

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM4110T-58**

**40HP,1470RPM,3PH,50HZ,324T,1272M,TEFC,F1**

Part Detail							
Revision:	E	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	12WGY897	CD Diagram:	CD0382	Mfg Plant:	
Mech. Spec:	12C51	Layout:	12LYC051	Poles:	04	Created Date:	04-03-2015
Base:	RG	Eff. Date:	09-11-2019	Leads:	6#8		

Specs			
Catalog Number:	EM4110T-58	Inverter Code:	Not Inverter
Enclosure:	TEFC	IP Rating:	NONE
Frame:	324T	KVA Code:	F
Frame Material:	Iron	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	40.000 HP @ 50 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	1500 RPM @ 50 HZ	Motor Lead Quantity/Wire Size:	6 @ 8 AWG
Voltage @ Frequency:	400.0 V @ 50 HZ	Motor Lead Exit:	Ko Box
XP Class and Group:	None	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	1272M
Agency Approvals:	CE	Mounting Arrangement:	F1
	CSA	Power Factor:	86
	UR	Product Family:	General Purpose
	WEEE	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	Standard
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	Rigid	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	RoHS Status:	ROHS COMPLIANT
Blower:	None	Shaft Extension Location:	Pulley End

<b>Current @ Voltage:</b>	52.000 A @ 400.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
<b>Design Code:</b>	B	<b>Shaft Rotation:</b>	Reversible
<b>Drip Cover:</b>	No Drip Cover	<b>Shaft Slinger Indicator:</b>	Shaft Slinger
<b>Duty Rating:</b>	CONT	<b>Speed Code:</b>	Single Speed
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Motor Standards:</b>	NEMA
<b>Feedback Device:</b>	NO FEEDBACK	<b>Starting Method:</b>	Wye Start - Delta Run
<b>Front Face Code:</b>	Standard	<b>Thermal Device - Bearing:</b>	None
<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

<b>Nameplate NP3444L</b>											
<b>CAT NO</b>	EM4110T-58										
<b>SPEC.</b>	12C051Y897G1										
<b>HP</b>	40							<b>PH</b>	3		
<b>VOLTS</b>	400										
<b>AMP</b>	52										
<b>RPM</b>	1470										
<b>FRAME</b>	324T				<b>HZ</b>	50			<b>I.P.</b>	54	
<b>SER.F.</b>	1.15		<b>CODE</b>	F		<b>DES</b>	B		<b>CL</b>	F	
<b>NOM.EFF.</b>	93.6										
<b>PF</b>	86			<b>USABLE AT 208V</b>							
<b>RATING</b>	40C AMB-CONT							<b>CC</b>			
<b>DE BRG</b>	6312			<b>ODE</b>	6311						
<b>ENCL</b>	TEFC		<b>SN</b>								
<b>VPWM INVERTER READY</b>											
<b>CT5-50(10:1)VT2.5-50(20:1</b>											
<b>BLANK</b>	IE3-94.5(75%)93.8(50%)										

Parts List		
Part Number	Description	Quantity
SA296419	SA 12C051Y897G1	1.000 EA
RA282459	RA 12C051Y897G1	1.000 EA
09FN3001C03	EXTERNAL FAN, PLASTIC	1.000 EA
10CB3001	CONDUIT BOX CAST W/2.500 LEAD HOLE	1.000 EA
09GS1000SP	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 EA
10XN3118K12	5/16-18 X .75 GRADE 5, ZINC PLATED	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 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
HA3400A13	STUD, 1/2-13 X 7" WELKER	4.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
HW5100A13	W4627-047 WVY WSHER	1.000 EA
10XN3118K36	5/16-18 X 2.25" HEX HD, GRADE 5	2.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 EA
12EP1106A01	PU ENDPLATE, MACH	1.000 EA
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 EA
10XN5013K28	1/2-13 X 1.75 HEX HEAD MACH SCREW,GRAD	4.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
12FH1002SP	FAN COVER, CAST	1.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	4.000 EA
10CB3500SP	CONDUIT BOX LID, CAST	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
10GS1000SP	GASKET, CONDUIT BOX LID	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 EA
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
12EP1107A05	FR ENDPLATE, MACH 324-6T	1.000 EA
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 EA
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.200 LB
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.080 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0382	CONNECTION LABEL	1.000 EA
NP3444L	ALUM SUPER-E VPWM INV READY NEMA IE3 UL	1.000 EA
12PA1000	PACKAGING GROUP PRINT PK1024A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA

LB1594	MYLAR WEEE WHEELIE BIN SYMBOL FOR CE MOT	1.000 EA
PE-0000013	ZRTG PE ASSEMBLY	1.000 EA

**AC Induction Motor Performance Data**

Record # 49470 - Typical performance - not guaranteed values

<b>Winding:</b> 12WGY897-R001	<b>Type:</b> 1272M	<b>Enclosure:</b> TEFC
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Nameplate Data				400 V, 50 Hz: Single Voltage Motor	
Rated Output (HP)	40			Full Load Torque	142 LB-FT
Volts	400			Start Configuration	direct on line
Full Load Amps	52			Breakdown Torque	399 LB-FT
R.P.M.	1470			Pull-up Torque	177 LB-FT
Hz	50	Phase	3	Locked-rotor Torque	246 LB-FT
NEMA Design Code	B	KVA Code	F	Starting Current	295 A
Service Factor (S.F.)	1.15			No-load Current	15.6 A
NEMA Nom. Eff.	93.6	Power Factor	86	Line-line Res. @ 25°C	0.141 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	60°C
S.F. Amps				Temp. Rise @ S.F. Load	75°C
				Locked-rotor Power Factor	27.1
				Rotor inertia	9.59 LB-FT <sup>2</sup>

**Load Characteristics 400 V, 50 Hz, 40 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	60	80	86	88	88	87	88
Efficiency	92.9	93.8	94.5	93.8	93	91.8	93.3
Speed	1491	1485	1479	1472	1464	1455	1467
Line amperes	19.5	28.6	39.5	52.2	65.9	81.1	60.4

Performance Graph at 400V, 50Hz, 40.0HP Typical performance - Not guaranteed values

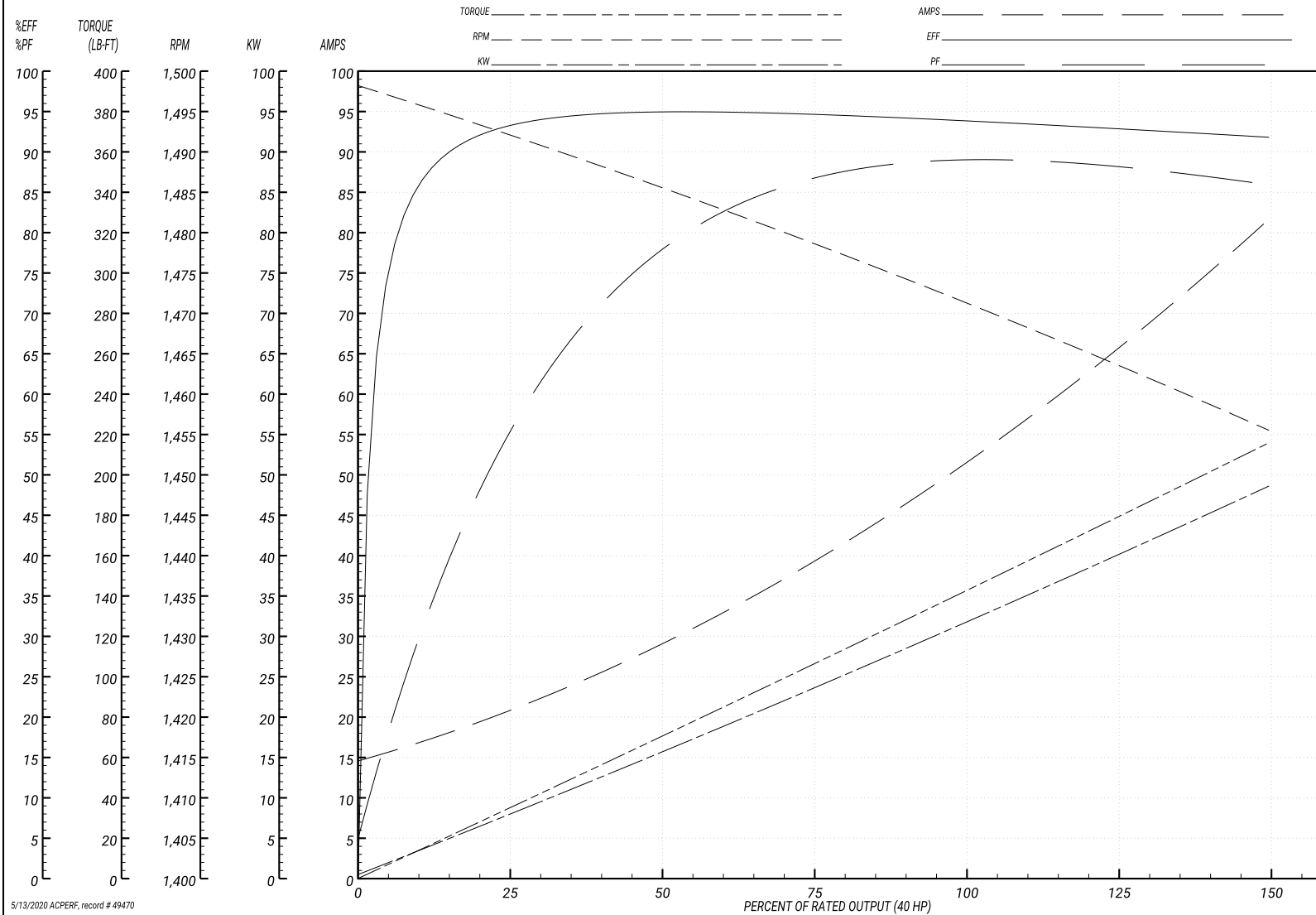
ABB Motors and Mechanical Inc.

WINDING # 12WGY897

Typical performance - not guaranteed values.

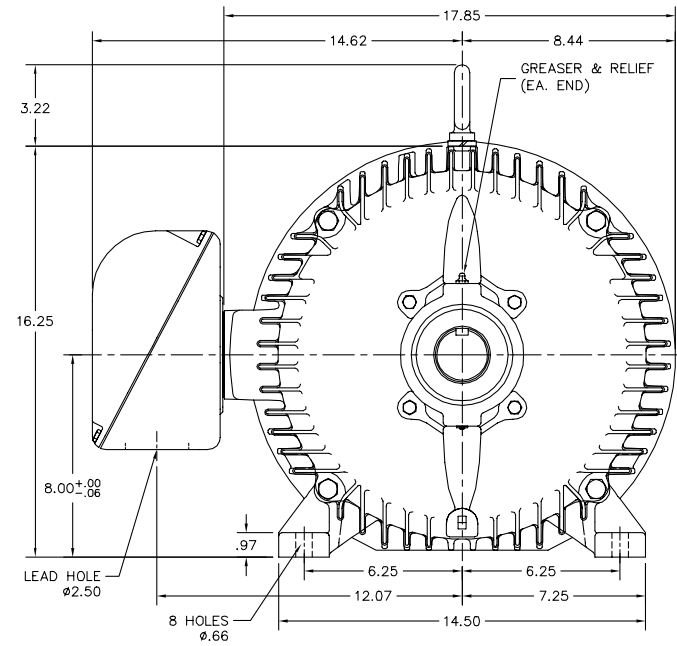
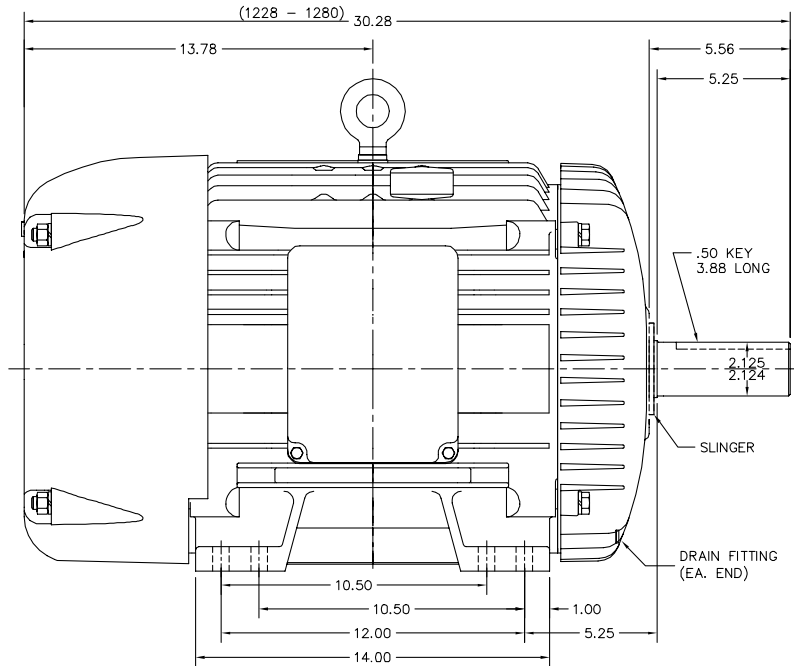
40 HP 3 PH 50 HZ 1470 RPM 400 V 1272M

TORQUES(LB-FT): PO=399 PU=177 LR=246 LRA=295



5/13/2020 ACPERF, record # 49470

12LYC051



12LYC051

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

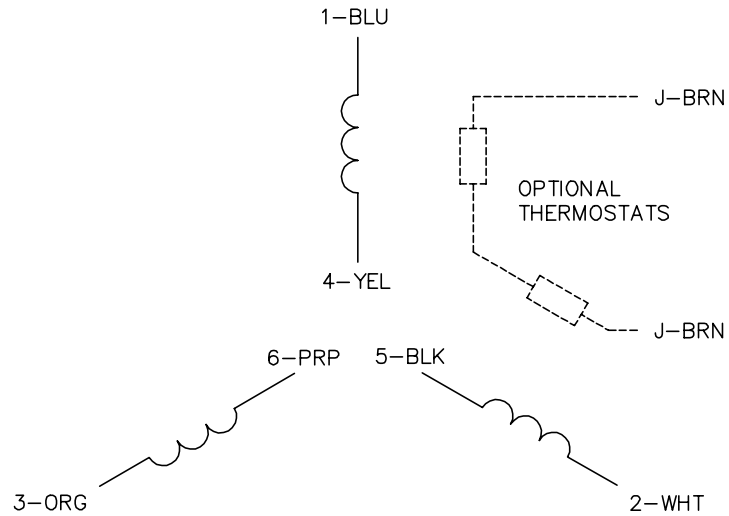
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MTL: -		

**BALDOR**

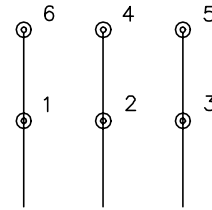
HORZ TEFC 324-6T

SH 1 of 1

CD0382

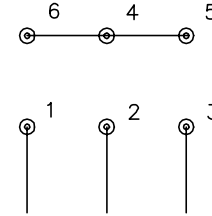


RUN CONNECTION  
(1D)



LINE

START CONNECTION  
(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.
5. FOR ACROSS-THE-LINE STARTING, USE 'RUN' CONNECTION.

CD0382

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: F	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\243	REVISED: 09:05:32 02/19/2019	BY: ENBRIRO
MTL: -	Ⓢ □	

**BALDOR - RELIANCE**®

3PH, SV, 6 LEADS, Y START/D RUN

SH 1 of 1