

ABB BALDOR RELIANCE III

Customer information packet

VDM3542

.75HP, 1725RPM, 3PH, 60HZ, 56C, 3428M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56C
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	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	UR CCSA US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	1.400 A @ 460.0 V 2.800 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	74.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	P
Type	AC
Mech. spec.	34M808
Base	
Status	PRD/A
Elec. spec.	34WGR422
Layout	34LYM808
Eff. date	12-01-2025
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	04-18-2016

High Voltage Full Load Amps	1.4 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3428M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.85 IN
Power Factor	68
Product Family	Dirty Duty Plus
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No 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

NP3659									
CAT.NO.	VDM3542								
SPEC.	34M808R422G1				ENCL		TEFC		
FRAME	56C	H.P.		.75					
VOLTS	230/460								
AMPS	2.8/1.4				IP		56		
R.P.M.	1725								
HZ.	60	PH.	3	CLASS		F			
SER.F.	1.25	DES.	B	CC					
NEMA NOM. EFF.	74								
RATING	40C AMB-CONT								
DE	6203	ODE		6203					
GREASE	POLYREX EM								
SN									
	50C AT 1.0 SF								
	SFA 3.2/1.6								

Parts List

Part number	Description	Quantity
SA319979	SA 34M808R422G1	1.000 ea
RA307690	RA 34M808R422G1	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
34CB1000A01E	CONDUIT BOX, WASHDOWN, W/E-COATED	1.000 ea
34GS1017	GASKET, CONDUIT BOX MODEL 34 (BLACK NEOP	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
34EP1100A137LP2	FRONT EP TEFC 203 BRG W/ SEAL	1.000 ea
HW4601A23	INPRO SEAL, 203 BRG, VBX	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	3.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
34EP1300A35E	ENDPLATE, MACH W/E-COAT	1.000 ea
HW4606A01	JM CLIPPER/SEAL (WDE-0667-1064-BH49)	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	3.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
12XN1032S20	10-32 X 1-1/4 HEX M.S. , STAINLESS STEEL	2.000 ea
34FN3002A01SP	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
34FH4002A01LP2	IEC FH NO GREASER	1.000 ea
11XW1032S06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	3.000 ea
34CB4500E	CONDUIT BOX LID, E-COAT	1.000 ea
34GS1007	GASKET, CONDUIT BOX LID MODEL 34 (BLACK	1.000 ea
59XW0832S07	TAPTITE II,HEX WSHR UNSLTD SER,410 S.S.,	4.000 ea
HW2502D13	SS KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
MJ5001A02	732 CL SEALANT 3 OZ DIXIE BEARING 289100	0.001 ea
LB1164	LABEL,WARNING AND DRAIN	1.000 ea
MJ5001A23	P.D. GEORGE B-276 AIR DRY VARNISH	0.001 ga
LB1000	LABEL, DIRTY DUTY	1.000 ea
HW3001B02	BRASS CUP WASHER W/GROUND SYMBOL TAB,	1.000 ea
WD1000D21	TRM,T&B #B71M,RING,18-14,.25,NON-INSL	9.000 ea

85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MG2000A17	RUST INHIBITOR PART # SRPO #20	0.001 ga
MG1025L01	WILKOFAS FD, 786.04, BLACK	0.014 ga
MG1500Y02	WILKOPON PRIMER YELLOW	0.014 ga
HA3100S14	THRUBOLT 10X32 X 8.875 302 OR 303 SS	4.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP3659	SS DIRTY DUTY PLUS UL CSA-C US EEV CC	1.000 ea
27PA1001	PKG GRP, PRINT PK1027A06	1.000 ea
PK3083	STYROFOAM PACKING CRADLE	1.000 ea
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS	1.000 ea

AC Induction Motor Performance Data

Record # 58333

Typical performance - not guaranteed values

Winding: 34WGR422-R001			Type: 3428M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		.75	Full Load Torque		2.28 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		2.8/1.4	Breakdown Torque		10 LB-FT	
R.P.M.		1725	Pull-up Torque		7.67 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		11.8 LB-FT	
NEMA Design Code		B	KVA Code		N	
Starting Current		11.1 A	No-load Current		1.04 A	
Service Factor (S.F.)		1.25	Line-line Res. @ 25°C		17.999 Ω	
NEMA Nom. Eff.		74	Power Factor		68	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		60°C	
S.F. Amps		3.2/1.6	Temp. Rise @ S.F. Load		70°C	
			Locked-rotor Power Factor		55.7	

Load Characteristics 460 V, 60 Hz, 0.75 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	48	60	68	75	79	75
Efficiency	50.2	65.5	71.3	74.1	75.2	75	75.2
Speed	1783.6	1770.3	1757	1742.7	1726.6	1709.9	1727
Line amperes	1.07	1.15	1.25	1.39	1.57	1.76	1.57

ABB Motors and Mechanical Inc.

WINDING # 34WGR422

Typical performance - not guaranteed values.

0.75 HP 3 PH 60 HZ 1725 RPM 460 V 3428M

TORQUES (LB-FT): PO=10 PU=7.67 LR=11.8 LRA=11.1





