

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM4110T-5**

**40HP,1775RPM,3PH,60HZ,324T,1254M,TEFC,F1**

Part Detail							
Revision:	V	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	12WGY285	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	12H13	Layout:	12LYH013	Poles:	04	Created Date:	04-29-2010
Base:	RG	Eff. Date:	06-26-2020	Leads:	3#8		

Specs			
Catalog Number:	EM4110T-5	Inverter Code:	Inverter Ready
Enclosure:	TEFC	KVA Code:	H
Frame:	324T	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Iron	Locked Bearing Indicator:	Locked Bearing
Output @ Frequency:	40.000 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	3 @ 8 AWG
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	575.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	1254M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	82
	CSA EEV	Product Family:	General Purpose
	UR	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)	Shaft Extension Location:	Pulley End
Blower:	None	Shaft Ground Indicator:	No Shaft Grounding
Current @ Voltage:	39.000 A @ 575.0 V	Shaft Rotation:	Reversible

<b>Design Code:</b>	A	<b>Shaft Slinger Indicator:</b>	Shaft 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
<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>Insulation Class:</b>	F	<b>Winding Thermal 2:</b>	None

<b>Nameplate NP3443L</b>										
CAT.NO.	EM4110T-5				CUST. P/N				ENCL	TEFC
SPEC.	12H013Y285G1		CC	010A	FRAME	324T		SER.NO.		
HP	40		CLASS	F	HZ	60				
R.P.M.	1775		PH	3	DES	A				
VOLTS	575		CODE	H	ODE BRG	6311		DE BRG	6312	
AMPS	39		USABLE AT 208V							
RATING	40C AMB-CONT		NEMA NOM. EFF.	94.1			GREASE	POLYREX EM		
P.F.	82		SER.F.	1.15		VPWM INVERTER READY				
HTR-VOLTS			HTR-AMPS			HTR-WATTS				

Parts List		
Part Number	Description	Quantity
SA194215	SA 12H013Y285G1	1.000 EA
RA181803	RA 12H013Y285G1	1.000 EA
09FN3001B03SP	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
12EP1107A05	FR ENDPLATE, MACH 324-6T	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
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 EA
HW5100A13	W4627-047 WVY WSHR	1.000 EA
12EP1106A01	PU ENDPLATE, MACH	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
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
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
12FH1002SP	FAN COVER, CAST	1.000 EA
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	4.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA

Parts List (continued)		
Part Number	Description	Quantity
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
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	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	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0006	CONNECTION LABEL	1.000 EA
NP3443L	SS SUPER-E UL CSA-EEV PREM CC	1.000 EA
12PA1000	PACKAGING GROUP PRINT PK1024A06	1.000 EA

PE-0000013	ZRTG PE ASSEMBLY	1.000 EA
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**AC Induction Motor Performance Data**

Record # 30999

Typical performance - not guaranteed values

Winding: 12WGY285-R001		Type: 1254M	Enclosure: TEFC
<b>Nameplate Data</b>		<b>575 V, 60 Hz: Single Voltage Motor</b>	
Rated Output (HP)	40	Full Load Torque	118 LB-FT
Volts	575	Start Configuration	direct on line
Full Load Amps	39	Breakdown Torque	367 LB-FT
R.P.M.	1775	Pull-up Torque	174 LB-FT
Hz	60 Phase	Locked-rotor Torque	185 LB-FT
NEMA Design Code	A KVA Code	Starting Current	267 A
Service Factor (S.F.)	1.15	No-load Current	15.6 A
NEMA Nom. Eff.	94.1 Power Factor	Line-line Res. @ 25°C	0.232 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	54°C
S.F. Amps		Temp. Rise @ S.F. Load	65°C
		Locked-rotor Power Factor	27.2
		Rotor inertia	7.19 lb-ft <sup>2</sup>

**Load Characteristics 575 V, 60 Hz, 40 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	46	67	77	82	84	85	83
Efficiency	90.1	93.6	94.3	94.3	94.2	93.3	94.2
Speed	1795	1790	1785	1780	1774	1767	1776
Line amperes	18.3	24.1	31.1	38.7	47.6	56.3	44

Performance Graph at 575V, 60Hz, 40.0HP Typical performance - Not guaranteed values

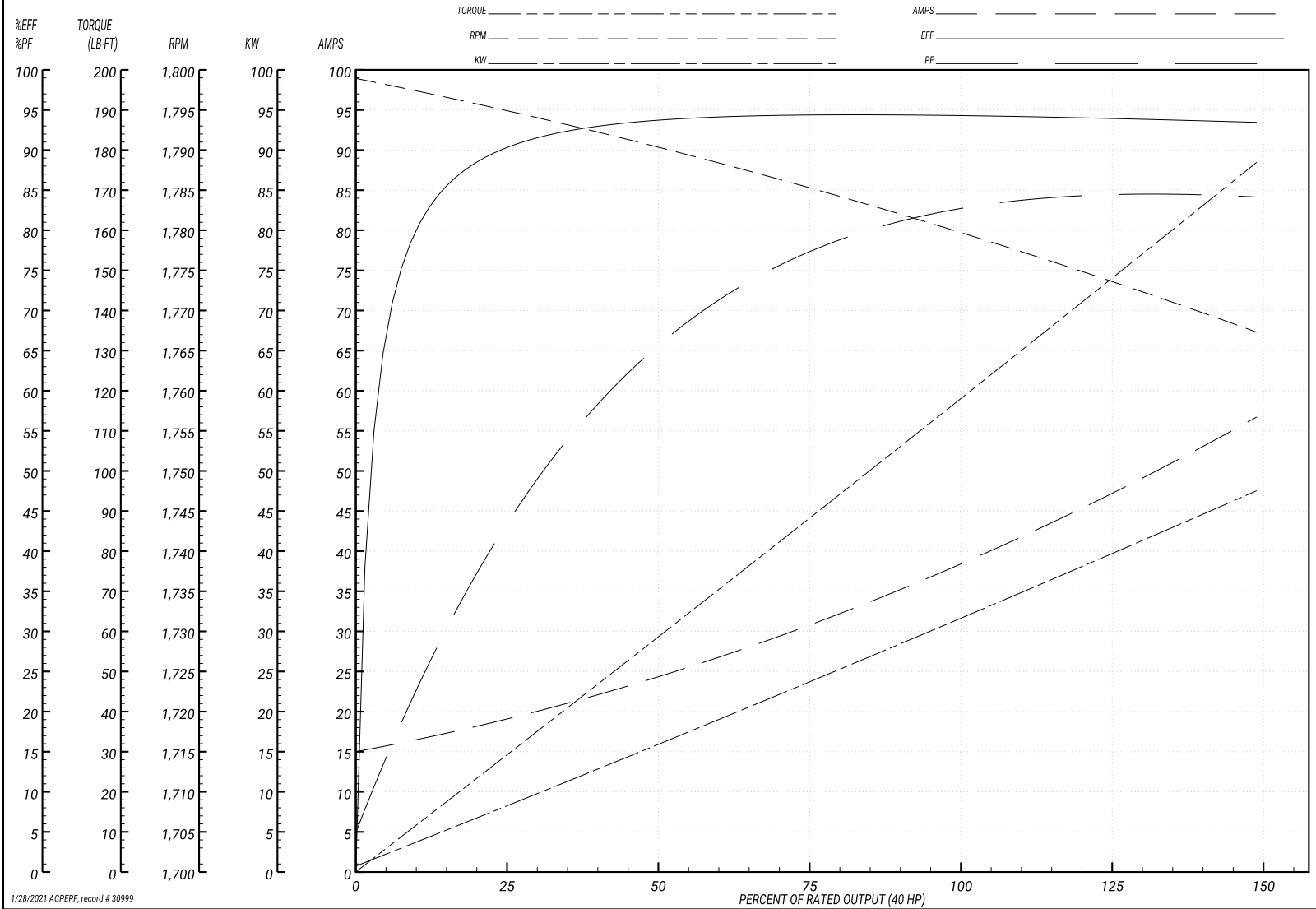
ABB Motors and Mechanical Inc.

WINDING # 12WGY285

Typical performance - not guaranteed values.

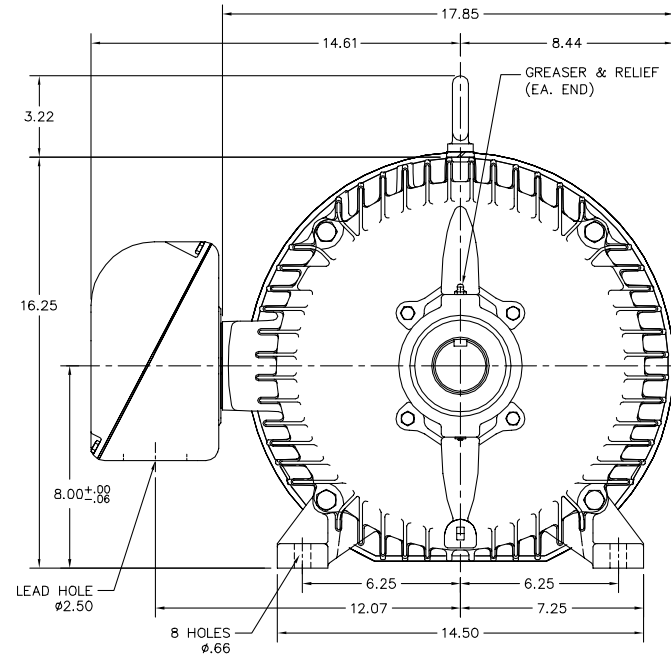
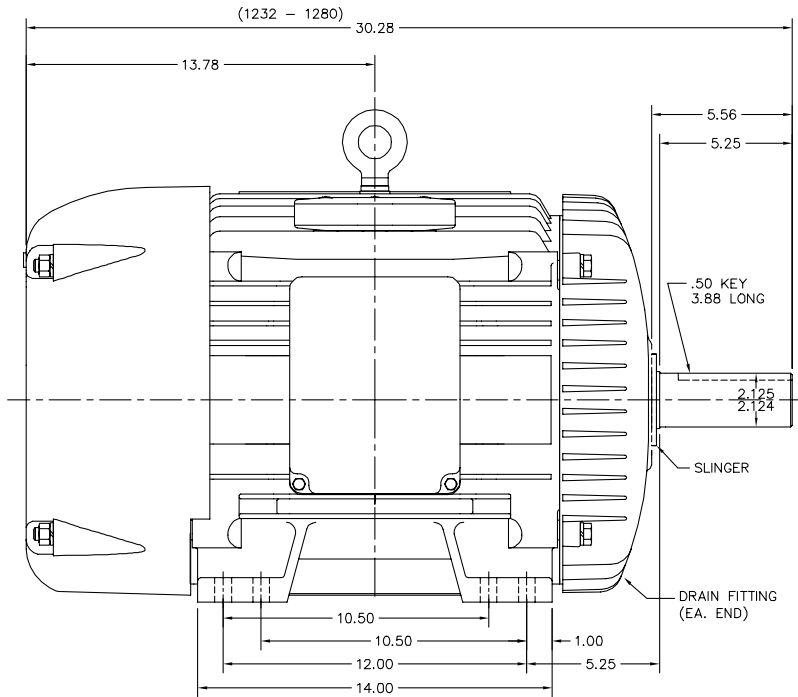
40 HP 3 PH 60 HZ 1775 RPM 575 V 1254M

TORQUES(LB-FT): PO=367 PU=174 LR=185 LRA=267



1/28/2021 ACPERF, record # 30999

12LYH013



12LYH013

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

REV. DESC: REMOVE LOCKNUT	VERSION: 05	TDR: 000000953592
REV. LTR: J	REVISED: 01:43:33 11/16/2015	BY: ENMARS0
FILE: \AAA\00011\066		
MTL: -		

**BALDOR**  
 HORZ TEFC 324-6T; HI-EFF  
 SH 1 of 1

CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIRO
MTL: -	© □	

**BALDOR - RELIANCE®**

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1

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