

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM2531T**

**25HP, 1770RPM, 3PH, 60HZ, 284T, 4050M, OPSB, F1**

Part Detail							
Revision:	W	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	40WGX793	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	40G48	Layout:	40LYG048	Poles:	04	Created Date:	01-22-2013
Base:	RG	Eff. Date:	01-05-2018	Leads:	9#10		

Specs			
Catalog Number:	EM2531T	Insulation Class:	F
Enclosure:	OPSB	Inverter Code:	Inverter Ready
Frame:	284T	KVA Code:	G
Frame Material:	Steel	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	25.000 HP @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 10 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
Agency Approvals:	CSA	Motor Type:	4050M
	CSA EEV	Mounting Arrangement:	F1
	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:	64.000 A @ 208.0 V	Shaft Extension Location:	Pulley End
	60.000 A @ 230.0 V	Shaft Ground Indicator:	No Shaft Grounding

	30.000 A @ 460.0 V	<b>Shaft Rotation:</b>	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>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Starting Method:</b>	Direct on line
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Bearing:</b>	NONE (OLD)
<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>Winding Thermal 2:</b>	None

Nameplate NP3554LUA											
CAT.NO.	EM2531T			P/N				ENCL	OPSB		
SPEC.	40G048X793		CC	010A		FRAME	284T		SER.NO.		
HP	25		CLASS	F		HZ	60				
RPM	1770		PH	3		DES	A				
VOLTS	230/460			CODE	G		ODE BRG	6309		DE BRG	6311
AMPS	60/30			USABLE AT 208V	64						
RATING	40C AMB-CONT			NEMA-NOM-EFF	93.6		GREASE	POLYREX EM			
PF	82		SER.F.	1.15		VPWM INVERTER READY					
USABLE AT	50Hz 25Hp 190/380V 72/36A				SF	1.0					
HTR-VOLTS			HTR-AMPS			MAX. SPACE HEATER TEMP.					

Parts List		
Part Number	Description	Quantity
SA257337	SA 40G048X793	1.000 EA
RA244123	RA 40G048X793	1.000 EA
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 EA
HA6017	CAST ADAPTER, 40,42 KOBX	1.000 EA
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	2.000 EA
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 EA
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 EA
10CB3000SP	STD KO BOX MODEL 310,312,314 MTRS W/2.00	1.000 EA
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	4.000 EA
40EP3200A02	STD FREP OPEN 309 BRG	1.000 EA
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 EA
40EP3200B05	STD PUEP OPEN 311 BRG	1.000 EA
XY3816A12	3/8-16 FINISHED NUT	8.000 EA
10CB3500SP	CONDUIT BOX LID, CAST	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 EA
HW2501H28	KEY, 1/2 SQ X 3.250	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.070 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 EA
40AD2002A01	LEXAN BAFFLE 40 FR OPEN	1.000 EA
HA3154A04	THRUBOLT STUD 3/8-16 X 18.750	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 EA
NP3554LUA	SS SUPER-E VPWM INV READY UL CSA-EEV PRE	1.000 EA
40PA1000	PACKAGING GROUP	1.000 EA

<b>Accessories</b>		
<b>Part Number</b>	<b>Description</b>	<b>Multiplier</b>
40-1400	C FACE KIT	A8

**AC Induction Motor Performance Data**

Record # 41050 - Typical performance - not guaranteed values

<b>Winding:</b> 40WGX793-R001	<b>Type:</b> 4050M	<b>Enclosure:</b> OPSB
-------------------------------	--------------------	------------------------

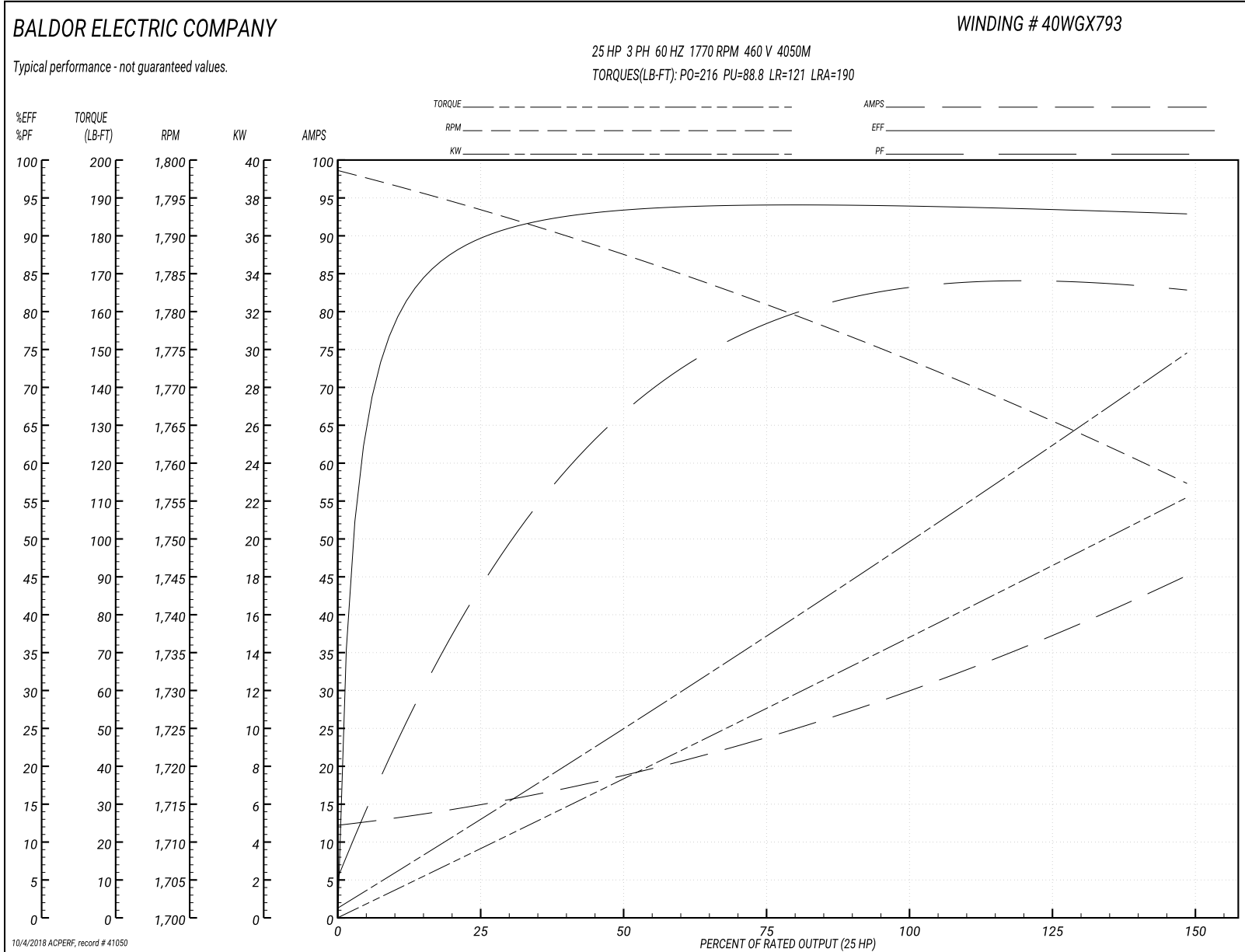
Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	25			Full Load Torque	74 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	60/30			Breakdown Torque	216 LB-FT
R.P.M.	1770			Pull-up Torque	88.8 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	121 LB-FT
NEMA Design Code	B	KVA Code	G	Starting Current	190 A
Service Factor (S.F.)	1.15			No-load Current	12.7 A
NEMA Nom. Eff.	93.6	Power Factor	82	Line-line Res. @ 25°C	0.299 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	28°C
S.F. Amps				Temp. Rise @ S.F. Load	34°C
				Locked-rotor Power Factor	33.5
				Rotor inertia	3.96 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 25 HP

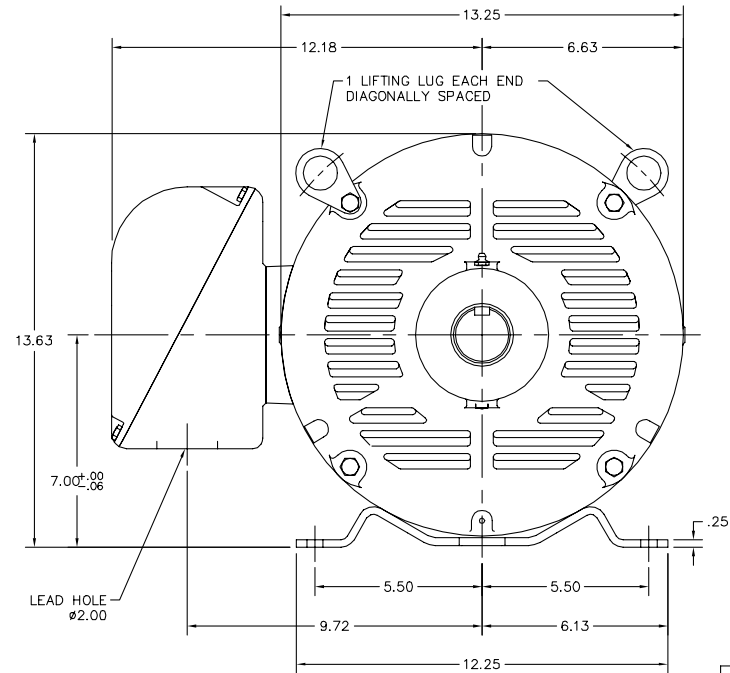
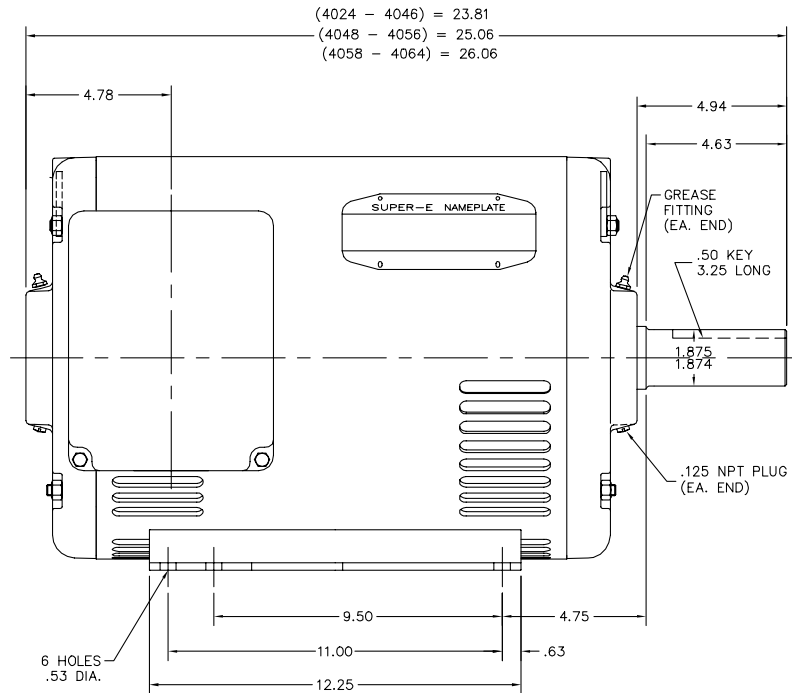
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	46	68	78	82	84	83	83
Efficiency	89.6	93	93.8	93.6	93.1	92.3	93.3
Speed	1793	1787	1781	1774	1766	1757	1769
Line amperes	14.3	18.6	24	30.4	37.2	44.9	34.5



Performance Graph at 460V, 60Hz, 25.0HP Typical performance - Not guaranteed values



40LYG048



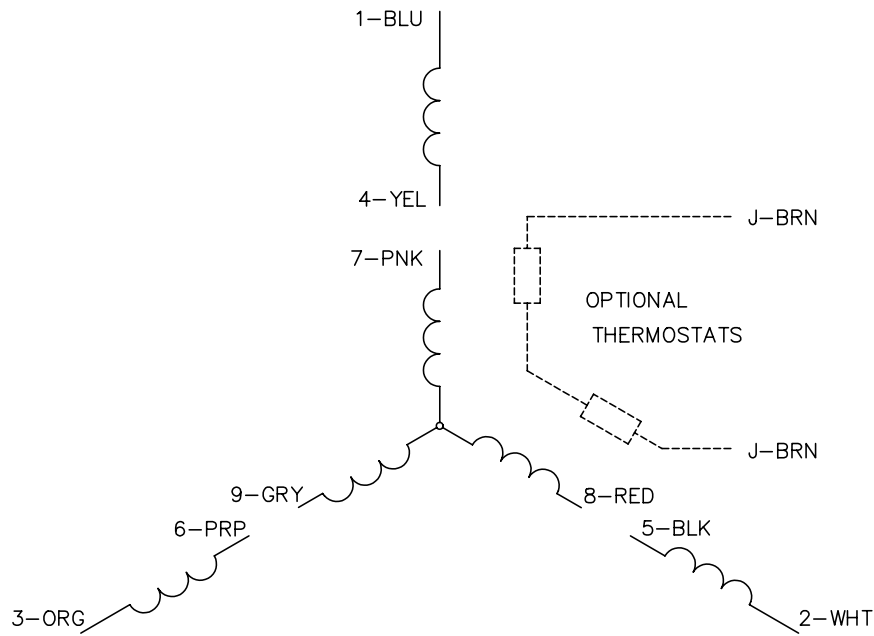
40LYG048

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

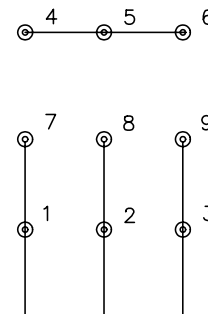
REV. DESC: ADDED 4058-4064	VERSION: 07	TDR: 000000971988
REV. LTR: H	REvised: 09:40:02 03/22/2016	BY: ENSHABO
FILE: \AAA\00037\873		
MTL: -		

**BALDOR**  
 HORZ OPSB 284-6T SUPER-E  
 SH 1 of 1

CD0005

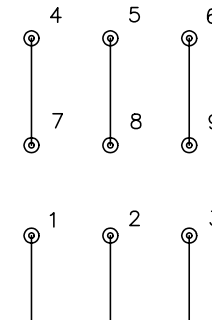


LOW VOLTAGE  
(2Y)



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
90000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005

Marketing maintained PDF of MN416:

<http://www.baldor.com/support/Literature/Load.ashx/MN416?ManNumber=MN416>