

ABB BALDOR RELIANCE III

Customer information packet

CSPM3709T-G

7.5HP, 3520RPM, 3PH, 60HZ, 213TC, 3728M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213TC
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	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	WEEE NEMA PREMIUM
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	18.000 A @ 230.0 V 9.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	90.2 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	9.0 a
Insulation Class	F

Part Detail

Revision	A
Type	AC
Mech. spec.	37T745
Base	
Status	PRD/A
Elec. spec.	37WGL869
Layout	37LYT745
Eff. date	11-19-2025
CD Diagram	CD0005
Poles	02
Leads	9#14
Proprietary	False
Created date	04-04-2025

Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3728M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	18.63 IN
Power Factor	86
Product Family	General Purpose
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	1.375 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3520 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

NP4423A01A01L											
CAT #	CSPM3709T-G					WGT	121	LBS			
SPEC	37T745L869					ENCL	TEFC				
SER #						CC	010A	IP	54		
HP	7.5		MAG CUR			7/3.5					
VOLTS	230/460					NEMA NOM. EFF					90.2
AMPS	18/9					PF	86				
RATING	40C AMB-CONT										
RPM	3520					MAX RPM	5400				
FRAME	213TC	HZ	60		CODE	J	CLASS	H			
SER.F.	1.25	SF AMP	21.4/10.7				PH	3	DES	A	
DE	6307		ODE		6206						
LUBRICATION	POLYREX EM										
ID LOGO	INVERTER TYPE			VPWM		CHP	TO				
ID LOGO	WK2	0.255	CT		TO						
ID LOGO	SL HZ	1.3	VT		TO						

AC Induction Motor Performance Data

Record # 112288

Typical performance - not guaranteed values

Winding: 37WGL869-R013				Type: 3728M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		7.5		Full Load Torque		11.2 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		18/9		Breakdown Torque		40.3 LB-FT	
R.P.M.		3520		Pull-up Torque		19.7 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		21.8 LB-FT	
NEMA Design Code		A	KVA Code	J	Starting Current		68.4 A
Service Factor (S.F.)		1.25		No-load Current		3.52 A	
NEMA Nom. Eff.		90.2	Power Factor	86	Line-line Res. @ 25°C		1.16 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		50°C	
S.F. Amps		21.4/10.7		Temp. Rise @ S.F. Load		68°C	
				Locked-rotor Power Factor		33.7	
				Rotor inertia		0.255 lb-ft²	

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	49	71	81	86	88	89	88
Efficiency	87.4	91.5	92.1	91.6	90.8	89.4	90.8
Speed	3580	3560	3540	3518	3494	3468	3494
Line amperes	4.1	5.4	7.06	8.96	11	13.2	11

ABB Motors and Mechanical Inc.

WINDING # 37WGL869

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 3520 RPM 460 V 3728M

TORQUES (LB-FT): PO=40.3 PU=19.7 LR=21.8 LRA=68.4





