

ABB BALDOR RELIANCE III

Customer information packet

VXM21742T-5

7.5HP, 1770RPM, 3PH, 60HZ, 213TC, 3738M, XPFC

Class - CLI GP D; CLII GP F,G

Division - Division I

Specifications

Enclosure	XPFC
Frame	213TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP D; CLII GP F,G
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	UL CSA EEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	7.600 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	7.6 a
Insulation Class	F
Inverter Code	Inverter Duty

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	37WGR907
Layout	37LY-000-164
Eff. date	12-09-2021
CD Diagram	CD0006
Poles	04
Leads	3#14
Proprietary	False
Created date	03-05-2021

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	3738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	20.32 IN
Power Factor	82
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
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

NP0887XPSLEV												
NO.						CC	010A					
S/N						TEMP CODE	T3C					
SPEC.	37-0000-0326					INV.TYPE	PWM					
CAT.NO.	VXM21742T-5					C HP FR	60	C HP TO	90			
HP	7.5					CT HZ FROM	6	CT HZ TO	60		60	
VOLTS	575					VT HZ FROM	6	VT HZ TO	60		60	
AMPS	7.6					MAG CUR	3.5					
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								
	NEMA MG-1 PART 5, IP54											
	1.15 SF ON SINE WAVE											

AC Induction Motor Performance Data

Record # 66654

Typical performance - not guaranteed values

Winding: 37WGR907-R008			Type: 3738M		Enclosure: TEFC		
Nameplate Data			575 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		7.5	Full Load Torque		22.2 LB-FT		
Volts		575	Start Configuration		direct on line		
Full Load Amps		7.6	Breakdown Torque		71 LB-FT		
R.P.M.		1770	Pull-up Torque		32.6 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		43 LB-FT	
NEMA Design Code		A	KVA Code	J	Starting Current		56.9 A
Service Factor (S.F.)		1.15	No-load Current		3.48 A		
NEMA Nom. Eff.		91.7	Power Factor	82	Line-line Res. @ 25°C		2.22 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		63°C	
S.F. Amps				Temp. Rise @ S.F. Load		77°C	
				Locked-rotor Power Factor		37.3	
				Rotor inertia		0.934 LB-FT2	

Load Characteristics 575 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	63	75	80	83	84	82
Efficiency	87	91.7	91.8	92	91	89.8	91.2
Speed	1793	1786	1778	1770	1760	1750	1757
Line amperes	3.9	4.84	6.1	7.61	9.29	11.1	8.64

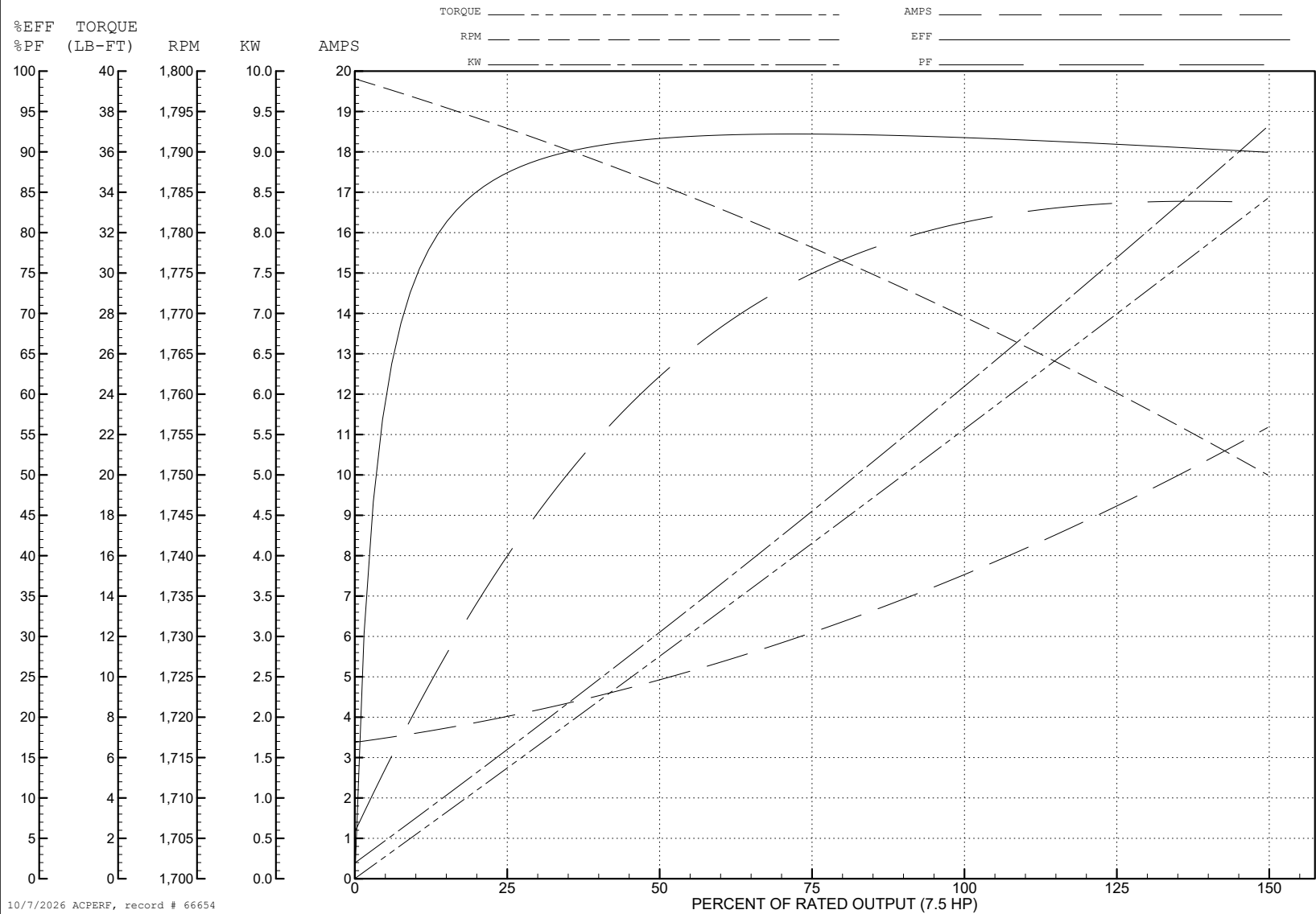
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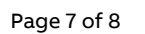
WINDING # 37WGR907

Typical performance - not guaranteed values.

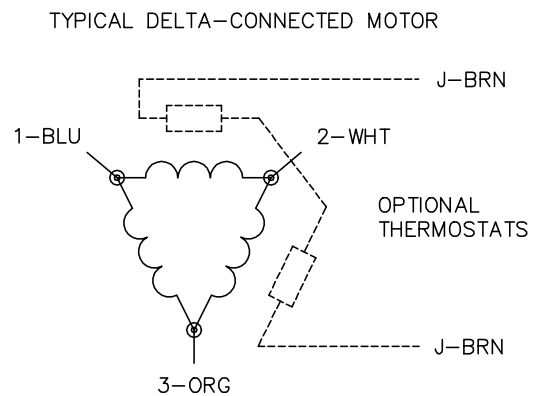
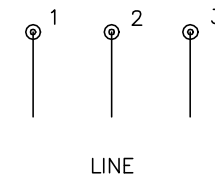
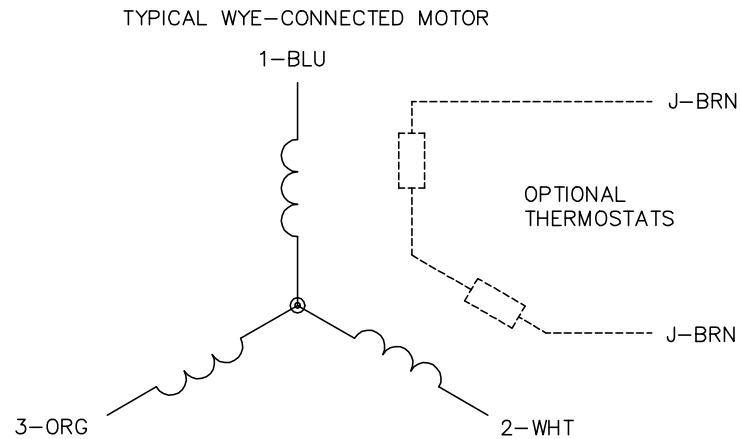
7.5 HP 3 PH 60 HZ 1770 RPM 575 V 3738M

TORQUES (LB-FT): PO=71 PU=32.6 LR=43 LRA=56.9





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

SH 1 of 1