

ABB BALDOR RELIANCE III

Customer information packet

EM3711T-58

10HP, 2900RPM, 3PH, 50HZ, 215T, 3740M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	215T
Frame Material	Steel
Frequency	50.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	10.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	3000 RPM @ 50 HZ
Voltage @ Frequency	400.0 V @ 50 HZ
Agency Approvals	CE CSA CURUS IE3 UKCA UR WEEE
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	13.100 A @ 400.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	90.2 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	R
Type	AC
Mech. spec.	37A001
Base	
Status	PRD/A
Elec. spec.	37WGR698
Layout	37LYA001
Eff. date	11-05-2025
CD Diagram	CD0382
Poles	02
Leads	6#14
Proprietary	False
Created date	12-08-2014

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	13.1 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3740M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	19.01 IN
Power Factor	89
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	2900 rpm
Speed Code	Single Speed
Starting Method	Wye Start - Delta Run
Thermal Device - Bearing	None
Thermal Device - Winding	None

Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3444L									
CAT NO	EM3711T-58								
SPEC.	37A001R698G1								
HP	10/7.5KW						PH	3	
VOLTS	400								
AMP	13.1								
RPM	2900 1/MIN IP54 IC411 64KG								
FRAME	215T		HZ		50		I.P.		44
SER.F.	1.15	CODE		H	DES		B	CL	F
NOM.EFF.	90.2								
PF	89	USABLE AT 208V						N/A	
RATING	40C AMB-S1 CONT					CC			
DE BRG	6307			ODE		6206			
ENCL	TEFC	SN							
VPWM INVERTER READY									
CT5-50(10:1)VT2.5-50(20:1									
BLANK	IE3-93.2(75%)93.7(50%)								

AC Induction Motor Performance Data

Record # 48453

Typical performance - not guaranteed values

Winding: 37WGR698-R001			Type: 3740M		Enclosure: TEFC	
Nameplate Data			400 V, 50 Hz: Single Voltage Motor			
Rated Output (HP)		10	Full Load Torque		18 LB-FT	
Volts		400	Start Configuration		direct on line	
Full Load Amps		13.1	Breakdown Torque		63.8 LB-FT	
R.P.M.		2900	Pull-up Torque		33.2 LB-FT	
Hz	50	Phase	3	Locked-rotor Torque		38.4 LB-FT
NEMA Design Code		B	KVA Code		H	
Service Factor (S.F.)		1.15	Starting Current		99.1 A	
NEMA Nom. Eff.		90.2	Power Factor		89	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		79°C
S.F. Amps				Temp. Rise @ S.F. Load		97°C
				Locked-rotor Power Factor		35.3
				Rotor inertia		0.364 LB-FT2

Load Characteristics 400 V, 50 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	54	76	86	89	90	91	90
Efficiency	91.4	93.7	93.2	92.5	90.9	89	91.5
Speed	2981	2957	2932	2905	2875	2840	2887
Line amperes	5.29	7.45	10	13.1	16.3	19.8	15

ABB Motors and Mechanical Inc.

WINDING # 37WGR698

Typical performance - not guaranteed values.

10 HP 3 PH 50 HZ 2900 RPM 400 V 3740M

TORQUES (LB-FT) : PO=63.8 PU=33.2 LR=38.4 LRA=99.1





