

ABB BALDOR RELIANCE III

Customer information packet

CPX21566T

5HP, 1160//965RPM, 3PH, 60HZ, 215T, XPFC, F1

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

Division - Division I

Specifications

Enclosure	XPFC
Frame	215T
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	3.000 HP @ 50 HZ 5.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 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	7.100 A @ 460.0 V 5.500 A @ 380.0 V 14.200 A @ 230.0 V 11.000 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.	07WGY242
Layout	07LY-000-018
Eff. date	04-13-2021
CD Diagram	CD0005
Poles	06
Leads	9#14
Proprietary	False
Created date	04-26-2019

Efficiency @ 100% Load	89.8 %
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	5.5 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	IP55
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	1800 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0748M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	20.02 IN
Power Factor	74
Product Family	General Purpose
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	1160 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.	07-0000-0120						INV.TYPE	PWM				
CAT.NO.	CPX21566T						C HP FR	60	C HP TO	90		
HP	5//3						CT HZ FROM	6	CT HZ TO	60		
VOLTS	230/460//190/380						VT HZ FROM	6	VT HZ TO	60		
AMPS	14.2/7.1//11/5.5						MAG CUR	6.4/3.2				
RPM	1160//965						MX RPM	1800				
HZ	60//50	PH	3	CL	F	NOM.EFF.	89.8					
SER.F.	1.00	DES	B	SL HZ	2	WK2	1.19					
FRAME	215T	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 # 74889

Typical performance - not guaranteed values

Winding: 07WGY242-R003			Type: 0748M		Enclosure: TEFC			
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		5//3		Full Load Torque		22.9 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		14.2/7.1//11/5.5		Breakdown Torque		68.1 LB-FT		
R.P.M.		1158//965		Pull-up Torque		40.7 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		48.9 LB-FT	
NEMA Design Code		B		KVA Code	J	Starting Current		45.7 A
Service Factor (S.F.)		1		No-load Current		3.19 A		
NEMA Nom. Eff.		89.8	Power Factor		74	Line-line Res. @ 25°C		1.91 Ω
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		53°C
						Locked-rotor Power Factor		21.7
						Rotor inertia		1.19 LB-FT2

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	39	58	69	74	76	76
Efficiency	86.7	90.4	90.9	89.8	88.2	86.1
Speed	1189	1179	1170	1158	1144	1126
Line amperes	3.53	4.38	5.57	7.08	8.71	10.7

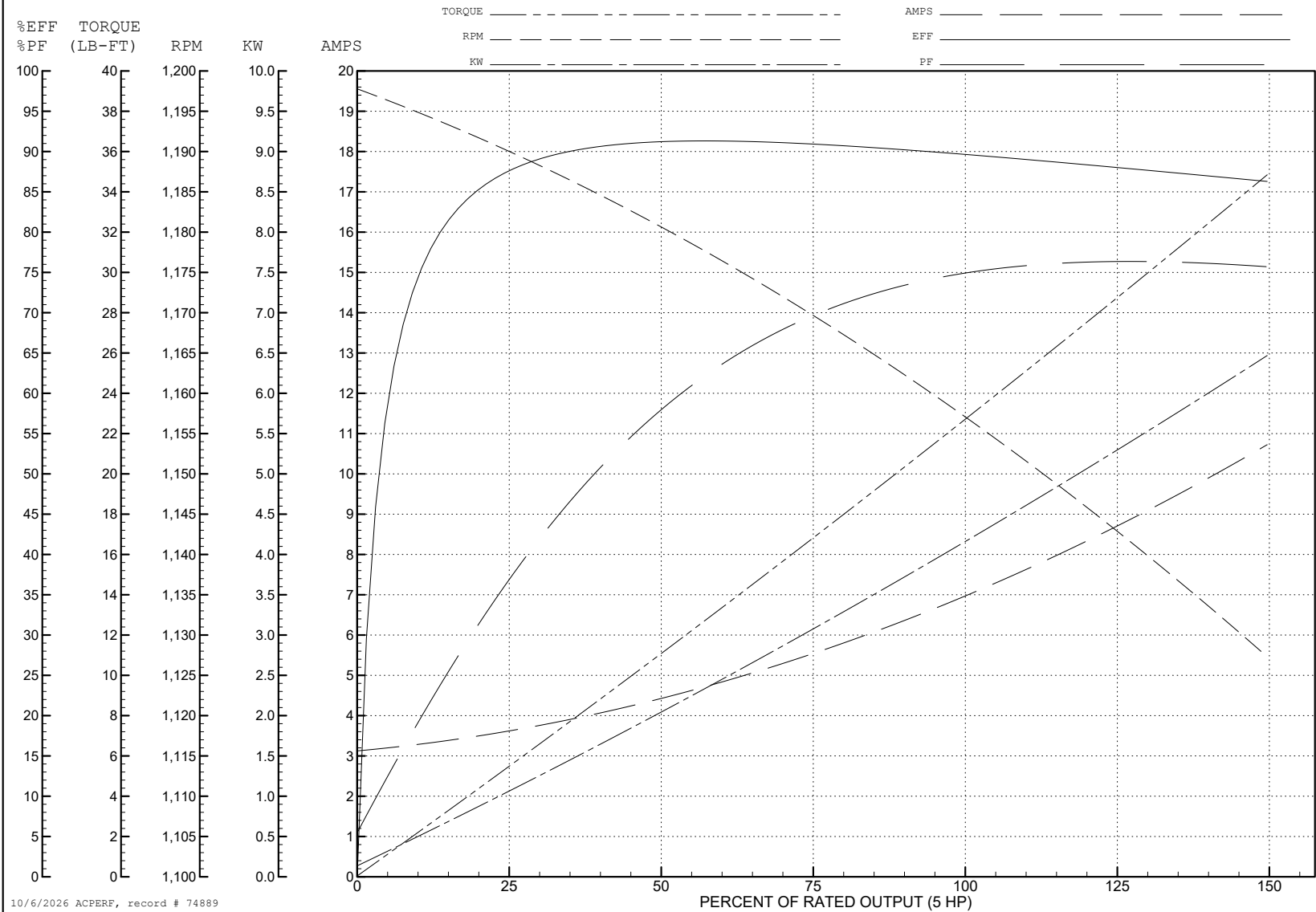
ABB Motors and Mechanical Inc.

WINDING # 07WGY242

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1158 RPM 460 V 0748M

TORQUES (LB-FT): PO=68.1 PU=40.7 LR=48.9 LRA=45.7



AC Induction Motor Performance Data

Record # 74890

Typical performance - not guaranteed values

Winding: 07WGY242-R003			Type: 0748M		Enclosure: TEFC			
Nameplate Data			380 V, 50 Hz: High Voltage Connection					
Rated Output (HP)		5//3	Full Load Torque		16.41 LB-FT			
Volts		230/460//190/380	Start Configuration		direct on line			
Full Load Amps		14.2/7.1//11/5.5	Breakdown Torque		65.64 LB-FT			
R.P.M.		1158//965	Pull-up Torque		44.98 LB-FT			
Hz		60//50	Phase		3	Locked-rotor Torque	54.05 LB-FT	
NEMA Design Code		B	KVA Code		J	Starting Current		44.82 A
Service Factor (S.F.)		1	No-load Current		3.15 A			
NEMA Nom. Eff.		89.8	Power Factor		74	Line-line Res. @ 25°C		1.91 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		36°C	
					Locked-rotor Power Factor		25.1	
					Rotor inertia		1.19 LB-FT2	

Load Characteristics 380 V, 50 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	32	50	62	69	74	76
Efficiency	80.8	87.3	89	88.9	88.1	87
Speed	991	984	978	970	961	951
Line amperes	3.36	3.88	4.61	5.57	6.56	7.68

ABB Motors and Mechanical Inc.

WINDING # 07WGY242

Typical performance - not guaranteed values.

3 HP 3 PH 50 HZ 970 RPM 380 V 0748M

TORQUES (LB-FT) : PO=65.64 PU=44.98 LR=54.05 LRA=44.82

