126 LB-FT
Locked-rotor Torque	141 LB-FT
Starting Current	198 A
No-load Current	10.4 A
Line-line Res. @ 25ºC	0.33814 Ω
Temp. Rise @ Rated Load	58°C
Locked-rotor Power Factor	26.5

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	45	67	78	83	86	87
Efficiency	89.2	93	93.7	93.6	93.1	92.4
Speed	1793.2	1786.4	1779.1	1771.9	1763.7	1755.3
Line amperes	11.8	15	19.2	24	29.3	34.9

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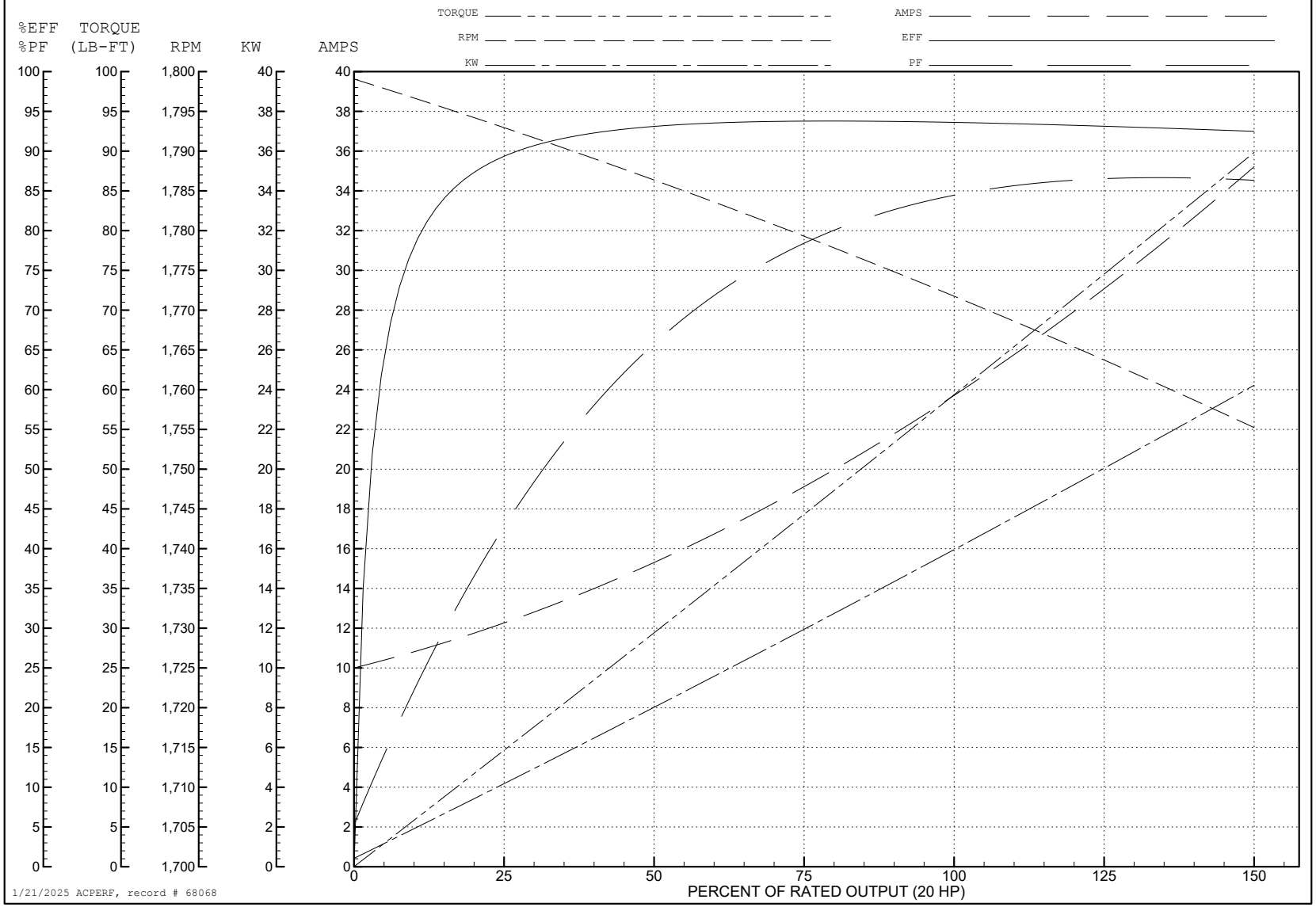
WINDING # 09WGT459

Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1770 RPM 460 V 0960M

TORQUES(LB-FT): PO=232 PU=126 LR=141 LRA=198



1/21/2025 ACPERF, record # 68068

AC Induction Motor Performance Data
Record # 75710
Typical performance - not guaranteed values

Winding: 09WGT459-R033 **Type:** 0960M **Enclosure:** XPFC

Nameplate Data			
Rated Output (HP)			20//15
Volts			230/460//190/380
Full Load Amps			48/24//44/22
R.P.M.			1770//1470
Hz	60//50	**Phase**	3
NEMA Design Code	A	**KVA Code**	J
Service Factor (S.F.)			1
NEMA Nom. Eff.	93	**Power Factor**	83
Rating - Duty			40C AMB-CONT

380 V, 50 Hz: High Voltage Connection	
Full Load Torque	53.39 LB-FT
Start Configuration	direct on line
Breakdown Torque	224 LB-FT
Pull-up Torque	130 LB-FT
Locked-rotor Torque	146 LB-FT
Starting Current	193 A
No-load Current	10.15 A
Line-line Res. @ 25ºC	0.332 Ω
Temp. Rise @ Rated Load	50°C
Locked-rotor Power Factor	29.8
Rotor inertia	2.65 lb-ft²

Load Characteristics 380 V, 50 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	43	65	77	83	85	87
Efficiency	89.1	92.8	93.5	93.4	92.8	92.1
Speed	1494	1488	1481	1475	1467	1460
Line amperes	11.28	14	17.72	21.99	26.74	31.76

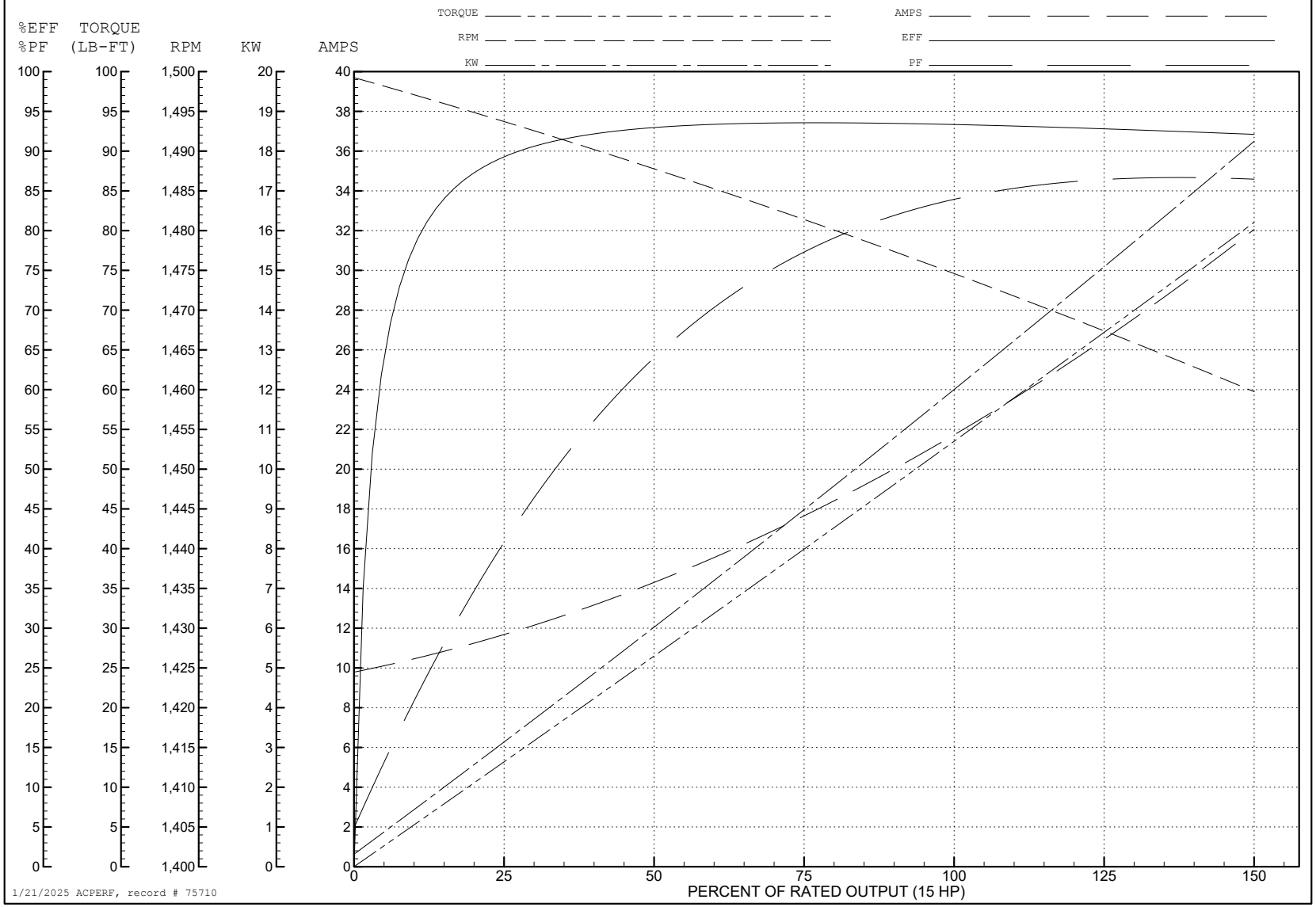
ABB Motors and Mechanical Inc.

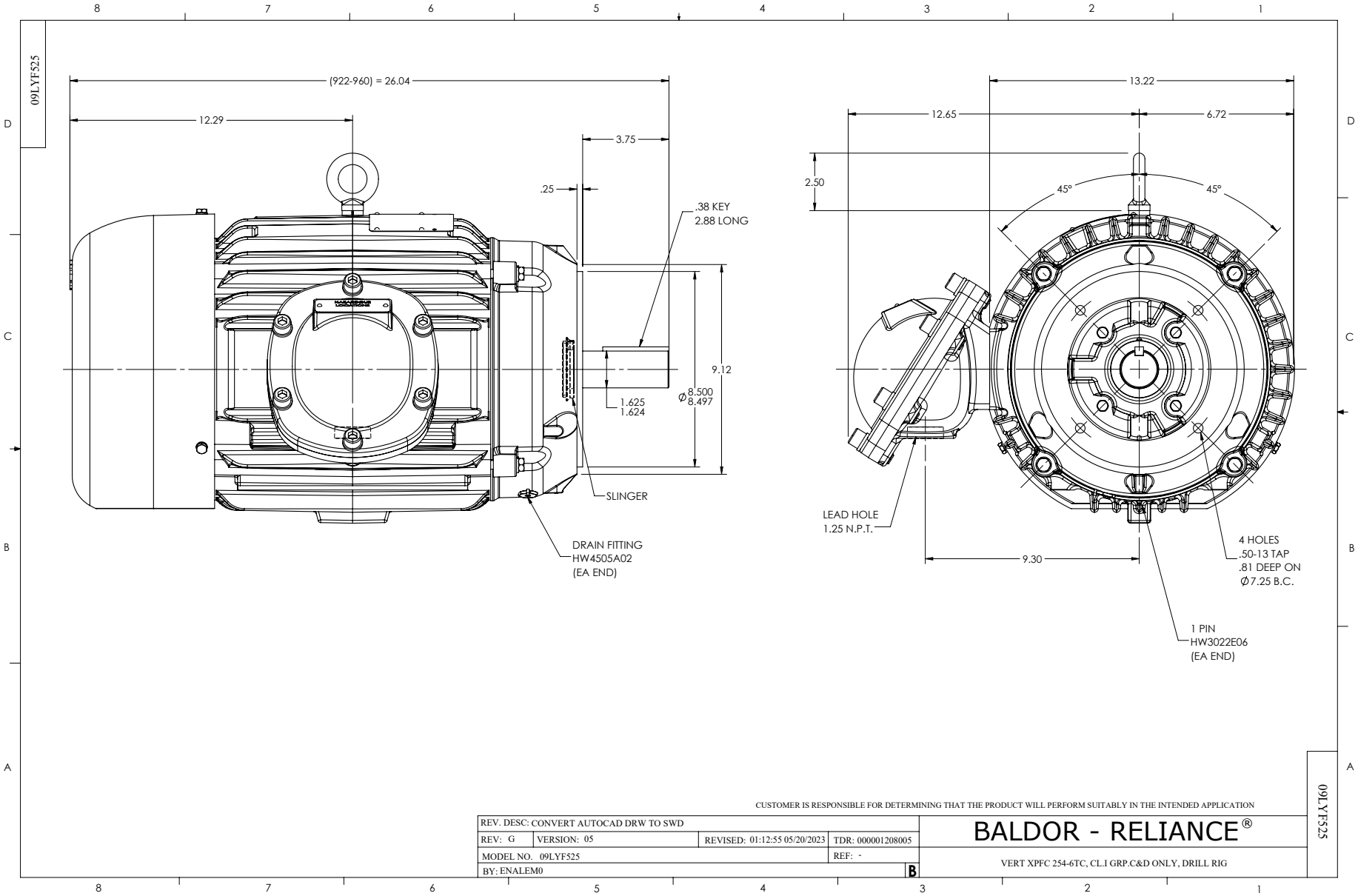
WINDING # 09WGT459

15 HP 3 PH 50 HZ 1475 RPM 380 V 0960M

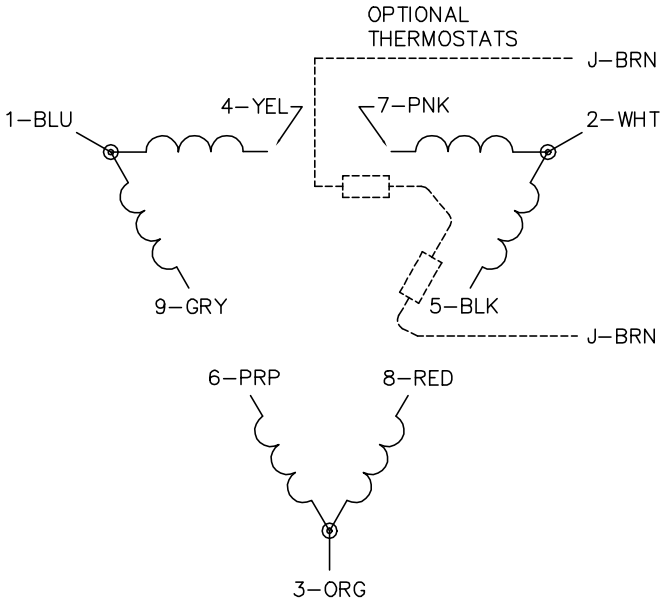
Typical performance - not guaranteed values.

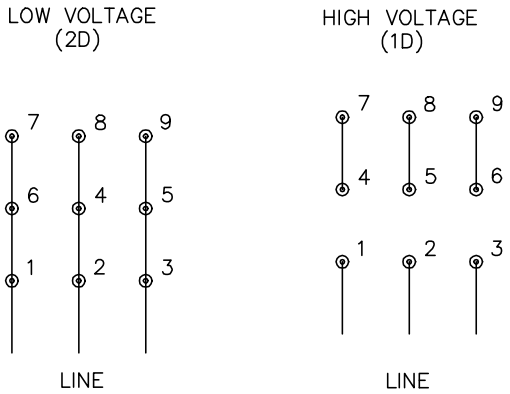
TORQUES(LB-FT): PO=224 PU=130 LR=146 LRA=193




09LYF525
(922-960) = 26.04
12.29
3.75
.25
.38 KEY
2.88 LONG
9.12
Ø8.500
8.497
1.625
1.624
SLINGER
DRAIN FITTING
HW4505A02
(EA END)
13.22
12.65
6.72
2.50
45°
45°
LEAD HOLE
1.25 N.P.T.
9.30
4 HOLES
.50-13 TAP
.81 DEEP ON
Ø7.25 B.C.
1 PIN
HW3022E06
(EA END)
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT AUTOCAD DRW TO SWD
REV: G
VERSION: 05
REVISED: 01:12:55 05/20/2023
TDR: 000001208005
MODEL NO. 09LYF525
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
VERT XPFC 254-6TC, CL.I GRP.C&D ONLY, DRILL RIG
09LYF525

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

SH 1 of 1