

ABB BALDOR RELIANCE III

Customer information packet

CDRX21744T-5

7.5HP, 1770RPM, 3PH, 60HZ, 213TC, XPFC, F1

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	213TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 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	7.500 A @ 575.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	7.5 a
Insulation Class	F
Inverter Code	Inverter Duty

Part Detail

Revision	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	07WGX817
Layout	07LYJ232
Eff. date	02-14-2024
CD Diagram	CD0006
Poles	04
Leads	3#14
Proprietary	False
Created date	07-22-2019

IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	20.78 IN
Power Factor	81
Product Family	General Purpose
Pulley Face Code	C-Face
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	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

NP1401XPSLEV													
NO.						CC	010A						
S/N						TEMP CODE				T3C			
SPEC.	07-0000-0207					INV.TYPE			PWM				
CAT.NO.	CDRX21744T-5					C HP FR	60		C HP TO	90			
HP	7.5					CT HZ FROM			6		CT HZ TO		60
VOLTS	575					VT HZ FROM			6		VT HZ TO		60
AMPS	7.5					MAG CUR		3.7					
RPM	1770					MX RPM		2700					
HZ	60	PH	3	CL	F	NOM.EFF.		91.7					
SER.F.	1.00	DES		A	SL HZ	1	WK2	0.934					
FRAME	213TC		RATING		40C AMB-CONT								
	1.15 SF SINEWAVE												
	55C AMB @ 1.0SF					NEMA MG-1 PT 5,IP55							

AC Induction Motor Performance Data

Record # 77546

Typical performance - not guaranteed values

Winding: 07WGX817-R033			Type: 0738M		Enclosure: XPFC			
Nameplate Data				575 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		7.5	Full Load Torque		22.1 LB-FT			
Volts		575	Start Configuration		direct on line			
Full Load Amps		7.5	Breakdown Torque		73 LB-FT			
R.P.M.		1770	Pull-up Torque		33.7 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		44.4 LB-FT		
NEMA Design Code		A	KVA Code	J	Starting Current		58.7 A	
Service Factor (S.F.)		1	No-load Current		3.66 A			
NEMA Nom. Eff.		91.7	Power Factor		81	Line-line Res. @ 25°C		2.23 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		42°C	
					Locked-rotor Power Factor		37.9	
					Rotor inertia		0.934 LB-FT2	

Load Characteristics 575 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	40	62	73	79	82	84
Efficiency	86.8	91.4	92.1	91.7	90.8	89.7
Speed	1793	1786	1779	1771	1761	1751
Line amperes	4.07	4.98	6.23	7.7	9.4	11.2

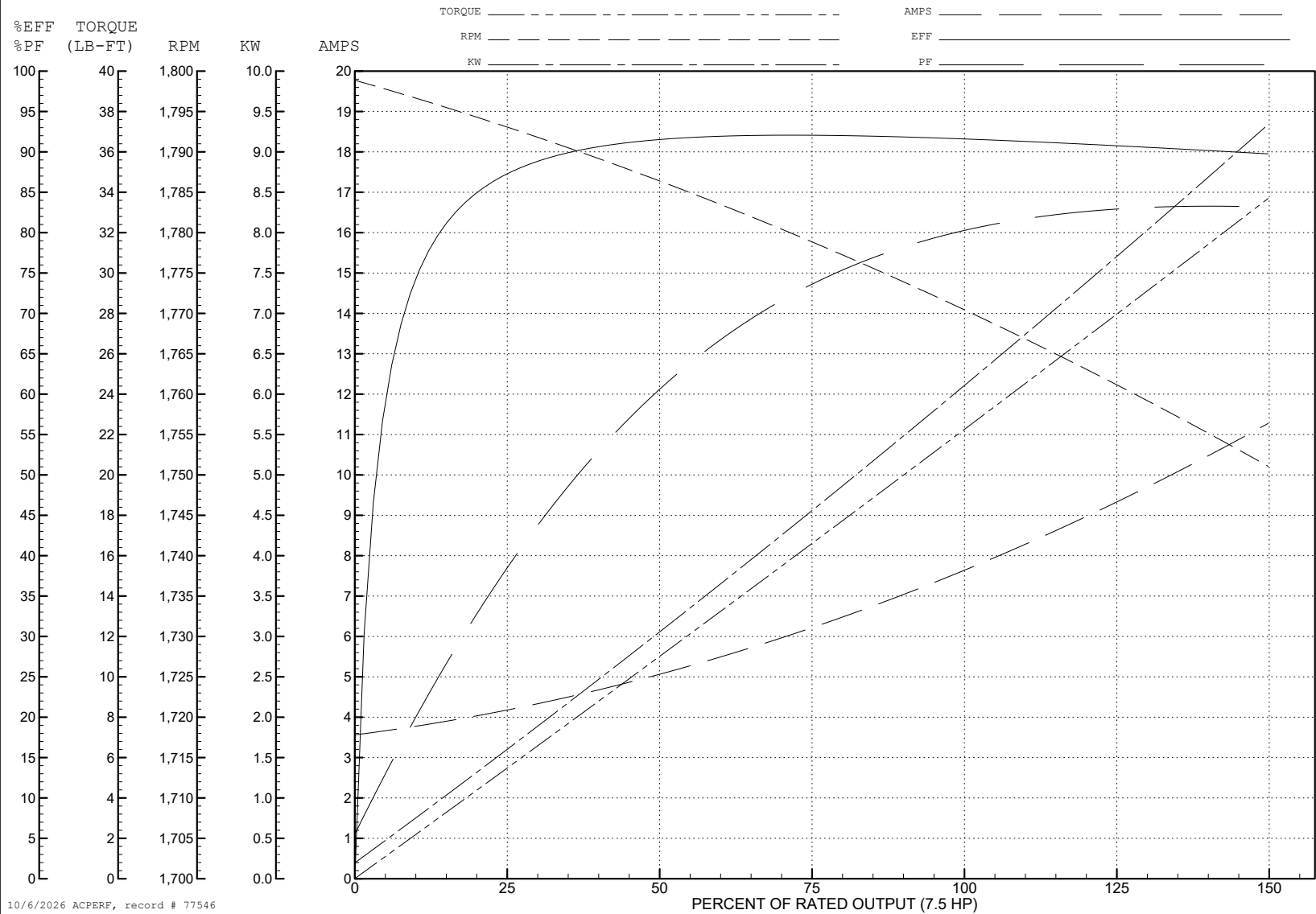
ABB Motors and Mechanical Inc.

WINDING # 07WGX817

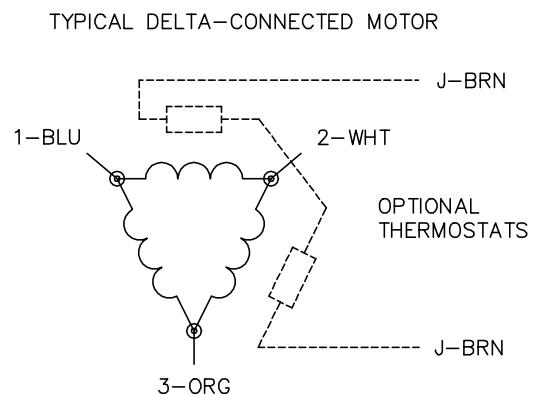
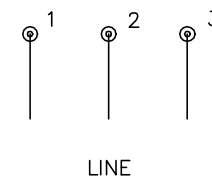
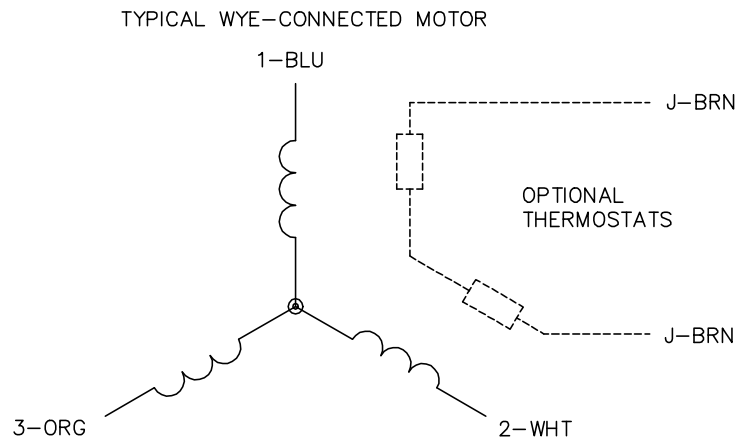
Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1770 RPM 575 V 0738M

TORQUES (LB-FT): PO=73 PU=33.7 LR=44.4 LRA=58.7



CD0006


NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10:24:49 02/19/2019

BY: ENBRIRO

MTL: —


BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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