

ABB BALDOR RELIANCE III

Customer information packet

SPM3713T

15HP, 3515RPM, 3PH, 60HZ, 215T, 3756M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	215T
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	15.000 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 4
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	17.000 A @ 460.0 V 34.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	17.0 a
Insulation Class	F

Part Detail

Revision	B
Type	AC
Mech. spec.	37T646
Base	
Status	PRD/A
Elec. spec.	37WGR601
Layout	37LYT646
Eff. date	05-03-2024
CD Diagram	CD0180
Poles	02
Leads	9#14
Proprietary	False
Created date	09-05-2023

Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Max Speed	5400 rpm
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3756M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	20.52 IN
Power Factor	88
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 Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3515 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

NP4423A01A05L														
CAT #	SPM3713T					WGT	187	LBS						
SPEC	37T646R601					ENCL	TEFC							
SER #						CC	010A	IP	54					
HP	15	MAG CUR				11.6/5.8								
VOLTS	230/460					NEMA NOM. EFF			92.4					
AMPS	34/17					PF	88							
RATING	40C AMB-CONT													
RPM	3515					MAX RPM		5400						
FRAME	215T	HZ	60	CODE		K	CLASS		F					
SER.F.	1.15	SF AMP	39/19.5				PH	3	DES	A				
DE	6307		ODE		6206									
LUBRICATION	POLYREX EM													
ID LOGO	INVERTER TYPE			VPWM		CHP	60	TO		90	1.5:1			
ID LOGO	WK2	0.51	CT	6	TO	60	10:1							
ID LOGO	SL HZ	1.4	VT	3	TO	60	20:1							
							QR							
YR														

AC Induction Motor Performance Data

Record # 100930

Typical performance - not guaranteed values

Winding: 37WGR601-R004			Type: 3756M		Enclosure: TEFC			
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		15		Full Load Torque		22.09 LB-FT		
Volts		230/460		Start Configuration		direct on line		
Full Load Amps		34/17		Breakdown Torque		112 LB-FT		
R.P.M.		3515		Pull-up Torque		43.2 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		62 LB-FT		
NEMA Design Code		A	KVA Code	K		Starting Current	161 A	
Service Factor (S.F.)		1.15		No-load Current		5.75 A		
NEMA Nom. Eff.		91.7	Power Factor	88	Line-line Res. @ 25°C		0.406 Ω	
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		63°C
S.F. Amps		39/19.5		Temp. Rise @ S.F. Load		76°C		
				Locked-rotor Power Factor		29.9		
				Rotor inertia		0.51 lb-ft²		

Load Characteristics 460 V, 60 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	53	76	85	88	90	90	89
Efficiency	89.4	92.8	93.2	92.7	91.9	90.8	92.2
Speed	3580	3561	3539	3516	3491	3465	3501
Line amperes	6.81	9.54	13.1	16.95	20.9	25.31	19.3

ABB Motors and Mechanical Inc.

WINDING # 37WGR601

Typical performance - not guaranteed values.

15 HP 3 PH 60 HZ 3515 RPM 460 V 3756M

TORQUES (LB-FT): PO=112 PU=43.2 LR=62 LRA=161

