

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EHM2539T**

**40HP, 1770RPM, 3PH, 60HZ, 324T, 4064M, OPSB, F1**

Part Detail							
Revision:	J	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	40WGX166	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	40E329	Layout:	40LYE329	Poles:	04	Created Date:	09-30-2013
Base:	RG	Eff. Date:	02-11-2021	Leads:	9#8		

Specs			
Catalog Number:	EHM2539T	Inverter Code:	Inverter Ready
Enclosure:	OPSB	KVA Code:	H
Frame:	324T	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Steel	Locked Bearing Indicator:	No Locked Bearing
Motor Letter Type:	Three Phase	Motor Lead Quantity/Wire Size:	9 @ 8 AWG
Output @ Frequency:	40.000 HP @ 60 HZ	Motor Lead Exit:	Ko Box
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Termination:	Flying Leads
Voltage @ Frequency:	230.0 V @ 60 HZ	Motor Type:	4064M
	460.0 V @ 60 HZ	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	82
	CSA	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	Standard
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End
Current @ Voltage:	49.000 A @ 460.0 V	Shaft Ground Indicator:	Mounting Provisions Only
	98.000 A @ 230.0 V	Shaft Rotation:	Reversible

	99.000 A @ 208.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Design Code:</b>	A	<b>Speed Code:</b>	Single Speed
<b>Drip Cover:</b>	No Drip Cover	<b>Motor Standards:</b>	NEMA
<b>Duty Rating:</b>	CONT	<b>Starting Method:</b>	Direct on line
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Bearing:</b>	None
<b>Front Face Code:</b>	Standard	<b>Thermal Device - Winding:</b>	None
<b>Front Shaft Indicator:</b>	None	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Heater Indicator:</b>	No Heater	<b>Winding Thermal 1:</b>	None
<b>Insulation Class:</b>	F	<b>Winding Thermal 2:</b>	None

Nameplate NP2094E06B03	
CAT.NO.	EHM2539T
SPEC.	40E329X166G1
HP	40
VOLTS	230/460
AMPS	98/49
RPM	1770
FRAME	324T
	HZ 60
	PH 3
SER.F.	1.15
CODE	H
DES	A
CL	F
NEMA-NOM-EFF	94.1
	PF 82
RATING	40C AMB-CONT
CC	010A
	USABLE AT 208V 99
DE	6312
	ODE 6309
AUTO	
MANUAL	
NONE	
ENCL	OPSB
SN	
BLANK	

Parts List		
Part Number	Description	Quantity
SA269920	SA 40E329X166G1	1.000 EA
RA256564	RA 40E329X166G1	1.000 EA
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 EA
40CB4000A01	CONDUIT BOX 40, STAMPED	1.000 EA
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	2.000 EA
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 EA
40EP3200A02	STD FREP OPEN 309 BRG	1.000 EA
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 EA
40EP3201A09	PU ENDPLATE, MACH - OPEN - FOR 312 BRG	1.000 EA
84XN0540J08	5-40 X 1/2" SHCS, BLACK OXIDE	2.000 EA
XY3816A12	3/8-16 FINISHED NUT	8.000 EA
39CB4500A01	CONDUIT BOX LID 39, STAMPED, W/ PRIMER	1.000 EA
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	2.000 EA
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2200bx) 4/22	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	2.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 LB
HW4500A20	1/8NPT SL PIPE PLUG	2.000 EA
MG1000G27	MED CHARCOAL METALLIC GREY 400-0096	0.030 GA
HA3159A08	THRUBOLT- .38-16 X 20.00 LONG STUD	4.000 EA
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 EA
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 EA
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 EA
NP2094E06B03	NP LABEL W/BARCODE (PREM EFF HVAC MTR)	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
40PA1000	PACKAGING GROUP	1.000 EA

**AC Induction Motor Performance Data**

Record # 31313

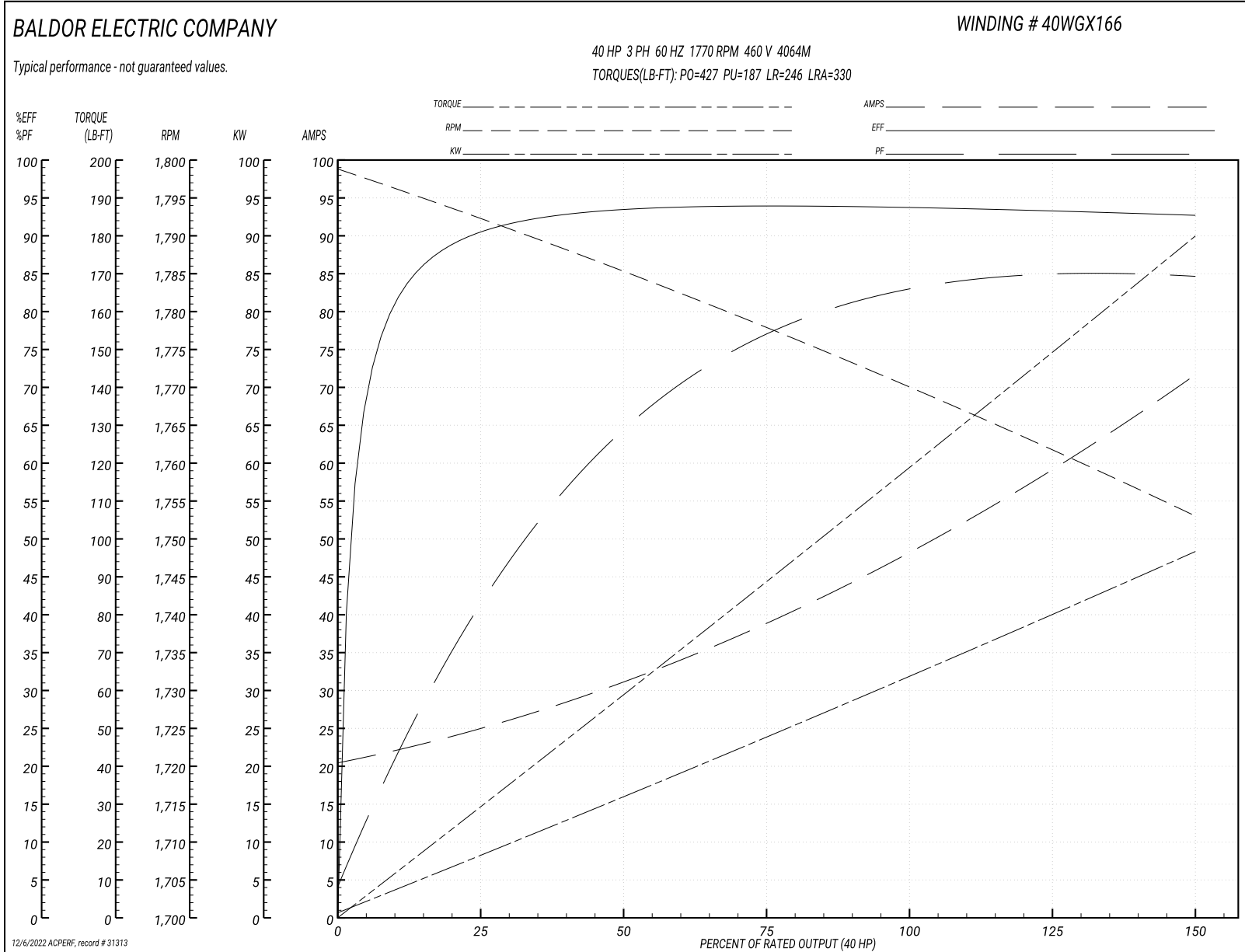
Typical performance - not guaranteed values

<b>Winding: 40WGX166-R002</b>		<b>Type: 4064M</b>		<b>Enclosure: OPSB</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	40	<b>Full Load Torque</b>	119 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	98/49	<b>Breakdown Torque</b>	427 LB-FT		
<b>R.P.M.</b>	1770	<b>Pull-up Torque</b>	187 LB-FT		
<b>Hz</b>	60 Phase	<b>Locked-rotor Torque</b>	246 LB-FT		
<b>NEMA Design Code</b>	A	<b>Starting Current</b>	330 A		
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	21.1 A		
<b>NEMA Nom. Eff.</b>	94.1	<b>Line-line Res. @ 25°C</b>	0.16236 Ω		
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	41°C		
<b>S.F. Amps</b>		<b>Temp. Rise @ S.F. Load</b>	51°C		
		<b>Locked-rotor Power Factor</b>	31.9		
		<b>Rotor inertia</b>	5.09 LB-FT <sup>2</sup>		

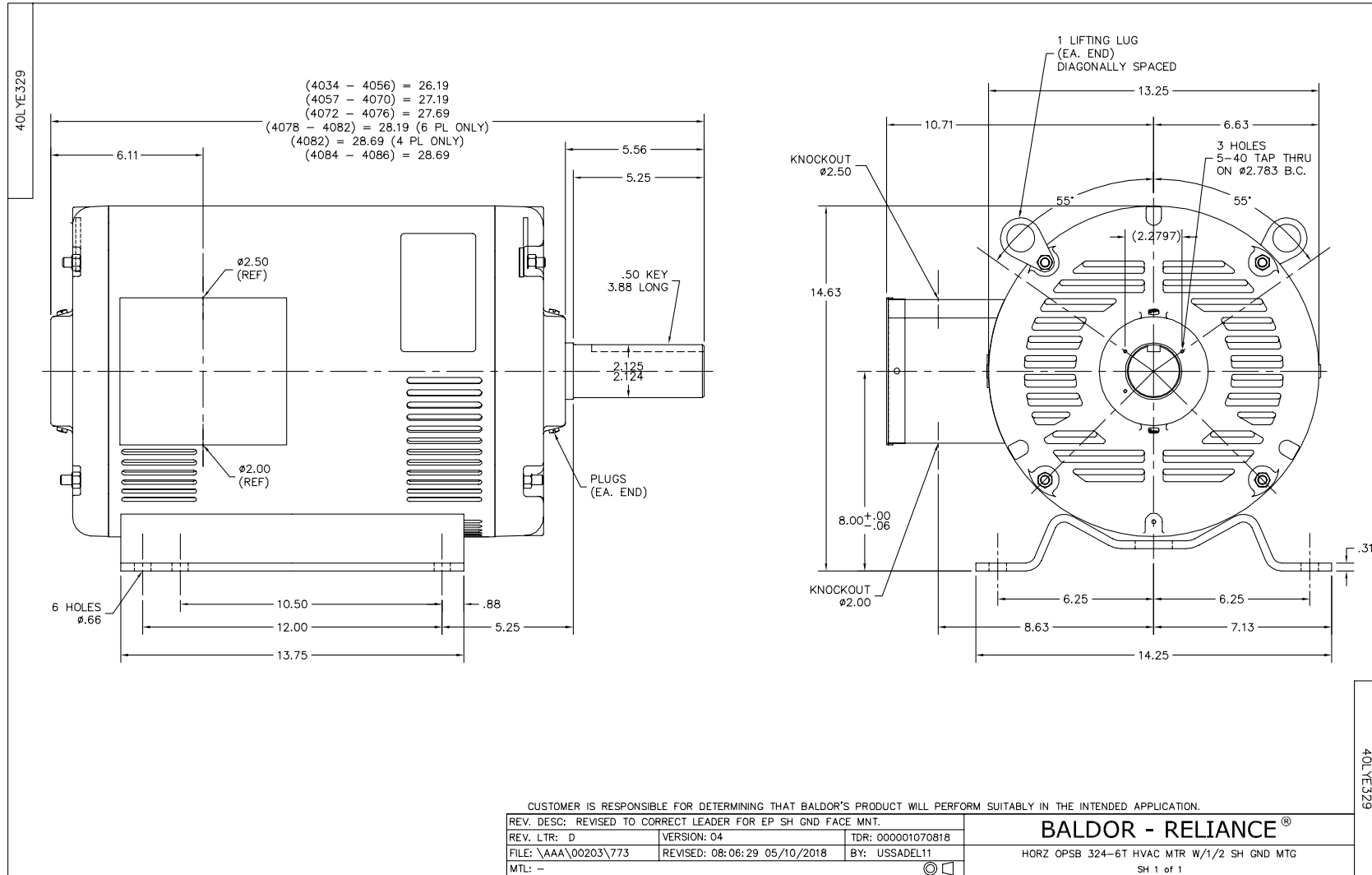
**Load Characteristics 460 V, 60 Hz, 40 HP**

<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>	43	65	76	82	85	85	84
<b>Efficiency</b>	91.1	94	94.5	94.2	93.6	92.8	93.8
<b>Speed</b>	1792.4	1785	1777.8	1770.2	1762.1	1752.8	1765
<b>Line amperes</b>	24.1	30.7	39.2	48.7	59.3	71.3	55.1

Performance Graph at 460V, 60Hz, 40.0HP Typical performance - Not guaranteed values







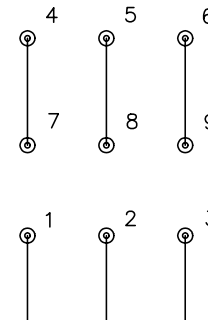
CD0005



LOW VOLTAGE  
(2Y)



HIGH VOLTAGE  
(1Y)



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
9000D		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005

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