

ABB BALDOR RELIANCE III

Customer information packet

CFSWDM3709T-E

7.5HP, 3500RPM, 3PH, 60HZ, 213TC, 3734M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213TC
Frame Material	Stainless 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	CSA CSA EEV NEMA PREMIUM 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	8.300 A @ 460.0 V 19.900 A @ 208.0 V 16.800 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	S
Type	AC
Mech. spec.	37Q242
Base	
Status	PRD/A
Elec. spec.	37WGS136
Layout	37LYQ242
Eff. date	09-22-2023
CD Diagram	CD0005
Poles	02
Leads	9#14
Proprietary	False
Created date	08-03-2017

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	8.3 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	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	3734M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	19.49 IN
Power Factor	93
Product Family	WD All SS Encapsulated
Pulley End Bearing Type	Sealed Bearing
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 Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3500 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

NP4427AAA01														
CAT #	CFSWDM3709T-E					WT	129	LBS						
SPEC	37Q242S136G2					ENCL	TEFC							
SER #						CC	010A	IP	69					
HP	7.5					MAG CUR	6.4/3.2							
VOLTS	230/460									NEMA NOM. EFF	91			
AMPS	16.8/8.3									PF	93			
RATING	40C AMB-CONT													
RPM	3500									MAX RPM	5400			
FRAME	213TC	HZ	60			CODE	K			CLASS	H			
SER.F.	1.15	SF AMP						PH	3	DES	A			
DE	6307				ODE	6307								
LUBRICATION	POLYREX EM													
ID LOGO	INVERTER TYPE				VPWM		CHP	60	TO	90	1.5:1			
ID LOGO	WK2	0.311	CT	4	TO	1	4:1							
ID LOGO	SL HZ	1.7	VT	10	TO	1	10:1							

Parts List

Part number	Description	Quantity
SA348759	SA 37Q242S136G2	1.000 ea
RA337342	RA 37Q242S136G2	1.000 ea
36FN3000C02SP	EXFN, PLASTIC, 5.25 OD, 1.175 ID	1.000 ea
35CB1017B01	37 MID SECT - 3 PC. CONDUIT BOX 1.00 NPT	1.000 ea
RM1070A81	O-RING, -043 VITON/FKM .070CS X 3.489ID	1.000 ea
HA3424S64	STUD - M6X1.0 THDS X 4.00"	1.000 ea
11XW1032G08	10-32 X .50, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
37EP1920A03	FREP, TEFC MACH - 307 BRG WD11/12 (STAIN	1.000 ea
RM1070A48	O-RING, .070 C.S. X 8.656 ID, VITON	1.000 ea
HW4600F35	35 X 52 X 8 LIP SEAL, GRAPHITE INFUSED V	1.000 ea
HW4600F34	35 X 53 X 4.5 AFX SEAL, GRAPHITE INFUSED	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	4.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	4.000 ea
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 ea
37EP1925A01	PUEP, MACH - 307 BRG WD11/12 (STAINLESS)	1.000 ea
RM1070A48	O-RING, .070 C.S. X 8.656 ID, VITON	1.000 ea
HW4600F35	35 X 52 X 8 LIP SEAL, GRAPHITE INFUSED V	1.000 ea
HW4600F34	35 X 53 X 4.5 AFX SEAL, GRAPHITE INFUSED	1.000 ea
RM1070A47	O-RING, -011 VITON/FKM .070CS X .301ID	4.000 ea
51XB1214S20	12-14X1.25 HXWSSLD SERTYB, SS	1.000 ea
37FH4000A45	STAINLESS FAN COVER, NO GREASER SLOT (FO	1.000 ea
10XN1032FS06	HEX HD CAP SCREW 10-32 X 3/8 SS FOOD SAF	3.000 ea
35CB1513A01	35-36-37 MACH. LID - 3 PC. CONDUIT BOX	1.000 ea
RM1070A81	O-RING, -043 VITON/FKM .070CS X 3.489ID	1.000 ea
HW2502F21	#303 SS,SQ KEY 5/16 X 2.375	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.005 qt
MJ5004A93	FOOD GRADE (H1 RATED) ANTISEIZE THRD COM	0.005 ea
HA1025A21	WSHR,FELT .125" THK	1.000 ea
HA5027A09	DRAIN KIT,(2)HA4002A03 BAGGED W/LABEL	1.000 ea

MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
WD5603A01	KIT, CLOSED-END LEAD SPLICE (18-14GA)	1.000 ea
HA3104FS17	THRUBOLT, 5/16-18 X 13.250 SS FOOD SAFE	4.000 ea
37PA1074	PALLET PACK GRP, PRINT BOX PK1026A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
FE-0000016	ZTRG FE ASSEMBLY	1.000 ea
PE-0000010	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 57387

Typical performance - not guaranteed values

Winding: 37WGS136-R005			Type: 3734M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		7.5	Full Load Torque		11.5 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		16.8/8.3	Breakdown Torque		66.3 LB-FT	
R.P.M.		3500	Pull-up Torque		25.8 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		36.7 LB-FT	
NEMA Design Code		A KVA Code	Starting Current		86.2 A	
Service Factor (S.F.)		1.15	No-load Current		3.25 A	
NEMA Nom. Eff.		91 Power Factor	Line-line Res. @ 25°C		0.913 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		47°C	
S.F. Amps			Temp. Rise @ S.F. Load		56°C	
			Locked-rotor Power Factor		32.4	
			Rotor inertia		0.311 LB-FT2	

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	62	85	89	94	95	100	95
Efficiency	84.7	90.9	92.1	92	91.4	90.7	91.6
Speed	3584	3564	3541	3520	3498	3481	3508
Line amperes	3.54	4.72	6.63	8.32	10.3	11.8	9.5

ABB Motors and Mechanical Inc.

WINDING # 37WGS136

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 3500 RPM 460 V 3734M

TORQUES (LB-FT): PO=66.3 PU=25.8 LR=36.7 LRA=86.2





