

ABB BALDOR RELIANCE III

Customer information packet

CPX14146T

1HP, 1770//1470RPM, 3PH, 60//50HZ, 143T, 0520

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

Division - Division I

Specifications

Enclosure	XPFC
Frame	143T
Frame Material	Iron
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	CLI GP C,D; CLII GP E,F,G
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 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 EEV 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
Constant Torque Speed Range	6
Current @ Voltage	3.200 A @ 230.0 V 3.200 A @ 208.0 V 3.000 A @ 190.0 V 1.600 A @ 460.0 V 1.500 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	D
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	05WGX508
Layout	05LY-000-046
Eff. date	09-24-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	10-28-2021

Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	1.5 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	N
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0520M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	16.66 IN
Power Factor	68
Product Family	Super-E Chemical Processing
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1770 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

NP2033XPSLEV											
NO.						CC	010A				
S/N						TEMP CODE		T3C			
SPEC.	05-0000-1051					INV.TYPE		PWM			
CAT.NO.	CPX14146T					C HP FR	60	C HP TO	90		
HP	1//.75					CT HZ FROM		6	CT HZ TO		60
VOLTS	230/460//190/380					VT HZ FROM		6	VT HZ TO		60
AMPS	3.2/1.6//3/1.5				MAG CUR	2.2/1.1					
RPM	1770//1470				MX RPM	2700					
HZ	60//50	PH	3	CL	F	NOM.EFF.		85.5			
SER.F.	1.00	DES	B	SL HZ	1	WK2	0.144				
FRAME	143T	RATING		40C AMB-CONT							
BLANK	55C AT 1.00SF SINEWAVE										
	1.15 SF SINEWAVE				IP55						

AC Induction Motor Performance Data

Record # 108239

Typical performance - not guaranteed values

Winding: 05WGX508-R029			Type: 0520M		Enclosure: XPFC			
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		1//.75		Full Load Torque		2.98 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		3.2/1.6//3/1.5		Breakdown Torque		13.9 LB-FT		
R.P.M.		1770//1470		Pull-up Torque		8 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		9.18 LB-FT	
NEMA Design Code		B		KVA Code	N	Starting Current		14.4 A
Service Factor (S.F.)		1		No-load Current		1.11 A		
NEMA Nom. Eff.		85.5	Power Factor		67	Line-line Res. @ 25°C		16.7 Ω
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		24°C
						Locked-rotor Power Factor		61.9
						Rotor inertia		0.144 lb-ft²

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	29	46	59	68	75	79
Efficiency	71.3	81.3	84.7	85.6	85.4	84.7
Speed	1791	1784	1777	1769	1760	1751
Line amperes	1.14	1.25	1.41	1.61	1.84	2.11

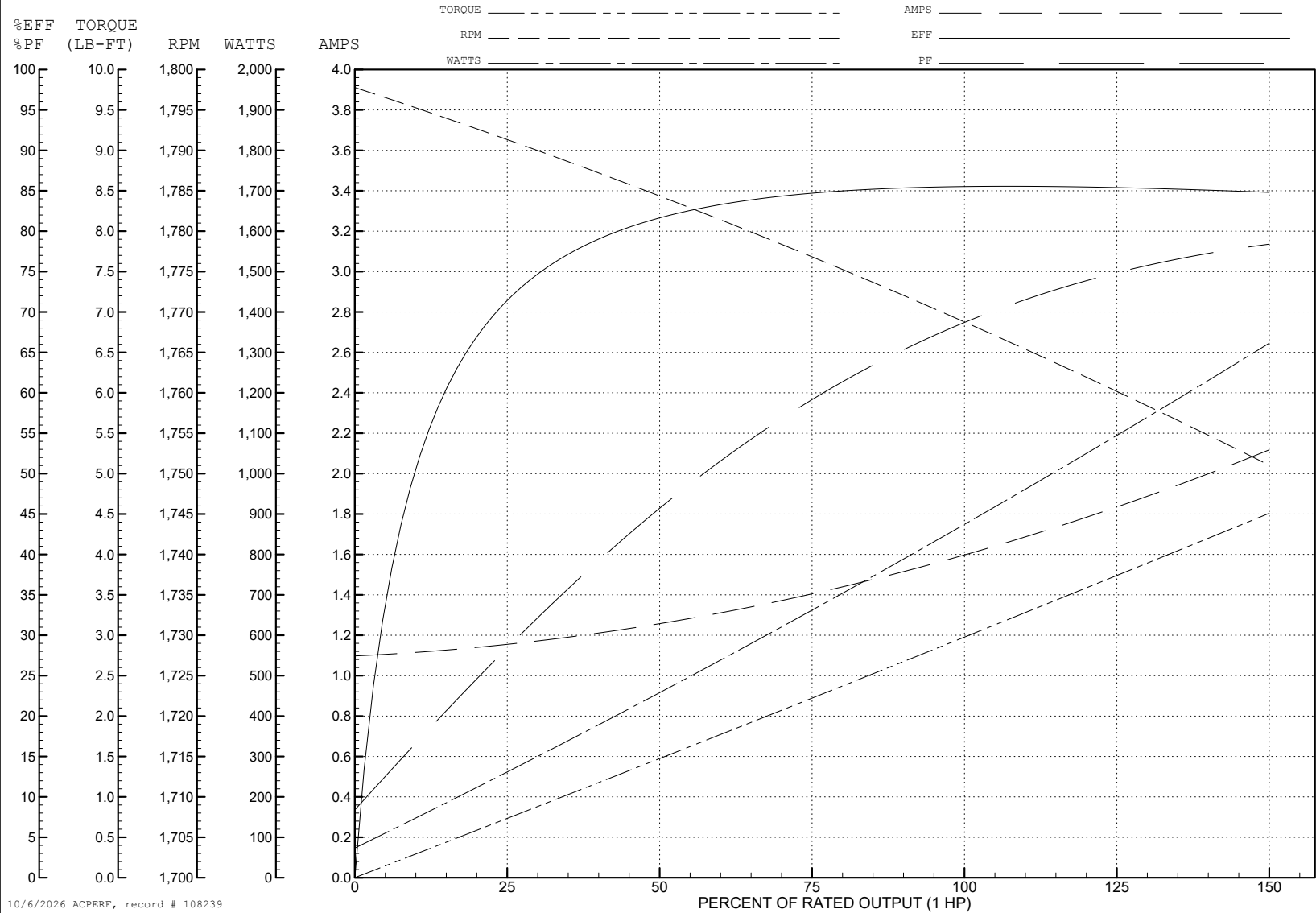
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WINDING # 05WGX508

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1769 RPM 460 V 0520M

TORQUES (LB-FT): PO=13.9 PU=8 LR=9.18 LRA=14.4



AC Induction Motor Performance Data

Record # 108240

Typical performance - not guaranteed values

Winding: 05WGX508-R029			Type: 0520M		Enclosure: XPFC			
Nameplate Data				380 V, 50 Hz: High Voltage Connection				
Rated Output (HP)		1//.75		Full Load Torque		2.68 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		3.2/1.6//3/1.5		Breakdown Torque		12.51 LB-FT		
R.P.M.		1770//1470		Pull-up Torque		7.58 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		8.69 LB-FT	
NEMA Design Code		B		KVA Code	N	Starting Current		13.35 A
Service Factor (S.F.)		1		No-load Current		1.09 A		
NEMA Nom. Eff.		85.5	Power Factor		67	Line-line Res. @ 25°C		16.7 Ω
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		22°C
						Locked-rotor Power Factor		67.5
						Rotor inertia		0.144 lb-ft²

Load Characteristics 380 V, 50 Hz, 0.75 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	28	44	57	66	74	78
Efficiency	69.5	79.9	83.2	84.4	84.3	83.5
Speed	1492	1486	1479	1472	1464	1456
Line amperes	1.11	1.2	1.34	1.52	1.72	1.96

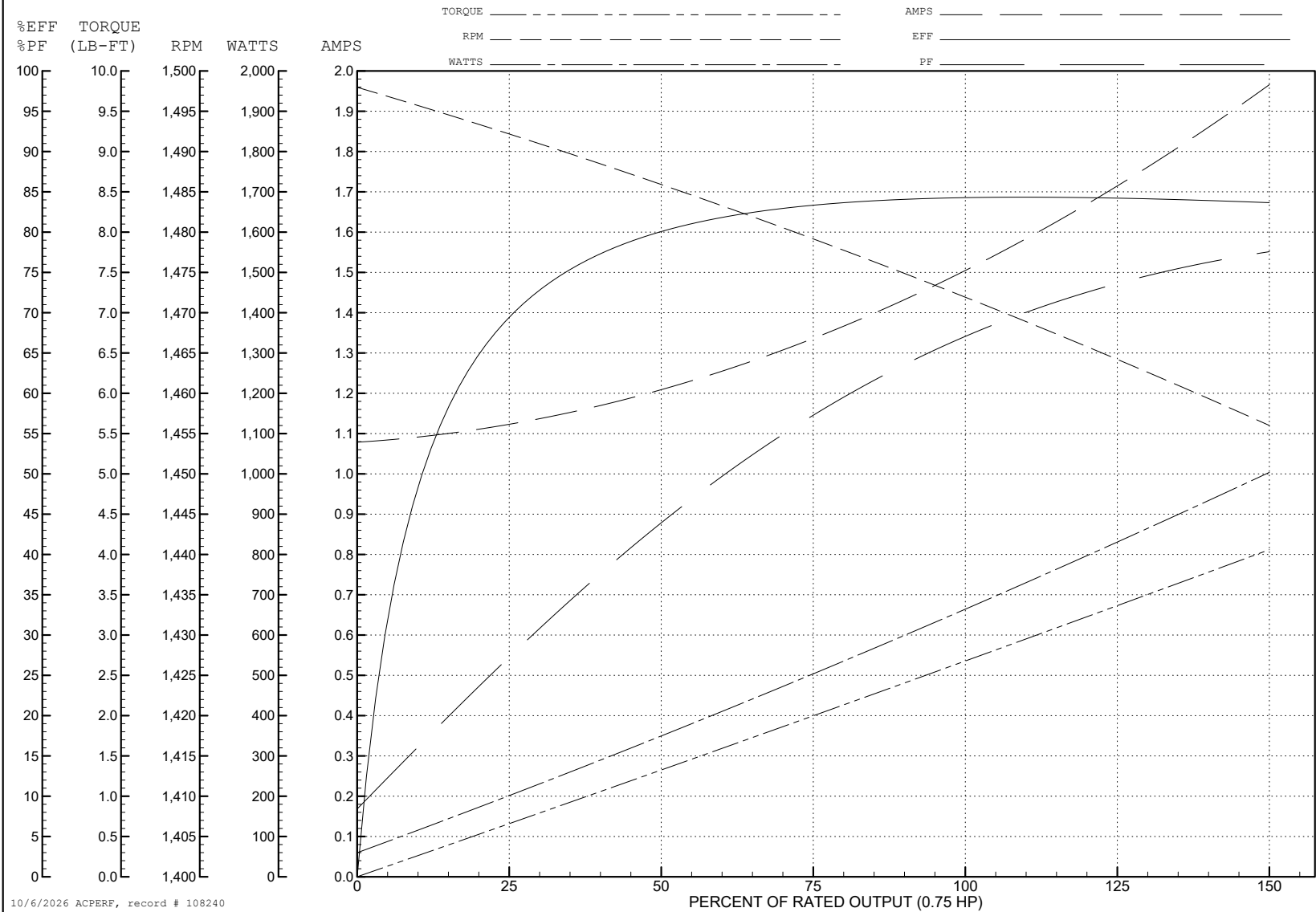
ABB Motors and Mechanical Inc.

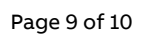
WINDING # 05WGX508

0.75 HP 3 PH 50 HZ 1472 RPM 380 V 0520M

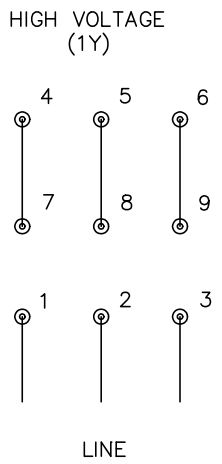
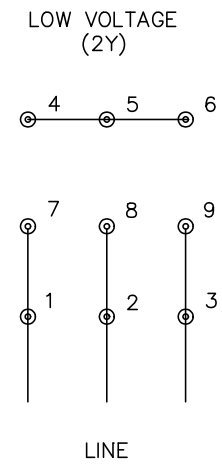
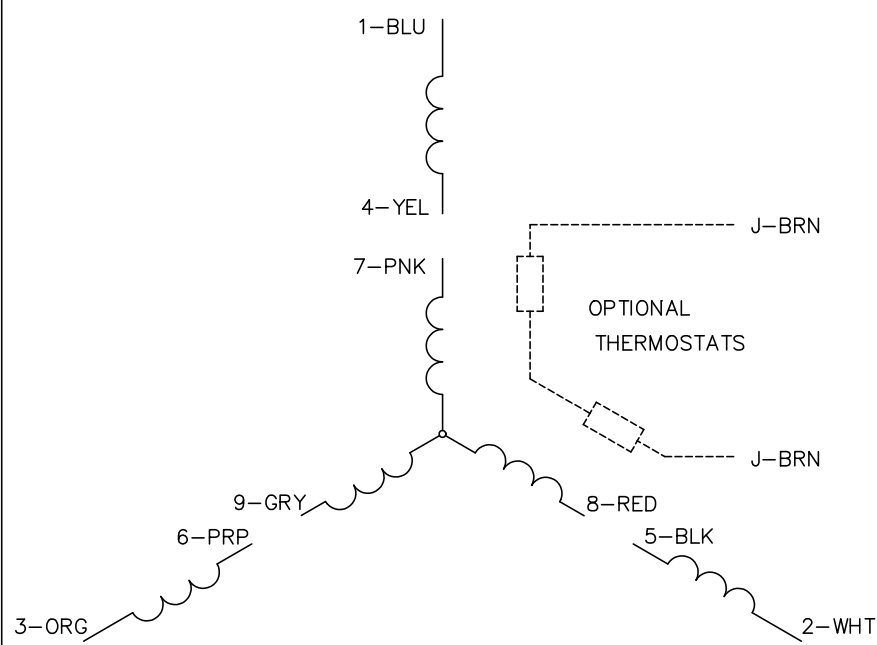
Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=12.51 PU=7.58 LR=8.69 LRA=13.35





CD0005



- 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: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
900000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005