

BALDOR® • RELIANCE 

Product Information Packet

EHFM2539T

40HP, 1770RPM, 3PH, 60HZ, 324T, 4064M, OPSB, F2

Part Detail							
Revision:	V	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	40WGX166	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	40E141	Layout:	40LYE141	Poles:	04	Created Date:	10-22-2010
Base:	RG	Eff. Date:	02-11-2021	Leads:	9#8		

Specs			
Catalog Number:	EHFM2539T	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:	CSA	Mounting Arrangement:	F2
	UR	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:	No Shaft Grounding
	99.000 A @ 208.0 V	Shaft Rotation:	Reversible

Design Code:	A	Shaft Slinger Indicator:	No Slinger
Drip Cover:	No Drip Cover	Speed Code:	Single Speed
Duty Rating:	CONT	Motor Standards:	NEMA
Electrically Isolated Bearing:	Not Electrically Isolated	Starting Method:	Direct on line
Feedback Device:	NO FEEDBACK	Thermal Device - Bearing:	None
Front Face Code:	Standard	Thermal Device - Winding:	None
Front Shaft Indicator:	None	Vibration Sensor Indicator:	No Vibration Sensor
Heater Indicator:	No Heater	Winding Thermal 1:	None
Insulation Class:	F	Winding Thermal 2:	None

Nameplate NP2094E06B03	
CAT.NO.	EHFM2539T
SPEC.	40E141X166G1
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
SA205152	SA 40E141X166G1	1.000 EA
RA192396	RA 40E141X166G1	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,1/4-20X1/2 TAPTITE-II OR ROLOC 91	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 (2100/bx) 4/22	1.000 EA
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	2.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	2.000 EA
HA3154A06	THRUBOLT STUD 3/8-16 X 19.500	4.000 EA
MG1000G27	MED CHARCOAL METALLIC GREY 400-0096	0.030 GA
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

Parts List (continued)		
Part Number	Description	Quantity
40PA1000	PACKAGING GROUP	1.000 EA

AC Induction Motor Performance Data

Record # 31313

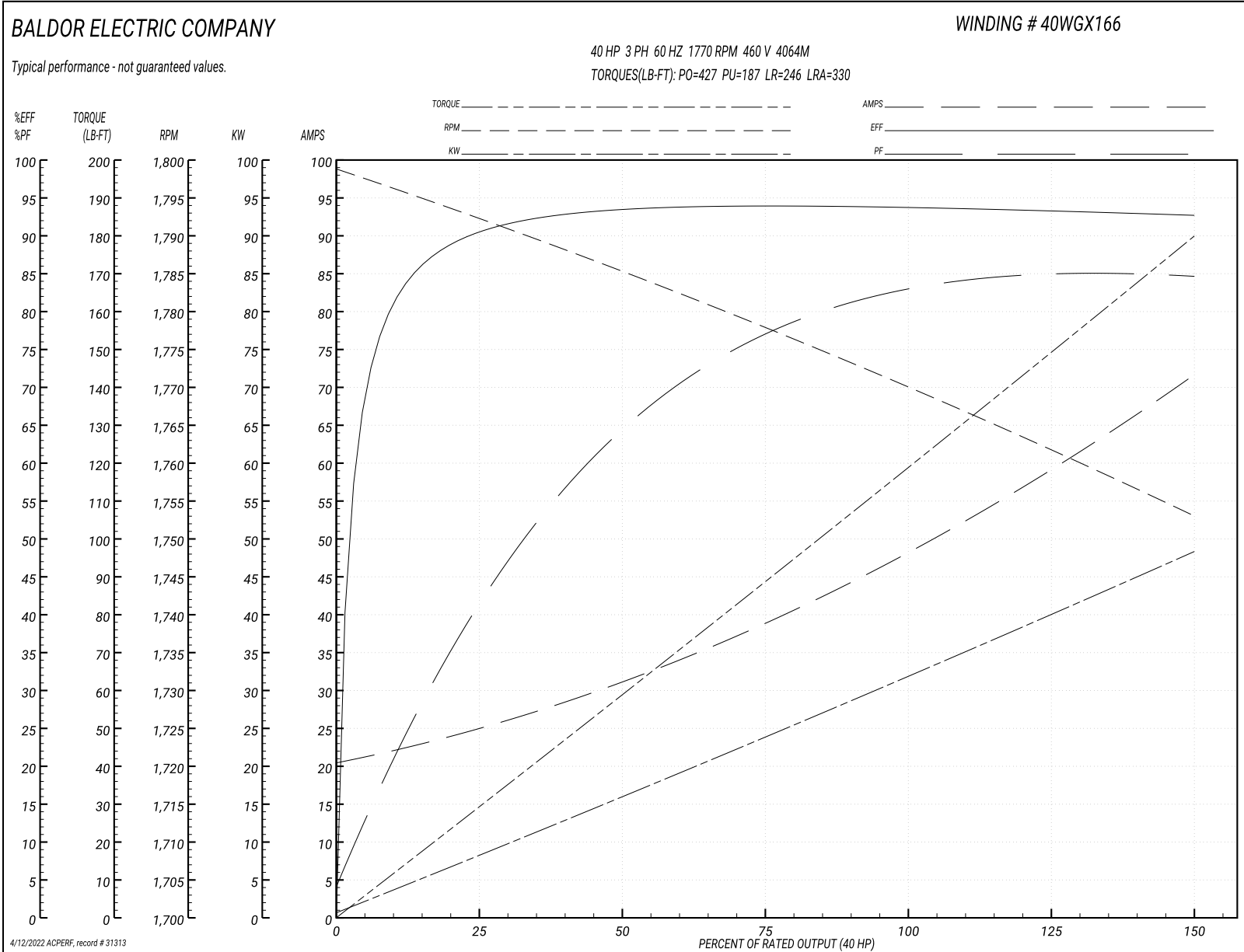
Typical performance - not guaranteed values

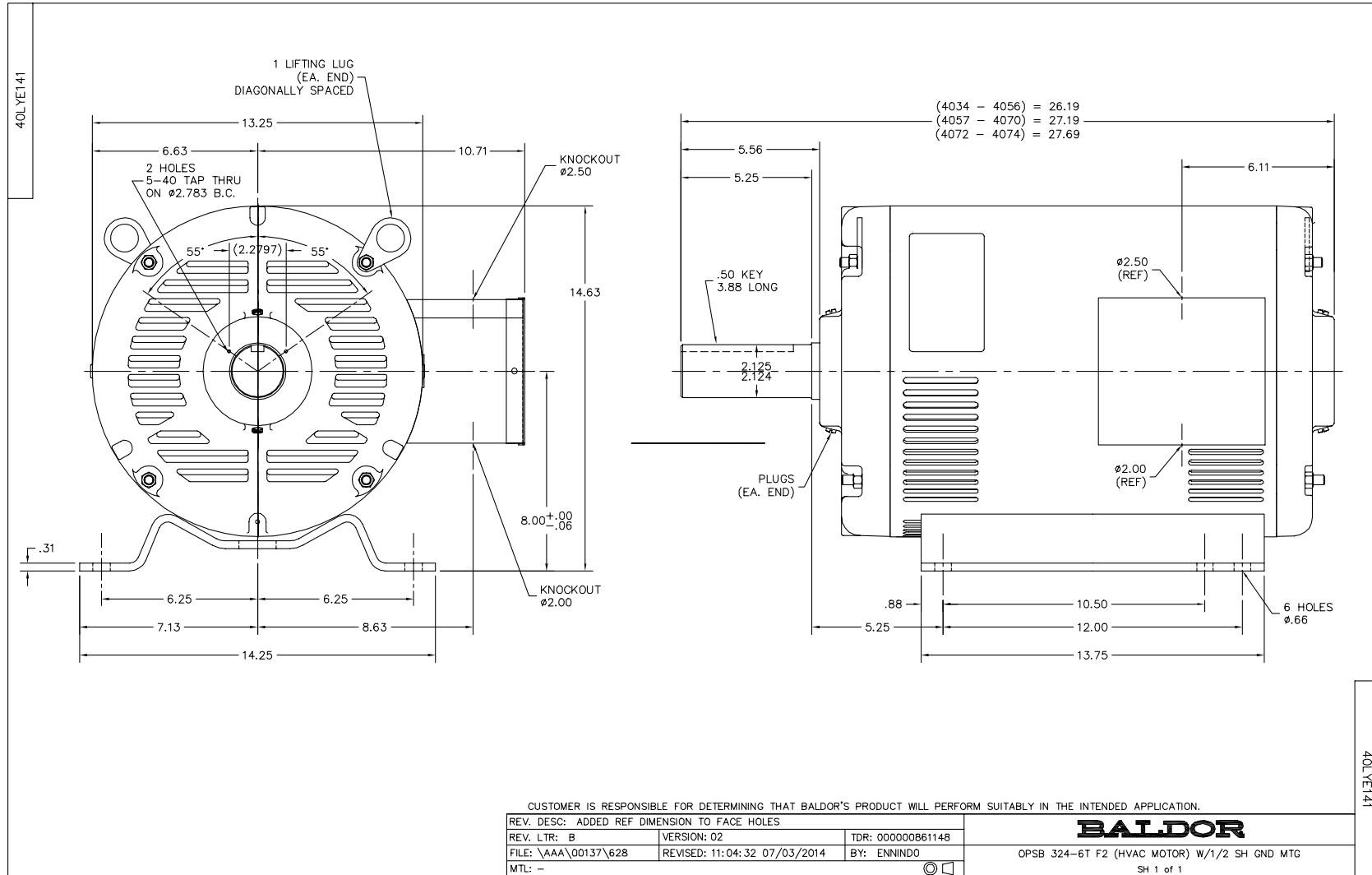
Winding: 40WGX166-R002		Type: 4064M		Enclosure: OPSB	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	40	Full Load Torque	119 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	98/49	Breakdown Torque	427 LB-FT		
R.P.M.	1770	Pull-up Torque	187 LB-FT		
Hz	60 Phase	Locked-rotor Torque	246 LB-FT		
NEMA Design Code	A	Starting Current	330 A		
Service Factor (S.F.)	1.15	No-load Current	21.1 A		
NEMA Nom. Eff.	94.1	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 ²		

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

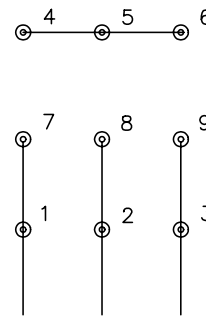




CD0005

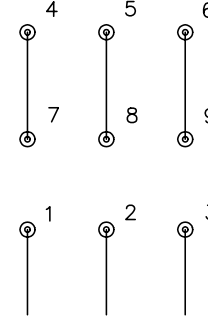


LOW VOLTAGE
(2Y)



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
9000D		FILE: AAA00005140	MDL: -
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BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005

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