



Customer information packet

EM4110T-58

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

ELECTRIC MOTOR WHOLESale.COM

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	324T
Frame Material	Iron
Frequency	50.00 Hz
Output @ Frequency	40.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	400.0 V @ 50 HZ
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	CE CSA UR WEEE
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	52.000 A @ 400.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	52.0 a
Insulation Class	F

Part detail

Revision	G
Type	AC
Mech. spec.	12C51
Base	
Status	PRD/A
Elec. spec.	12WGY897
Layout	12LYC051
Eff. date	06-28-2021
CD Diagram	CD0382
Poles	04
Leads	6#8
Proprietary	False
Created date	04-03-2015

Inverter Code	Not Inverter
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1272M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	30.28 IN
Power Factor	86
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1470 rpm
Speed Code	Single Speed
Starting Method	Wye Start - Delta Run
Thermal Device - Bearing	NONE (OLD)
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3444L										
CAT NO	EM4110T-58									
SPEC.	12C051Y897G1									
HP	40/30KW IC411						PH	3		
VOLTS	400									
AMP	52									
RPM	1470 1/MIN 318KG									
FRAME	324T		HZ		50		I.P.		54	
SER.F.	1.15	CODE	F	DES	B	CL	F			
NOM.EFF.	93.6									
PF	86	USABLE AT 208V								
RATING	40C AMB-CONT				CC					
DE BRG	6312		ODE		6311					
ENCL	TEFC	SN								
VPWM INVERTER READY										
CT5-50(10:1)VT2.5-50(20:1										
BLANK	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 (COMES W/SCREW FRO	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 WSHR	1.000 ea
10XN3118K40	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
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	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
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 PK1024A07	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 1/21	1.000 ea
LB1594	MYLAR WEEE WHEELIE BIN SYMBOL FOR CE MOT	1.000 ea
PE-0000013	ZRTG PE ASSEMBLY	1.000 ea
FE-0000022	ZRTG FE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 49470

Typical performance - not guaranteed values

Winding: 12WGY897-R001			Type: 1272M		Enclosure: TEFC		
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-FT2

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

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





