

ABB BALDOR RELIANCE III

Customer information packet

EM2515T-5BG

20HP, 1765RPM, 3PH, 60HZ, 256T, 3948M, OPSB, F1

Class -

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	256T
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV UR
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	19.100 A @ 575.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
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	19.1 a
Insulation Class	H
Inverter Code	Inverter Ready

Part Detail

Revision	R
Type	AC
Mech. spec.	39E531
Base	
Status	PRD/A
Elec. spec.	39WGX995
Layout	39LYE531
Eff. date	06-11-2024
CD Diagram	CD0006
Poles	04
Leads	3#12
Proprietary	False
Created date	09-08-2016

KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3948M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	23.19 IN
Power Factor	85
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	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1765 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

NP3553L									
CAT.NO.	EM2515T-5BG								
SPEC	39E531X995G1								
HP	20								
VOLTS	575								
AMPS	19.1								
RPM	1765								
FRAME	256T		HZ	60			PH	3	
SF	1.15	CODE	G	DES	A	CLASS		H	
NEMA NOM. EFF	93	PF	85						
RATING	40C AMB-CONT								
CC	010A								
ENCL	OPSB	SER							
DE	6309		ODE	6208					
VPWM INVERTER READY									
CT30-60(2:1) VT3-60(20:1)									

AC Induction Motor Performance Data

Record # 59144

Typical performance - not guaranteed values

Winding: 39WGX995-R002			Type: 3948M		Enclosure: OPSB		
Nameplate Data			575 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		20	Full Load Torque		59.7 LB-FT		
Volts		575	Start Configuration		direct on line		
Full Load Amps		19.1	Breakdown Torque		189 LB-FT		
R.P.M.		1765	Pull-up Torque		78.9 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		113 LB-FT	
NEMA Design Code		A	KVA Code	G	Starting Current		126 A
Service Factor (S.F.)		1.15		No-load Current		7.18 A	
NEMA Nom. Eff.		93	Power Factor	85	Line-line Res. @ 25°C		0.711 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		37°C	
S.F. Amps				Temp. Rise @ S.F. Load		46°C	
				Locked-rotor Power Factor		33.3	
				Rotor inertia		2.1 LB-FT2	

Load Characteristics 575 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	49	72	81	85	86	87	86
Efficiency	90.2	93.1	93.4	93.1	92.1	91	92.5
Speed	1792	1785	1776	1768	1758	1747	1762
Line amperes	8.49	11.3	14.9	19.1	23.6	28.5	21.8

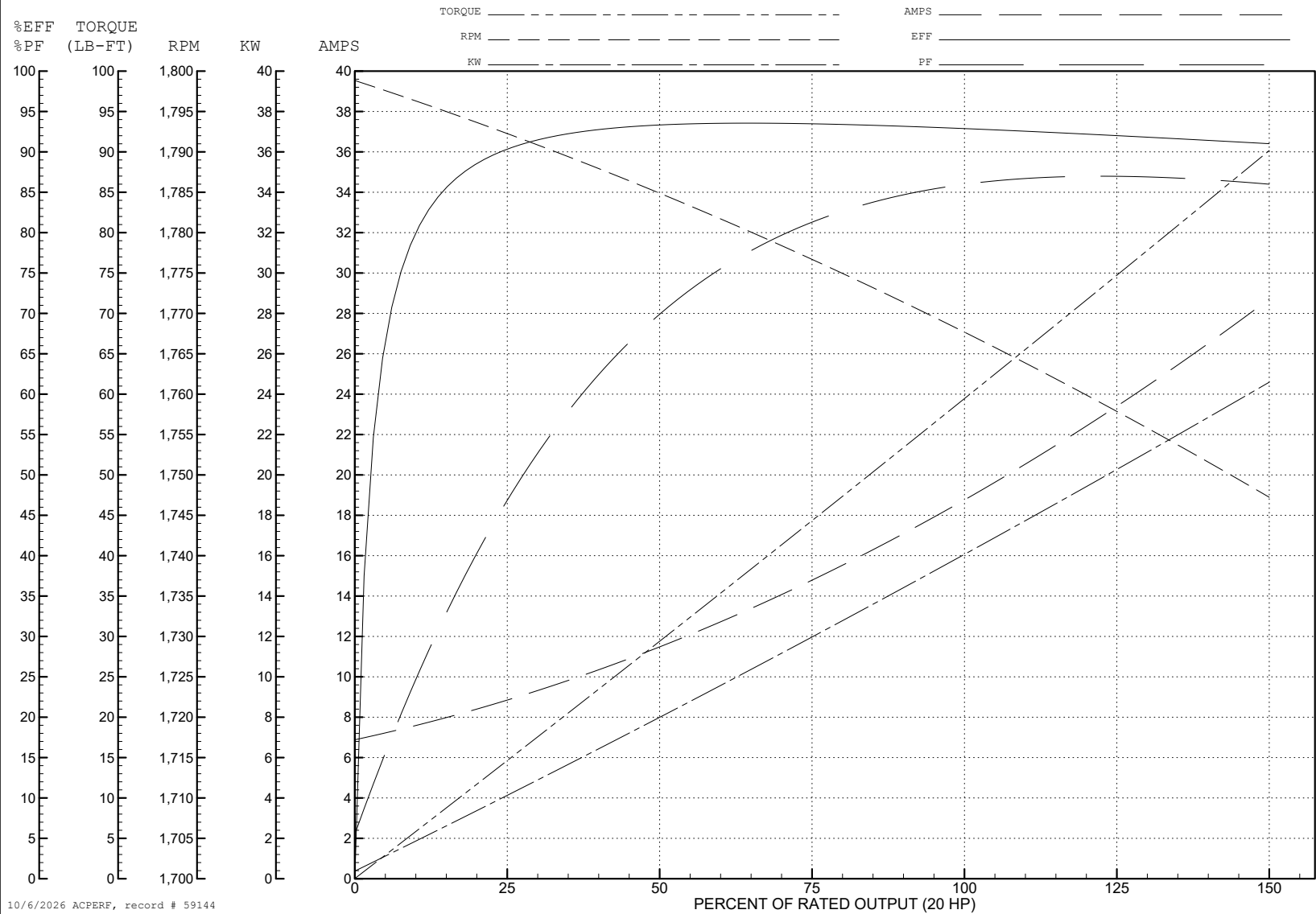
ABB Motors and Mechanical Inc.

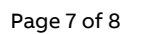
WINDING # 39WGX995

Typical performance - not guaranteed values.

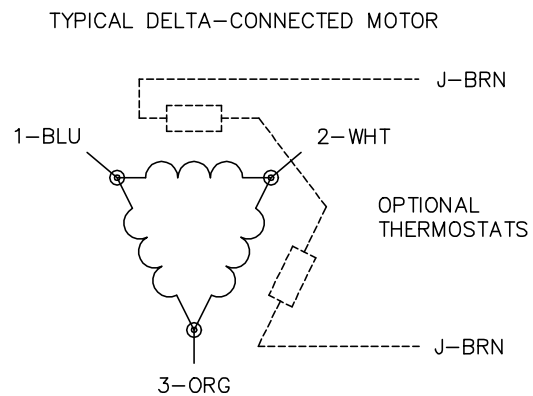
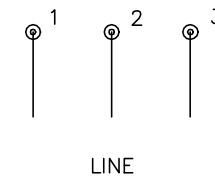
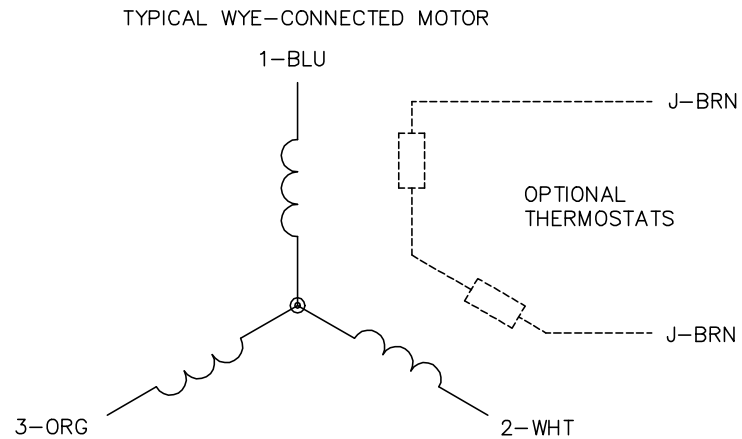
20 HP 3 PH 60 HZ 1765 RPM 575 V 3948M

TORQUES (LB-FT): PO=189 PU=78.9 LR=113 LRA=126





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

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