

ABB BALDOR RELIANCE III

Customer information packet

EM7083T-I

30//25HP, 3520//2920RPM, 3PH, 60//50HZ, 286T

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	286TS
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	30.000 HP @ 60 HZ 25.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	3000 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	33.000 A @ 460.0 V 34.000 A @ 380.0 V 66.000 A @ 230.0 V 68.000 A @ 190.0 V 72.000 A @ 208.0 V
Design Code	B

Part Detail

Revision	Z
Type	AC
Mech. spec.	10F284
Base	
Status	PRD/A
Elec. spec.	10WGZ035
Layout	10LYF284
Eff. date	11-22-2024
CD Diagram	CD0180
Poles	02
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	33.0 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	X1046M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	27.23 IN
Power Factor	90
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	2920 rpm
	3520 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.	10F284Z035G1											
CAT.NO.	EM7083T-I											
HP	30//25 NEMA MG-1 PT.5,IP55											
VOLTS	230/460//190/380											
AMPS	66/33//68/34											
RPM	3520//2920					MOTOR WEIGHT			495			
HERTZ	60//50	PH	3	CL	F	DE BRG	6311					
SER.F.	1.15	DES	B	CODE		G	ODE BRG		6309			
FRAME	286TS		GREASE			POLYREX EM						
RATING	40C AMB-CONT											
					NEMA-NOM-EFF				91.7		PF	90
	55C AMB @ 1.0 SF 60C RISE											

AC Induction Motor Performance Data

Record # 53267

Typical performance - not guaranteed values

Winding: 10WGZ035-R003				Type: 1046M		Enclosure: XPFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		30//25		Full Load Torque		44.4 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		66/33//68/34		Breakdown Torque		169 LB-FT	
R.P.M.		3520//2920		Pull-up Torque		60.8 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		80 LB-FT	
NEMA Design Code		B	KVA Code	Starting Current		223 A	
Service Factor (S.F.)		1.15		No-load Current		8.85 A	
NEMA Nom. Eff.		91.7	Power Factor	Line-line Res. @ 25°C		0.217 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		58°C	
S.F. Amps				Temp. Rise @ S.F. Load		72°C	
				Locked-rotor Power Factor		24	
				Rotor inertia		1.97 LB-FT2	

Load Characteristics 460 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	64	83	89	91	92	91	92
Efficiency	89.7	92.9	93.6	92.8	92.5	91.5	92.6
Speed	3580	3561	3544	3525	3504	3480	3512
Line amperes	12	18.3	25.2	33	41.5	50.5	38.1

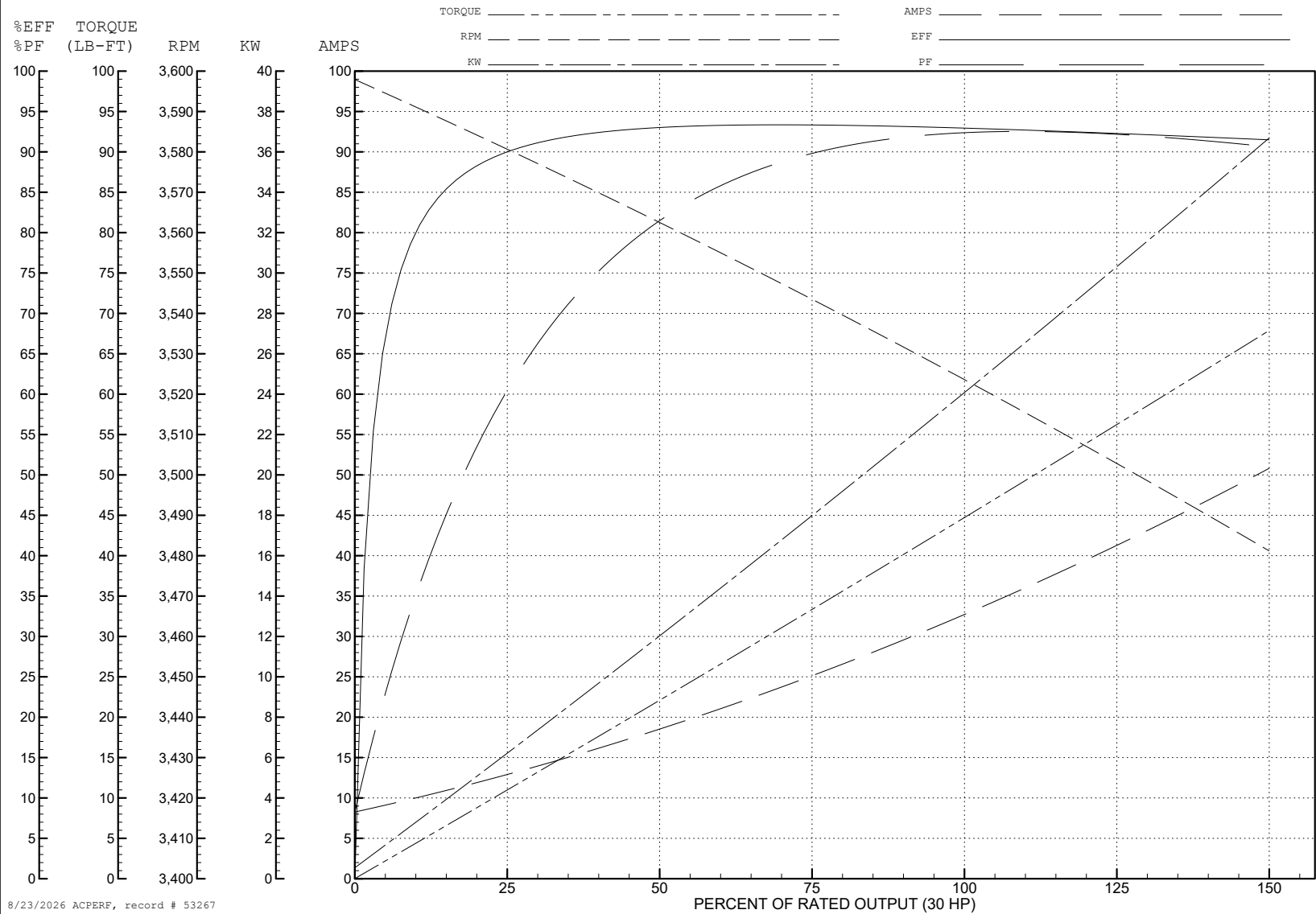
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WINDING # 10WGZ035

Typical performance - not guaranteed values.

30 HP 3 PH 60 HZ 3525 RPM 460 V 1046M

TORQUES (LB-FT): PO=169 PU=60.8 LR=80 LRA=223



AC Induction Motor Performance Data

Record # 53268

Typical performance - not guaranteed values

Winding: 10WGZ035-R003			Type: 1046M		Enclosure: XPFC		
Nameplate Data				380 V, 50 Hz: High Voltage Connection			
Rated Output (HP)		30//25		Full Load Torque		44.7 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		66/33//68/34		Breakdown Torque		164 LB-FT	
R.P.M.		3520//2920		Pull-up Torque		64.7 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		85.2 LB-FT	
NEMA Design Code		B	KVA Code	G	Starting Current		219 A
Service Factor (S.F.)		1.15		No-load Current		8.74 A	
NEMA Nom. Eff.		91.7	Power Factor	90	Line-line Res. @ 25°C		0.217 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		59°C	
S.F. Amps				Temp. Rise @ S.F. Load		74°C	
				Locked-rotor Power Factor		27	
				Rotor inertia		1.97 LB-FT2	

Load Characteristics 380 V, 50 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	65	84	89	91	92	91	92
Efficiency	88.5	92.3	92.8	92	91.4	90.2	91.6
Speed	2981	2963	2946	2927	2906	2883	2914
Line amperes	12	18.5	25.5	33.6	42.3	51.7	38.8

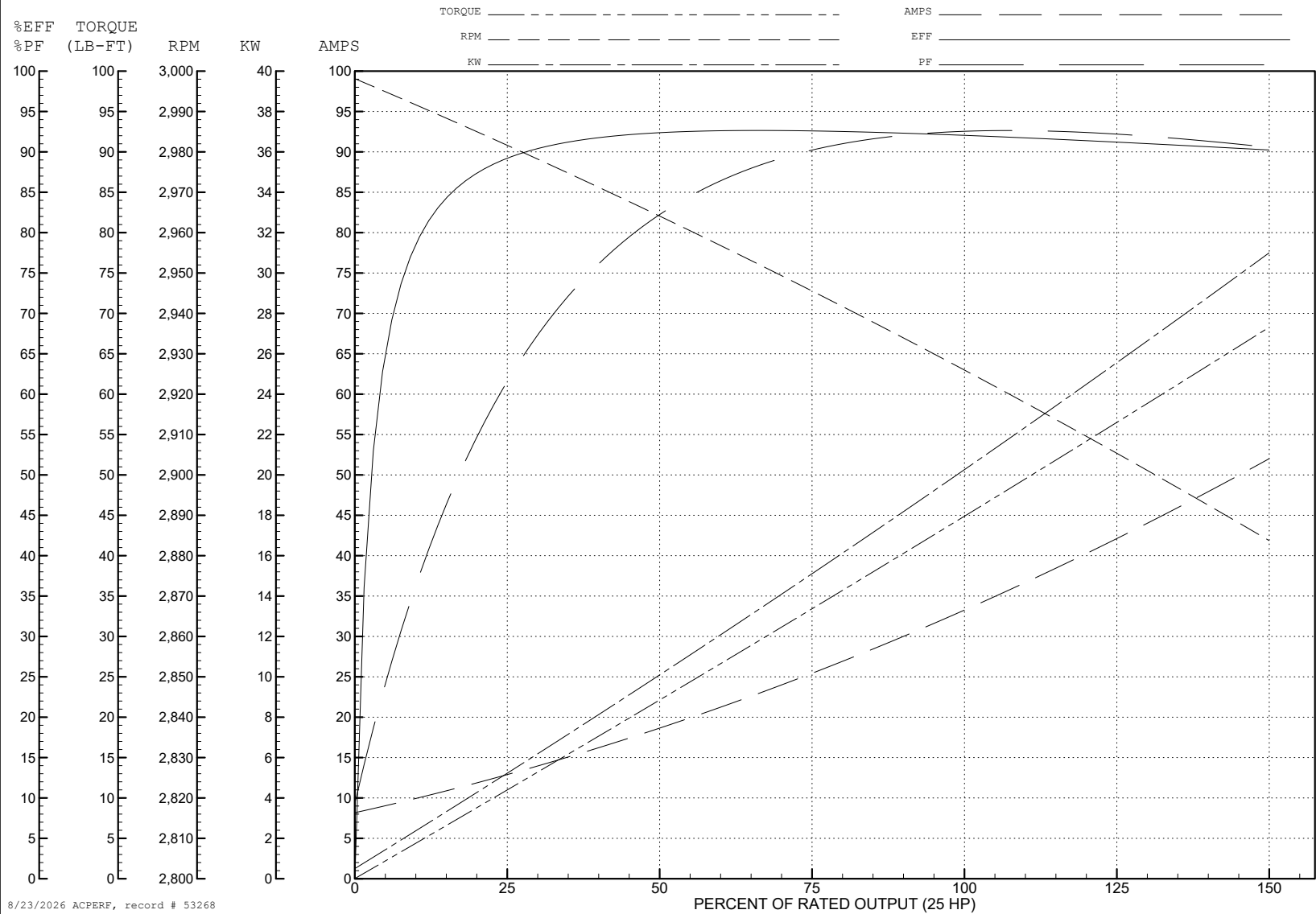
ABB Motors and Mechanical Inc.

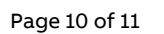
WINDING # 10WGZ035

Typical performance - not guaranteed values.

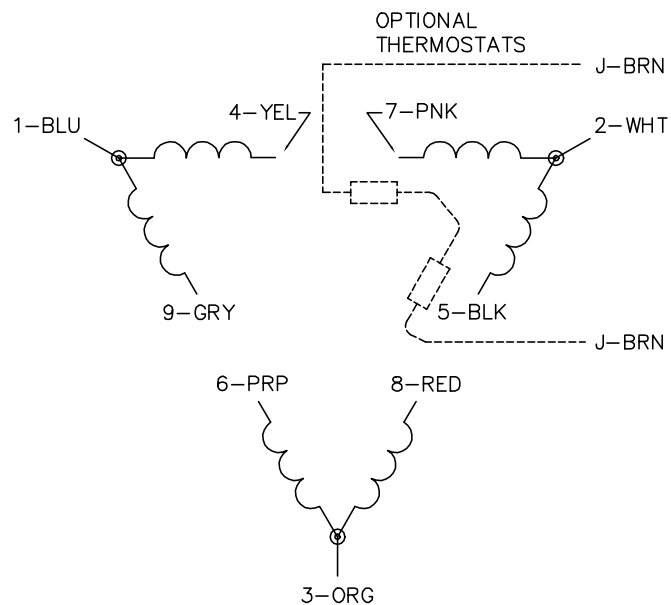
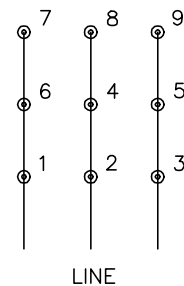
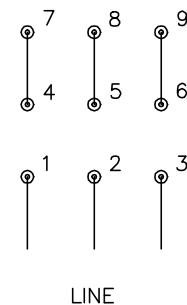
25 HP 3 PH 50 HZ 2927 RPM 380 V 1046M

TORQUES (LB-FT): PO=164 PU=64.7 LR=85.2 LRA=219





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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