

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM7170T-I**

**10//7.5HP,1765//1465RPM,3PH,60//50HZ,215**

Part Detail							
Revision:	Q	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	07WGX598	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	07J231	Layout:	07LYJ231	Poles:	04	Created Date:	08-04-2010
Base:	RG	Eff. Date:	03-09-2020	Leads:	9#14		

Specs			
Catalog Number:	EM7170T-I	Front Shaft Indicator:	None
Enclosure:	XPFC	Heater Indicator:	No Heater
Frame:	215T	Insulation Class:	F
Frame Material:	Iron	Inverter Code:	Not Inverter
Output @ Frequency:	7.500 HP @ 50 HZ	KVA Code:	J
	10.000 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	1500 RPM @ 50 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	230.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 14 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:	X0750M
XP Class and Group:	CLI GP C,D	Mounting Arrangement:	F1
XP Division:	Division I	Power Factor:	81
Agency Approvals:	UR	Product Family:	General Purpose
	UL	Pulley End Bearing Type:	Sealed Bearing
	CSA EEV	Pulley Face Code:	Standard
	CSA	Pulley Shaft Indicator:	Standard
Auxillary Box:	No Auxillary Box	Rodent Screen:	None

<b>Auxillary Box Lead Termination:</b>	None	<b>RoHS Status:</b>	ROHS COMPLIANT
<b>Base Indicator:</b>	Rigid	<b>Shaft Extension Location:</b>	Pulley End
<b>Bearing Grease Type:</b>	Polyrex EM (-20F +300F)	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
<b>Blower:</b>	None	<b>Shaft Rotation:</b>	Reversible
<b>Current @ Voltage:</b>	24.600 A @ 230.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
	23.000 A @ 190.0 V	<b>Speed Code:</b>	Single Speed
	12.300 A @ 460.0 V	<b>Motor Standards:</b>	NEMA
	11.500 A @ 380.0 V	<b>Starting Method:</b>	Direct on line
<b>Design Code:</b>	A	<b>Thermal Device - Bearing:</b>	None
<b>Drip Cover:</b>	No Drip Cover	<b>Thermal Device - Winding:</b>	Normally Closed Thermostat
<b>Duty Rating:</b>	CONT	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Winding Thermal 1:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Winding Thermal 2:</b>	None
<b>Front Face Code:</b>	Standard	<b>XP Temp Code:</b>	T3C

Nameplate NP0977XPSLEV											
NO.							CC	010A			
SER.							TEMP CODE		T3C		
SPEC.	07J231X598G1										
CAT.NO.	EM7170T-I										
HP	10//7.5										
VOLTS	230/460//190/380										
AMPS	24.6/12.3//23/11.5										
RPM	1765//1465						MOTOR WEIGHT	252			
HERTZ	60//50		PH	3	CL	F	DE BRG	6307			
SER.F.	1.15		DES	A	CODE	J	ODE BRG	6206			
FRAME	215T		GREASE		POLYREX EM						
RATING	40C AMB-CONT 55C AMB AT 1.0 SF										
USABLE AT 208V							NEMA-NOM-EFF	92.4		PF	81
	NEMA MG-1 PT 5,IP55										

Parts List		
Part Number	Description	Quantity
SA200989	SA 07J231X598G1	1.000 EA
RA188294	RA 07J231X598G1	1.000 EA
37FN3002B01	EXFN, PLASTIC, 7.50 OD, 1.155 ID	1.000 EA
HW3201A05	3/8-16 EYEBOLT	1.000 EA
07CB1000A01	CONDUIT BOX MACH	1.000 EA
10XN3118A16	5/16-18X1 HEX HD CAP	4.000 EA
WD1000B17	T&B CX35TN OR L35P TERMINAL LUG	1.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
07EP1707A17	FREP XP GR C W/DRAINS, GRSRS	1.000 EA
HW4500A19	1/4-28X1/4 SLOTTED PLUG F/S	2.000 EA
HW4506A02	BREATHER/DRAIN-EXP PROOF-.125-27 NPTF AI	1.000 EA
HW3022E05	.125 DIA X .500 ROLLED 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
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 EA
07EP1709A17	SPL PU ENDPLATE X-P W/DRAIN/LOCKED BEARI	1.000 EA
HW4500A19	1/4-28X1/4 SLOTTED PLUG F/S	2.000 EA
HW4506A02	BREATHER/DRAIN-EXP PROOF-.125-27 NPTF AI	1.000 EA
HW3022E05	.125 DIA X .500 ROLLED 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
10XN2520A36	1/4-20X 2 1/4 HEX HD X	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
07FH1003A05	FAN HOUSING 307 EXPLOSION PROOF W/ GREAS	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
HA2065A02	SLINGER, ALUM MODLE 36 & 37 DRILL RIG MT	1.000 EA
10XN2520A12	1/4-20 X 3/4 HEX HEAD CAP	4.000 EA
07CB1502A01	CONDUIT BOX LID MACH (DUCTILE IRON)	1.000 EA
84XN2520J16	1/4-20 X 1 SOC HD CAP SCREW	4.000 EA
80XN1032A07	SET SCREW, HEX XOCK, ZN	1.000 EA
HW2501F21	KEY, 5/16 SQ X 2.375	1.000 EA
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	6.000 EA
LB1081F	ALUM XP CAUTION LABEL (FS PLANT ONLY-	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 QT
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1025G29	WILKOFASST, 789.229, DARK CHARCOAL GRAY	0.036 GA
LB1119N	WARNING LABEL	1.000 EA
LC0145B01	CONNECTION LABEL	1.000 EA
NP0977XPSLEV	SS XP UL CSA-EEV CC CL-I GP-C&D	1.000 EA
07PA1011	PKG GRP, 07 CAST IRON PK1181	1.000 EA
10XL3808A28	3/8 X 1 3/4" LAG SCREW	2.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA

**AC Induction Motor Performance Data**

Record # 33780 - Typical performance - not guaranteed values

<b>Winding:</b> 07WGX598-R007	<b>Type:</b> 0750M	<b>Enclosure:</b> XPFC
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Nameplate Data				380 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	10//7.5			Full Load Torque	26.8 LB-FT
Volts	230/460//190/380			Start Configuration	direct on line
Full Load Amps	24.6/12.3//23.2/11.6			Breakdown Torque	90 LB-FT
R.P.M.	1765//1465			Pull-up Torque	58.1 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	64.4 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	92.9 A
Service Factor (S.F.)	1.15			No-load Current	5.49 A
NEMA Nom. Eff.	92.4	Power Factor	81	Line-line Res. @ 25°C	0.867 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	48°C
S.F. Amps				Temp. Rise @ S.F. Load	58°C
				Locked-rotor Power Factor	39
				Rotor inertia	1.23 LB-FT <sup>2</sup>

Load Characteristics 380 V, 50 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	39	61	74	80	83	85	82
Efficiency	89.3	93.4	92.3	91.9	90.9	89.7	91.3
Speed	1491	1484	1475	1468	1458	1449	1462
Line amperes	6.07	7.46	9.35	11.6	14.1	16.8	13.1

Performance Graph at 380V, 50Hz, 7.5HP Typical performance - Not guaranteed values

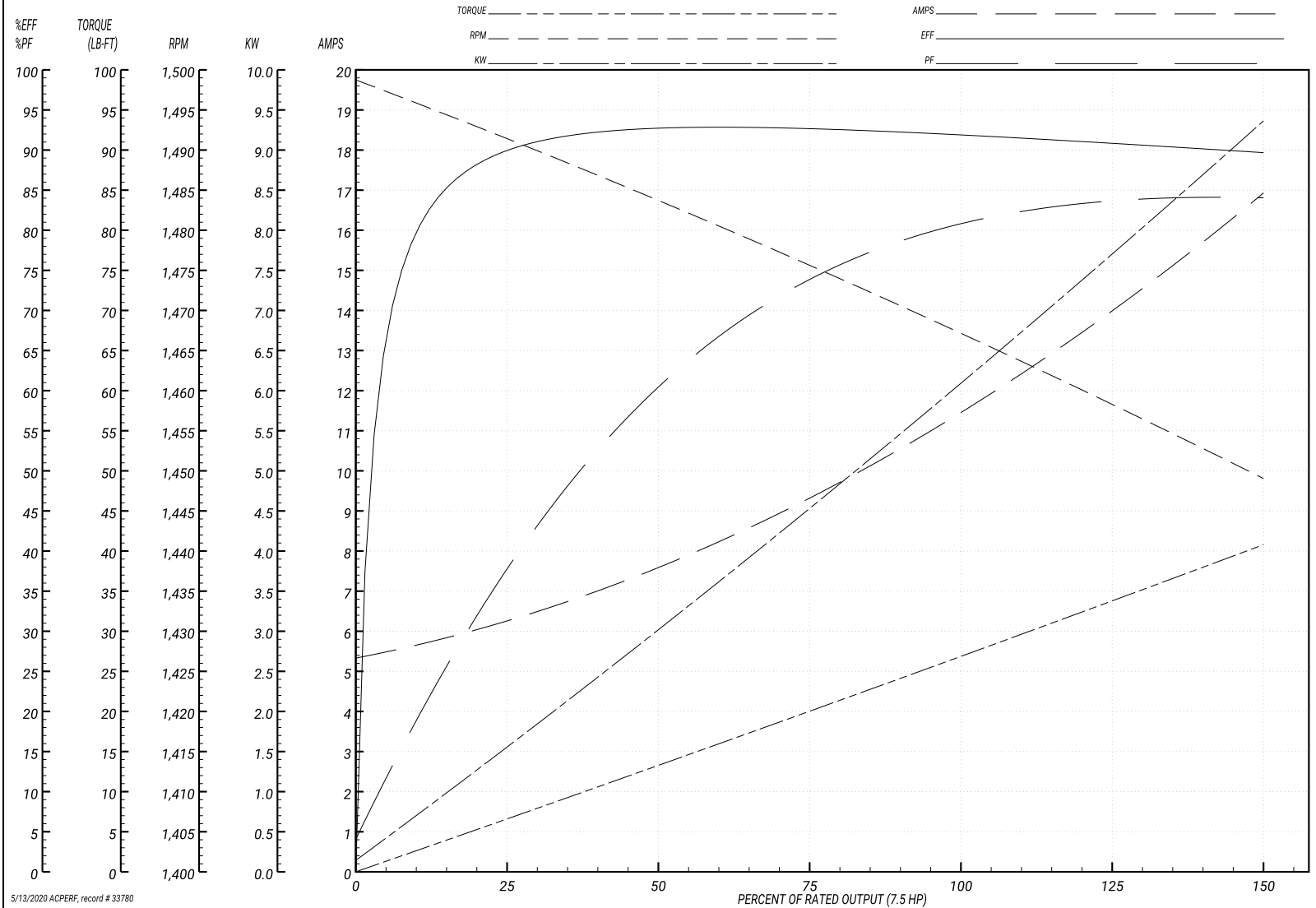
ABB Motors and Mechanical Inc.

WINDING # 07WGX598

Typical performance - not guaranteed values.

7.5 HP 3 PH 50 HZ 1468 RPM 380 V 0750M

TORQUES(LB-FT): PO=90 PU=58.1 LR=64.4 LRA=92.9



5/13/2020 ACPERF, record # 33780

**AC Induction Motor Performance Data**

Record # 39054 - Typical performance - not guaranteed values

<b>Winding:</b> 07WGX598-R007	<b>Type:</b> 0750M	<b>Enclosure:</b> XPFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	10//7.5			Full Load Torque	29.7 LB-FT
Volts	230/460//190/380			Start Configuration	direct on line
Full Load Amps	24.6/12.3//23/11.5			Breakdown Torque	94.2 LB-FT
R.P.M.	1765//1465			Pull-up Torque	56.3 LB-FT
Hz	60//50	Phase	3	Locked-rotor Torque	62.4 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	95.7 A
Service Factor (S.F.)	1.15			No-load Current	5.6 A
NEMA Nom. Eff.	92.4	Power Factor	81	Line-line Res. @ 25°C	0.867 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	55°C
S.F. Amps				Temp. Rise @ S.F. Load	70°C
				Locked-rotor Power Factor	35
				Rotor inertia	1.23 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	41	64	76	81	84	85	83
Efficiency	89.8	93.6	92.6	92.4	91.3	90.2	91.7
Speed	1790	1782	1772	1764	1753	1743	1757
Line amperes	6.28	7.9	10	12.5	15.3	18.3	14.2

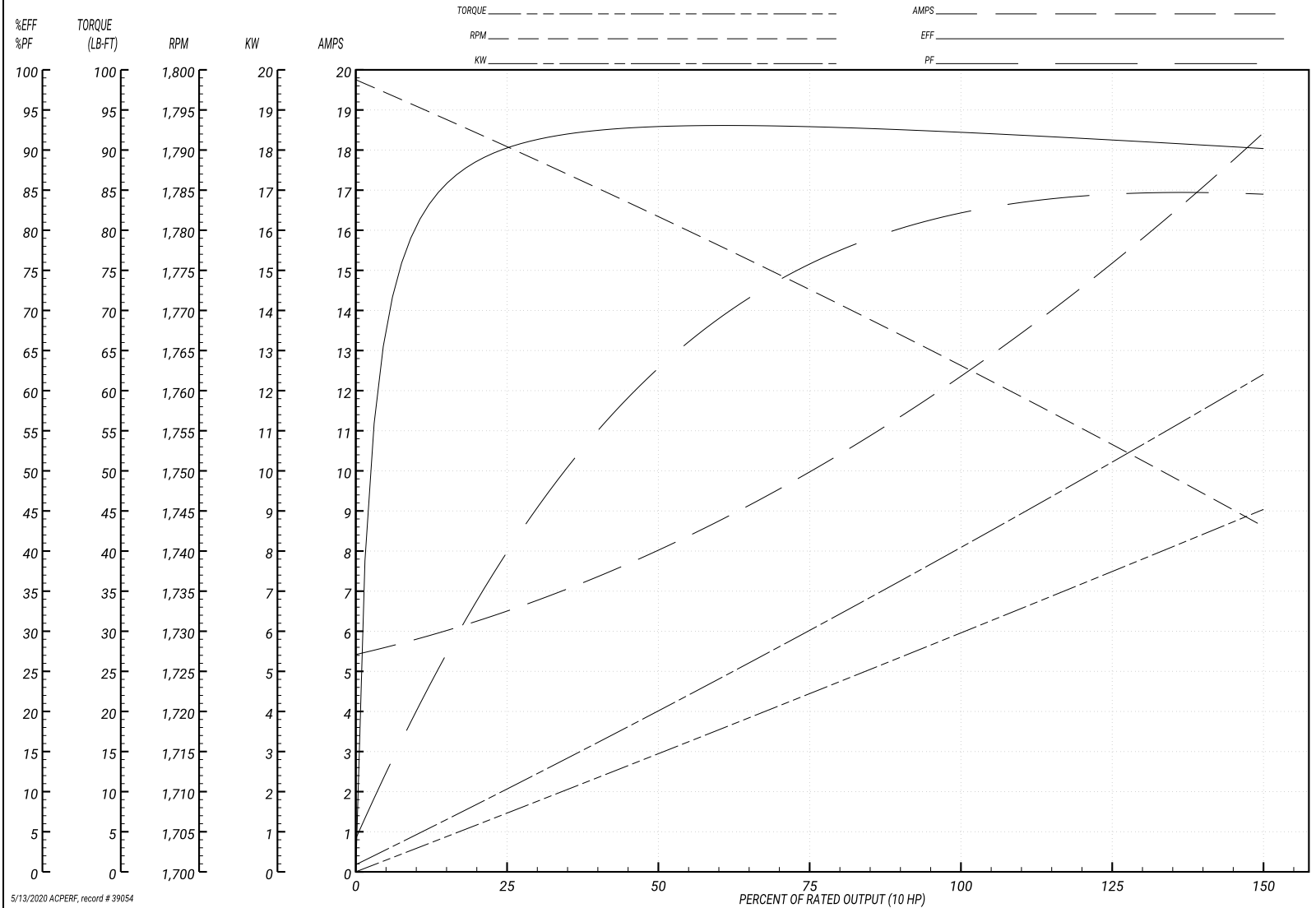
Performance Graph at 460V, 60Hz, 10.0HP Typical performance - Not guaranteed values

ABB Motors and Mechanical Inc.

WINDING # 07WGX598

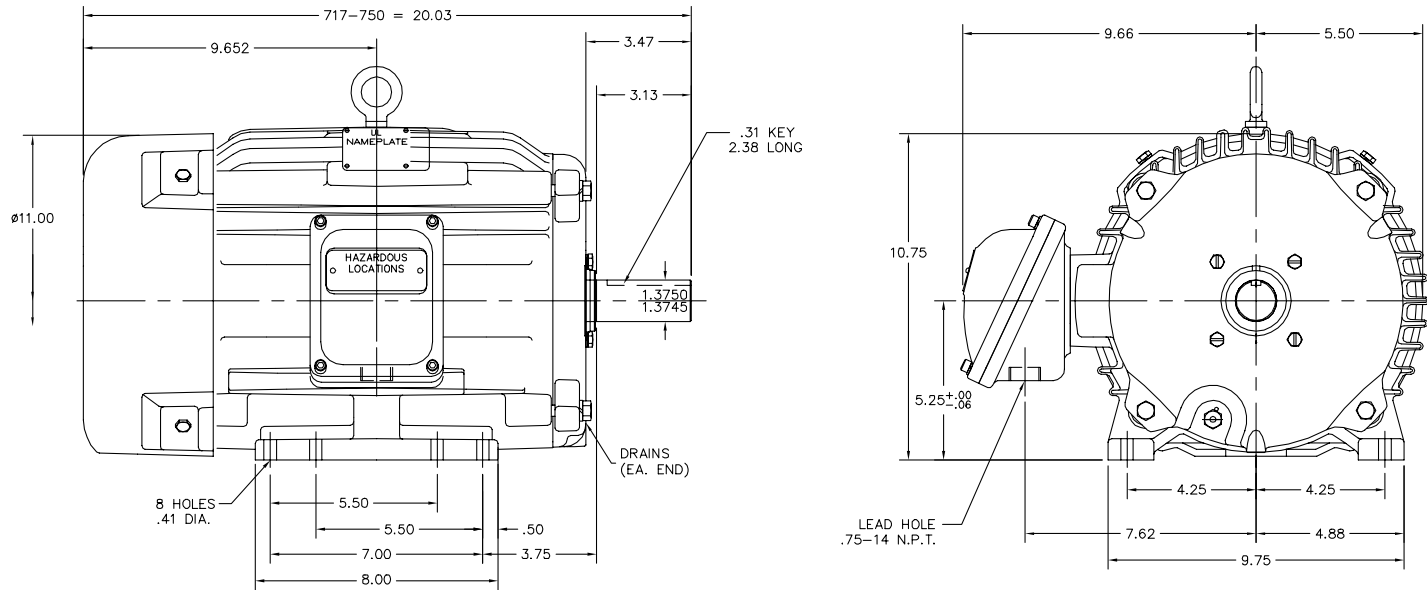
Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 1764 RPM 460 V 0750M  
 TORQUES(LB-FT): PO=94.2 PU=56.3 LR=62.4 LRA=95.7



5/13/2020 ACPERF, record # 39054

07LYJ231



07LYJ231

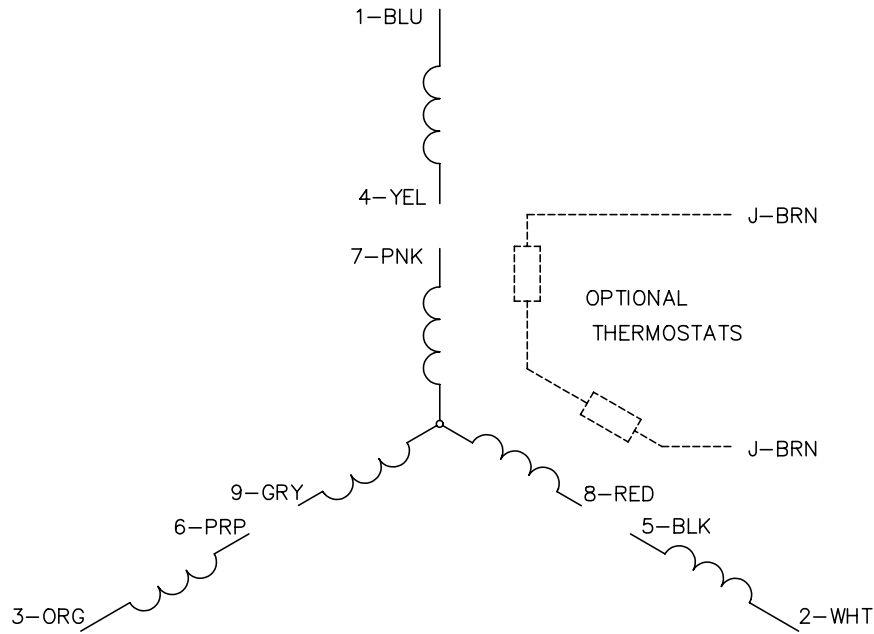
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: ADD DRAIN LEADER TO LAYOUT			TDR: 000000934411
REV. LTR: D	VERSION: 02		
FILE: \AAA\00076\166	REVISED: 11:03:16 07/14/2015	BY: ENALEMO	
MTL: -			

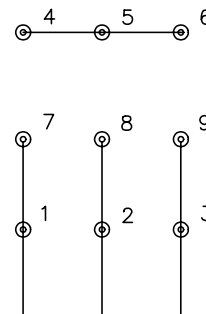
**BALDOR**

HRZ 213-5T XPFC X307M CL I-GP C&D - DRILL RIG MOTOR  
SH 1 of 1

CD0005

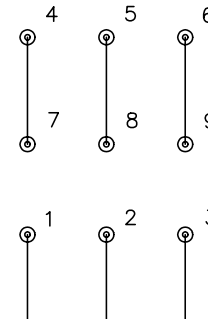


LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: E BY: JLP

REVISED: 01/19/99 10:15

TDR: 0171435

900000

FILE: AAA00005140

MDL: -

MTL: -

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005