

ABB BALDOR RELIANCE III

Customer information packet

CXM21742T

7.5//5HP, 1770//1470RPM, 3PH, 60//50HZ, 213T

Class - CLI GP D; CLII GP F,G

Division - Division I

Specifications

Enclosure	XPFC
Frame	213TC
Frame Material	Steel
Frequency	50.00 Hz 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 5.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 190.0 V @ 50 HZ 230.0 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	16.200 A @ 190.0 V 19.000 A @ 230.0 V 8.100 A @ 380.0 V 9.500 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	B
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	37WGR872
Layout	37LYL772
Eff. date	12-09-2021
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	02-18-2021

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	8.1 a
Insulation Class	F
Inverter Code	Inverter Duty
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	21.81 IN
Power Factor	80
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.	37-0000-0322					INV.TYPE		PWM			
CAT.NO.	CXM21742T					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	19/9.5//16.2/8.1				MAG CUR		8.6/4.3				
RPM	1770//1470				MX RPM		2700				
HZ	60//50	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 # 73680

Typical performance - not guaranteed values

Winding: 37WGR872-R029			Type: 3738M		Enclosure: XPFC		
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		7.5//5		Full Load Torque		22.2 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		19/9.5//16.2/8.1		Breakdown Torque		70.9 LB-FT	
R.P.M.		1770//1470		Pull-up Torque		32.6 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		43 LB-FT	
NEMA Design Code		A	KVA Code	J	Starting Current		70.9 A
Service Factor (S.F.)		1		No-load Current		4.31 A	
NEMA Nom. Eff.		91.7	Power Factor	80	Line-line Res. @ 25°C		1.41 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		63°C	
				Locked-rotor Power Factor		37.2	
				Rotor inertia		0.934 LB-FT2	

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	42	64	75	80	83	84
Efficiency	87.1	91.5	91.9	91.9	91	89.8
Speed	1793	1786	1778	1770	1760	1750
Line amperes	4.83	6.02	7.6	9.5	11.6	13.9

ABB Motors and Mechanical Inc.

WINDING # 37WGR872

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3738M

TORQUES (LB-FT): PO=70.9 PU=32.6 LR=43 LRA=70.9



