

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EHM2539T**

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

Part Detail							
Revision:	F	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	40WG166	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	40E329	Layout:	40LYE329	Poles:	04	Created Date:	09-30-2013
Base:	RG	Eff. Date:	05-16-2018	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
Output @ Frequency:	40.000 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 8 AWG
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
	460.0 V @ 60 HZ	Motor Type:	4064M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA	Power Factor:	82
Auxillary Box:	No Auxillary Box	Product Family:	General Purpose
Auxillary Box Lead Termination:	None	Pulley End Bearing Type:	Ball
Base Indicator:	Rigid	Pulley Face Code:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Pulley Shaft Indicator:	Standard
Blower:	None	Rodent Screen:	None
Current @ Voltage:	49.000 A @ 460.0 V	Shaft Extension Location:	Pulley End
	98.000 A @ 230.0 V	Shaft Ground Indicator:	Mounting Provisions Only
	99.000 A @ 208.0 V	Shaft Rotation:	Reversible

<b>Design Code:</b>	A	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Drip Cover:</b>	No Drip Cover	<b>Speed Code:</b>	Single Speed
<b>Duty Rating:</b>	CONT	<b>Motor Standards:</b>	NEMA
<b>Feedback Device:</b>	NO FEEDBACK	<b>Starting Method:</b>	Direct on line
<b>Front Face Code:</b>	Standard	<b>Thermal Device - Bearing:</b>	NONE (OLD)
<b>Front Shaft Indicator:</b>	None	<b>Thermal Device - Winding:</b>	None
<b>Heater Indicator:</b>	No Heater	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Insulation Class:</b>	F	<b>Winding Thermal 1:</b>	None
		<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
S/P107-000-004	SUPER-E(284 FR. & UP)-CL PLANT,POLYREX E	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 TERMINAL	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 (1200/bx) 5/18	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	2.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	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

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
NP2094E06B03	NP LABEL W/BARCODE (PREM EFF HVAC MTR)	1.000 EA
40PA1000	PACKAGING GROUP	1.000 EA

**AC Induction Motor Performance Data**

Record # 31313 - Typical performance - not guaranteed values

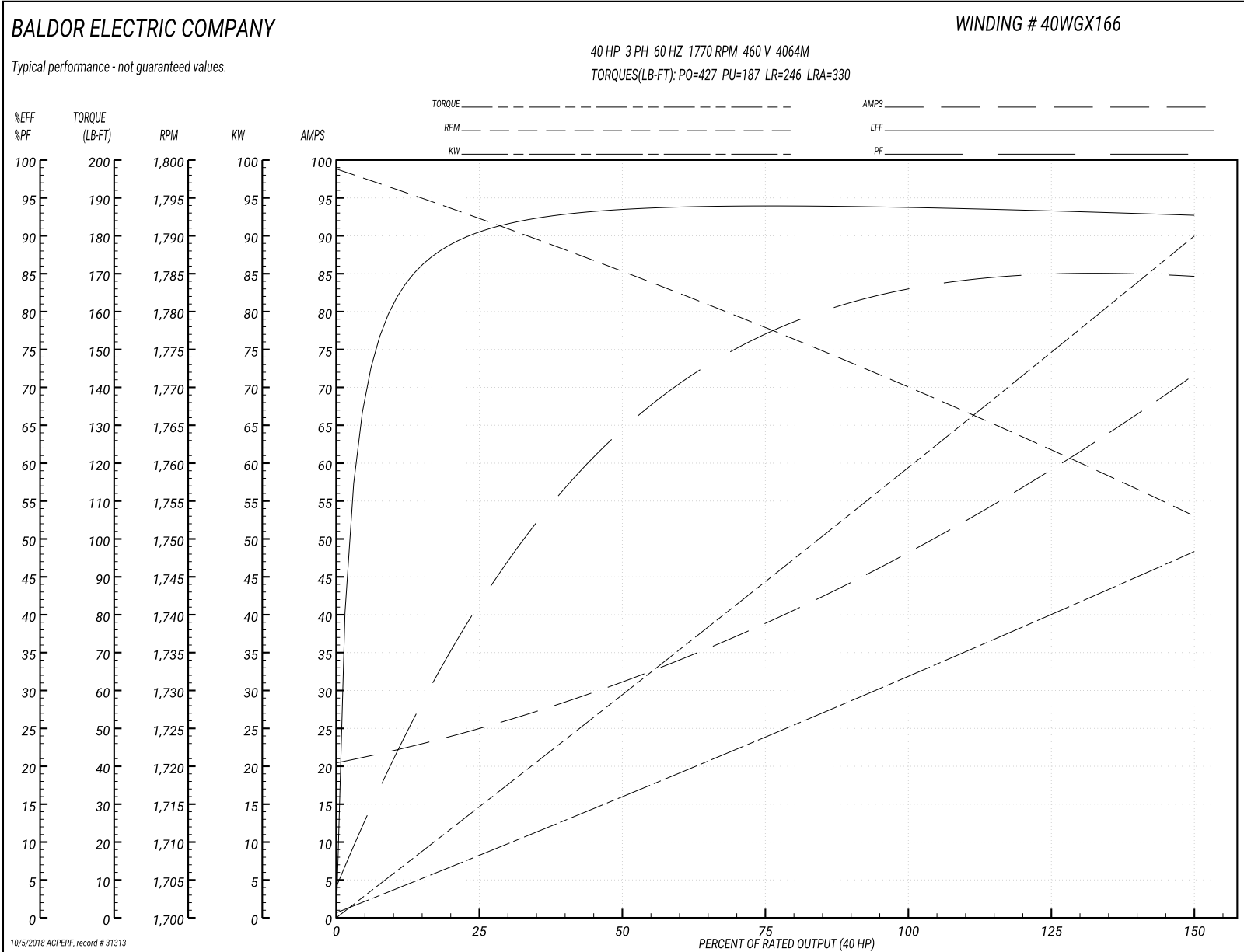
<b>Winding:</b> 40WGX166-R002	<b>Type:</b> 4064M	<b>Enclosure:</b> OPSB
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	40			Full Load Torque	119 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	98/49			Breakdown Torque	427 LB-FT
R.P.M.	1770			Pull-up Torque	187 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	246 LB-FT
NEMA Design Code	A	KVA Code	H	Starting Current	330 A
Service Factor (S.F.)	1.15			No-load Current	21.1 A
NEMA Nom. Eff.	94.1	Power Factor	82	Line-line Res. @ 25°C	0.16236 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	41°C
S.F. Amps				Temp. Rise @ S.F. Load	51°C
				Locked-rotor Power Factor	31.9
				Rotor inertia	5.09 LB-FT <sup>2</sup>

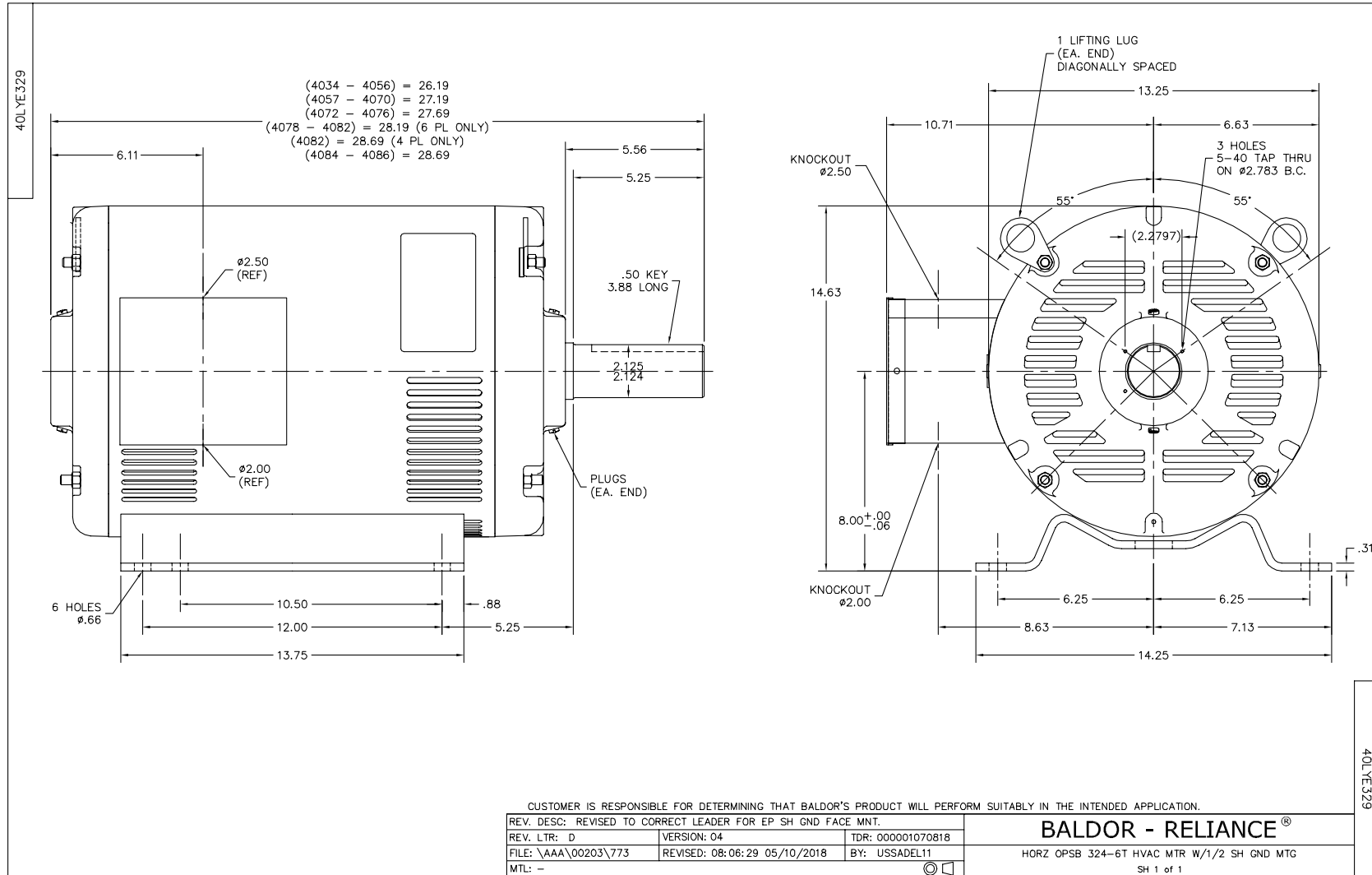
Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	43	65	76	82	85	85	84
Efficiency	91.1	94	94.5	94.2	93.6	92.8	93.8
Speed	1792.4	1785	1777.8	1770.2	1762.1	1752.8	1765
Line amperes	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







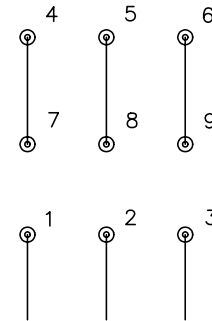
CD0005



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
90000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005