

ABB BALDOR RELIANCE III

Customer information packet

EM7079T-I

20//15HP, 1180//980RPM, 3PH, 60//50HZ, 286T

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	286T
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	20.000 HP @ 60 HZ 15.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1000 RPM @ 50 HZ
Voltage @ Frequency	190.0 V @ 50 HZ 230.0 V @ 60 HZ 380.0 V @ 50 HZ 460.0 V @ 60 HZ
Agency Approvals	UL 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	23.000 A @ 380.0 V 25.000 A @ 460.0 V 46.000 A @ 190.0 V 50.000 A @ 230.0 V 54.000 A @ 208.0 V
Design Code	B

Part Detail

Revision	AG
Type	AC
Mech. spec.	10E950
Base	
Status	PRD/A
Elec. spec.	10WZ033
Layout	10LYE950
Eff. date	11-22-2024
CD Diagram	CD0180
Poles	06
Leads	9#10
Proprietary	False
Created date	06-04-2012

Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
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	23.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	G
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	X1056M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	28.61 IN
Power Factor	78
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	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding

Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1180 rpm 980 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.	10E950Z033G1											
CAT.NO.	EM7079T-I											
HP	20//15 NEMA MG-1 PT.5,IP55											
VOLTS	230/460//190/380											
AMPS	50/25//46/23											
RPM	1180//980				MOTOR WEIGHT				475			
HERTZ	60//50		PH	3	CL	F	DE BRG	6311				
SER.F.	1.15		DES	B	CODE	G	ODE BRG			6309		
FRAME	286T		GREASE			POLYREX EM						
RATING	40C AMB-CONT											
					NEMA-NOM-EFF				91.7		PF	78
	55C AMB @ 1.0 SF 60C RISE											

AC Induction Motor Performance Data

Record # 38689

Typical performance - not guaranteed values

Winding: 10WGZ033-R001				Type: 1056M		Enclosure: XPFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		20//15		Full Load Torque		89.2 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		50/25//46/23		Breakdown Torque		243 LB-FT	
R.P.M.		1180//980		Pull-up Torque		94 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		134 LB-FT	
NEMA Design Code		B	KVA Code	G	Starting Current		146 A
Service Factor (S.F.)		1.15		No-load Current		10.7 A	
NEMA Nom. Eff.		91.7	Power Factor	78	Line-line Res. @ 25°C		0.477 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		51°C	
S.F. Amps				Temp. Rise @ S.F. Load		63°C	
				Locked-rotor Power Factor		30	
				Rotor inertia		6.86 LB-FT2	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	44	66	76	80	81	81	81
Efficiency	88.5	92.2	93.1	92.8	91.4	91.3	92
Speed	1194	1190	1185	1180	1174	1168	1176
Line amperes	12.1	15.7	20.1	25.4	31.3	38.2	28.9

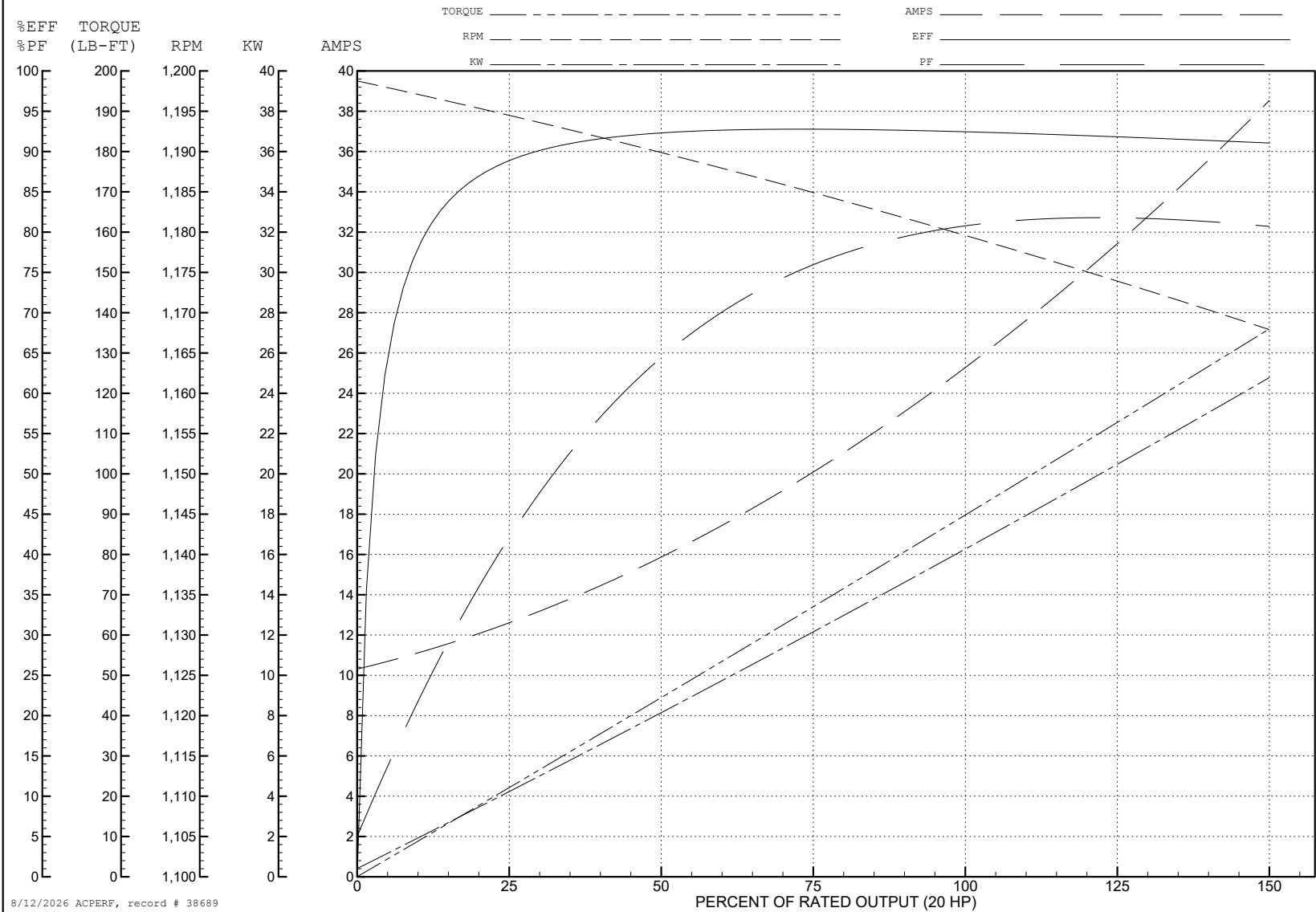
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WINDING # 10WGZ033

Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1180 RPM 460 V 1056M

TORQUES (LB-FT): PO=243 PU=94 LR=134 LRA=146



AC Induction Motor Performance Data

Record # 38690

Typical performance - not guaranteed values

Winding: 10WGZ033-R001				Type: 1056M		Enclosure: XPFC	
Nameplate Data				380 V, 50 Hz: High Voltage Connection			
Rated Output (HP)		20//15		Full Load Torque		80.4 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		50/25//46/23		Breakdown Torque		234 LB-FT	
R.P.M.		1180//980		Pull-up Torque		97.3 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		139 LB-FT	
NEMA Design Code		B	KVA Code	G	Starting Current		142 A
Service Factor (S.F.)		1.15		No-load Current		10.5 A	
NEMA Nom. Eff.		91.7	Power Factor	78	Line-line Res. @ 25°C		0.477 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		45°C	
S.F. Amps				Temp. Rise @ S.F. Load		56°C	
				Locked-rotor Power Factor		34	
				Rotor inertia		6.86 LB-FT2	

Load Characteristics 380 V, 50 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	63	75	79	81	82	80
Efficiency	87.2	91.4	92.4	92.1	90.7	90.8	91.3
Speed	995	991	986	982	977	971	979
Line amperes	11.7	14.9	18.7	23.5	28.7	34.8	26.6

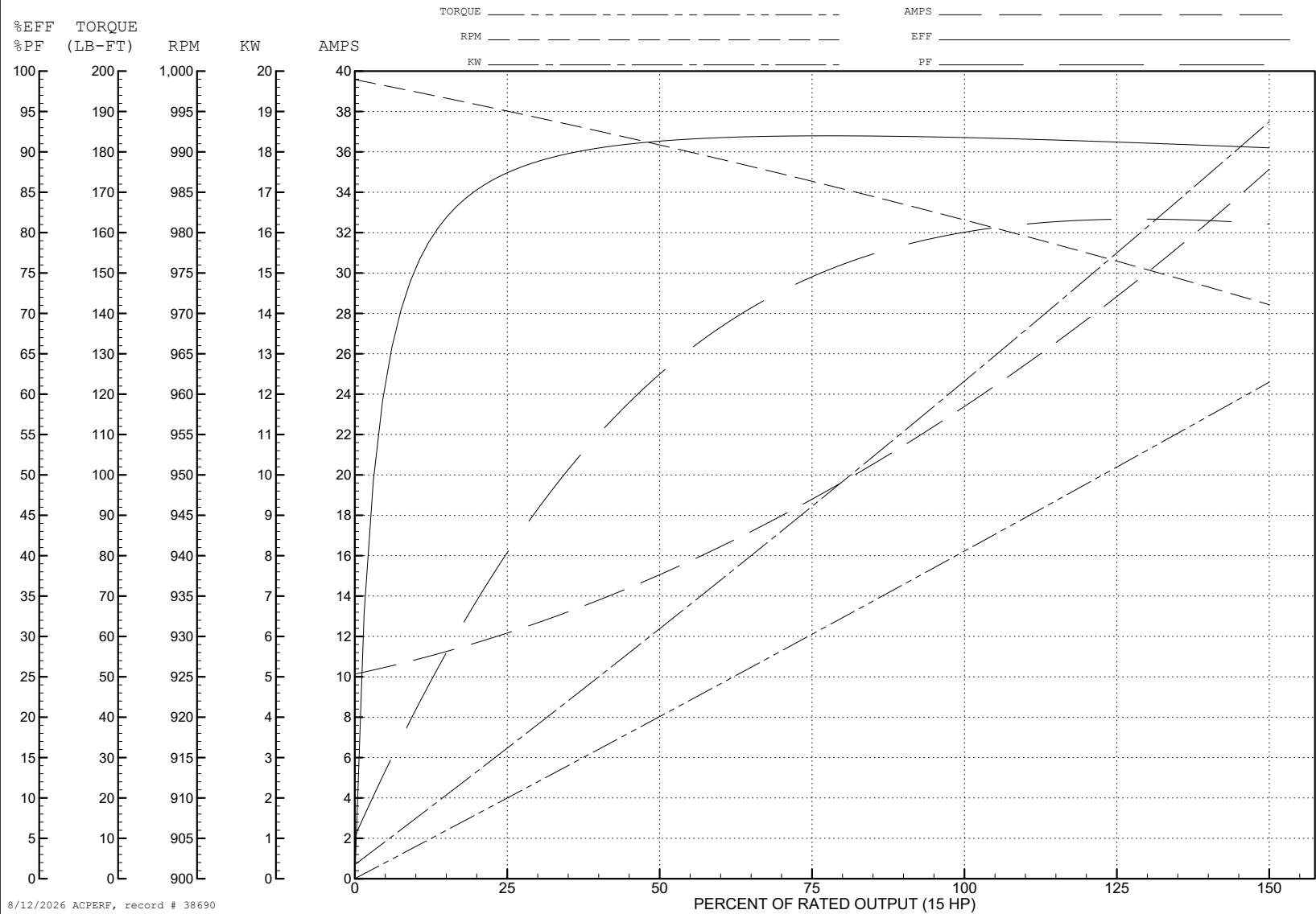
ABB Motors and Mechanical Inc.

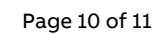
WINDING # 10WGZ033

Typical performance - not guaranteed values.

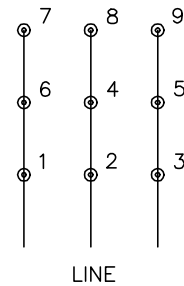
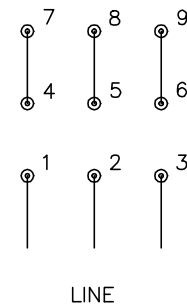
15 HP 3 PH 50 HZ 982 RPM 380 V 1056M

TORQUES (LB-FT): PO=234 PU=97.3 LR=139 LRA=142





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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