

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM2542T-CI**

**50HP,3540RPM,3PH,60HZ,324TS,1250M,OPEN,F**

Part Detail							
Revision:	Q	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	12WGY256	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	12E01	Layout:	12LYE001	Poles:	02	Created Date:	03-08-2010
Base:	RG	Eff. Date:	09-24-2019	Leads:	9#6		

Specs			
Catalog Number:	EM2542T-CI	Heater Indicator:	No Heater
Enclosure:	OPEN	Insulation Class:	F
Frame:	324TS	Inverter Code:	Inverter Ready
Frame Material:	Iron	IP Rating:	NONE
Motor Letter Type:	Three Phase	KVA Code:	G
Output @ Frequency:	50.000 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	230.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 6 AWG
	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
XP Class and Group:	None	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	1250M
Agency Approvals:	CSA	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	89
	UR	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	Standard
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None

<b>Blower:</b>	None	<b>Shaft Extension Location:</b>	Pulley End
<b>Current @ Voltage:</b>	56.000 A @ 460.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	124.000 A @ 208.0 V	<b>Shaft Rotation:</b>	Reversible
	112.000 A @ 230.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Design Code:</b>	A	<b>Speed Code:</b>	Single Speed
<b>Drip Cover:</b>	No Drip Cover	<b>Motor Standards:</b>	NEMA
<b>Duty Rating:</b>	CONT	<b>Starting Method:</b>	Direct on line
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Bearing:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Winding:</b>	None
<b>Front Face Code:</b>	Standard	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	None

Nameplate NP3554LUA											
CAT.NO.	EM2542T-CI			P/N				ENCL	OPEN		
SPEC.	12E001Y256G1		CC	010A		FRAME	324TS		SER.NO.		
HP	50		CLASS	F		HZ	60				
RPM	3540		PH	3		DES	A				
VOLTS	230/460			CODE	G		ODE BRG	6311		DE BRG	6311
AMPS	112/56		USABLE AT 208V	124							
RATING	40C AMB-CONT			NEMA-NOM-EFF	93		GREASE	POLYREX EM			
PF	89		SER.F.	1.15		CT30-60(2:1)		VT3-60(20:1)			
USABLE AT	50HZ 50HP 190/380V 138/69A				SF	1.0					
HTR-VOLTS			HTR-AMPS			MAX. SPACE HEATER TEMP.					

Parts List		
Part Number	Description	Quantity
SA192018	SA 12E001Y256G1	1.000 EA
RA179672	RA 12E001Y256G1	1.000 EA
10CB3000SP	KOBX, CAST W/2.00 LEAD HOLE	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
12EP1200A04	FR ENDPLATE, MACH	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	3.000 EA
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	3.000 EA
10XN5013K80	HEX HD , 1/2-13 X 5.00 LGGRADE 5,ZINC PL	4.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
HW5100A13	W4627-047 WVY WSHER	1.000 EA
12EP1200A03	ENDPLATE, MACH	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	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
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
10XN5013K80	HEX HD , 1/2-13 X 5.00 LGGRADE 5,ZINC PL	4.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
10CB3500SP	CONDUIT BOX LID, CAST	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
HW2501H18	KEY, 1/2 SQ X 2.000	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	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	0.200 LB
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	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
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA
12AD2000A01	AIR DEFLECTOR	1.000 EA
12AD2000A01	AIR DEFLECTOR	1.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0181	CONNECTION LABEL	1.000 EA
NP3554LUA	SS SUPER-E VPWM INV READY UL CSA-EEV PRE	1.000 EA
12PA1000	PACKAGING GROUP PRINT PK1024A07	1.000 EA

**AC Induction Motor Performance Data**

Record # 53034

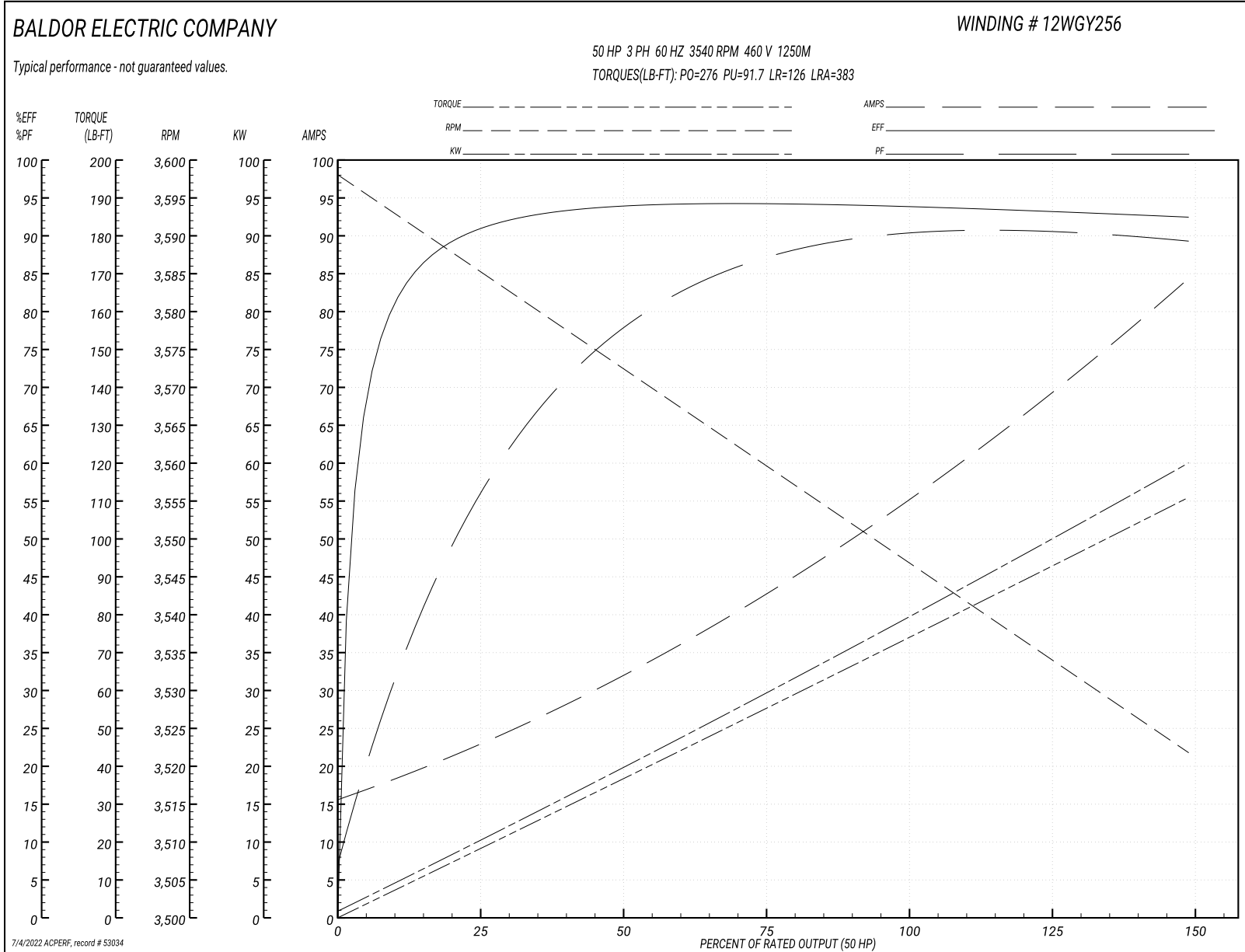
Typical performance - not guaranteed values

Winding: 12WGY256-R003			Type: 1250M			Enclosure: OPEN		
<b>Nameplate Data</b>				<b>460 V, 60 Hz: High Voltage Connection</b>				
Rated Output (HP)	50		Full Load Torque	74.1 LB-FT				
Volts	230/460		Start Configuration	direct on line				
Full Load Amps	112/56		Breakdown Torque	276 LB-FT				
R.P.M.	3540		Pull-up Torque	91.7 LB-FT				
Hz	60 Phase	3	Locked-rotor Torque	126 LB-FT				
NEMA Design Code	A KVA Code	G	Starting Current	383 A				
Service Factor (S.F.)	1.15		No-load Current	16.6 A				
NEMA Nom. Eff.	93 Power Factor	89	Line-line Res. @ 25°C	0.117 Ω				
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	81°C				
S.F. Amps			Temp. Rise @ S.F. Load	100°C				
			Locked-rotor Power Factor	21				
			Rotor inertia	3.91 LB-FT <sup>2</sup>				

**Load Characteristics 460 V, 60 Hz, 50 HP**

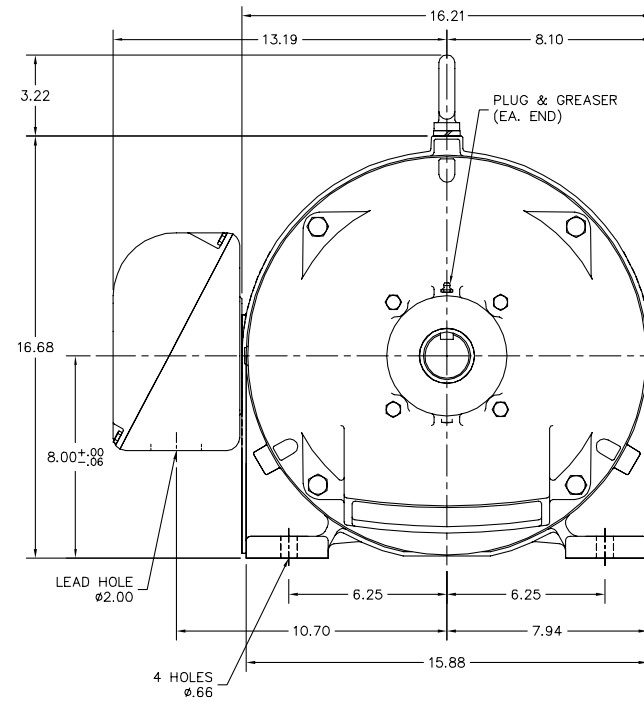
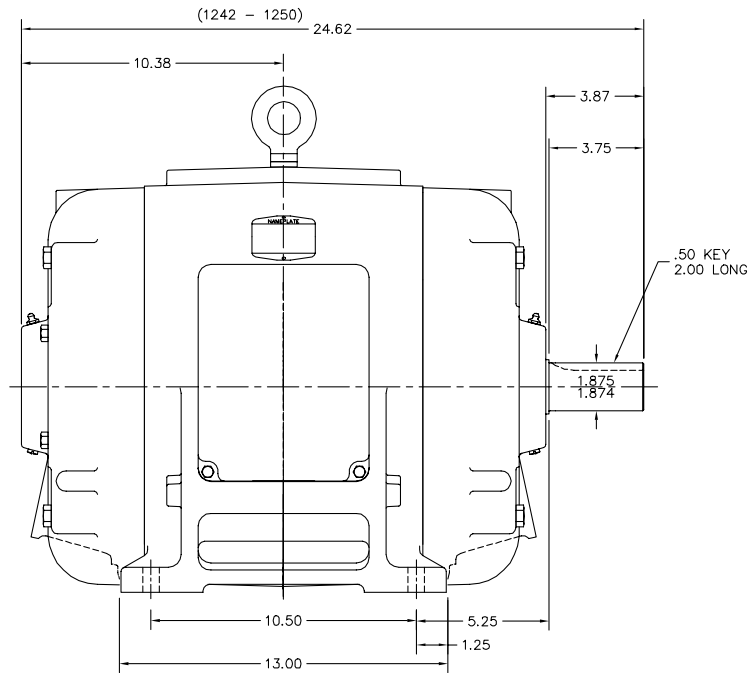
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	59	80	86	89	90	90	90
Efficiency	90.6	93.7	94.2	94	93.3	92.4	93.6
Speed	3584	3572	3560	3547	3535	3521	3540
Line amperes	21.6	31.4	43.1	56	69.8	83.7	64.3

Performance Graph at 460V, 60Hz, 50.0HP Typical performance - Not guaranteed values





12LYE001



12LYE001

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

REV. DESC: UPDATED DESCRIPTION		
REV. LTR: F	VERSION: 03	TDR: 000000855727
FILE: \AAA\00048\435	REVISED: 02:59:40 05/29/2014	BY: ENNINDO
MTL: -		

**BALDOR**

HORZ OPEN 324TS  
SH 1 of 1

CD0180



LOW VOLTAGE  
(2D)



HIGH VOLTAGE  
(1D)



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.

CD0180

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10:25:29 02/19/2019	BY: ENBRIRO
MTL: -	© □	

**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

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