

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EH3M9239T**

**20HP, 1765RPM, 3PH, 60HZ, 254T, 3940M, OPSB, F3**

Part Detail							
Revision:	M	Status:	INA/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	39WG100	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	39R080	Layout:	39LYR080	Poles:	04	Created Date:	
Base:	RG	Eff. Date:	08-27-2016	Leads:	9#12		

Specs			
Catalog Number:	EH3M9239T	Insulation Class:	F
Enclosure:	ODP	Inverter Code:	Not Inverter
Frame:	256T	KVA Code:	H
Frame Material:	Steel	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	20.000 HP @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 12 AWG
Voltage @ Frequency:	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	460.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	3940M
Auxillary Box:	No Auxillary Box	Mounting Arrangement:	F3
Auxillary Box Lead Termination:	None	Power Factor:	83
Base Indicator:	Rigid	Product Family:	General Purpose
Bearing Grease Type:	Polyrex EM (-20F +300F)	Pulley End Bearing Type:	Ball
Blower:	None	Pulley Face Code:	Standard
Current @ Voltage:	25.000 A @ 460.0 V	Pulley Shaft Indicator:	Standard
	50.000 A @ 230.0 V	Rodent Screen:	None
	52.000 A @ 208.0 V	Shaft Extension Location:	Pulley End
Design Code:	B	Shaft Ground Indicator:	No Shaft Grounding

<b>Drip Cover:</b>	No Drip Cover	<b>Shaft Rotation:</b>	Reversible
<b>Duty Rating:</b>	CONT	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Speed Code:</b>	Single Speed
<b>Feedback Device:</b>	NO FEEDBACK	<b>Motor Standards:</b>	NEMA
<b>Front Face Code:</b>	Standard	<b>Starting Method:</b>	Direct on line
<b>Front Shaft Indicator:</b>	None	<b>Thermal Device - Bearing:</b>	None
<b>Heater Indicator:</b>	No Heater	<b>Thermal Device - Winding:</b>	None
		<b>Vibration Sensor Indicator:</b>	No Vibration Sensor

Nameplate NP1892A01											
CAT.NO.											
SPEC.	39R080X100G1										
HP	20										
VOLTS	230/460										
AMPS	50/25										
RPM	1765										
FRAME	256T					HZ	60			PH	3
SER.F.	1.15			CODE	H		DES	B		CL	F
NEMA-NOM-EFF	91.7			PF	83						
RATING	40C AMB-CONT										
CC	010A					USABLE AT 200V	52				
DE	6309					ODE	6208				
AUTO				MANUAL			NONE				
ENCL	OPSB			SN							
BLANK											

Parts List		
Part Number	Description	Quantity
SA080889	SA 39R080X100G1	1.000 EA
RA074277	RA 39R080X100G1	1.000 EA
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 EA
39CB4000A01	CONDUIT BOX 39, STAMPED	1.000 EA
51XF2520A08	SCREW,1/4-20X1/2 TAPTITE-II OR ROLOC 91	2.000 EA
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 EA
39EP3200A01SP	FR/PU ENDPLATE, MACH	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	2.000 EA
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 EA
39EP3201A13	PU ENDPLATE, MACH	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	2.000 EA
XY3816A12	3/8-16 FINISHED NUT	8.000 EA
39CB4500A01	CONDUIT BOX LID 39, STAMPED, W/ PRIMER	1.000 EA
51XF1032A08	10/32X1/2 HXWSHR HD, SL, TYPE F ,SERATED	2.000 EA
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 EA
39AD2002A01	BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.030 LB
39AD2002A01	BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS	1.000 EA
HA3154A09	TB STUD 3/8-16 X 16.25	4.000 EA
MG1000G59	PAINT, 689.959 WILKO SILVER	0.050 GA
LB1172A01	CUSTOM MTR CARTON LABEL LASER PRINTER	4.000 EA
NP1892A01	NP LABEL W/CD0005 (FOR PREM EFFICIENCY H	1.000 EA
39PA1000	PACKAGING GROUP 39 PRINT	1.000 EA
LB1417	LABEL CARTON 6X4 PERFORATED BLANK ROLLS	1.000 EA

<b>Accessories</b>		
<b>Part Number</b>	<b>Description</b>	<b>Multiplier</b>
39-3400	C FACE KIT	A8

**AC Induction Motor Performance Data**

Record # 13047

Typical performance - not guaranteed values

<b>Winding: 39WGX100-R001</b>		<b>Type: 3940M</b>		<b>Enclosure: OPSB</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	20	<b>Full Load Torque</b>	60 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	50/25	<b>Breakdown Torque</b>	214 LB-FT		
<b>R.P.M.</b>	1765	<b>Pull-up Torque</b>	94 LB-FT		
<b>Hz</b>	60 Phase	<b>Locked-rotor Torque</b>	120 LB-FT		
<b>NEMA Design Code</b>	B	<b>Starting Current</b>	174 A		
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	11.5 A		
<b>NEMA Nom. Eff.</b>	91.7	<b>Line-line Res. @ 25°C</b>	0.49 Ω		
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	34°C		
<b>S.F. Amps</b>		<b>Temp. Rise @ S.F. Load</b>	41°C		
		<b>Locked-rotor Power Factor</b>	35		
		<b>Rotor inertia</b>	1.75 LB-FT <sup>2</sup>		

**Load Characteristics 460 V, 60 Hz, 20 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	44	67	78	83	86	86	85
<b>Efficiency</b>	85.6	90.8	91.9	91.8	91.3	90.4	91.5
<b>Speed</b>	1792	1785	1778	1769	1760	1751	1764
<b>Line amperes</b>	12.6	15.7	19.8	24.8	30.1	36.1	27.98

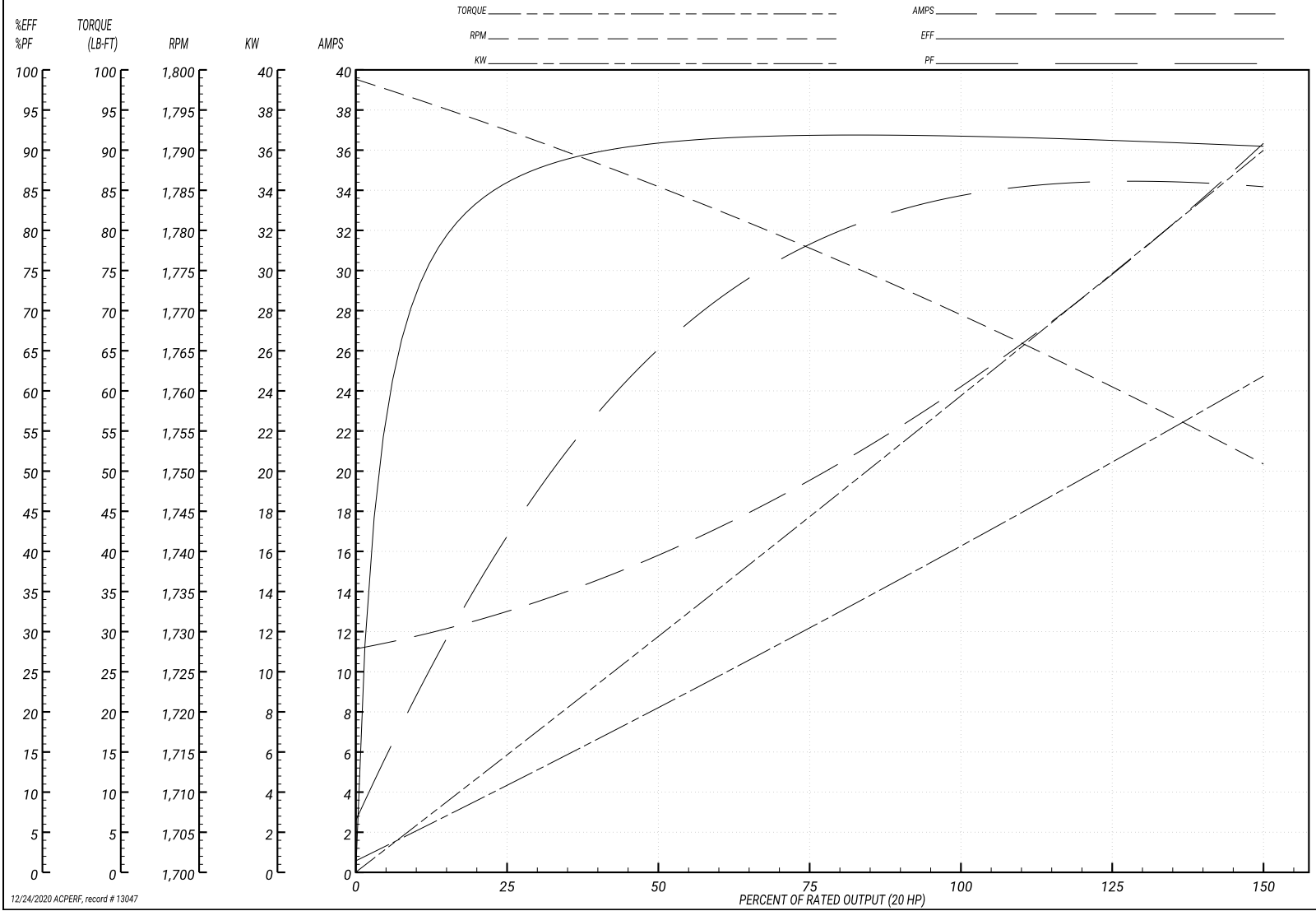
Performance Graph at 460V, 60Hz, 20.0HP Typical performance - Not guaranteed values

ABB Motors and Mechanical Inc.

WINDING # 39WGx100

Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1765 RPM 460 V 3940M  
 TORQUES(LB-FT): PO=214 PU=94 LR=120 LRA=174



12/24/2020 ACPERF, record # 13047

**AC Induction Motor Performance Data**

Record # 20795

Typical performance - not guaranteed values

<b>Winding: 39WGX100-R002</b>		<b>Type: 3940M</b>		<b>Enclosure: OPSB</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	20	<b>Full Load Torque</b>	60 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	50/25	<b>Breakdown Torque</b>	214 LB-FT		
<b>R.P.M.</b>	1765	<b>Pull-up Torque</b>	94 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	120 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	H	<b>Starting Current</b>	174 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	11.5 A		
<b>NEMA Nom. Eff.</b>	91.7	<b>Power Factor</b>	83	<b>Line-line Res. @ 25°C</b>	0.49 Ω
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	34°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	41°C	
			<b>Locked-rotor Power Factor</b>	35	
			<b>Rotor inertia</b>	1.75 LB-FT <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 20 HP**

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<b>Line amperes</b>	12.6	15.7	19.8	24.8	30.1	36.1	27.98

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

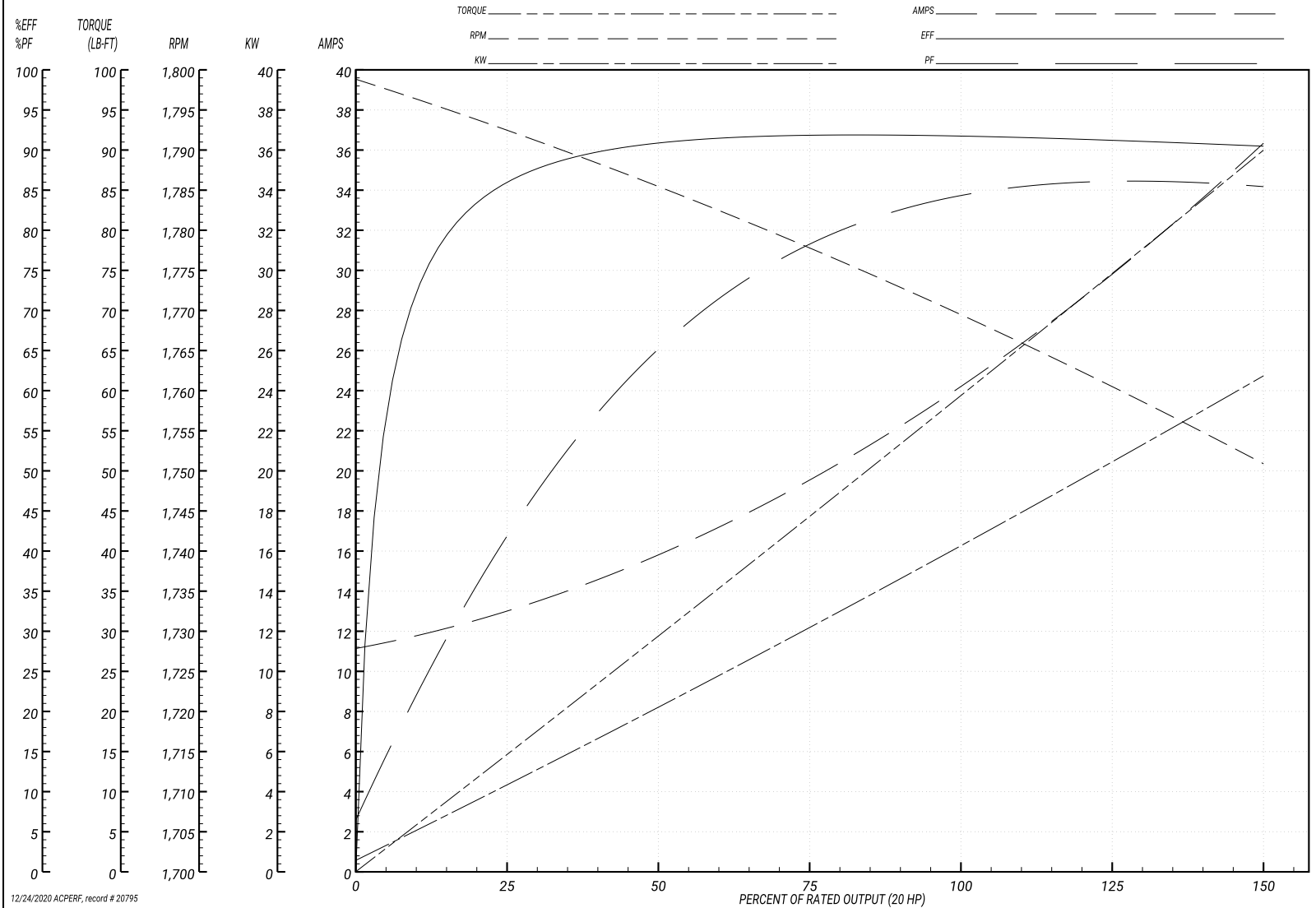
ABB Motors and Mechanical Inc.

WINDING # 39WG100

Typical performance - not guaranteed values.

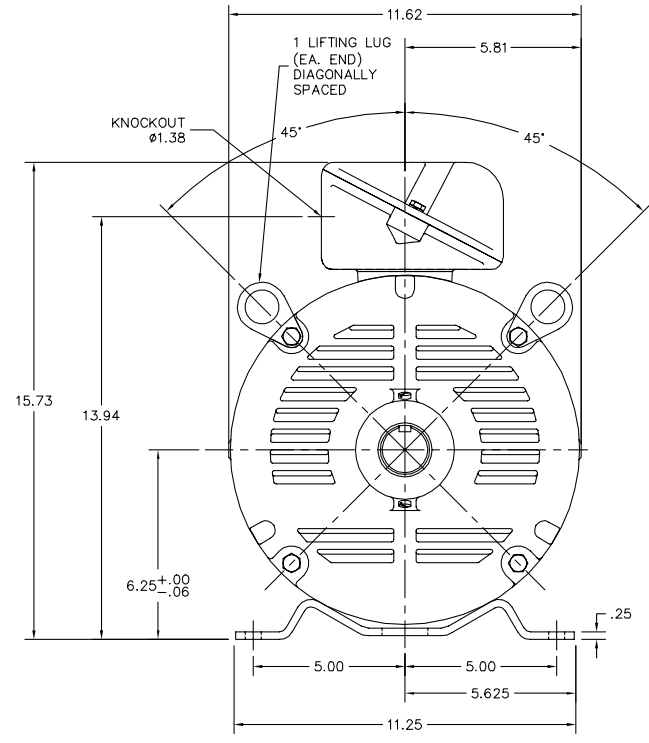
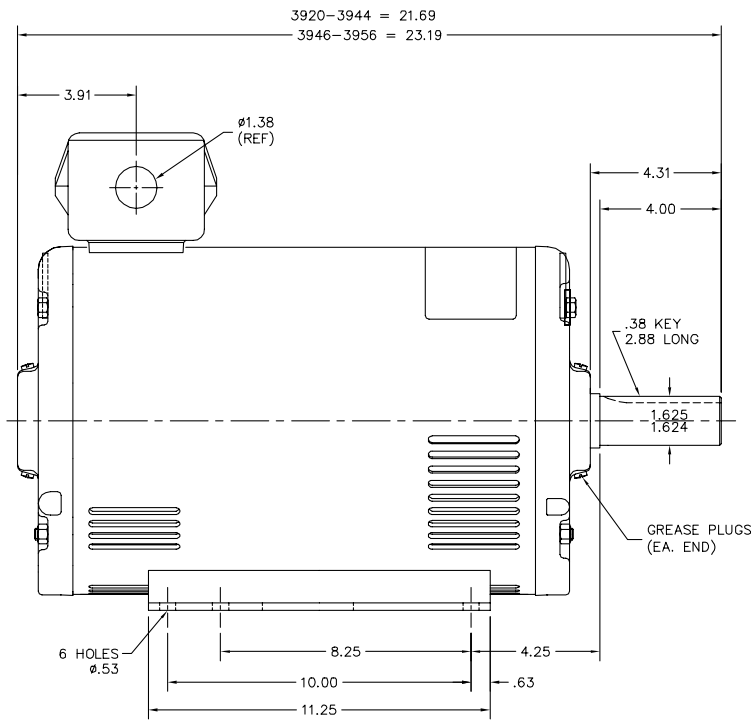
20 HP 3 PH 60 HZ 1765 RPM 460 V 3940M

TORQUES(LB-FT): PO=214 PU=94 LR=120 LRA=174



12/24/2020 ACPERF, record # 20795

39LYR080



39LYR080

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

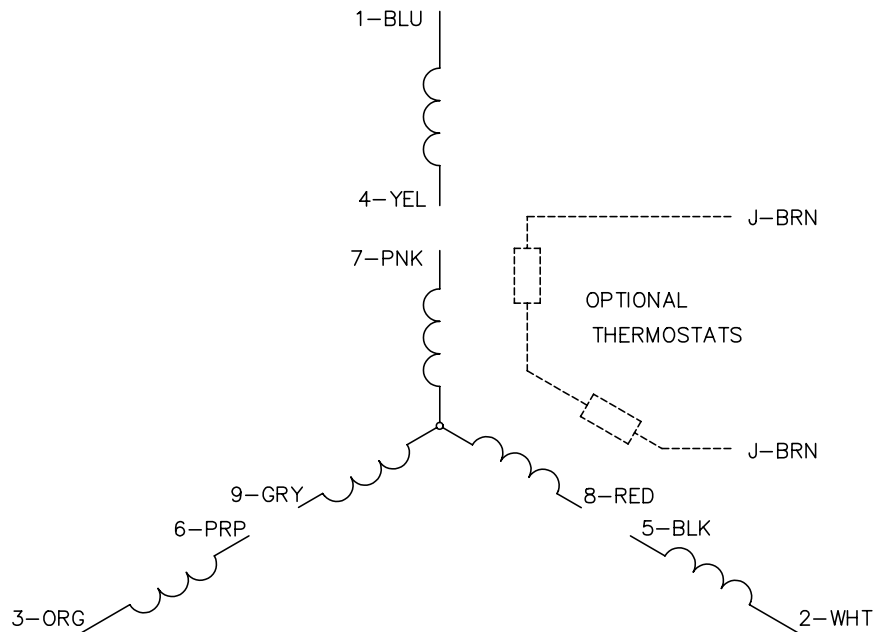
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REV. LTR: C	REVISED: 08:54:12 07/08/2020	BY: USODDIL
FILE: \AAA\00090\188		
MTL: -		

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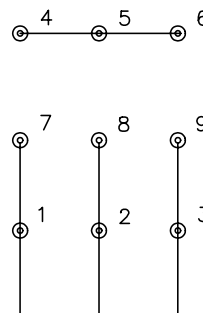
HORZ OPSB F3 254-6T W/ GREASE PLUGS (HVAC MOTOR)

SH 1 of 1

CD0005

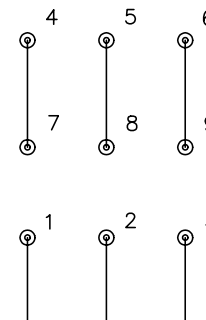


LOW VOLTAGE  
(2Y)



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