

BALDOR® • RELIANCE 

Product Information Packet

EM2543T-CI

50HP, 1775RPM, 3PH, 60HZ, 326T, 1256M, OPEN, F1

Part Detail							
Revision:	AA	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	12WGX320	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	12D01	Layout:	12LYD001	Poles:	04	Created Date:	
Base:	RG	Eff. Date:	12-09-2019	Leads:	9#8		

Specs			
Catalog Number:	EM2543T-CI	Insulation Class:	F
Enclosure:	OPEN	Inverter Code:	Inverter Ready
Frame:	326T	IP Rating:	NONE
Frame Material:	Iron	KVA Code:	G
Output @ Frequency:	50.000 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 8 AWG
	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
XP Class and Group:	None	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	1256M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	83
	CSA	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
Blower:	None	Shaft Extension Location:	Pulley End

Current @ Voltage:	120.000 A @ 230.0 V	Shaft Ground Indicator:	No Shaft Grounding
	126.000 A @ 208.0 V	Shaft Rotation:	Reversible
	60.000 A @ 460.0 V	Shaft Slinger Indicator:	No Slinger
Design Code:	B	Speed Code:	Single Speed
Drip Cover:	No Drip Cover	Motor Standards:	NEMA
Duty Rating:	CONT	Starting Method:	Direct on line
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Bearing:	None
Feedback Device:	NO FEEDBACK	Thermal Device - Winding:	None
Front Face Code:	Standard	Vibration Sensor Indicator:	No Vibration Sensor
Front Shaft Indicator:	None	Winding Thermal 1:	None
Heater Indicator:	No Heater	Winding Thermal 2:	None

Nameplate NP3554LUA											
CAT.NO.	EM2543T-CI			P/N				ENCL	OPEN		
SPEC.	12D001X320G1		CC	010A		FRAME	326T		SER.NO.		
HP	50		CLASS	F		HZ	60				
RPM	1775		PH	3		DES	B				
VOLTS	230/460			CODE	G		ODE BRG	6311		DE BRG	6311
AMPS	120/60			USABLE AT 208V	126						
RATING	40C AMB-CONT			NEMA-NOM-EFF	94.5		GREASE	POLYREX EM			
PF	83		SER.F.	1.15		CT30-60(2:1)		VT3-60(20:1)			
USABLE AT	50HZ 50HP 190/380V 136/68A				SF 1.0						
HTR-VOLTS			HTR-AMPS			MAX. SPACE HEATER TEMP.					

Parts List		
Part Number	Description	Quantity
SA067474	SA 12D001X320G1	1.000 EA
RA061509	RA 12D001X320G1	1.000 EA
10CB3001	CONDUIT BOX CAST W/2.500 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
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	3.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 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
51XF2520A08	SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L	3.000 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

Parts List (continued)		
Part Number	Description	Quantity
HW2501H33	KEY, 1/2 SQ X 3.875	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, MOBIL POLYREX EM - 124047	0.200 LB
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	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
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 PK1024A06	1.000 EA

AC Induction Motor Performance Data

Record # 56462 - Typical performance - not guaranteed values

Winding: 12WGX320-R001	Type: 1256M	Enclosure: OPEN
-------------------------------	--------------------	------------------------

Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	50			Full Load Torque	148 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	120/60			Breakdown Torque	404 LB-FT
R.P.M.	1775			Pull-up Torque	204 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	237 LB-FT
NEMA Design Code	B	KVA Code	G	Starting Current	382 A
Service Factor (S.F.)	1.15			No-load Current	23.6 A
NEMA Nom. Eff.	94.5	Power Factor	83	Line-line Res. @ 25°C	0.13209 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	27.1

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	47	69	79	83	85	85	84
Efficiency	92.1	94.8	95.1	94.8	94.3	93.5	94.5
Speed	1794.9	1789.6	1784.2	1777.7	1771.1	1764	1774
Line amperes	27.4	35.9	47	59.6	73.4	88.6	67.9

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

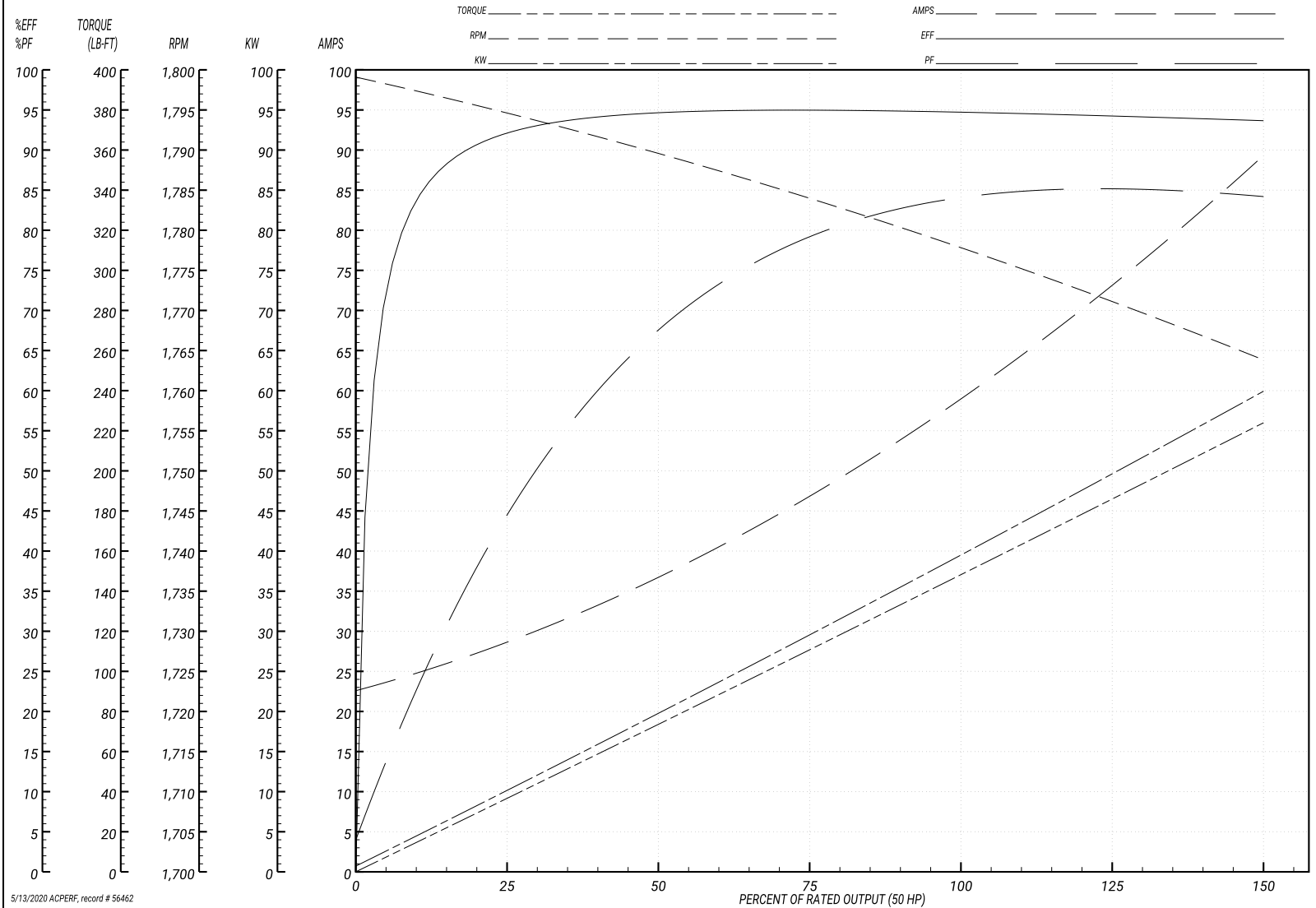
ABB Motors and Mechanical Inc.

WINDING # 12WGX320

Typical performance - not guaranteed values.

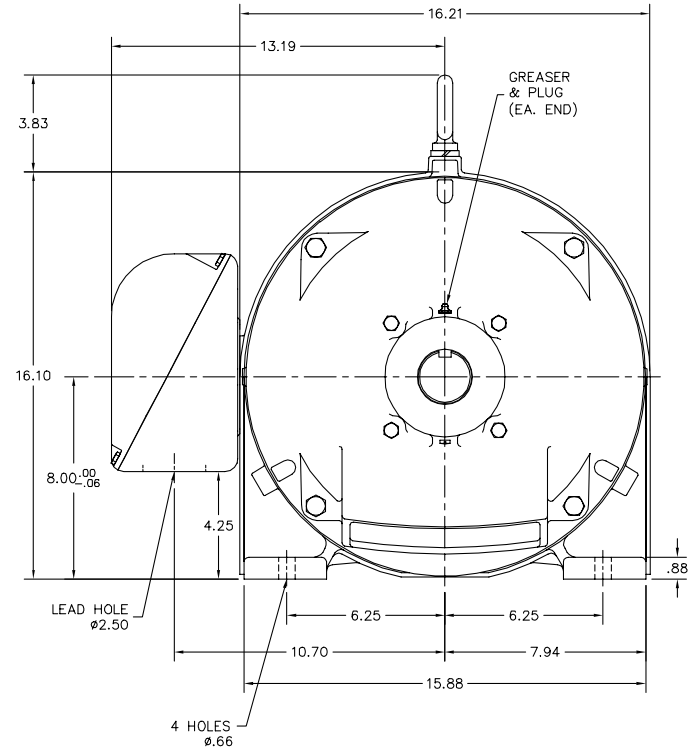
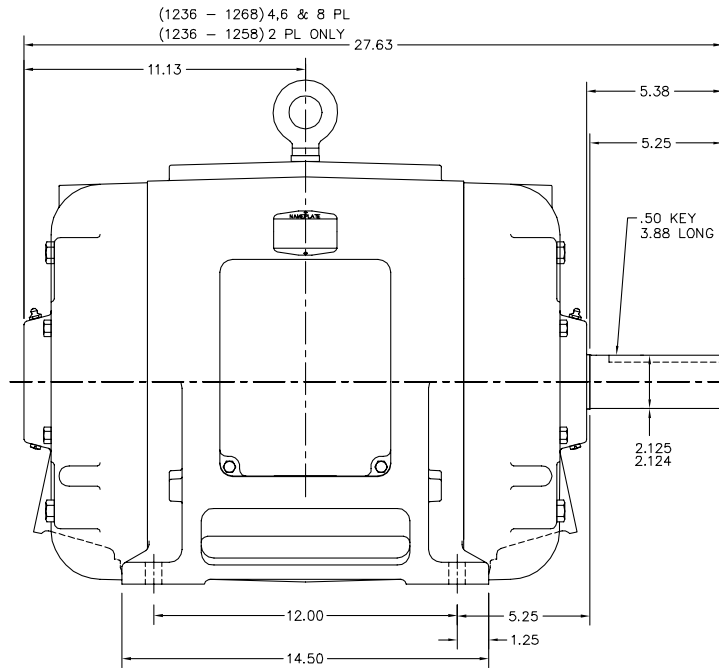
50 HP 3 PH 60 HZ 1775 RPM 460 V 1256M

TORQUES(LB-FT): PO=404 PU=204 LR=237 LRA=382



5/13/2020 ACPERF, record # 56462

12LYD001



12LYD001

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

REV. DESC: CHGD 10CB3000 TO 10CB3001 TO MEET NEMA REQUIREMENT	VERSION: 07	TDR: 0000011049B4
REV. LTR: P	REVISD: 09:32:03 04/09/2019	BY: ENSHABO
FILE: \AAA\00002\483		
MTL: -		

BALDOR - RELIANCE®

HORZ OPEN 326T
 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

SH 1 of 1

Marketing maintained PDF of MN416:

[MN416?ManNumber=MN416](#)