

BALDOR® • RELIANCE 

Product Information Packet

CEM7056T-I

20//15 NEMA MG-1 PT.5,IP55HP,1770//147

Part Detail							
Revision:	F	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	09WGT459	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	09F368	Layout:	09LYF368	Poles:	04	Created Date:	11-20-2017
Base:	RG	Eff. Date:	03-09-2020	Leads:	9#10		

Specs			
Catalog Number:	CEM7056T-I	Front Shaft Indicator:	None
Enclosure:	XPFC	Heater Indicator:	No Heater
Frame:	256TC	Insulation Class:	F
Frame Material:	Iron	Inverter Code:	Not Inverter
Output @ Frequency:	15.000 HP @ 50 HZ	KVA Code:	J
	20.000 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	230.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 10 AWG
	190.0 V @ 50 HZ	Motor Lead Exit:	Ko Box
	460.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
	380.0 V @ 50 HZ	Motor Type:	X0960M
XP Class and Group:	CLI GP C,D	Mounting Arrangement:	F1
XP Division:	Division I	Power Factor:	83
Agency Approvals:	CSA	Product Family:	General Purpose
	CSA EEV	Pulley End Bearing Type:	Sealed Bearing
	UR	Pulley Face Code:	C-Face
Auxillary Box:	No Auxillary Box	Pulley Shaft Indicator:	Standard
Auxillary Box Lead Termination:	None	Rodent Screen:	None

Base Indicator:	Rigid	RoHS Status:	ROHS COMPLIANT
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Extension Location:	Pulley End
Blower:	None	Shaft Ground Indicator:	No Shaft Grounding
Current @ Voltage:	52.000 A @ 208.0 V	Shaft Rotation:	Reversible
	48.000 A @ 230.0 V	Shaft Slinger Indicator:	Shaft Slinger
	44.000 A @ 190.0 V	Speed Code:	Single Speed
	24.000 A @ 460.0 V	Motor Standards:	NEMA
	22.000 A @ 380.0 V	Starting Method:	Direct on line
Design Code:	A	Thermal Device - Bearing:	None
Drip Cover:	No Drip Cover	Thermal Device - Winding:	Normally Closed Thermostat
Duty Rating:	CONT	Vibration Sensor Indicator:	No Vibration Sensor
Electrically Isolated Bearing:	Not Electrically Isolated	Winding Thermal 1:	None
Feedback Device:	NO FEEDBACK	Winding Thermal 2:	None
Front Face Code:	Standard	XP Temp Code:	T3C

Nameplate NP0977XPSLEV			
NO.		CC	010A
SER.		TEMP CODE	T3C
SPEC.	09F368T459G1		
CAT.NO.	CEM7056T-I		
HP	20//15 NEMA MG-1 PT.5,IP55		
VOLTS	230/460//190/380		
AMPS	48/24//44/22		
RPM	1770//1470	MOTOR WEIGHT	339
HERTZ	60//50	PH	3
SER.F.	1.15	CL	F
FRAME	256TC	DE BRG	6309
RATING	40C AMB-CONT	ODE BRG	6208
USABLE AT 208V	52	GREASE	POLYREX EM
	55C AMB @ 1.0 SF,60C RISE	NEMA-NOM-EFF	93
		PF	83

Parts List		
Part Number	Description	Quantity
SA348245	SA 09F368T459G1	1.000 EA
RA336797	RA 09F368T459G1	1.000 EA
09FN3001D01SP	EXTERNAL FAN, PLASTIC	1.000 EA
HW1002A63	WASHER, 5/8 HI-COLLAR SPRING WASHER	1.000 EA
MJ5000A01	SEALANT, CHICO A COMPOUND	0.050 LB
09CB1003A01P	KOBY, MACH 1.25 NPT GROUP C MTRS PRIMED	1.000 EA
10XN3118K24	5/16-18 X 1.50" HEX HD, GRADE 5	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 EA
10XN3118K12	5/16-18 X .75 GRADE 5, ZINC PLATED	1.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	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
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
HA2066A01	SLINGER, ALUM (AUTO)	1.000 EA
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 EA
10XN2520K36	1/4-20 X 2.25" HX HD SCRW GRADE 5, ZINC P	4.000 EA
09EP1708A19P	PUEP, MACH W/METAL SLINGER & HW4505A02 W	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
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
80XN1032A07	SET SCREW, HEX LOCK, ZN	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
09FH1004A03P	FAN COVER, MACH PRIMED	1.000 EA
10XN2520K14	1/4-20 X .88 HEX GRD 5 (20001)	3.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	3.000 EA
09CB1502A01P	CONDUIT BOX LID MACH. GROUP C MTRS W/EP	1.000 EA
84XN5013J24	1/2-13 X 1-1/2 HEX SOCKET HD CAP SCREW	6.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	6.000 EA
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
LB1081Z	ALUM XP CAUTION LABEL (ZK PLANT ONLY-	1.000 EA
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 QT
09EP1700A33PP	FR ENDPLATE, MACH, XPFC W/DRN HW4505A02	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	2.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.080 LB
HW4500A20	1/8NPT SL PIPE PLUG	2.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1025G05	WILKOFASST, 789.227, MED. GRAY CHAR. MET.	0.050 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	6.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0181	CONNECTION LABEL	1.000 EA
NP0977XPSLEV	SS XP UL CSA-EEV CC CL-I GP-C&D	1.000 EA
40PA1005	PACKAGING GROUP, 09 STD	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA

AC Induction Motor Performance Data

Record # 68069 - Typical performance - not guaranteed values

Winding: 09WGT459-R010	Type: 0960M	Enclosure: XPFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	20//15			Full Load Torque	59.27 LB-FT
Volts	230/460//190/380			Start Configuration	direct on line
Full Load Amps	48/24//44/22			Breakdown Torque	232 LB-FT
R.P.M.	1770//1470			Pull-up Torque	126 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	141 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	198 A
Service Factor (S.F.)	1.15			No-load Current	10.4 A
NEMA Nom. Eff.	93	Power Factor	83	Line-line Res. @ 25°C	0.33814 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	58°C
S.F. Amps				Temp. Rise @ S.F. Load	70°C
				Locked-rotor Power Factor	26.5

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	67	78	83	86	87	85
Efficiency	89.2	93	93.7	93.6	93.1	92.4	93.3
Speed	1793.2	1786.4	1779.1	1771.9	1763.7	1755.3	1767
Line amperes	11.8	15	19.2	24	29.3	34.9	27.2

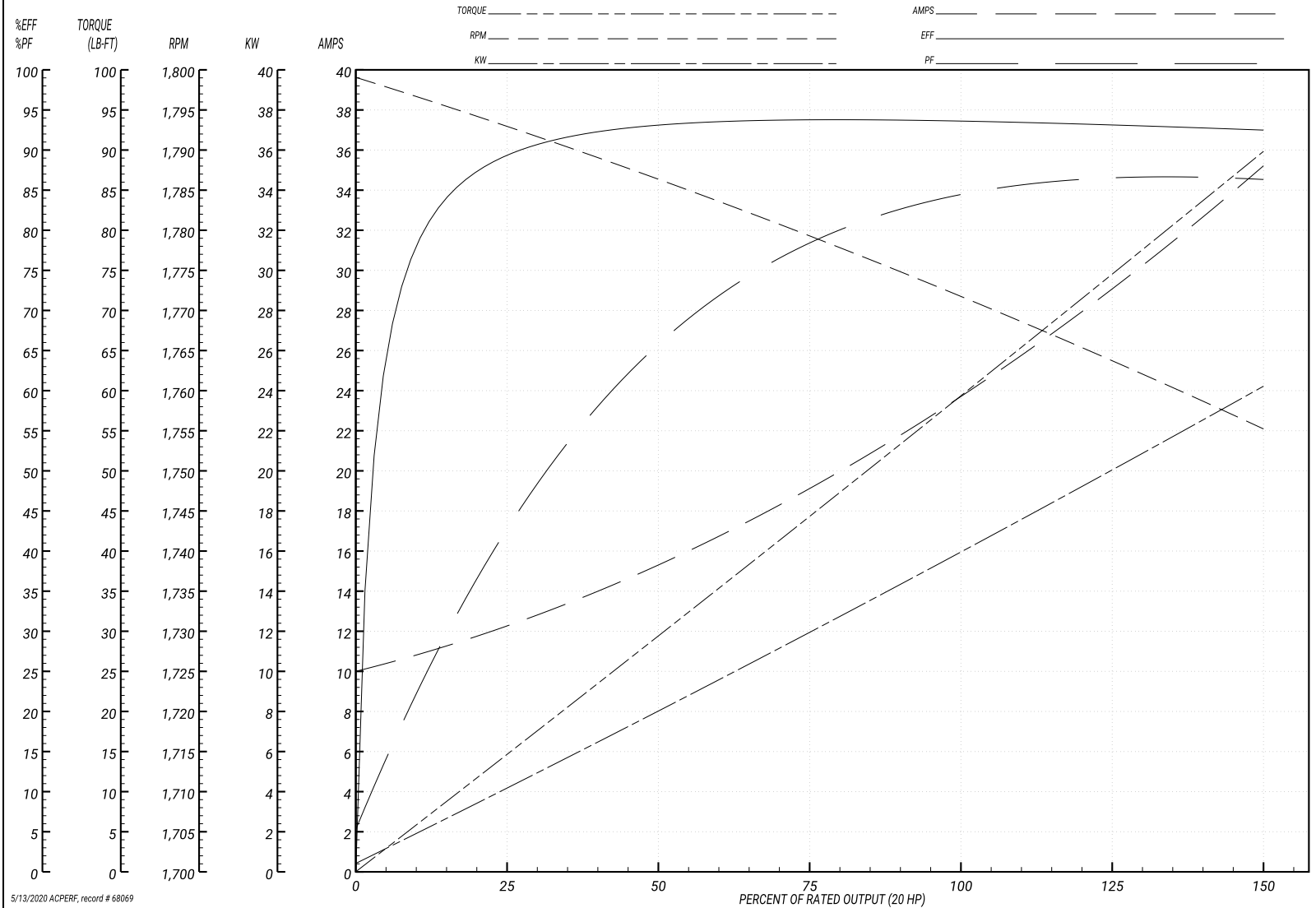
Performance Graph at 460V, 60Hz, 20.0HP Typical performance - Not guaranteed values

ABB Motors and Mechanical Inc.

WINDING # 09WGT459

Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1771.9 RPM 460 V 0960M
 TORQUES(LB-FT): PO=232 PU=126 LR=141 LRA=198



5/13/2020 ACPERF, record # 68069

AC Induction Motor Performance Data

Record # 68070 - Typical performance - not guaranteed values

Winding: 09WGT459-R010	Type: 0960M	Enclosure: XPFC
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Nameplate Data				380 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	20//15			Full Load Torque	53.45 LB-FT
Volts	230/460//190/380			Start Configuration	direct on line
Full Load Amps	48/24//44/22			Breakdown Torque	224 LB-FT
R.P.M.	1770//1470			Pull-up Torque	131 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	146 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	193 A
Service Factor (S.F.)	1.15			No-load Current	10.16 A
NEMA Nom. Eff.	93	Power Factor	83	Line-line Res. @ 25°C	0.316 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	50°C
S.F. Amps				Temp. Rise @ S.F. Load	61°C
				Locked-rotor Power Factor	29.3
				Rotor inertia	2.65 LB-FT ²

Load Characteristics 380 V, 50 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	43	66	77	83	86	87	85
Efficiency	88	92.2	93.1	93.1	92.5	91.8	92.7
Speed	1494	1488	1481	1475	1467	1460	1470
Line amperes	11.32	14.06	17.76	22.07	26.82	31.83	24.9

Performance Graph at 380V, 50Hz, 15.0HP Typical performance - Not guaranteed values

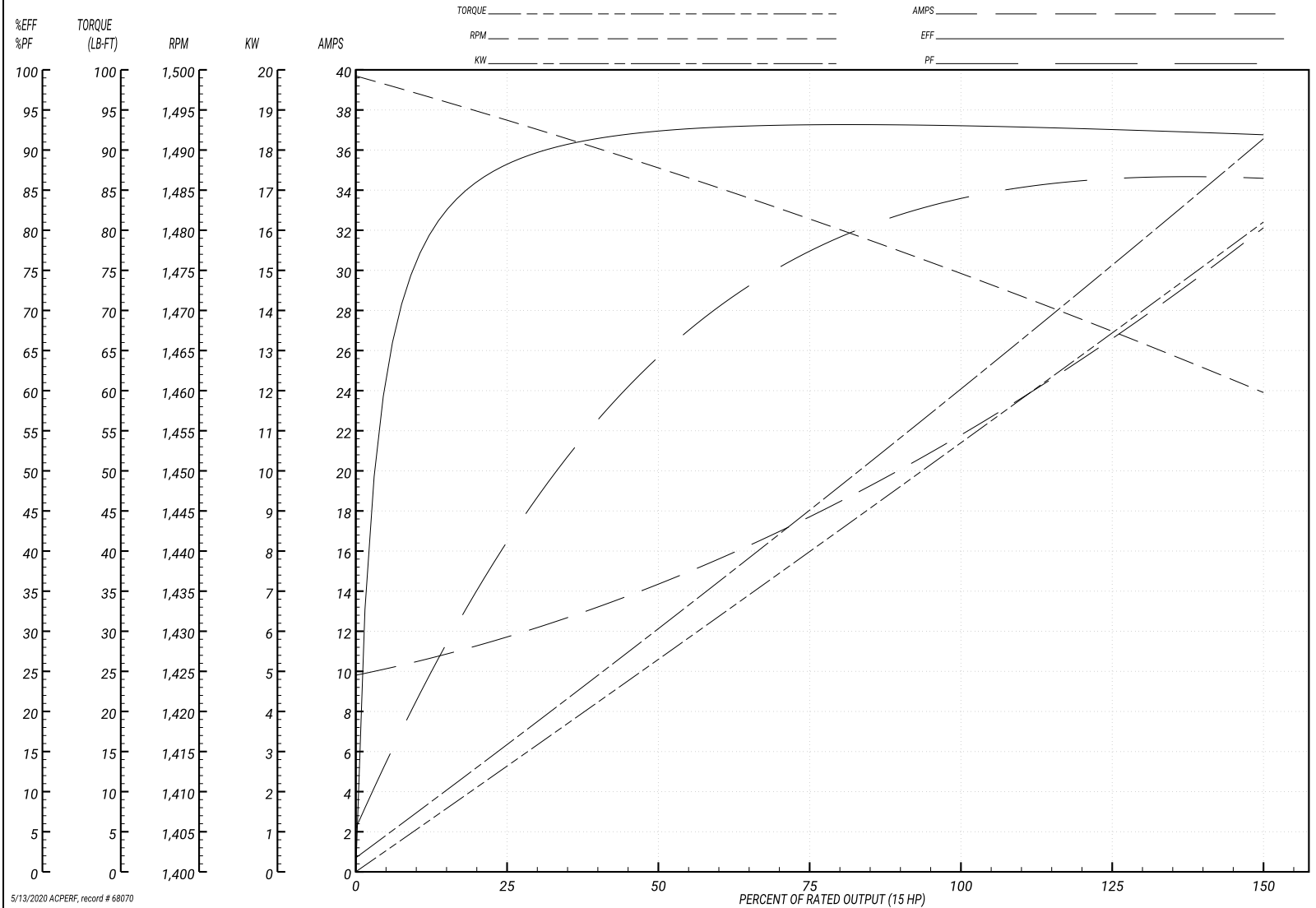
ABB Motors and Mechanical Inc.

WINDING # 09WGT459

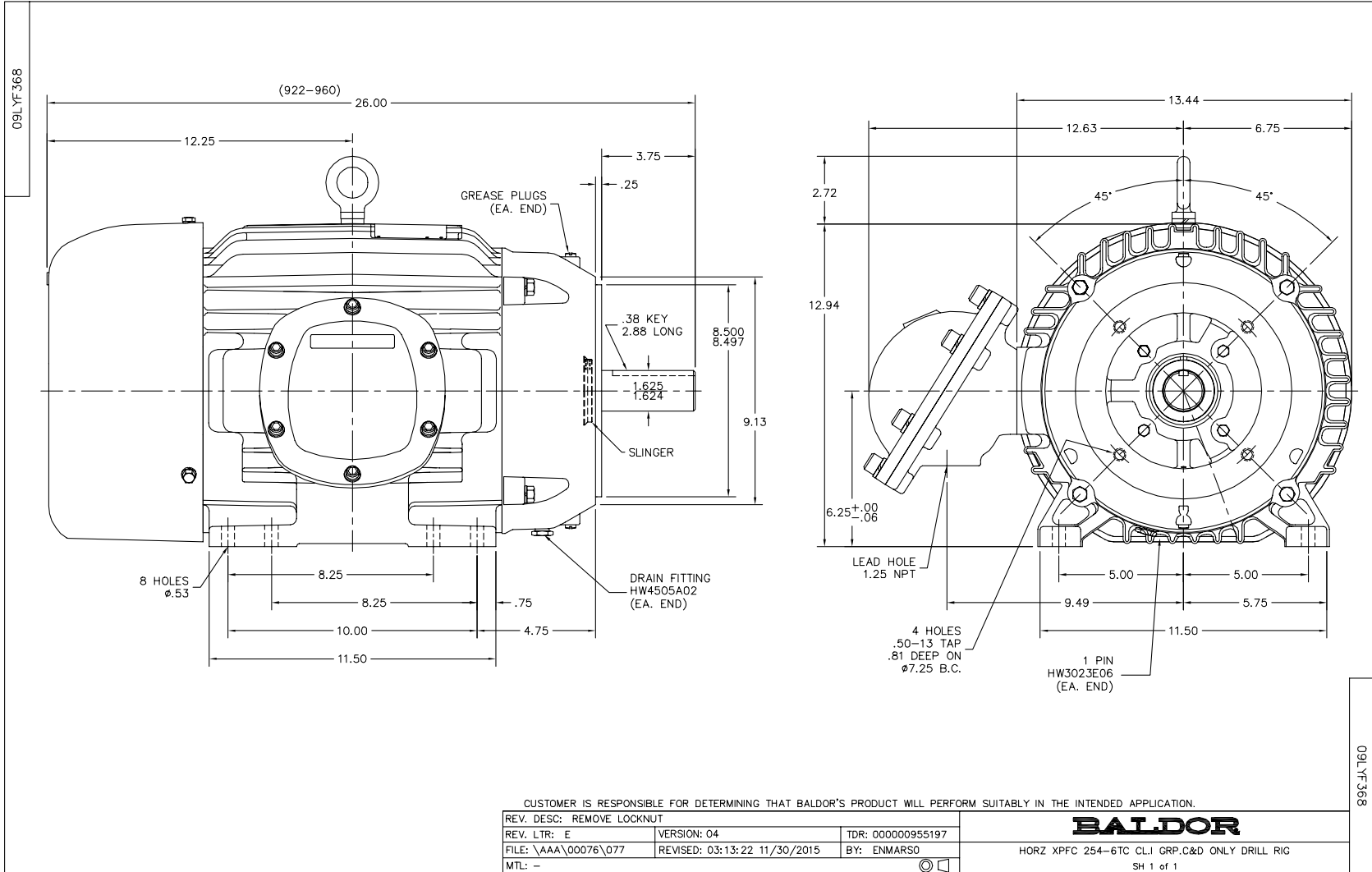
Typical performance - not guaranteed values.

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

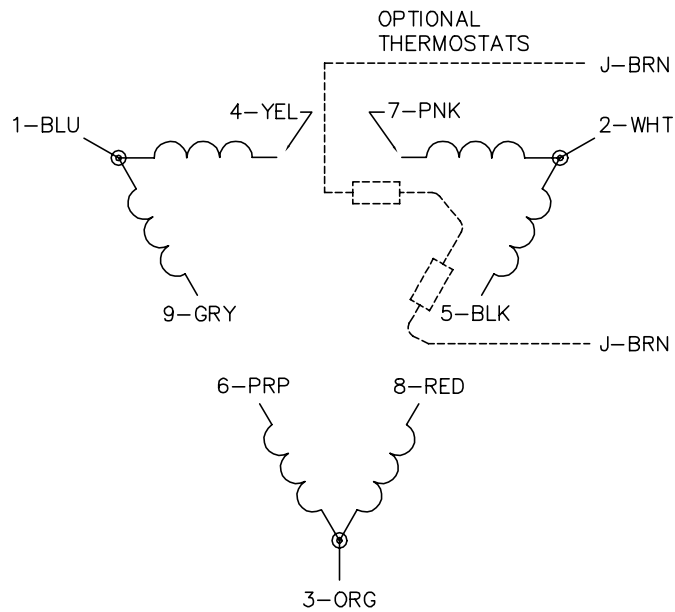
TORQUES(LB-FT): PO=224 PU=131 LR=146 LRA=193



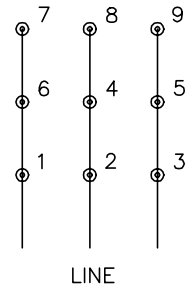
5/13/2020 ACPERF, record # 68070



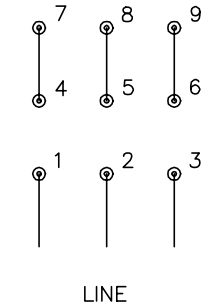
CD0180



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

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3PH, DV, 9 LEADS, DELTA CONNECTION

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