

ABB BALDOR RELIANCE III

Customer information packet

CDRX21124T

10HP, 3490//2900RPM, 3PH, 60HZ, 215TC, XPFC, F

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	215TC
Frame Material	Iron
Frequency	50.00 Hz 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 @ 50 HZ 10.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 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	11.000 A @ 380.0 V 11.800 A @ 460.0 V 21.600 A @ 190.0 V 23.600 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	D
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	07WGY855
Layout	07LYJ232
Eff. date	02-14-2024
CD Diagram	CD0005
Poles	02
Leads	9#14
Proprietary	False
Created date	05-28-2019

Efficiency @ 100% Load	90.2 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	11.0 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0730M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	20.78 IN
Power Factor	87
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	3490 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.	07-0000-0145						INV.TYPE		PWM			
CAT.NO.	CDRX21124T						C HP FR	60	C HP TO	90		
HP	10//7.5						CT HZ FROM		6	CT HZ TO		60
VOLTS	230/460//190/380						VT HZ FROM		6	VT HZ TO		60
AMPS	23.6/11.8//21.6/11						MAG CUR		7.2/3.6			
RPM	3490//2900						MX RPM		5400			
HZ	60//50	PH	3	CL	F	NOM.EFF.		90.2				
SER.F.	1.00	DES	B	SL HZ	1.8	WK2		0.273				
FRAME	215TC	RATING		40C AMB-CONT								
	1.15 SF SINEWAVE											
	55C AMB @ 1.0SF						NEMA MG-1 PT 5,IP55					

AC Induction Motor Performance Data

Record # 73682

Typical performance - not guaranteed values

Winding: 07WGY855-R021				Type: 0730M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		10//7.5		Full Load Torque		15.1 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		23.6/11.8//21.6/11		Breakdown Torque		56.3 LB-FT	
R.P.M.		3490//2900		Pull-up Torque		17.7 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		23.8 LB-FT	
NEMA Design Code		B	KVA Code	G	Starting Current		78.5 A
Service Factor (S.F.)		1		No-load Current		3.65 A	
NEMA Nom. Eff.		90.2	Power Factor	87	Line-line Res. @ 25°C		1.05 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		63°C	
S.F. Amps				Temp. Rise @ S.F. Load		79°C	
				Locked-rotor Power Factor		33.7	
				Rotor inertia		0.273 lb-ft²	

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	60	80	87	90	90	90
Efficiency	88	91.4	91.3	90.5	89.5	88.2
Speed	3576	3551	3525	3497	3465	3429
Line amperes	4.55	6.56	8.97	11.6	14.5	17.7

ABB Motors and Mechanical Inc.

WINDING # 07WGY855

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 3497 RPM 460 V 0730M

TORQUES (LB-FT): PO=56.3 PU=17.7 LR=23.8 LRA=78.5





