



Customer information packet

M3458

.33HP, 1730RPM, 3PH, 60HZ, 48, 3413M, TEFC, F1

ABB Ltd Drives

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	48
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	.330 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	C UR US
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	.700 A @ 460.0 V 1.300 A @ 208.0 V 1.400 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	68.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.7 a
Insulation Class	B

Part detail

Revision	D
Type	AC
Mech. spec.	34A051
Base	
Status	PRD/A
Elec. spec.	34WGR709
Layout	34LYA051
Eff. date	12-30-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	02-05-2021

Inverter Code	Not Inverter
KVA Code	L
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	3413M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	10.72 IN
Power Factor	66
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	1.35
Shaft Diameter	0.500 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1730 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

NP1256L									
CAT.NO.	M3458								
SPEC.	34A051R709								
HP	.33								
VOLTS	230/460								
AMP	1.4/.7								
RPM	1730								
FRAME	48		HZ	60		PH	3		
SER.F.	1.35	CODE	L	DES	B	CLASS	B		
NEMA-NOM-EFF	68	PF	66						
RATING	40C AMB-CONT								
CC									
DE	6203		ODE	6203					
ENCL	TEFC	SN							
	SFA 1.6/.8								

Parts list

Part number	Description	Quantity
SA390562	SA 34A051R709	1.000 ea
RA381014	RA 34A051R709	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
34EP3102A02SP	FR/PU ENDPLATE, MACH	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
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.014 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 ea
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/22	1.000 ea
NP1256L	ALUM UL CC INDUSTRIAL MOTOR A60	1.000 ea
34PA1002	PKG GRP, PRINT PK1001A01	1.000 ea

Accessories

Part number	Description	Multiplier
34-3900T	C-FACE KIT	A8

AC Induction Motor Performance Data

Record # 85527

Preliminary Data Sheet

Winding: 34WGR709-R001			Type: 3413M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)		.33		Full Load Torque		1 LB-FT
Volts		230/460		Start Configuration		direct on line
Full Load Amps		1.4/0.7		Breakdown Torque		3.5 LB-FT
R.P.M.		1725		Pull-up Torque		2.13 LB-FT
Hz	60	Phase	3	Locked-rotor Torque		2.72 LB-FT
NEMA Design Code		B	KVA Code	Starting Current		3.93 A
Service Factor (S.F.)		1.35		No-load Current		0.6 A
NEMA Nom. Eff.		67	Power Factor	Line-line Res. @ 25°C		70.9 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		51°C
S.F. Amps		1.6/0.8		Temp. Rise @ S.F. Load		67°C
				Locked-rotor Power Factor		82
				Rotor inertia		0.031 lb-ft²

Load Characteristics 460 V, 60 Hz, 0.33 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	46	57	67	69	81	77
Efficiency	38.6	55.6	63.2	67.3	68.7	67.2	68.7
Speed	1779	1764	1749	1731	1712	1691	1697
Line amperes	0.6	0.62	0.65	0.7	0.76	0.85	0.81

ABB Motors and Mechanical Inc.

WINDING # 34WGR709

Typical performance - not guaranteed values.

0.33 HP 3 PH 60 HZ 1725 RPM 460 V 3413M

TORQUES (LB-FT): PO=3.5 PU=2.13 LR=2.72 LRA=3.93





