

ABB BALDOR RELIANCE III

Customer information packet

CPX21726T

7.5HP, 3510//2925RPM, 3PH, 60HZ, 213T, XPFC, F

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

Division - Division I

Specifications

Enclosure	XPFC
Frame	213T
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	5.000 HP @ 50 HZ 7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 190.0 V @ 50 HZ 460.0 V @ 60 HZ 380.0 V @ 50 HZ
Agency Approvals	UL CSA EEV
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	8.600 A @ 460.0 V 7.200 A @ 380.0 V 17.200 A @ 230.0 V 14.400 A @ 190.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	07WGY010
Layout	07LY-000-018
Eff. date	04-13-2021
CD Diagram	CD0005
Poles	02
Leads	9#14
Proprietary	False
Created date	04-26-2019

Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	7.2 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	IP55
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0732M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	20.02 IN
Power Factor	88
Product Family	Super-E Chemical Processing
Pulley Face Code	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	3510 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.	07-0000-0121					INV.TYPE		PWM			
CAT.NO.	CPX21726T					C HP FR	60	C HP TO	90		
HP	7.5//5					CT HZ FROM		6	CT HZ TO		60
VOLTS	230/460//190/380					VT HZ FROM		6	VT HZ TO		60
AMPS	17.2/8.6//14.4/7.2				MAG CUR	5.6/2.8					
RPM	3510//2925				MX RPM	5400					
HZ	60//50	PH	3	CL	F	NOM.EFF.		91.7			
SER.F.	1.00	DES	B	SL HZ	1.5	WK2	0.292				
FRAME	213T	RATING		40C AMB-CONT							
BLANK	55C AMB AT 1.00 SF SINEWAVE										
	NEMA MG-1 PART 5, IP55					1.15 SF SINEWAVE					

AC Induction Motor Performance Data

Record # 75759

Typical performance - not guaranteed values

Winding: 07WGY010-R003			Type: 0732M		Enclosure: XPFC			
Nameplate Data					460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		7.5		Full Load Torque		11.1 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		17.2/8.6//14.4/7.2		Breakdown Torque		45.1 LB-FT		
R.P.M.		3510//2925		Pull-up Torque		15 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		21.3 LB-FT	
NEMA Design Code		B		KVA Code	H	Starting Current		61.4 A
Service Factor (S.F.)		1		No-load Current		2.75 A		
NEMA Nom. Eff.		91.7	Power Factor		88	Line-line Res. @ 25°C		1.14 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		41°C		
				Locked-rotor Power Factor		31.7		
				Rotor inertia		0.292 LB-FT2		

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	57	78	85	89	89	90
Efficiency	86.7	91.2	92.2	91.8	90.9	89.8
Speed	3579	3558	3536	3510	3484	3454
Line amperes	3.42	4.86	6.63	8.52	10.7	13

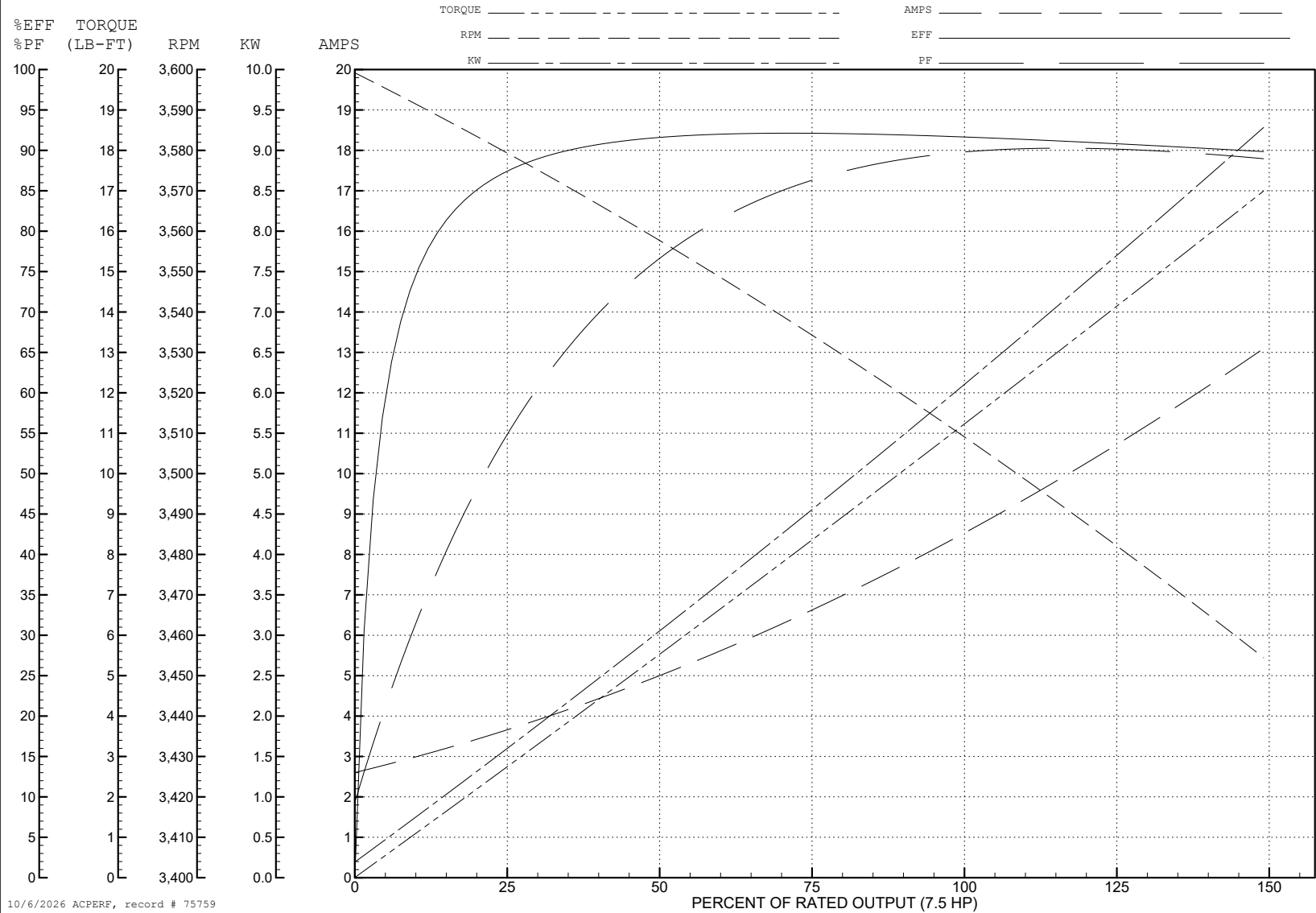
ABB Motors and Mechanical Inc.

WINDING # 07WGY010

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 3510 RPM 460 V 0732M

TORQUES (LB-FT): PO=45.1 PU=15 LR=21.3 LRA=61.4



AC Induction Motor Performance Data

Record # 75760

Typical performance - not guaranteed values

Winding: 07WGY010-R003			Type: 0732M		Enclosure: XPFC			
Nameplate Data				380 V, 50 Hz: High Voltage Connection				
Rated Output (HP)		7.5		Full Load Torque		8.88 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		17.2/8.6//14.4/7.2		Breakdown Torque		43.08 LB-FT		
R.P.M.		3510//2925		Pull-up Torque		15.9 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		22.58 LB-FT	
NEMA Design Code		B		KVA Code	H	Starting Current		59.71 A
Service Factor (S.F.)		1		No-load Current		2.71 A		
NEMA Nom. Eff.		91.7	Power Factor	88	Line-line Res. @ 25°C		1.14 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		32°C		
				Locked-rotor Power Factor		35.9		
				Rotor inertia		0.292 LB-FT2		

Load Characteristics 380 V, 50 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	53	74	83	87	89	89
Efficiency	80	87	89.2	89.6	89.2	88.4
Speed	2982	2964	2947	2926	2905	2881
Line amperes	3.22	4.34	5.7	7.18	8.88	10.68

ABB Motors and Mechanical Inc.

WINDING # 07WGY010

Typical performance - not guaranteed values.

5 HP 3 PH 50 HZ 2926 RPM 380 V 0732M

TORQUES (LB-FT) : PO=43.08 PU=15.9 LR=22.58 LRA=59.71

