

ABB BALDOR RELIANCE III

Customer information packet

VEWDM3559T

3HP, 3450RPM, 3PH, 60HZ, 145TC, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	145TC
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	3.000 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	CSA UR
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
Current @ Voltage	7.900 A @ 208.0 V 7.200 A @ 230.0 V 3.600 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	3.6 a
Insulation Class	F

Part Detail

Revision	B
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGQ060
Layout	35LYZ299
Eff. date	02-14-2024
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	11-14-2019

Inverter Code	Inverter Ready
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3532M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	14.17 IN
Power Factor	92
Product Family	Wash Down
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	3450 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

NP1669L									
CAT.NO.	VEWDM3559T								
SPEC.	35-0000-0458								
HP	3								
VOLTS	230/460								
AMP	7.2/3.6								
RPM	3450								
FRAME	145TC		HZ	60			PH	3	
SER.F.	1.15	CODE	L	DES	B	CLASS	F		
NEMA-NOM-EFF	86.5	PF	92						
RATING	40C AMB-CONT								
CC	010A								
DE	6205		ODE	6203					
ENCL	TEFC	SN							
BLANK	20:1CT, 20:1VT, 1.00SF								

Parts List

Part number	Description	Quantity
SA378750	SA 35-0000-0458	1.000 ea
RA368717	RA 35-0000-0458	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LB1164	LABEL,WARNING AND DRAIN	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP1669L	SS WD SUPER-E UL PREM REV MTG	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
35FH4005A32	IEC FH NO GRSR W/3 HOLES - PRIMED	1.000 ea
11XW1032S06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	3.000 ea
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3100S09	THRUBOLT 9.25 LENGTH SS	4.000 ea
35EP3122B00W	MASTER ODE,203 BRG,.683SH,.125NPT DRNS,F	1.000 ea
HW4600B39SP	V-RING SLINGER 0.550 X 0.790 X .18 VITON	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
HW4072A01	BLACK DRAIN PLUG FOR .125 NPT	3.000 ea
35CB3008A01G	SPL CONDUIT BOX, MACHINED GRAY	1.000 ea
35EP3307E00W	MASTER DE,205 BRG,1.623SH,.125NPT DRNS,C	1.000 ea
HW4600B46	V-RING SLINGER 0.875 X 1.420 X .24 VITON	1.000 ea
HW4600B49	SEAL 0.938 X 1.624 X 0.250 SINGLE LIP DB	1.000 ea
12XN1032S20	10-32 X 1-1/4 HEX M.S. , STAINLESS STEEL	2.000 ea
HA5027A02	HA4054 T-DRAIN X2 BAGGED WITH LABEL	1.000 ea
HW4072A01	BLACK DRAIN PLUG FOR .125 NPT	3.000 ea
35GS1022A03	GASKET BOX .125 THK WHITE NEOPRENE	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
35CB4522	35 LIPPED CB LID PRIMED	1.000 ea
35GS1030A02	35 GS FOR CB LID - WHITE NEOPRENE	1.000 ea
59XW0832S07	TAPTITE II,HEX WSHR UNSLTD SER,410 S.S.,	4.000 ea

NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
MG1025W01	WILKOFAST, 781.01, SIGNAL WHITE #9003	0.022 ga
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
HW2502D13	SS KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
MG1025Z02	ACTIVATOR WILKOFAST 060.02HF 55 GALLON	0.022 ga
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000002	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 78123

Typical performance - not guaranteed values

Winding: 35WGQ060-R042			Type: 3532M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		3	Full Load Torque		4.5 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		7.2/3.6	Breakdown Torque		18 LB-FT	
R.P.M.		3450	Pull-up Torque		11 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		16 LB-FT	
NEMA Design Code		B KVA Code	L	Starting Current		33 A
Service Factor (S.F.)		1.15	No-load Current		1.2 A	
NEMA Nom. Eff.		86.5 Power Factor	92	Line-line Res. @ 25°C		4.7 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		61°C	
S.F. Amps			Temp. Rise @ S.F. Load		74°C	
			Locked-rotor Power Factor		47.1	
			Rotor inertia		0.0885 LB-FT2	

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	57	77	85	88	89	90	89
Efficiency	84	87.9	88.3	87.2	85.6	83.5	86.2
Speed	3562	3531	3498	3462	3421	3375	3437
Line amperes	1.5	2.1	2.8	3.6	4.5	5.4	4.14

ABB Motors and Mechanical Inc.

WINDING # 35WGQ060

Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 3450 RPM 460 V 3532M

TORQUES (LB-FT): PO=18 PU=11 LR=16 LRA=33



