

ABB BALDOR RELIANCE III

Customer information packet

FDM3542

.75HP, 1725RPM, 3PH, 60HZ, 56, 3420M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56
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	.750 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	208.0 V @ 60 HZ 230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA 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	3.200 A @ 208.0 V 3.000 A @ 230.0 V 1.500 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	75.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	B
Type	AC
Mech. spec.	34M734
Base	
Status	PRD/A
Elec. spec.	34WGR707
Layout	34LYM734
Eff. date	01-02-2025
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	01-29-2021

High Voltage Full Load Amps	1.5 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3420M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.35 IN
Power Factor	64
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1725 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

NP1279L									
CAT.NO.	FDM3542								
SPEC.	34M734R707G2								
HP	.75								
VOLTS	208-230/460								
AMP	3.2-3/1.5								
RPM	1725								
FRAME	56	HZ	60	PH	3				
SER.F.	1.25	CODE	M	DES	B	CL	B		
NEMA-NOM-EFF	75.5	PF	64						
RATING	40C AMB-CONT								
CC									
DE	6203	ODE	6203						
ENCL	TEFC	SN							
	SFA 3.6-3.4/1.7								

Parts List

Part number	Description	Quantity
SA390548	SA 34M734R707G2	1.000 ea
RA381000	RA 34M734R707G2	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
34CB3002A	CB CAST W/.88 DIA HOLE	1.000 ea
34GS1029A01	GASKET, CONDUIT BOX	1.000 ea
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
34EP3102A01SP	FR ENDPLATE, MACH	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
34EP3102A99	PU ENDPLATE, MACH FOR SEAL	1.000 ea
HW4600A54	SEAL 0.668 X 1.064 X 0.250 DOUBLE SHIELD	1.000 ea
HW4600B39SP	V-RING SLINGER 0.550 X 0.790 X .18 VITON	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
34FN3002A01SP	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
34FH4002A01SP	IEC FH NO GREASER PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
34CB4517	CB LID 4 MTG HOLES .22 DIA STAMPED, FOR	1.000 ea
34GS1031A01	GASKET, FLAT CONDUIT BOX LID (LEXIDE)	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
MG1025C02	WILKOFASST SG, 787.105, TAN	0.014 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 ea
NP1279L	ALUM FARM DUTY UL CSA CC	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea

AC Induction Motor Performance Data

Record # 85439

Preliminary Data Sheet

Winding: 34WGR707-R001			Type: 3420M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		0.75	Full Load Torque		2.27 LB-FT		
Volts		208-230/460	Start Configuration		direct on line		
Full Load Amps		3.2-3.0/1.5	Breakdown Torque		9.9 LB-FT		
R.P.M.		1725	Pull-up Torque		7.1 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		9.2 LB-FT	
NEMA Design Code		B	KVA Code	M	Starting Current		9.8 A
Service Factor (S.F.)		1.25	No-load Current		1.08 A		
NEMA Nom. Eff.		77	Power Factor	61	Line-line Res. @ 25°C		21 Ω
Rating - Duty		40C-AMB CONT	Temp. Rise @ Rated Load		69°C		
S.F. Amps		3.6-3.4/1.7	Temp. Rise @ S.F. Load		83°C		
			Locked-rotor Power Factor		59.2		
			Rotor inertia		0.0476 LB-FT2		

Load Characteristics 460 V, 60 Hz, 0.75 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	29	44	56	66	73	79	73
Efficiency	54.7	68.4	73.5	75.2	75.8	74.9	76.5
Speed	1780	1763	1745	1726	1723	1700	1723
Line amperes	1.09	1.15	1.26	1.4	1.58	1.79	1.58

ABB Motors and Mechanical Inc.

WINDING # 34WGR707

Typical performance - not guaranteed values.

0.75 HP 3 PH 60 HZ 1725 RPM 460 V 3420M

TORQUES (LB-FT) : PO=9.9 PU=7.1 LR=9.2 LRA=9.8





