

BALDOR® • RELIANCE 

Product Information Packet

VDRX32544T

50HP,1775//1475RPM,3PH,60/50HZ,326TC,XPF

Part Detail							
Revision:	J	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	12WGY585	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:		Layout:	12LYE292	Poles:	04	Created Date:	06-06-2019
Base:		Eff. Date:	11-08-2021	Leads:	9#8		

Specs			
Catalog Number:	VDRX32544T	Duty Rating:	CONT
Enclosure:	XPFC	Electrically Isolated Bearing:	Not Electrically Isolated
Frame:	326TC	Feedback Device:	NO FEEDBACK
Frame Material:	Iron	Heater Indicator:	No Heater
Output @ Frequency:	40.000 HP @ 50 HZ	Insulation Class:	F
	50.000 HP @ 60 HZ	Inverter Code:	Inverter Duty
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	IP Rating:	NONE
Voltage @ Frequency:	230.0 V @ 60 HZ	KVA Code:	J
	190.0 V @ 50 HZ	Lifting Lugs:	Standard Lifting Lugs
	380.0 V @ 50 HZ	Locked Bearing Indicator:	Locked Bearing
	460.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	CLI GP C,D	Motor Type:	1276M
XP Division:	Division I	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	84
	CSA EEV	Product Family:	Hazardous Location Motor
	CSA	Pulley Face Code:	C-Face
Auxillary Box:	No Auxillary Box	Rodent Screen:	None
Auxillary Box Lead Termination:	None	RoHS Status:	ROHS NON-COMPLIANT

Base Indicator:	No Mounting	Shaft Ground Indicator:	No Shaft Grounding
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Rotation:	Reversible
Blower:	None	Speed Code:	Single Speed
Constant Torque Speed Range:	6	Motor Standards:	NEMA
Current @ Voltage:	59.000 A @ 460.0 V	Starting Method:	Direct on line
	57.000 A @ 380.0 V	Thermal Device - Bearing:	None
	118.000 A @ 230.0 V	Thermal Device - Winding:	Normally Closed Thermostat
	114.000 A @ 190.0 V	Vibration Sensor Indicator:	No Vibration Sensor
Design Code:	A	Winding Thermal 1:	None
Drip Cover:	No Drip Cover	Winding Thermal 2:	None
		XP Temp Code:	T3C

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						

Parts List		
Part Number	Description	Quantity
SA370407	SA 12-0000-0767	1.000 EA
RA360057	RA 12-0000-0767	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0181	CONNECTION LABEL	1.000 EA
LB1417	LABEL CARTON 6X4 PERFORATED BLANK ROLLS	1.000 EA
NP1401XPSLEV	SS XP INV UL CSA-EEV CC CL-I GP-C&D	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA
LB1081C	ALUM XP CAUTION LABEL (COL PLANT ONLY-	1.000 EA
12FH1001A07P	FAN COVER, MACH W/EPOXY PRIMER & SLOT FO	1.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	3.000 EA
10XN3118K12	5/16-18 X .75 GRADE 5, ZINC PLATED	3.000 EA
09FN3001B03SP	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.200 LB
12EP1705A34PP15	FREP MACH. 312 W/EPOXY PRIMER & PAINT	1.000 EA
HA3051A03	1/2-13X2.75 BLT GR8 1.75 TO E NC F/S	4.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
HA2067A01	ALUM SLINGER (AUTO)	1.000 EA
80XN1032A07	SET SCREW, HEX XOCK, ZN	2.000 EA
HW5100A13	W4627-047 WVY WSHER	1.000 EA
HA4017A03	.125 X 1.75 GREASE EXT (F/S)	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
HA4017A08	.125X3.50 GREASER EXTEN.	1.000 EA
HW4019A01	PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HW4505A02	BREATHER/DRAIN-EXP PROOF-.250-18 PTF AIS	1.000 EA
HW3023E06	.125 X .625 SPIRAL SPRING PIN	1.000 EA
12EP1707A11P	FACE MTD. EP XPFC, W/DRN HW4505A02 W/PRI	1.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
HA3051A03	1/2-13X2.75 BLT GR8 1.75 TO E NC F/S	4.000 EA
HA2067A02	SLINGER ALUM (AUTO)	1.000 EA
80XN1032A10	10-32 X 5/8 SET SC HEX SOCK	2.000 EA
10XN3118K40	5/16-18 X 2.75" HEX HD, GRADE 5	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HW4505A02	BREATHER/DRAIN-EXP PROOF-.250-18 PTF AIS	1.000 EA
HW3023E06	.125 X .625 SPIRAL SPRING PIN	1.000 EA
12CB1003A01P	KOBX,MACH 2.00 NPT GROUP C MTRS,EPOXY PR	1.000 EA
10XN3118K24	5/16-18 X 1.50" HEX HD, GRADE 5	4.000 EA
WD1000B19	TERMINAL BURNDY L250HP	1.000 EA
10XN3816K12	3/8-16 X 3/4 HEX HD CAP GRADE 5	1.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	1.000 EA

Product Information Packet: VDRX32544T - 50HP,1775//1475RPM,3PH,60/50HZ,326TC,XPF

12CB1502A01P	CONDUIT BOX LID MACH. GROUP C MTRS	1.000 EA
84XN5013J32	SOCKET HD.CAP SCR,1/2-13 X 2"LG,ALLOY ST	10.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT, .879 OD, .509 I	10.000 EA
MG1025G29	WILKOFAS, 789.229, DARK CHARCOAL GRAY	0.125 GA
14PA1064	PKGP 310-316 FRAME 38X31 1X4 RISER	1.000 EA
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 EA
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 QT

AC Induction Motor Performance Data

Record # 60172

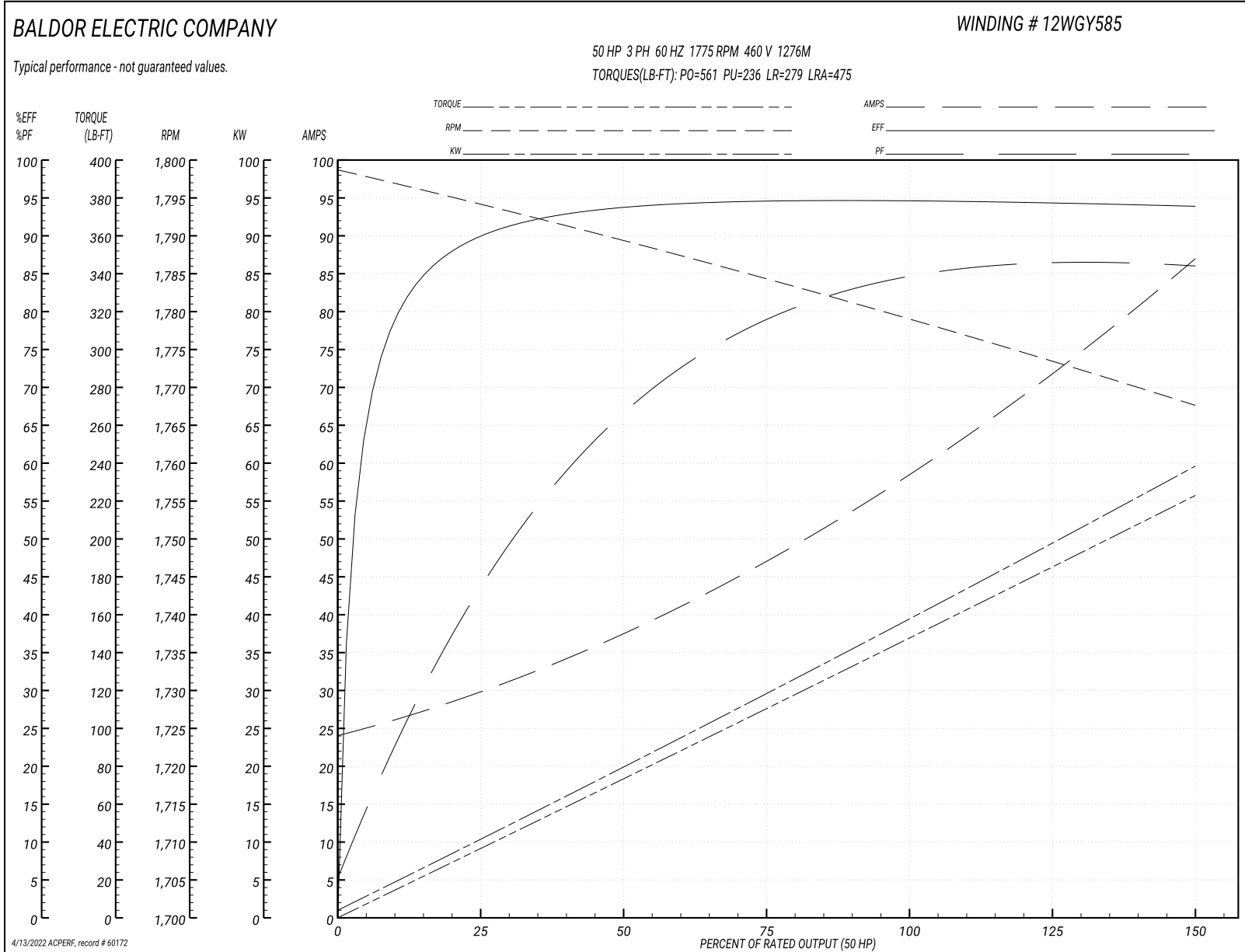
Typical performance - not guaranteed values

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. @ 25°C	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-FT ²		

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

Performance Graph at 460V, 60Hz, 50.0HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data

Record # 74482

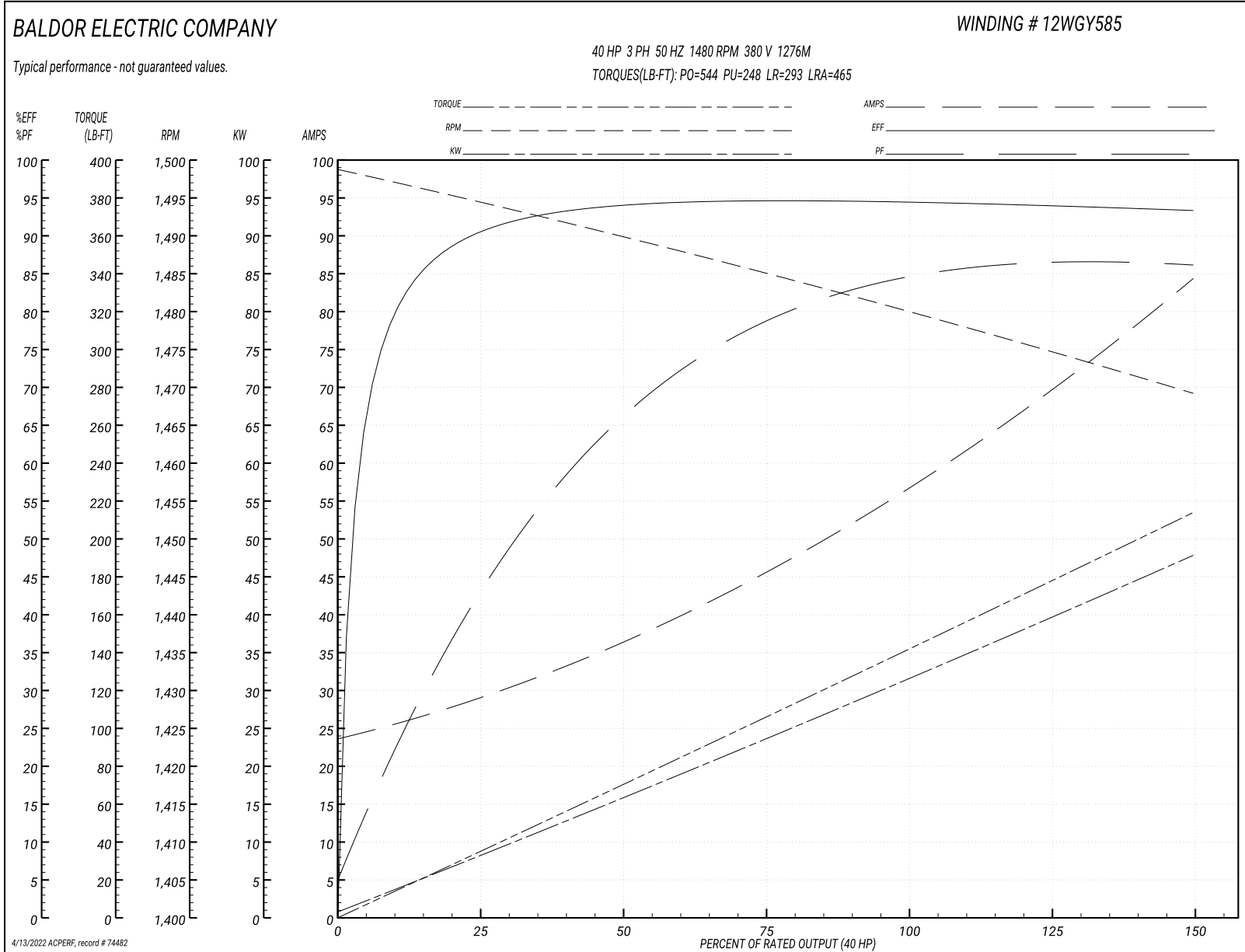
Typical performance - not guaranteed values

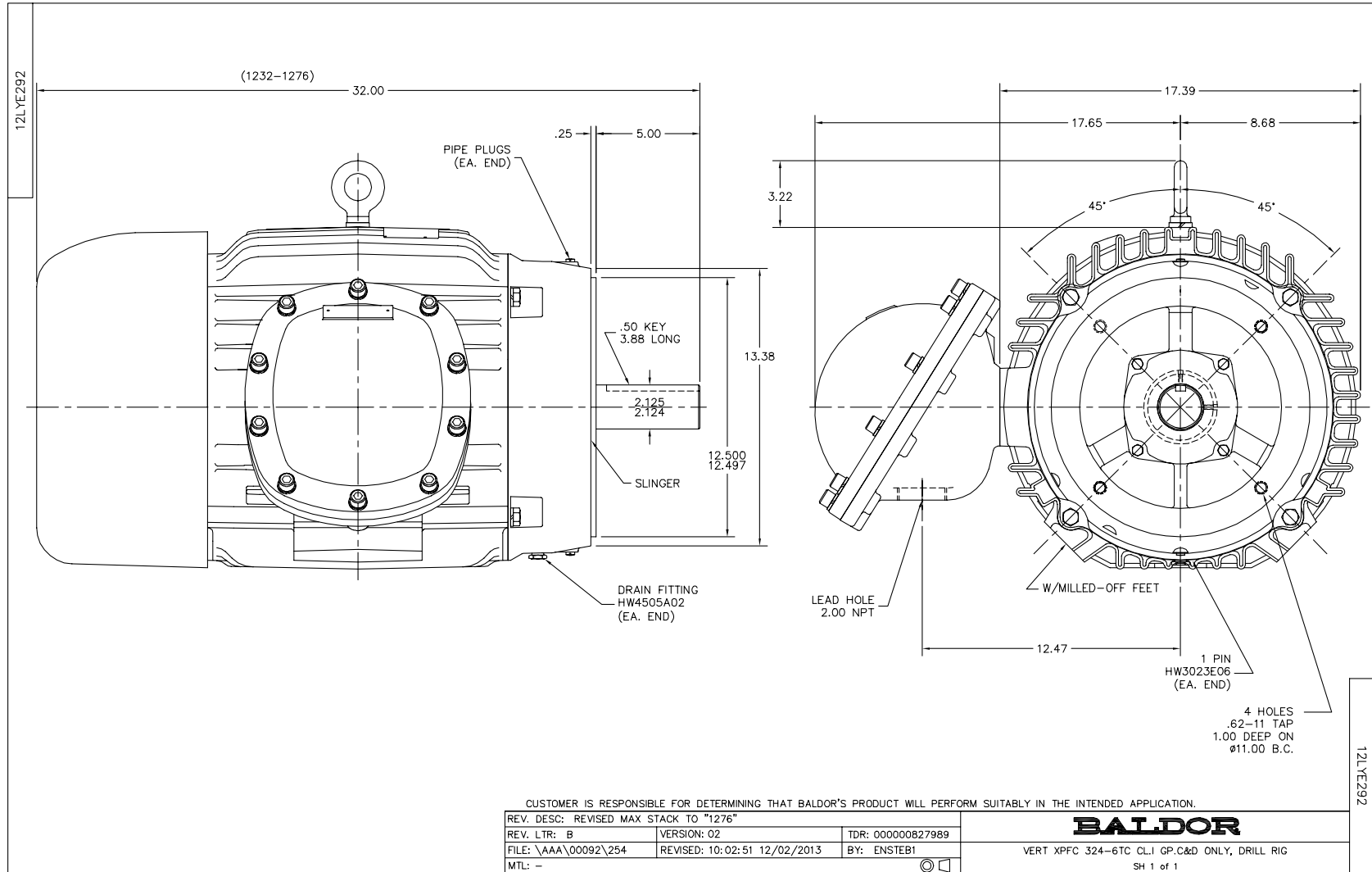
Winding: 12WGY585-R011		Type: 1276M		Enclosure: XPFC	
Nameplate Data			380 V, 50 Hz: High Voltage Connection		
Rated Output (HP)	50//40		Full Load Torque	142 LB-FT	
Volts	230/460//190/380		Start Configuration	direct on line	
Full Load Amps	118/59//114/57		Breakdown Torque	544 LB-FT	
R.P.M.	1775//1475		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. @ 25°C	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-FT ²	

Load Characteristics 380 V, 50 Hz, 40 HP

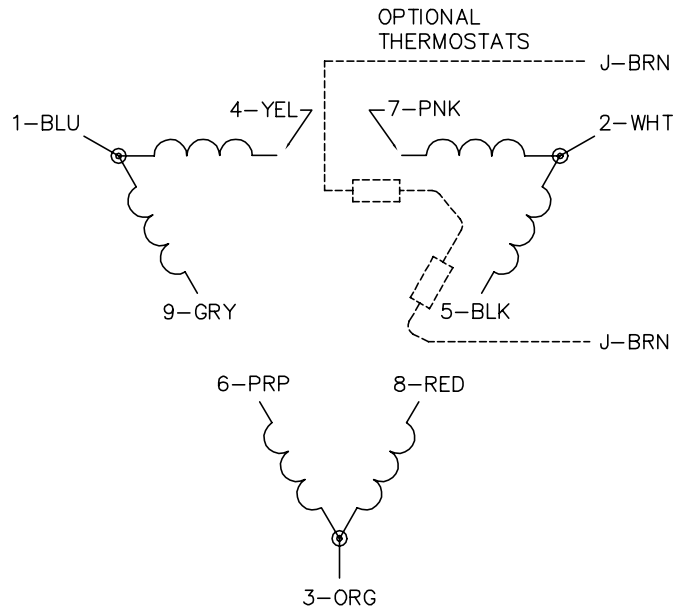
% of Rated Load	25	50	75	100	125	150
Power Factor	45	67	78	84	86	87
Efficiency	90.3	93.7	94.6	94.3	94.2	93.2
Speed	1494	1490	1485	1480	1475	1469
Line amperes	27.9	35.86	45.89	57.36	70.22	83.76

Performance Graph at 380V, 50Hz, 40.0HP Typical performance - Not guaranteed values

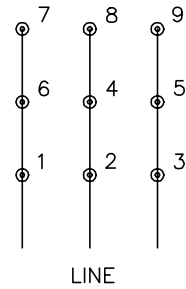




CD0180



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

SH 1 of 1

Marketing maintained PDF of MN416:

<http://www.baldor.com/support/Literature/Load.ashx/MN416?ManNumber=MN416>