

ABB BALDOR RELIANCE III

Customer information packet

EM7559T-I

20HP, 3530RPM, 3PH, 60HZ, 256T, 0950M, XPFC, F1

Class - CLI GP D; CLII GP E,F,G

Division - Division I

Specifications

Enclosure	XPFC
Frame	256T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CL I GP D; CL II GP E,F,G
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	UR CSA CSA EEV
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	48.000 A @ 208.0 V 44.000 A @ 230.0 V 22.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	R
Type	AC
Mech. spec.	09J321
Base	
Status	PRD/A
Elec. spec.	09WGZ651
Layout	09LYJ321
Eff. date	12-26-2024
CD Diagram	CD0180
Poles	02
Leads	9#10
Proprietary	False
Created date	09-08-2016

Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	22.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	X0950M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	25.81 IN
Power Factor	91
Product Family	Hazardous Location Motor
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3530 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1044XPSLEV												
NO.							CC	010A				
SER.							TEMP CODE			T3C		
SPEC.	09J321Z651G1											
CAT.NO.												
HP	20											
VOLTS	230/460											
AMPS	44/22											
RPM	3530				MOTOR WEIGHT				390			
HERTZ	60	PH	3	CL	F	DE BRG		6309				
SER.F.	1.15	DES	A	CODE		H	ODE BRG		6208			
FRAME	256T	GREASE			POLYREX EM							
RATING	40C AMB-CONT											
					NEMA-NOM-EFF				91		PF	91
	55C AMB @ 1.0 SF,60C RISE											

AC Induction Motor Performance Data

Record # 54029

Typical performance - not guaranteed values

Winding: 09WVGZ651-R004			Type: 0950M		Enclosure: XPFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		20	Full Load Torque		30 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		44/22	Breakdown Torque		167 LB-FT	
R.P.M.		3530	Pull-up Torque		33.7 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		51 LB-FT
NEMA Design Code		A	KVA Code		H	
Service Factor (S.F.)		1.15	Starting Current		160 A	
NEMA Nom. Eff.		91	Power Factor		91	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		58°C
S.F. Amps				Temp. Rise @ S.F. Load		72°C

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	65	83	89	91	91	91	91
Efficiency	89.4	92.7	92.9	92.4	91.4	90.1	91.8
Speed	3580.7	3566.7	3547.3	3526.6	3504.5	3479.4	3513
Line amperes	8.04	12.2	17.1	22.4	28.2	34.2	25.9

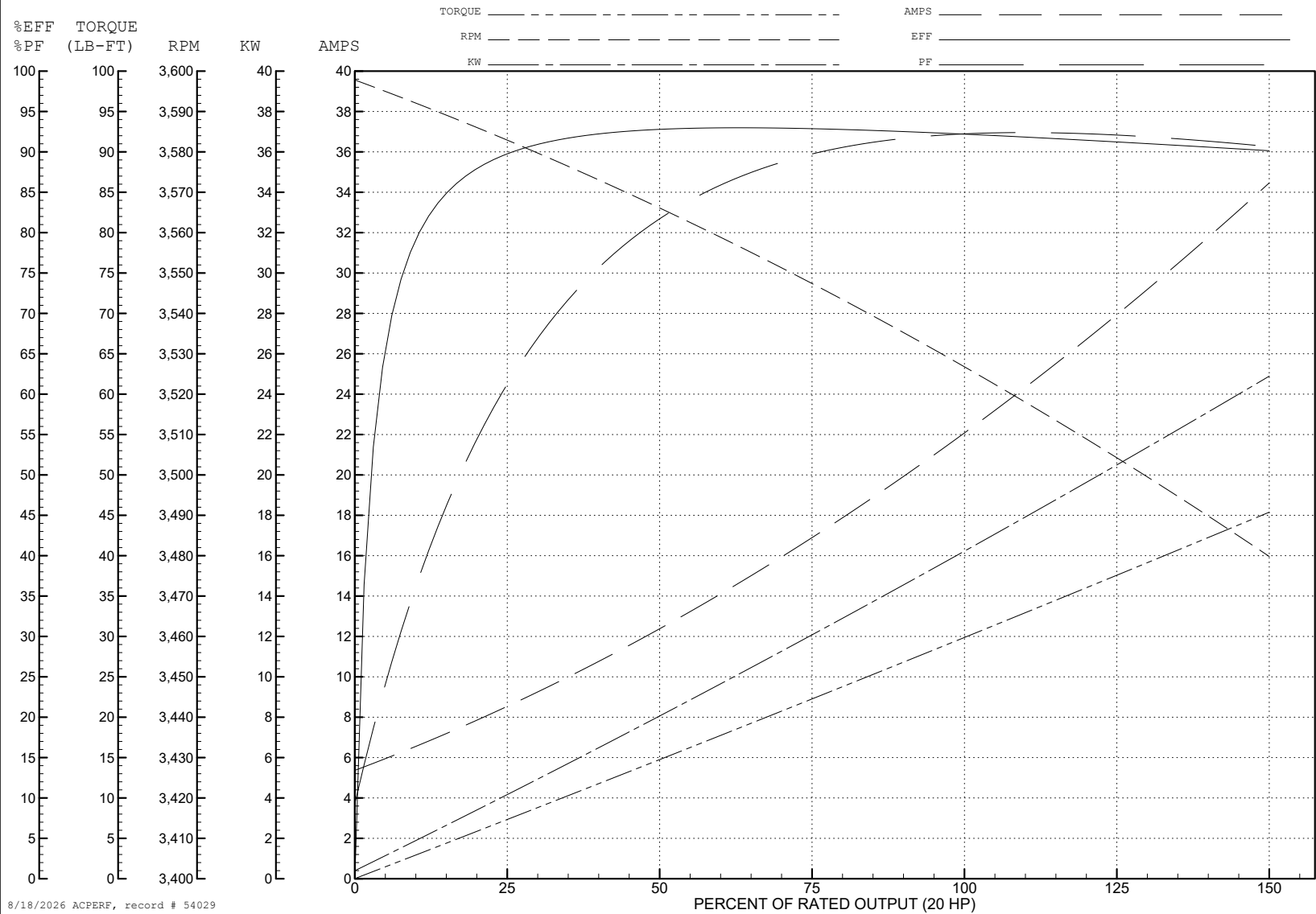
ABB Motors and Mechanical Inc.

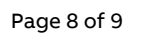
WINDING # 09WGZ651

Typical performance - not guaranteed values.

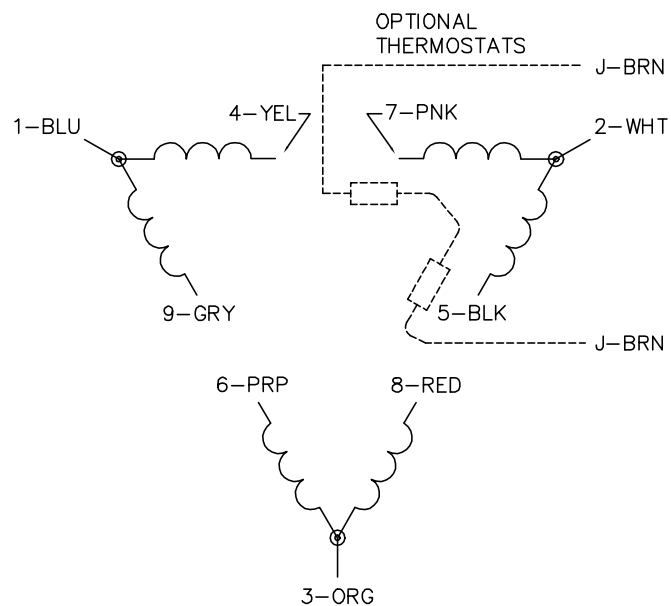
20 HP 3 PH 60 HZ 3530 RPM 460 V 0950M

TORQUES (LB-FT): PO=167 PU=33.7 LR=51 LRA=160

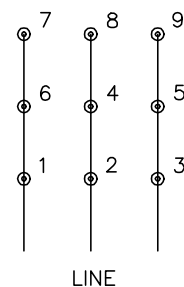




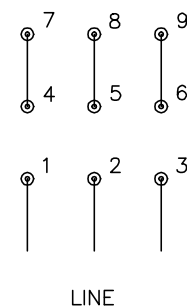
CD0180



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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