

ABB BALDOR RELIANCE III

Customer information packet

EM2543T-CI

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

Class - None

Division - Not Applicable

Specifications

Enclosure	OPEN
Frame	326T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	50.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM NEMA PREMIUM (OLD LOGO)
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	126.000 A @ 208.0 V 60.000 A @ 460.0 V 120.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	AG
Type	AC
Mech. spec.	12D01
Base	
Status	PRD/A
Elec. spec.	12WGX320
Layout	12LYD001
Eff. date	04-09-2025
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	01-01-0001

Heater Indicator	No Heater
High Voltage Full Load Amps	60.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1256M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.63 IN
Power Factor	83
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
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	No Slinger
Speed	1775 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor

Winding Thermal 1	None
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										
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.									

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

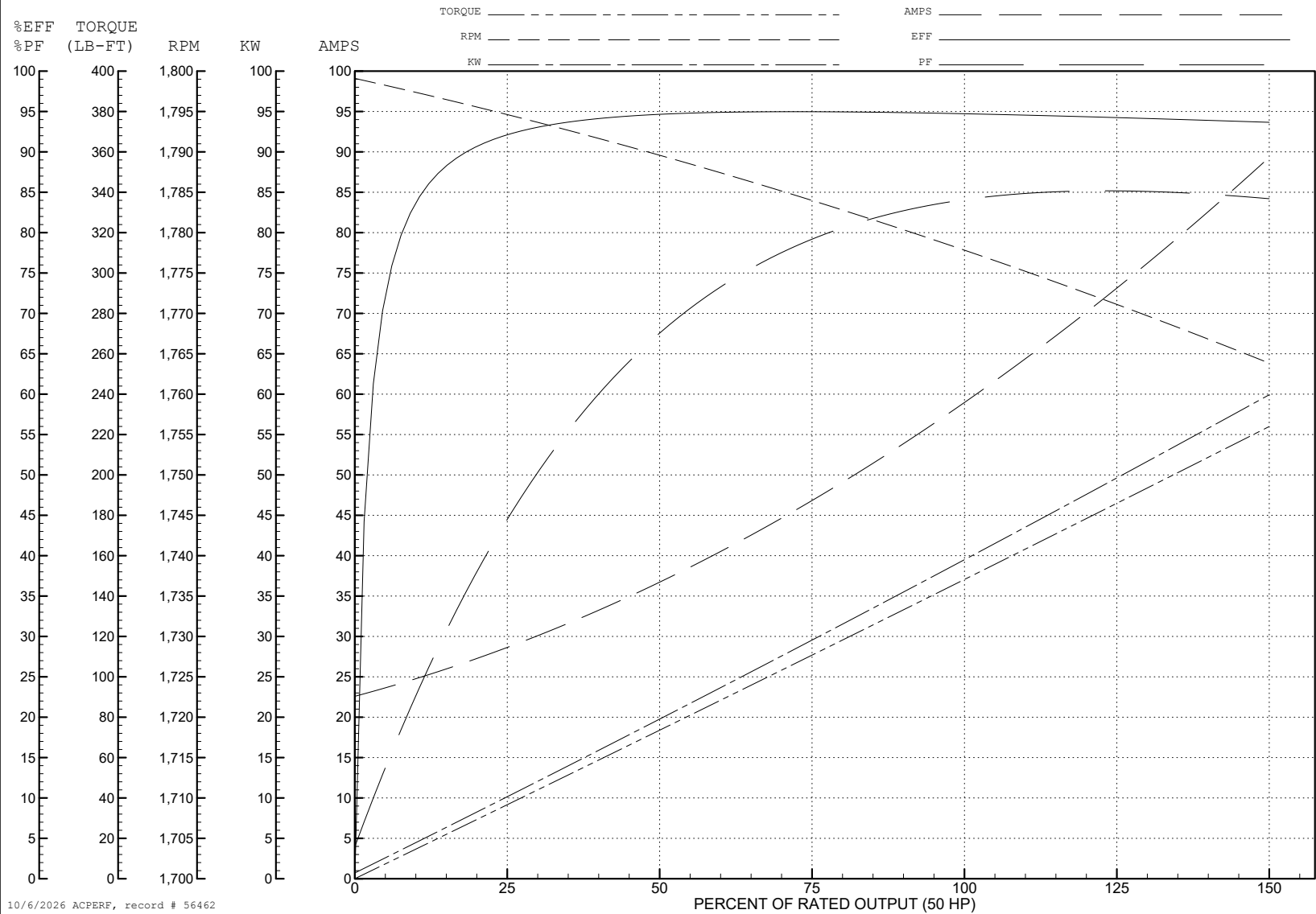
ABB Motors and Mechanical Inc.

WINDING # 12WGX320

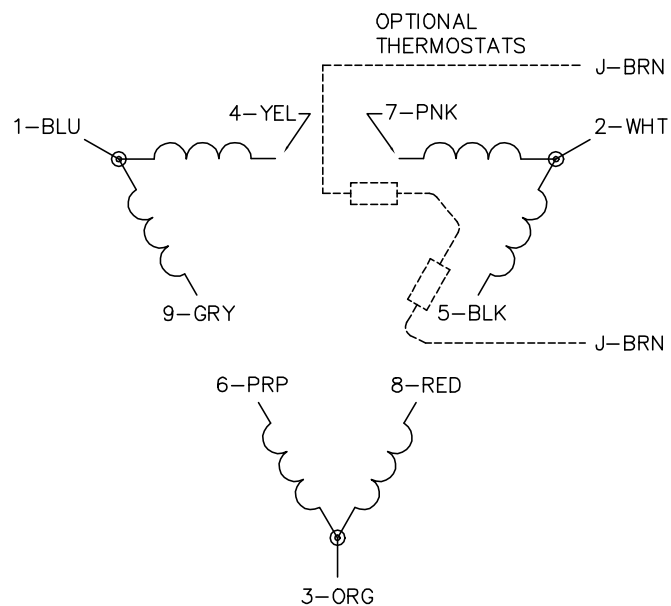
Typical performance - not guaranteed values.

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

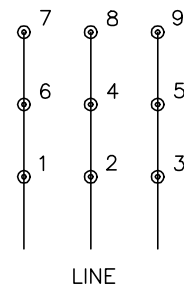
TORQUES (LB-FT): PO=404 PU=204 LR=237 LRA=382



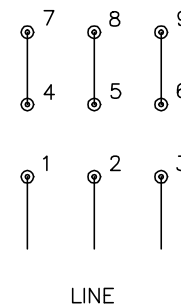
CD0180



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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