

ABB BALDOR RELIANCE III

Customer information packet

EM7059T-I

15//20HP, 2930//3530RPM, 3PH, 50//60HZ, 256T

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	256T
Frame Material	Iron
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	15.000 HP @ 50 HZ 20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 380.0 V @ 50 HZ 230.0 V @ 60 HZ 190.0 V @ 50 HZ
Agency Approvals	CSA UL
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 40.000 A @ 190.0 V 22.000 A @ 460.0 V 20.000 A @ 380.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	AD
Type	AC
Mech. spec.	09F369
Base	
Status	PRD/A
Elec. spec.	09WGZ651
Layout	09LYF369
Eff. date	02-21-2024
CD Diagram	CD0180
Poles	02
Leads	9#10
Proprietary	False
Created date	09-09-2010

Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	20.0 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	25.50 IN
Power Factor	91
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
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	2930 rpm 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

NP0977XPSLEV												
NO.							CC	010A				
SER.							TEMP CODE	T3C				
SPEC.	09F369Z651G1											
CAT.NO.	EM7059T-I											
HP	20//15 NEMA MG-1 PT.5,IP55											
VOLTS	230/460//190/380											
AMPS	44/22//40/20											
RPM	3530//2930						MOTOR WEIGHT		409			
HERTZ	60//50		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 # 54030

Typical performance - not guaranteed values

Winding: 09WGZ651-R015			Type: 0950M		Enclosure: XPFC			
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		20//15		Full Load Torque		30 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		44/22//40/20		Breakdown Torque		167 LB-FT		
R.P.M.		3530//2930		Pull-up Torque		33.7 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		51 LB-FT	
NEMA Design Code		A	KVA Code		H	Starting Current		160 A
Service Factor (S.F.)		1.15		No-load Current		5.75 A		
NEMA Nom. Eff.		91	Power Factor		91	Line-line Res. @ 25°C		0.43337 Ω
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

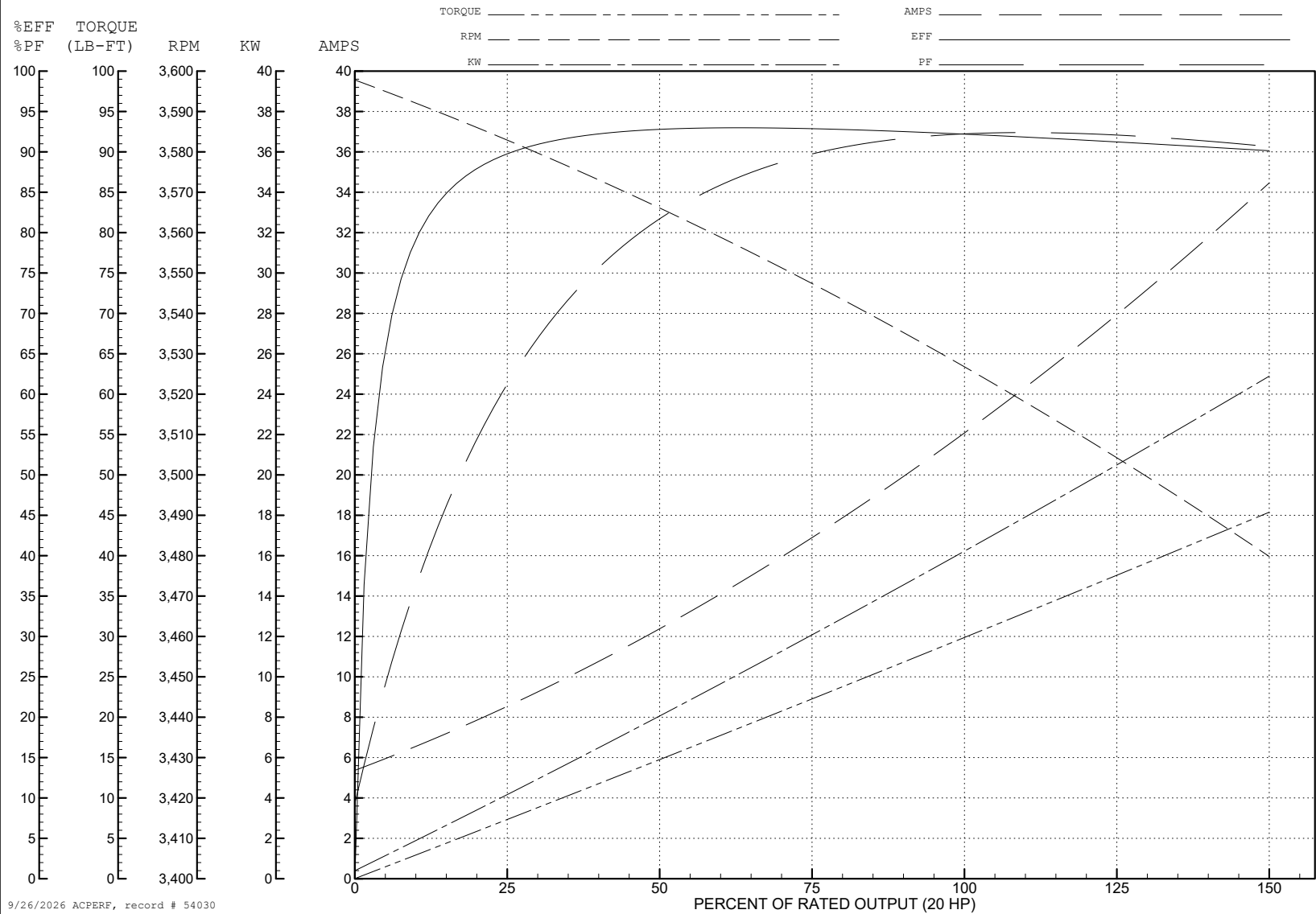
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WINDING # 09WGZ651

Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 3526.6 RPM 460 V 0950M

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



AC Induction Motor Performance Data

Record # 54031

Typical performance - not guaranteed values

Winding: 09WGZ651-R015				Type: 0950M		Enclosure: XPFC	
Nameplate Data				380 V, 50 Hz: High Voltage Connection			
Rated Output (HP)		20//15		Full Load Torque		27 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		44/22//40/20		Breakdown Torque		160 LB-FT	
R.P.M.		3530//2930		Pull-up Torque		35.6 LB-FT	
Hz		60//50		Phase		3	
NEMA Design Code		A		KVA Code		H	
Service Factor (S.F.)		1.15		Starting Current		156 A	
NEMA Nom. Eff.		91		Power Factor		91	
Rating - Duty		40C AMB-CONT		Line-line Res. @ 25°C		0.41 Ω	
S.F. Amps				Temp. Rise @ Rated Load		51°C	
				Temp. Rise @ S.F. Load		64°C	
				Locked-rotor Power Factor		31.3	
				Rotor inertia		1.28 LB-FT2	

Load Characteristics 380 V, 50 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	63	82	88	91	91	92	91
Efficiency	86.8	91.6	91.6	91.2	90.3	89.1	90.6
Speed	2982	2969	2952	2933	2914	2891	2922
Line amperes	7.7	11.5	15.8	20.6	25.9	31.3	23.8

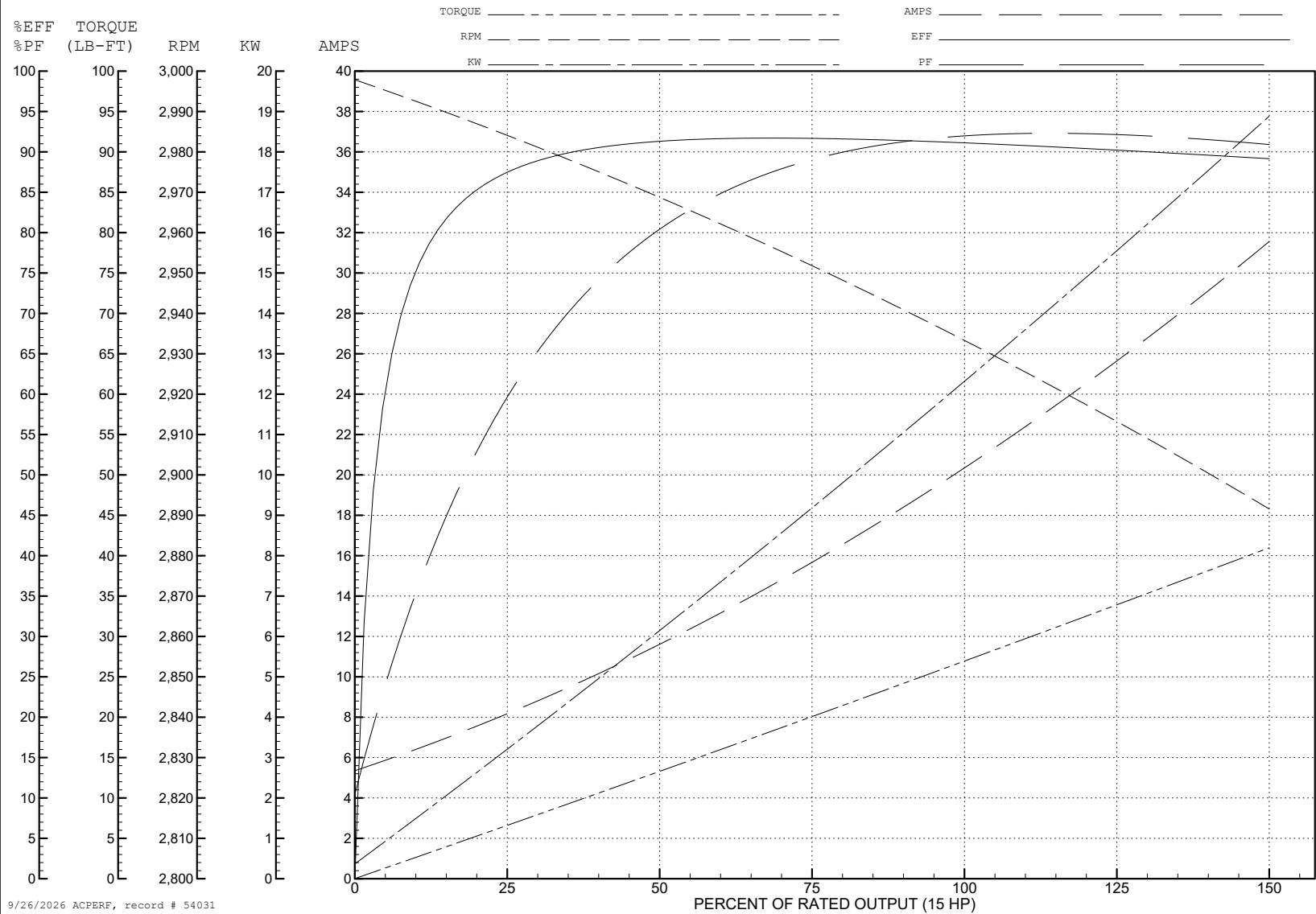
ABB Motors and Mechanical Inc.

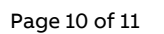
WINDING # 09WGZ651

Typical performance - not guaranteed values.

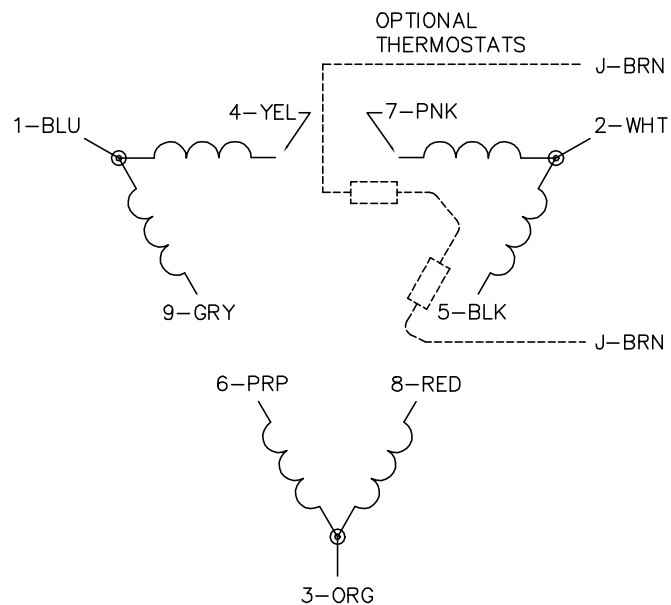
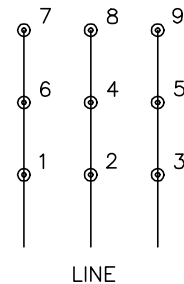
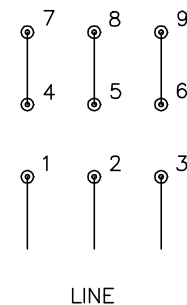
15 HP 3 PH 50 HZ 2933 RPM 380 V 0950M

TORQUES (LB-FT): PO=160 PU=35.6 LR=53.9 LRA=156





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.

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

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