

ABB BALDOR RELIANCE III

Customer information packet

ZDWNM3609T

2HP, 1760RPM, 3PH, 60HZ, 182TC, 3628M, TENV, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	182TC
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	2.000 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 CSA
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	2.900 A @ 460.0 V 5.800 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	88.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	ENCODER
Front Face Code	Encoder/Feedback Device
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.9 a

Part Detail

Revision	C
Type	AC
Mech. spec.	36J562
Base	
Status	PRD/A
Elec. spec.	36WGR049
Layout	36LYJ562
Eff. date	09-27-2024
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	02-23-2016

Insulation Class	H
Inverter Code	Inverter Duty
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	6000 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3628M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	17.77 IN
Power Factor	73
Product Family	Wash Down
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.00
Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1760 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2

None

Nameplate

NP1609L									
CAT NO	ZDWNM3609T								
SPEC.	36J562R049Z1								
FRAME	182TC			HP	2 TE				
VOLTS	230/460								
MAG CUR	3.4/1.7			FLA		5.8/2.9			
RPM	1760		RPM MAX			6000			
HZ	60		PH	3	CLASS			H	
SER.F.	1.00		DES	B	SL HZ			1.3	
NEMA-NOM-EFF	88.5		WK2	0.26					
BLWR V	PH		HZ		A				
RATING	40C AMB-CONT								
DE BRG	6206		ODE BRG			6205			
CC	010A		SER.NO						

Parts List

Part number	Description	Quantity
SA315672	SA 36J562R049Z1	1.000 ea
RA303209	RA 36J562R049Z1	1.000 ea
36CB3005A03W	36 CB .75 NPT @ 6 W/WHITE EPOXY	1.000 ea
35GS1022A03	GASKET BOX .125 THK WHITE NEOPRENE	1.000 ea
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	2.000 ea
HA5027A01	HA4066A01 T-DRAIN X2 BAGGED	1.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
36EP3104A77MW	FREP TENV 205 BRG, (WD) FOR THRU-SHAFT	1.000 ea
HW4032A01	BLACK DRAIN PLUG FOR WASH DOWN MOTORS	3.000 ea
HW4600B49	SEAL 0.938 X 1.624 X 0.250 SINGLE LIP DB	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
36PE3301A27MW	PUEP ASSEMBLY FOR ROUTING PURPOSES	1.000 ea
HW4032A01	BLACK DRAIN PLUG FOR WASH DOWN MOTORS	3.000 ea
HW4600B50	SEAL 1.156 X 1.874 X 0.250 SINGLE LIP DB	1.000 ea
10XN2520S26	1/4-20X 1 5/8 HEX HD SS	4.000 ea
10XN2520S08	SCREW, 1/4-20 X 1/2 HHCS SS	1.000 ea
35FH4801W	THRU-SHAFT ENCODER COVER INV/VEC F1 & F2	1.000 ea
10XN2520S08	SCREW, 1/4-20 X 1/2 HHCS SS	4.000 ea
36CB4518	36 LIPPED CB LID PRIMED	1.000 ea
37GS3010SP	1/16"WHITE LID GASKET	1.000 ea
59XW0832S07	TAPTITE II,HEX WSHR UNSLTD SER,410 S.S.,	4.000 ea
HW4600B36SP	V-RING SLINGER 1.188 X 1.380 X .24 VITON	1.000 ea
HW2502E16	#303 SS,SQ KEY 1/4 X 1.750	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
MJ5004A05	#242-21 LOCTITE GENERAL PURPOSE MED. STR	0.005 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1164	LABEL,WARNING AND DRAIN	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
OE5011A05SP	HS25 ENCODER ASSY - TENV	1.000 ea
MG1025Z02	ACTIVATOR WILKOFAS 060.02HF 55 GALLON	0.010 ga

MG1025W01	WILKOFAS, 781.01, SIGNAL WHITE #9003	0.022 ga
HA3101S25	THRUBOLT 1/4-20 X 11.00	4.000 ea
LC0145B01	CONNECTION LABEL	1.000 ea
NP1609L	SS WD VEC UL CSA CC REV MTG	1.000 ea
G7PA1000	PKG GRP, PRINT PK1034A07	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea

AC Induction Motor Performance Data

Record # 57979

Typical performance - not guaranteed values

Winding: 36WGR049-R002			Type: 3628M		Enclosure: TENV		
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		2		Full Load Torque		5.98 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		5.8/2.9		Breakdown Torque		23.2 LB-FT	
R.P.M.		1760		Pull-up Torque		13.2 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		14.9 LB-FT	
NEMA Design Code		B	KVA Code	K		Starting Current	22.3 A
Service Factor (S.F.)		1		No-load Current		1.7 A	
NEMA Nom. Eff.		88.5	Power Factor	73		Line-line Res. @ 25°C	5.6879 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		59°C	
				Locked-rotor Power Factor		43.2	

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	33	53	65	73	78	81
Efficiency	79.9	86.9	88.7	89	88.5	87.7
Speed	1790.3	1781.4	1772.5	1762	1751	1739
Line amperes	1.82	2.08	2.43	2.88	3.4	3.96

ABB Motors and Mechanical Inc.

WINDING # 36WGR049

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 1760 RPM 460 V 3628M

TORQUES (LB-FT): PO=23.2 PU=13.2 LR=14.9 LRA=22.3





