

ABB BALDOR RELIANCE III

Customer information packet

CEM7018T-I

1.5//1HP, 3500//2900RPM, 3PH, 60//50HZ, 143T

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	143TC
Frame Material	Steel
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	1.000 HP @ 50 HZ 1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3000 RPM @ 50 HZ
Voltage @ Frequency	380.0 V @ 50 HZ 230.0 V @ 60 HZ 190.0 V @ 50 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV CSA UL UR
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
Current @ Voltage	3.400 A @ 190.0 V 3.800 A @ 230.0 V 1.900 A @ 460.0 V 1.700 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover

Part Detail

Revision	J
Type	AC
Mech. spec.	35X732
Base	
Status	PRD/A
Elec. spec.	35WGM760
Layout	35LYX732
Eff. date	02-21-2024
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	11-21-2013

Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	1.7 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	14.36 IN
Power Factor	85
Product Family	Hazardous Location Motor
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible

Shaft Slinger Indicator	Shaft Slinger
Speed	2900 rpm 3500 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

NP0977XPSLEV												
NO.								CC	010A			
SER.								TEMP CODE			T3C	
SPEC.	35X732M760G1											
CAT.NO.	CEM7018T-I											
HP	1.5//1											
VOLTS	230/460//190/380											
AMPS	3.8/1.9//3.4/1.7											
RPM	3500//2900					MOTOR WEIGHT						
HERTZ	60//50	PH	3	CL	F	DE BRG	6205					
SER.F.	1.15	DES	B	CODE		L	ODE BRG		6203			
FRAME	143TC		GREASE			POLYREX EM						
RATING	40C AMB-CONT											
					NEMA-NOM-EFF				84		PF	85
	NEMA MG-1 PT 5,IP55											

AC Induction Motor Performance Data

Record # 73829

Typical performance - not guaranteed values

Winding: 35WGM760-R091		Type: 3520M	Enclosure: XPFC
Nameplate Data		460 V, 60 Hz: High Voltage, High Speed Connection	
Rated Output (HP)	1.5//1	Full Load Torque	2.23 LB-FT
Volts	230/460//190/380	Start Configuration	direct on line
Full Load Amps	3.8/1.9//3.4/1.7	Breakdown Torque	9.38 LB-FT
R.P.M.	3500//2900	Pull-up Torque	3.61 LB-FT
Hz	60//50 Phase	Locked-rotor Torque	7.35 LB-FT
NEMA Design Code	B KVA Code	Starting Current	17.9 A
Service Factor (S.F.)	1	No-load Current	0.951 A
NEMA Nom. Eff.	84 Power Factor	Line-line Res. @ 25°C	12.2 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	46°C
		Locked-rotor Power Factor	60.1
		Rotor inertia	0.0553 LB-FT ²

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	50	70	81	87	90	91
Efficiency	61.4	74.1	78.3	80	80.3	79.3
Speed	3569	3545	3519	3491	3459	3425
Line amperes	1.08	1.32	1.63	2	2.41	2.9

ABB Motors and Mechanical Inc.

WINDING # 35WGM760

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 3491 RPM 460 V 3520M

TORQUES (LB-FT) : PO=9.38 PU=3.61 LR=7.35 LRA=17.9





