

ABB BALDOR RELIANCE III

Customer information packet

EBM3710TY

7.5HP, 1770RPM, 3PH, 60HZ, 213T, 3736M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213T
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM CURUSEEV
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	18.800 A @ 230.0 V 21.000 A @ 208.0 V 9.400 A @ 460.0 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
Front Face Code	Brake Mounting
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	M
Type	AC
Mech. spec.	37A021
Base	
Status	PRD/A
Elec. spec.	37WGT859
Layout	37LYA021
Eff. date	05-01-2024
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	10-12-2015

High Voltage Full Load Amps	9.4 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3736M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	27.01 IN
Power Factor	81
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor

Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1259L									
CAT.NO.	EBM3710TY								
SPEC.	37A021T859G2								
HP	7.5								
VOLTS	230/460								
AMP	18.8/9.4								
RPM	1770								
FRAME	213T		HZ	60			PH	3	
SER.F.	1.15	CODE	J	DES	A	CL	F		
NEMA-NOM-EFF	91.7	PF	81						
RATING	40C AMB-CONT								
CC	010A								
DE	6307		ODE	6306					
ENCL	TEFC	SN							

AC Induction Motor Performance Data

Record # 17797

Typical performance - not guaranteed values

Winding: 37WGT859-R001			Type: 3736M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		7.5	Full Load Torque		22.4 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		18.8/9.4	Breakdown Torque		69.2 LB-FT		
R.P.M.		1770	Pull-up Torque		36.1 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		41.1 LB-FT	
NEMA Design Code		A	KVA Code	J	Starting Current		70.1 A
Service Factor (S.F.)		1.15	No-load Current		4.4 A		
NEMA Nom. Eff.		91.7	Power Factor	81	Line-line Res. @ 25°C		1.37 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		53°C
S.F. Amps					Temp. Rise @ S.F. Load		65°C
					Locked-rotor Power Factor		37
					Rotor inertia		0.885 LB-FT2

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	41	63	75	81	84	85	83
Efficiency	88.6	92.2	92.7	92.2	91.3	90.1	91.7
Speed	1793	1786	1778	1770	1761	1751	1765
Line amperes	4.88	6.08	7.59	9.49	11.5	13.8	10.7

ABB Motors and Mechanical Inc.

WINDING # 37WGT859

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3736M

TORQUES (LB-FT): PO=69.2 PU=36.1 LR=41.1 LRA=70.1





