ABB BALDOR RELIANCE

Customer information packet

CEM7048T-I

7.5//5HP, 1180//980RPM, 3PH, 60//50HZ, 254TC
Class - CLI GP C,D
Division - Division I

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Specifications

Enclosure	XPFC
Frame	254TC
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	5.000 HP @ 50 HZ
	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1000 RPM @ 50 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
	CSA
	UL
	UR
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
Current @ Voltage	22.000 A @ 230.0 V
	9.600 A @ 380.0 V
	19.200 A @ 190.0 V
	11.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover

Part Detail

Revision	U
Type	AC
Mech. spec.	09F368
Base	
Status	PRD/A
Elec. spec.	09WGT118
Layout	09LYF368
Eff. date	02-21-2024
CD Diagram	CD0005
Poles	06
Leads	9#12
Proprietary	False
Created date	10-03-2014

Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	9.6 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	X0954M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	26.00 IN
Power Factor	70
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible

Shaft Slinger Indicator	Shaft Slinger
Speed	1180 rpm
	980 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

NP0977XPSLEV												
NO.						**CC**	010A					
SER.						**TEMP CODE**	T3C					
SPEC.	09F368T118G1											
CAT.NO.	CEM7048T-I											
HP	7.5//5 NEMA MG-1 PT.5,IP55											
VOLTS	230/460//190/380											
AMPS	22/11//19.2/9.6											
RPM	1180//980					**MOTOR WEIGHT**	374					
HERTZ	60//50	**PH**	3	**CL**	F	**DE BRG**	6309					
SER.F.	1.15	**DES**	A	**CODE**	J	**ODE BRG**	6208					
FRAME	254TC	**GREASE**	POLYREX EM									
RATING	40C AMB-CONT											
				NEMA-NOM-EFF		91	**PF**	70				
	55C AMB @ 1.0 SF,60C RISE											

AC Induction Motor Performance Data
Record # 47560
Typical performance - not guaranteed values

Winding: 09WGT118-R004	**Type:** 0954M	**Enclosure:** XPFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			7.5//5	**Full Load Torque**	33.2 LB-FT
Volts			230/460//190/380	**Start Configuration**	direct on line
Full Load Amps			22/11//19.2/9.6	**Breakdown Torque**	113 LB-FT
R.P.M.			1180//980	**Pull-up Torque**	41.3 LB-FT
Hz	60//50	**Phase**	3	**Locked-rotor Torque**	57.4 LB-FT
NEMA Design Code	A	**KVA Code**	J	**Starting Current**	74.8 A
Service Factor (S.F.)			1.15	**No-load Current**	6.06 A
NEMA Nom. Eff.	91	**Power Factor**	70	**Line-line Res. @ 25ºC**	0.87037 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	36°C
S.F. Amps				**Temp. Rise @ S.F. Load**	42°C

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	32	52	63	70	74	75	72
Efficiency	83.2	89.4	90.9	91.1	90.7	89.9	90.9
Speed	1196.5	1192.4	1188.3	1183.7	1178.7	1173.2	1181
Line amperes	6.49	7.59	9.09	11	13.1	15.5	12.3

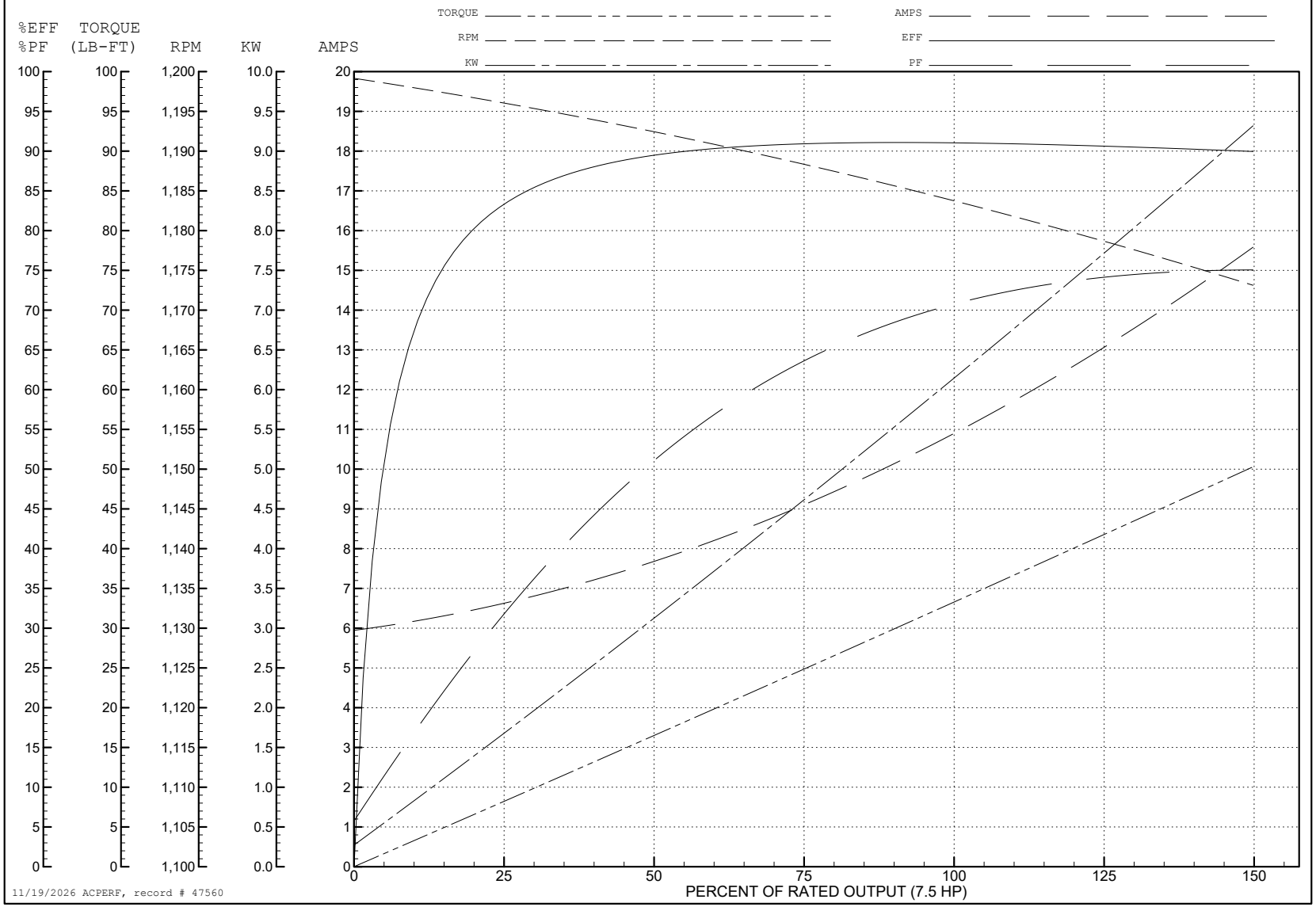
ABB Motors and Mechanical Inc.

WINDING # 09WGT118

7.5 HP 3 PH 60 HZ 1183.7 RPM 460 V 0954M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=113 PU=41.3 LR=57.4 LRA=74.8



AC Induction Motor Performance Data
Record # 47561
Typical performance - not guaranteed values

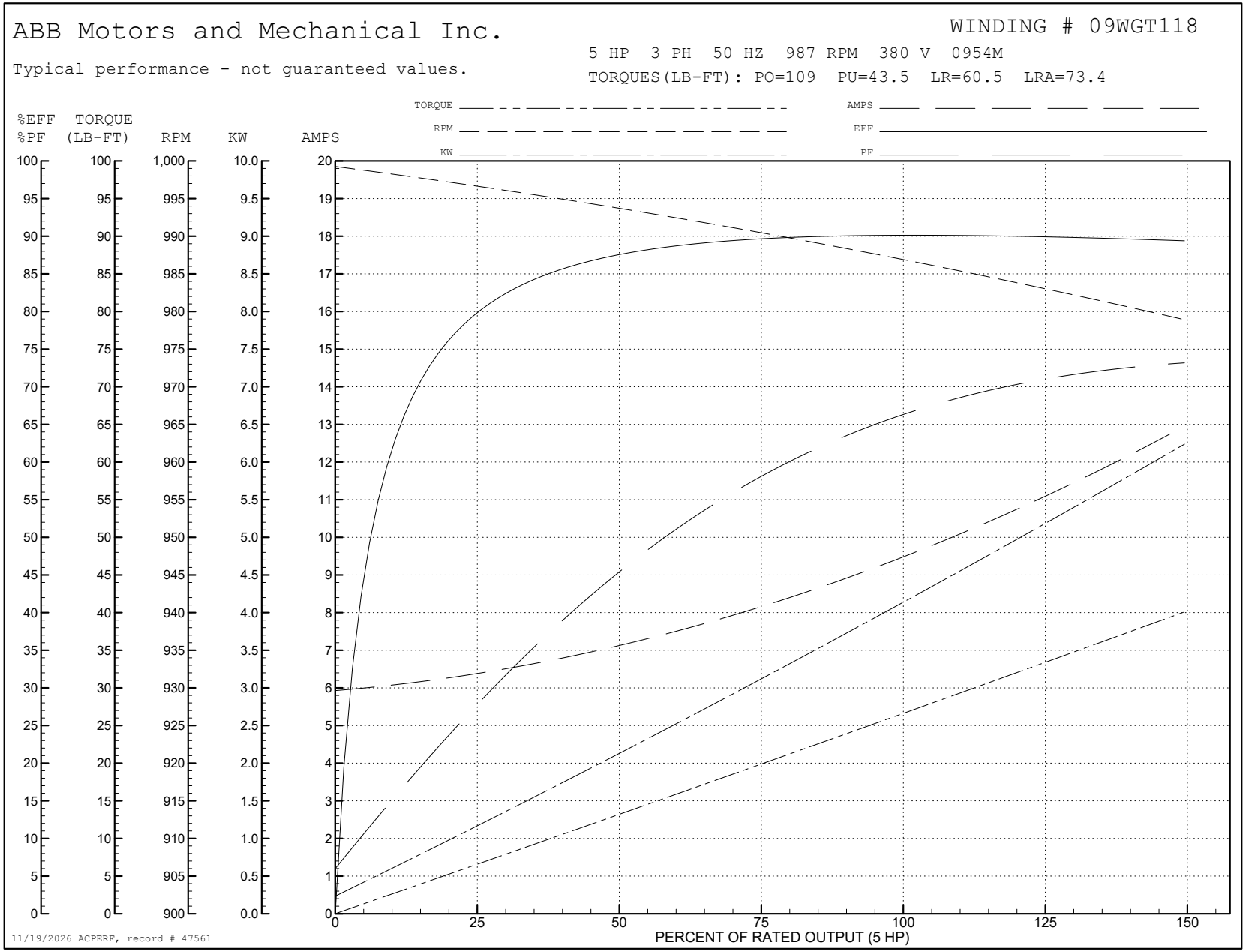
Winding: 09WGT118-R004	**Type:** 0954M	**Enclosure:** XPFC

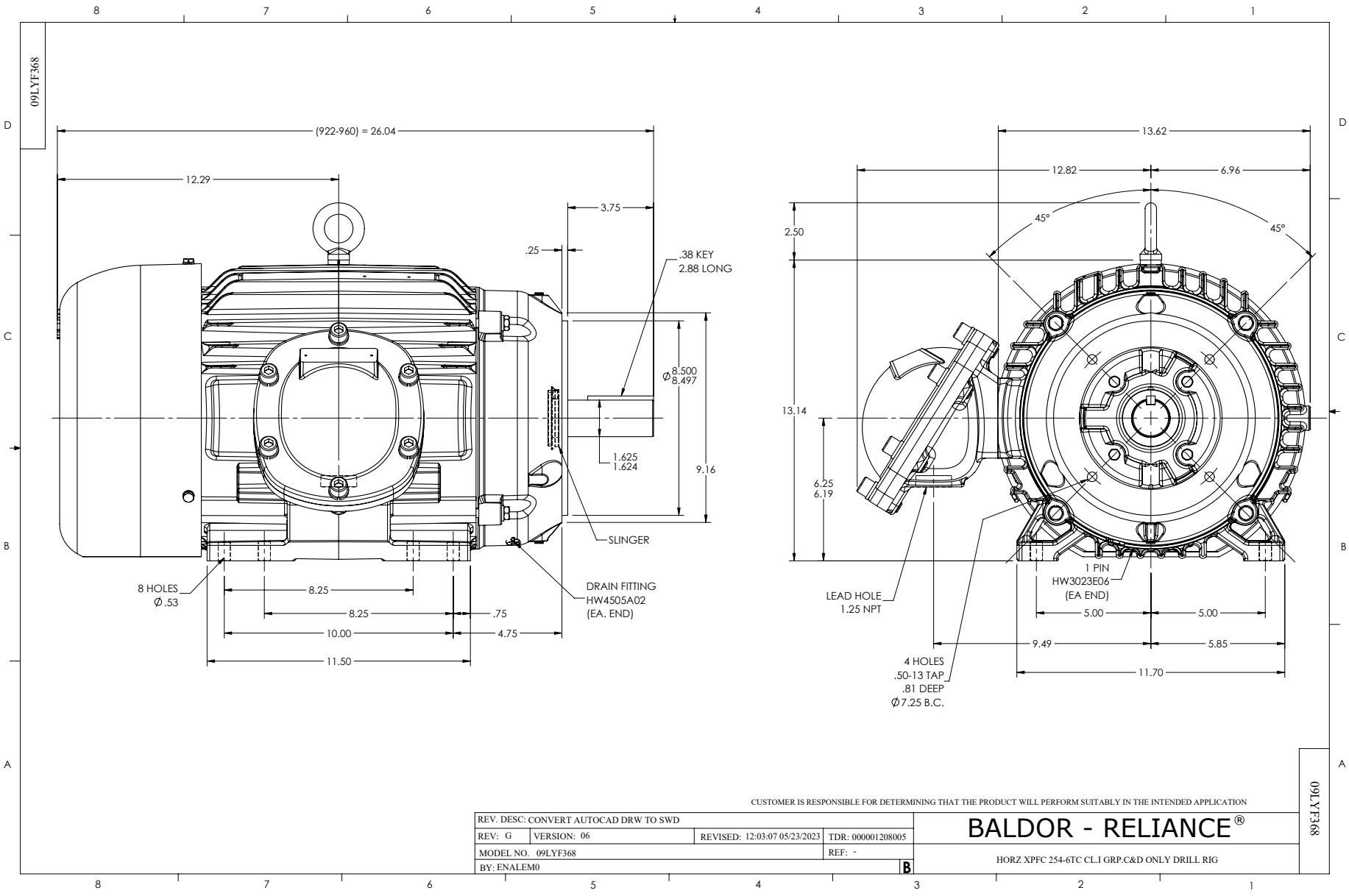
Nameplate Data			
Rated Output (HP)			7.5//5
Volts			230/460//190/380
Full Load Amps			22/11//19.2/9.6
R.P.M.			1180//980
Hz	60//50	**Phase**	3
NEMA Design Code	A	**KVA Code**	J
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	91	**Power Factor**	70
Rating - Duty			40C AMB-CONT
S.F. Amps			

380 V, 50 Hz: High Voltage Connection	
Full Load Torque	26.6 LB-FT
Start Configuration	direct on line
Breakdown Torque	109 LB-FT
Pull-up Torque	43.5 LB-FT
Locked-rotor Torque	60.5 LB-FT
Starting Current	73.4 A
No-load Current	6 A
Line-line Res. @ 25ºC	0.895 Ω
Temp. Rise @ Rated Load	29°C
Temp. Rise @ S.F. Load	34°C
Locked-rotor Power Factor	28.9
Rotor inertia	4.34 LB-FT2

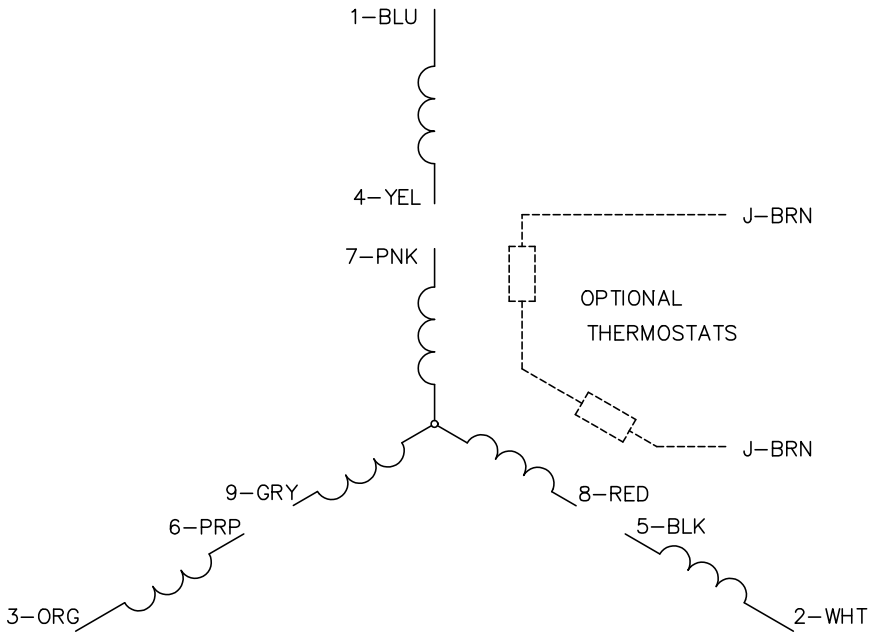
Load Characteristics 380 V, 50 Hz, 5 HP

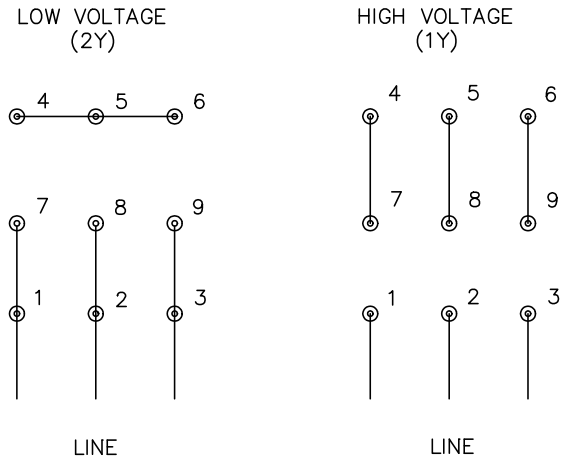
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	28	46	58	66	71	74	73
Efficiency	79.9	87.2	89.7	90.3	90.1	89.3	91.3
Speed	997	994	990	987	983	979	986
Line amperes	6.3	7.07	8.15	9.56	11.1	12.9	9.77


ABB Motors and Mechanical Inc.
WINDING # 09WGT118
5 HP 3 PH 50 HZ 987 RPM 380 V 0954M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=109 PU=43.5 LR=60.5 LRA=73.4
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (5 HP)
11/19/2026 ACPERF, record # 47561


09LYF368
(922-960) = 26.04
12.29
3.75
.25
.38 KEY
2.88 LONG
Ø 8.500
8.497
1.625
1.624
9.16
SLINGER
8 HOLES
Ø .53
8.25
8.25
.75
10.00
4.75
11.50
DRAIN FITTING
HW4505A02
(EA. END)
13.62
12.82
6.96
45°
45°
2.50
13.14
6.25
6.19
LEAD HOLE
1.25 NPT
1 PIN
HW3023E06
(EA END)
5.00
5.00
9.49
5.85
11.70
4 HOLES
.50-13 TAP
.81 DEEP
Ø 7.25 B.C.
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: 06
REVISED: 12:03:07 05/23/2023
TDR: 000001208005
MODEL NO. 09LYF368
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
HORZ XPFC 254-6TC CL.I GRP.C&D ONLY DRILL RIG
09LYF368

CD0005





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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS