

ABB BALDOR RELIANCE III

Customer information packet

EM7064T-C

50//40HP, 1775//1470RPM, 3PH, 60//50HZ, 326T

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

Division - Division I

Specifications

Enclosure	XPFC
Frame	326T
Frame Material	Iron
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	CLI GP C,D; CLII GP F,G
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	40.000 HP @ 50 HZ 50.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 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 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	58.000 A @ 460.0 V 56.000 A @ 380.0 V 116.000 A @ 230.0 V 112.000 A @ 190.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	M
Type	AC
Mech. spec.	12R031
Base	
Status	INA/A
Elec. spec.	12WGY141
Layout	12LYR031
Eff. date	09-04-2020
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	06-07-2013

Efficiency @ 100% Load	94.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Haz Area Temp Code	T4
Heater Indicator	No Heater
High Voltage Full Load Amps	56.0 a
Insulation Class	B
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 @ 6 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1272M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	32.00 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	1.00
Shaft Diameter	2.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1470 rpm

	1775 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

NP0978XPSLEV											
NO.								CC	010A		
SER.								TEMP CODE		T4	
SPEC.	12R031Y141G1										
CAT.NO.											
HP	50//40										
VOLTS	230/460//190/380										
AMPS	116/58//112/56										
RPM	1775//1470						MOTOR WEIGHT		790		
HERTZ	60//50		PH	3	CL	B	DE BRG	6312			
SER.F.	1.00		DES	A	CODE	H	ODE BRG	6311			
FRAME	326T		GREASE			POLYREX EM					
RATING	40C AMB-CONT										
NEMA-NOM-EFF	94.5		PF	85							

AC Induction Motor Performance Data

Record # 42428

Typical performance - not guaranteed values

Winding: 12WGY141-R020				Type: 1272M		Enclosure: XPFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		50//40		Full Load Torque		147 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		116/58//112/56		Breakdown Torque		396 LB-FT	
R.P.M.		1775//1470		Pull-up Torque		183 LB-FT	
Hz		60//50		Phase		3	
NEMA Design Code		A		KVA Code		G	
Service Factor (S.F.)		1		No-load Current		19.8 A	
NEMA Nom. Eff.		94.5		Power Factor		85	
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load	
						Locked-rotor Power Factor	
						Rotor inertia	

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	53	74	83	86	87	87
Efficiency	91.3	94.3	94.8	94.6	94	93.1
Speed	1794.5	1789.3	1783.5	1777.5	1770.7	1761.5
Line amperes	24.2	33.5	44.7	57.6	71.5	90

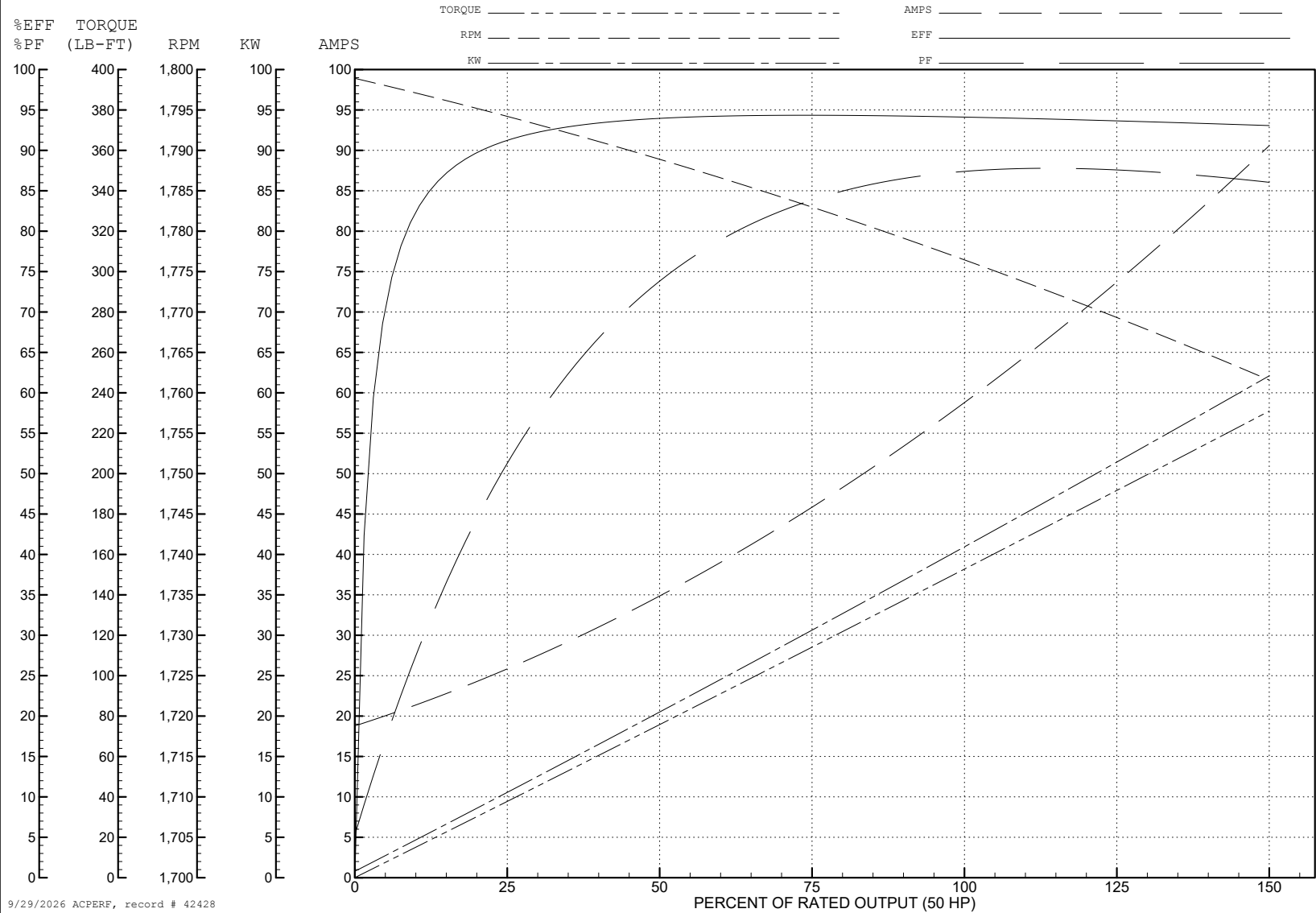
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WINDING # 12WGY141

Typical performance - not guaranteed values.

50 HP 3 PH 60 HZ 1777.5 RPM 460 V 1272M

TORQUES (LB-FT): PO=396 PU=183 LR=254 LRA=397



AC Induction Motor Performance Data

Record # 42429

Typical performance - not guaranteed values

Winding: 12WGY141-R020				Type: 1272M		Enclosure: XPFC	
Nameplate Data				380 V, 50 Hz: High Voltage Connection			
Rated Output (HP)		50//40		Full Load Torque		141 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		116/58//112/56		Breakdown Torque		383 LB-FT	
R.P.M.		1775//1470		Pull-up Torque		192 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		267 LB-FT	
NEMA Design Code		A	KVA Code	G	Starting Current		389 A
Service Factor (S.F.)		1		No-load Current		19.5 A	
NEMA Nom. Eff.		94.5	Power Factor	85	Line-line Res. @ 25°C		0.107 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		60°C	
S.F. Amps				Temp. Rise @ S.F. Load		74°C	
				Locked-rotor Power Factor		29	
				Rotor inertia		9.59 LB-FT2	

Load Characteristics 380 V, 50 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	52	74	83	86	87	87
Efficiency	90	93.7	93.7	93.5	93.2	92.2
Speed	1495	1490	1484	1479	1472	1464
Line amperes	23.7	32.7	43.6	56.1	69.6	87.7

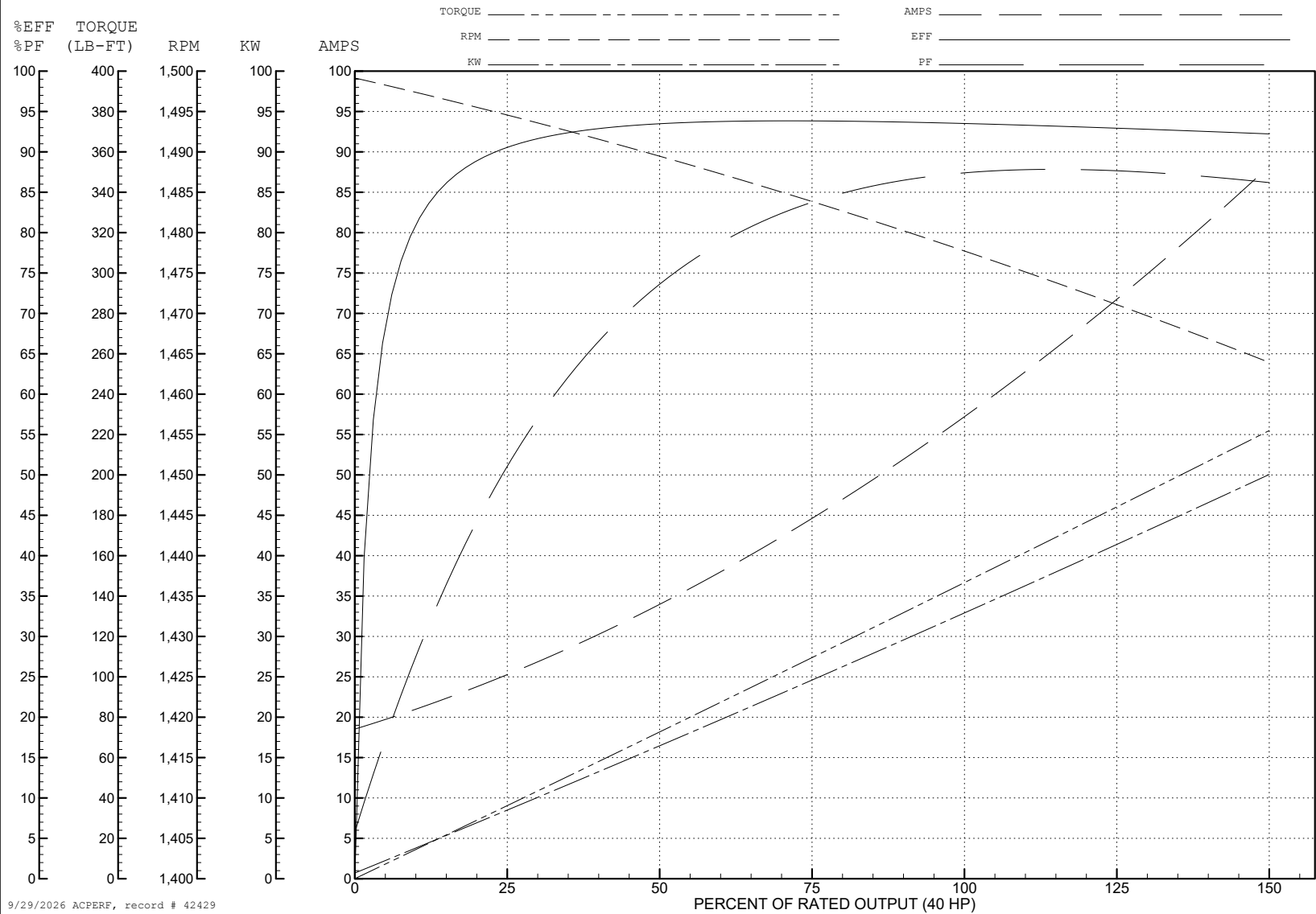
ABB Motors and Mechanical Inc.

WINDING # 12WGY141

Typical performance - not guaranteed values.

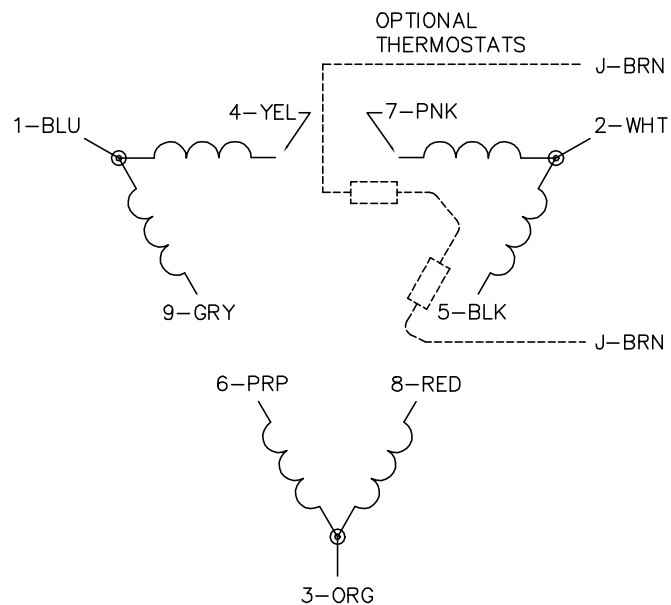
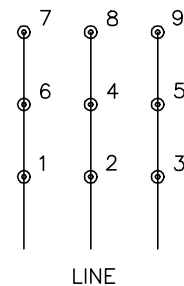
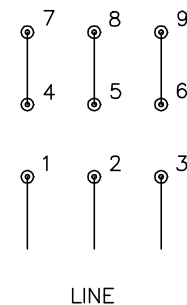
40 HP 3 PH 50 HZ 1479 RPM 380 V 1272M

TORQUES (LB-FT): PO=383 PU=192 LR=267 LRA=389





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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