

ABB BALDOR RELIANCE III

Customer information packet

CWDM3561TP

3HP, 1645RPM, 3PH, 60HZ, 143TC, 3540M, TEFC, F3

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	143TC
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	1800 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	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	4.300 A @ 460.0 V 8.600 A @ 230.0 V 8.800 A @ 208.0 V
Design Code	D
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	81.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	4.3 a

Part Detail

Revision	N
Type	AC
Mech. spec.	35E2678
Base	
Status	PRD/A
Elec. spec.	35WGG301
Layout	35LYE2678
Eff. date	03-28-2025
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	10-01-2021

Insulation Class	H
Inverter Code	Not Inverter
KVA Code	H
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3540M
Mounting Arrangement	F3
Number of Poles	4
Overall Length	15.54 IN
Power Factor	80
Product Family	Wash Down
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1645 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

NP1496L											
CAT.NO.	CWDM3561TP										
SPEC.	35E2678G301G1										
HP	3										
VOLTS	230/460										
AMP	8.2/4.1										
RPM	1690										
FRAME	143TC		HZ	60				PH	3		
SER.F.	1.00	CODE	H	DES	D	CLASS		H			
NEMA-NOM-EFF	81.5	PF	80								
RATING	40C AMB-CONT										
CC											
DE	6205		ODE	6203							
ENCL	TEFC	SN									

Parts List

Part number	Description	Quantity
SA398806	SA 35E2678G301G1	1.000 ea
RA389827	RA 35E2678G301G1	1.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
RM1006A03	GROMMET, #2867 1.12 HOLE (ATLANTIC INDIA	1.000 ea
35CB3010A01G	35 CB .75 NPT @ 6:00 (GRAY)	1.000 ea
35GS1039	05 MOLDED GASKET W/LIP, 1.12 LEAD HOLE,	1.000 ea
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
35EP3122R07W	CUSTOM ODE,203 BRG,1.063SH,.125NPT DRNS,	1.000 ea
HW4072A01	BLACK DRAIN PLUG FOR .125 NPT	3.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3307E00W	MASTER DE,205 BRG,1.623SH,.125NPT DRNS,C	1.000 ea
HW4072A01	BLACK DRAIN PLUG FOR .125 NPT	3.000 ea
HW4606A02	JM CLIPPER/SEAL (LWE-0938-1624-AL23)	1.000 ea
12XN1032S20	10-32 X 1-1/4 HEX M.S. , STAINLESS STEEL	2.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	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
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
HW4606A01	JM CLIPPER/SEAL (WDE-0667-1064-BH49)	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
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1164	LABEL,WARNING AND DRAIN	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
HA5027A02	HA4054 T-DRAIN X2 BAGGED WITH LABEL	1.000 ea
MJ5001A02	732 CL SEALANT 3 OZ DIXIE BEARING 289100	0.001 ea
HA1025A21	WSHR,FELT .125" THK	1.000 ea

MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1025W01	WILKOFAS, 781.01, SIGNAL WHITE #9003	0.050 ga
MG1025Z02	ACTIVATOR WILKOFAS 060.02HF	0.010 ga
HA3100S03	THRUBOLT- 10-32 X 10.625 302 OR 303 SS	4.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP1496L	SS WD UL CC	1.000 ea
36PA1001	PKG GRP, PRINT PK1017A07	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
PE-0000002	ZRTG PE ASSEMBLY	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 86945

Preliminary Data Sheet

Winding: 35WGG301-R001			Type: 3540M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		3	Full Load Torque		9.54 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		8.6/4.3	Breakdown Torque		34.9 LB-FT	
R.P.M.		1655	Pull-up Torque		34.8 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		39.2 LB-FT
NEMA Design Code		D	KVA Code		H	
Service Factor (S.F.)		1	Starting Current		26 A	
NEMA Nom. Eff.		81.5	Power Factor		80	
Rating - Duty		40C	AMB-CONT			
			Line-line Res. @ 25°C		5.66 Ω	
			Temp. Rise @ Rated Load		105°C	
			Locked-rotor Power Factor		70.6	
			Rotor inertia		0.289 lb-ft ²	

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	37	59	72	79	84	86
Efficiency	80.2	85.1	85	82.7	79.5	75.5
Speed	1768	1736	1701	1658	1610	1553
Line amperes	2.39	2.83	3.46	4.29	5.27	6.47

ABB Motors and Mechanical Inc.

WINDING # 35WGG301

Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 1655 RPM 460 V 3540M

TORQUES (LB-FT): PO=34.9 PU=34.8 LR=39.2 LRA=26





