

BALDOR® • RELIANCE 

Product Information Packet

EM2540T

40HP, 1180RPM, 3PH, 60HZ, 364T, 4278M, OPSB, F1

Part Detail							
Revision:	M	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	42WG920	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	42H047	Layout:	42LYH047	Poles:	06	Created Date:	06-24-2011
Base:	RG	Eff. Date:	08-21-2018	Leads:	9#8		

Specs			
Catalog Number:	EM2540T	Insulation Class:	F
Enclosure:	OPSB	Inverter Code:	Not Inverter
Frame:	364T	KVA Code:	H
Frame Material:	Steel	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	40.000 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	1200 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 8 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:	4278M
	CSA EEV	Mounting Arrangement:	F1
	UR	Power Factor:	79
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:	51.000 A @ 460.0 V	Shaft Extension Location:	Pulley End
	110.000 A @ 208.0 V	Shaft Ground Indicator:	No Shaft Grounding

	104.000 A @ 230.0 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 (OLD)
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
		Winding Thermal 2:	None

Nameplate NP2138LUA											
CAT.NO.	EM2540T			P/N				ENCLOSURE	OPSB		
SPEC.	42H047W920G1		CC	010A		FRAME	364T		S/N		
HP	40			CLASS	F		HZ	60			
RPM	1180			PH	3		DES	A			
VOLT	230/460			KVA-CODE	H		ODE BRG	6311		DE BRG	6313
AMP	104/51			USABLE AT 208V	110						
RATING	40C AMB-CONT			GREASE	POLYREX EM						
NEMA-NOM-EFF	94.1	PF	79	SER.F.	1.15						
HTR-VOLTS	50Hz 40Hp 190/380V 120/60A					SF 1.0					
	HTR-AMPS										

Parts List		
Part Number	Description	Quantity
SA225904	SA 42H047W920G1	1.000 EA
RA213008	RA 42H047W920G1	1.000 EA
S/P107-000-004	SUPER-E(284 FR. & UP)-CL PLANT,POLYREX E	1.000 EA
HA6360	LIFTING LUG FOR 42 FRAME MOTORS.	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
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	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
10CB3001	CONDUIT BOX CAST W/2.500 LEAD HOLE	1.000 EA
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
42EP3200A01	FR ENDPLATE, MACH	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW5100A13	W4627-047 WVY WSHER	1.000 EA
10XN3816K44	3/8-16 X 2.75 HEX HD CAP SCREW, GRADE 5	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
42EP1202A01	STD PU ENDPLATE MODEL 42 313 BRG.	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	8.000 EA
10CB3500SP	CONDUIT BOX LID, CAST	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 EA
HW2501J36	KEY, 5/8 SQ X 4.250	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 5/18	1.000 EA
42AD2004A01	BAFFLE PLATE 42 OPSB MTRS "X"=.04; "Y"=7	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.030 LB
42AD2004A01	BAFFLE PLATE 42 OPSB MTRS "X"=.04; "Y"=7	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HA3151A09	THRUBOLT STUD 1/2-13 X 22.000	4.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.080 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 EA
NP2138LUA	ALUM SUPER-E UL CSA-EEV PREM CC (300SER)	1.000 EA
42PA1000	PACKAGING GROUP PRINT PK1024A06	1.000 EA
PE-0000013	ZRTG PE ASSEMBLY	1.000 EA

AC Induction Motor Performance Data

Record # 34461 - Typical performance - not guaranteed values

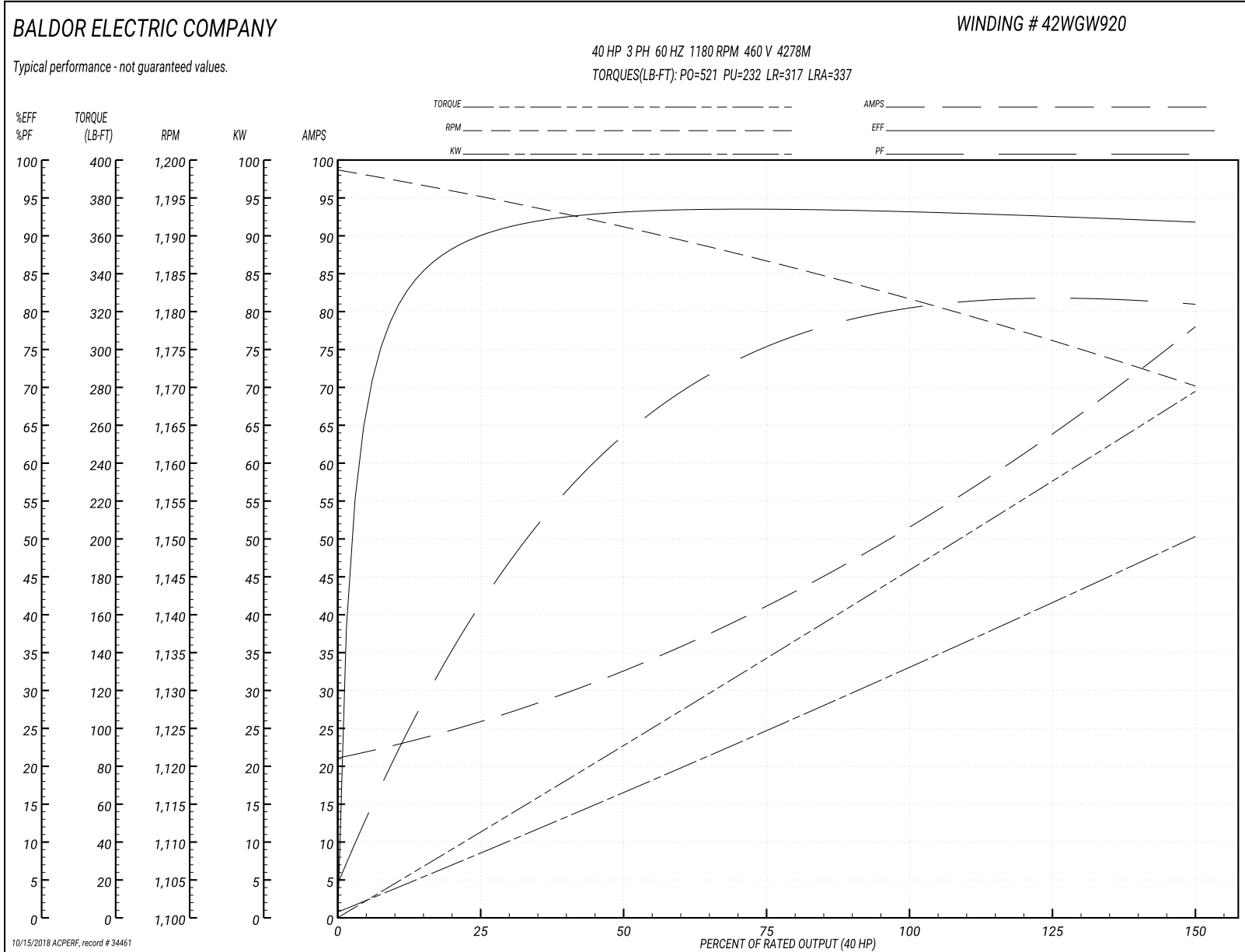
Winding: 42WGW920-R001	Type: 4278M	Enclosure: OPSB
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	40			Full Load Torque	178 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	104/51			Breakdown Torque	521 LB-FT
R.P.M.	1180			Pull-up Torque	232 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	317 LB-FT
NEMA Design Code	A	KVA Code	H	Starting Current	337 A
Service Factor (S.F.)	1.15			No-load Current	21.9 A
NEMA Nom. Eff.	94.1	Power Factor	79	Line-line Res. @ 25°C	0.154 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	41°C
S.F. Amps				Temp. Rise @ S.F. Load	50°C
				Locked-rotor Power Factor	28
				Rotor inertia	14.9 LB-FT ²

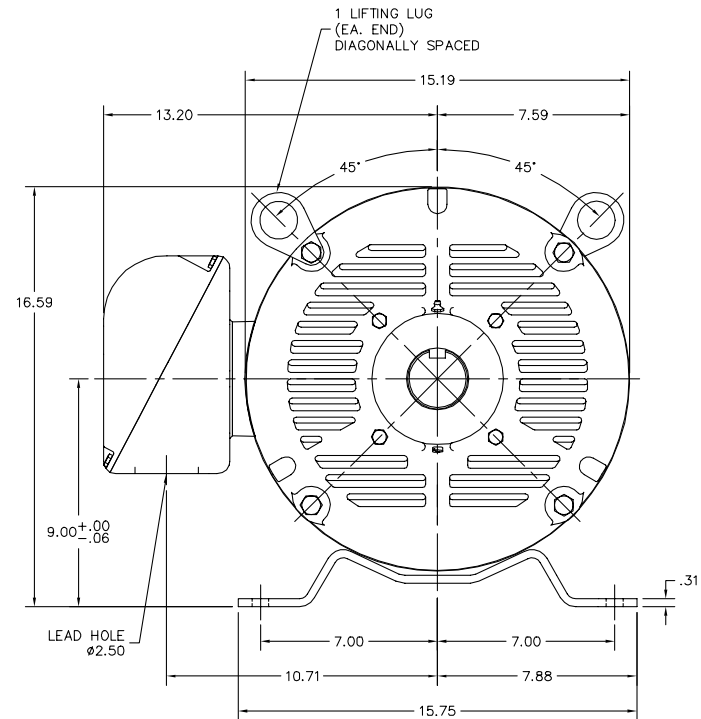
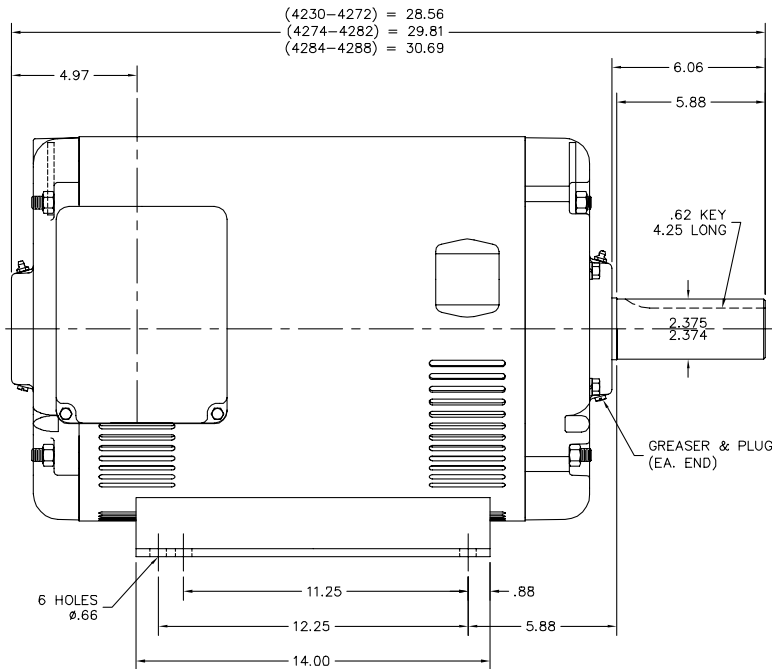
Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	43	64	74	79	81	82	80
Efficiency	89.3	93.1	94.1	94.1	93.3	92.2	93.6
Speed	1195	1191	1187	1183	1177	1170	1179
Line amperes	24.8	31.6	40.5	50.9	62.2	77.5	57.7

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



42LYH047



42LYH047

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

REV. DESC: CHG NOTE "GREASER & RELIEF" TO BE "GREASER & PLUG"	VERSION: 02	TDR: 000000572206
REV. LTR: B	REVISED: 01:32:49 12/17/2010	BY: ENTYLLO
FILE: \AAA\00075\466		
MTL: -		

BALDOR
 HORZ OPSB 364-5T W/42AD2004
 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

900003

FILE: AAA00005140

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005