

ABB BALDOR RELIANCE III

Customer information packet

DMG2310

10KW, 2500RPM, DC, 219AT, DPFG, F2

Specifications

Armature Voltage	230 V
Base Speed	2500 rpm
Enclosure	DPFG
Field Voltage	230 V
Frame Material	Steel
Output Power	10.000 KW
Agency Approvals	CSA
Ambient Temperature	40 °C
Armature Current	43.5 a
Bearing Grease Type	Polyrex EM (-20F +300F)
Drip Cover	No Drip Cover
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Field Winding Type	COMPOUND
Heater Indicator	No Heater
Insulation Class	F
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Mounting Arrangement	F2
Overall Length	24.50 IN
Service Factor	1.00
Shaft Diameter	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Slinger Indicator	No Slinger
Thermal Device - Bearing	None

Part Detail

Revision	B
Type	DC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	K0002A
Layout	1486
Eff. date	08-18-2022
CD Diagram	
Poles	00
Leads	
Proprietary	False
Created date	12-12-2019

Nameplate

15405												
CAT.NO.			MODEL NO.		T21S8001							
KW	10 KW	RPM	2500		FRAME		0219AT					
ARM VOLTS	230		ARM AMPS		43.50		WOUND		COMPOUND			
FIELD VOLTS	230		FIELD AMPS		.81							
FIELD CONN.			OHMS	188.5		INSUL. CLASS				F		
ENCL	DPFG	DUTY		CONT		MAX AMBIENT			40			
SERVICE FACTOR	1.0											
S/N			E/S	K0002A								
	-											
O.D.E. BRG.	6207	D.E. BRG.	6207	BRUSH		150986-21-1					QTY	2

Parts List

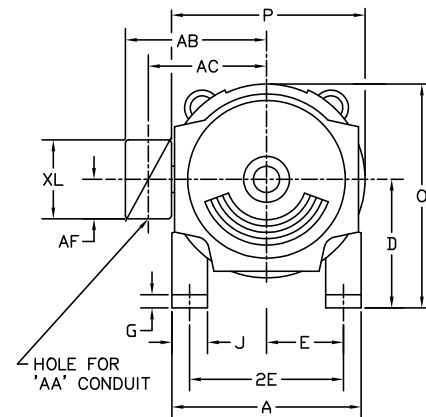
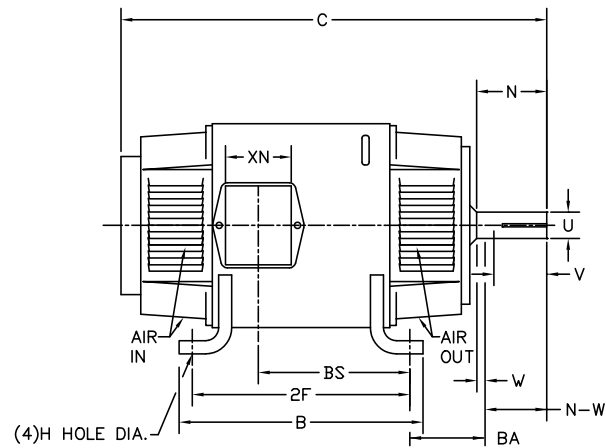
Part number	Description	Quantity
SA376985	SA T21S8001	1.000 ea
AA018212	AA T21S8001	1.000 ea
000613006NT	NAME PLATE IEC	1.000 ea
036170004DA	DRSCW METRIC NAMEPLATE	4.000 ea
15405	ALUM CSA DC GENERATOR	1.000 ea
004824007AB	PAINT,XT	0.100 ea
034017014AB	LCKW 3/8 STD. PLATED	8.000 ea
032018004BK	HHCS 5/16-18X1/2 PLATED	2.000 ea
15094	DISHED LOCKWASHER .332 ID, .865 OD	2.000 ea
21702-1	ROCKER RING ASSY FR 210 1 BRUSH PER BRU	1.000 ea
150986-21-1SP	BRUSH,210 FR. SERIES T563 NATIONAL	2.000 ea
21075-13	ODE BRKT MACH,FR 210,LOCKED ODE BRG,FOR	1.000 ea
21073-8	FE BRKT MACH FR210 STANDARD FOR L	1.000 ea
032018048BK	5/16-18 X 6.00 HHCS	4.000 ea
032018032BK	HHCS 5/16-18X4"PLTD-250	4.000 ea
HA4048A05	DRIVE-IN PLUG,1.38"EXPAN.PLUG,	1.000 ea
HW5100A07	W2816-030 WVY WASHER (WB)	1.000 ea
034690001AC	P/PLG	2.000 ea
032130016AA	HSCHS	2.000 ea
150449-25	T BOX GRD STUD ARG 1/4 20 DIA. STUD	1.000 ea
21091	GASKET TERM BOX FRAME 210	1.000 ea
21091	GASKET TERM BOX FRAME 210	1.000 ea
21090	TERM BOX HOLE COVER 1018 STEEL PLATE	1.000 ea
032018004AK	HHCS 1/4-20X1/2 PLATED	4.000 ea
21079-2	GASKET COVER CE FRAME 210	3.000 ea
21079-1	GASKET,CVR,FAN END,FR.2103/32 THK DC205(	3.000 ea
032018004AK	HHCS 1/4-20X1/2 PLATED	28.000 ea
21080-1	VENT COVER FR 21 SERIES	3.000 ea
21080-2	VENT COVER, FR 21 SERIES W-5.00	3.000 ea
15029-1	TERM.BOX BASE FR-210 DUREX P/N:1DR	1.000 ea
15029-2	TERM.BOX COVER FR-210 DUREX P/N:D616	1.000 ea

15029-3	GASKET T BOX CVR,1/8 THK ARMSTRONG DC 20	1.000 ea
032018004AK	HHCS 1/4-20X1/2 PLATED	2.000 ea
032018004AK	HHCS 1/4-20X1/2 PLATED	4.000 ea
151128	LABEL DC GENERATOR CONN. & TERMINA	1.000 ea
034180014EA	KEY 5/16X5/16X1-3/4L	1.000 ea
MG1025G05	WILKOFAS, 789.227, MED. GRAY CHAR. MET.	0.700 ga

Accessories

Part number	Description	Multiplier
91EP5000A01	C-FACE CONVERSION KIT FOR STOCK MTR,FR 2	P1

REL S.O.	FRAME	RATING	RPM	ARM. VOLTS	ARM. AMPS
	219AT	10.0HP	2500	230	43.5
WINDING TYPE		S.F.	ENCL.	AMB °C/INSUL	DUTY
STAB. SHUNT		1.0	DPG	40/F	CONT
POWER CODE		TYPE	WK ² (LB-FT ²)	HOT ARM.CIR.RES.	FLD. AMPS@25 °C
A		T	1.201	1.02	1.21
ARM. CIR. IND. (mh)		FIELD IND. (H)	COOLING AIR(CFM/IN H ² 0)		TEST DATE
4.23		10.2	-/-		-
LOAD PERFORMANCE					
LOAD	AMPERES	TORQUE IN OZ.-FT.	OUTPUT IN HP	RPM	% EFFICIENCY
NO LOAD	4971	0	0	4220	0
1/4	11	0	0	3978	0
2/4	22	0	0	3717	0
3/4	33	0	0	3466	0
4/4	44	0	0	3222	0
O.L.	65	0	0	2751	0
RPM VS. FIELD AMPS					
FIELD AMPS	RPM N.L.	RPM F.L.	Eg VS. FIELD AMPS		
.878	4219	3222	Eg N.L. @ BASE SPEED	Eg F.L. @ BASE SPEED	
6.22	-184	2929	134	134	
11.5	-34	2604	333	234	
16.9	-15	2831	333	260	
22.2	4219	3222	333	266	
			134	134	
REMARKS: TYPICAL DATA					
		DR. BY E. GILLOT CK. BY B. GRANT APP. BY R. ERLACHER DATE 11-19-07		D-C MOTOR PERFORMANCE DATA	
				DK0002A ISSUE DATE 11-19-07	



1486

FOOT MOUNTING							D.E. SHAFT EXTENSION					DRIVE KEY		FRAME					
FRAME	BA	E	2F	G	H	J	N	N-W	U	V	W	KEY-SQ.	KEY-LONG	A	B	C	D	O	P
1810AT	2.75	3.75	11.00	.38	.406	1.50	2.90	2.77	1.125 ¹	2.50 ³	.13	.250	1.38	8.75	12.25	21.46	4.50 ²	9.00	9.00
219AT	3.50	4.25	11.00	.50	.406	2.00	3.00	2.75	1.375 ¹	2.50 ³	.25	.312	1.75	10.38	12.00	24.50	5.25 ²	10.47	10.44
258AT	4.25	5.00	12.50	.69	.531	2.25	3.44	3.25	1.625 ¹	3.00 ³	.19	.375	2.31	12.38	14.00	26.50	6.25 ²	12.47	12.44
259AT	4.25	5.00	14.00	.69	.531	2.25	3.44	3.25	1.625 ¹	3.00 ³	.19	.375	2.31	12.38	15.50	28.00	6.25 ²	12.47	12.44
288AT	4.75	5.50	14.00	.69	.531	2.50	3.91	3.75	1.875 ¹	3.50 ³	.16	.500	2.50	13.81	15.62	32.00	7.00 ²	13.88	13.75
328AT	5.25	6.25	16.00	.81	.656	3.00	4.40	4.25	2.125 ¹	4.00 ³	.15	.500	3.12	15.88	17.75	34.63	8.00 ²	15.94	15.88
329AT	5.25	6.25	18.00	.81	.656	3.00	4.40	4.25	2.125 ¹	4.00 ³	.15	.500	3.12	15.88	19.75	36.63	8.00 ²	15.94	15.88

CONDUIT BOX								APPROXIMATE WEIGHT
FRAME	AA	AB	AC	AF	BS	XL	XN	
1810AT	3/4NPT	INTEGRAL WITH ENDPLATE						195
219AT	3/4-1	7.91	6.44	2.44	9.38	3.81	3.12	260
258AT	1-1/4	9.35	7.72	2.94	9.75	4.94	4.00	366
259AT	1-1/4	9.35	7.72	2.94	11.25	4.94	4.00	411
288AT	1-1/4	11.88	9.25	5.00	12.64	7.88	5.25	566
328AT	2	12.94	10.32	5.00	13.68	7.88	5.25	775
329AT	2	12.94	10.32	5.00	15.68	7.88	5.25	884

- 1) SHAFT DIAMETERS TO 1.500 TOLERANCE $+.0000 - .0005$
SHAFT DIAMETERS ABOVE 1.500 TOLERANCE $+.0000 - .0010$
SHAFT DIAMETERS TO 1.625 RUNOUT .002 T.I.R. MAX.
SHAFT DIAMETERS ABOVE 1.625 RUNOUT .003 T.I.R. MAX.
- 2) 'D' DIMENSION TOLERANCE $+.000 - .030$
- 3) 'V' DIMENSION IS MAX. HUB LENGTH ON SHAFT
- 4) CONDUIT BOX CAN BE ROTATED IN 90° STEPS ON ITS OWN AXIS.
- 5) ALL DIMENSIONS NOT NOTED ARE NOMINAL DIMENSIONS CONSULT FACTORY FOR TOLERANCES.

 FOR F1 OR F2 CONDUIT BOX
LOCATION SEE SALES ORDER

1486

MATL: -			
REV:	C	CORRECTED "A" DIMENSIONS	
9871		SCALE: 0.08	BY: TBM
		FILE: CHB00003091	REVISED: 09/10/96
		TDR: 0104915	

BALDOR ELECTRIC Co.

DIM SHEET, 1810AT THRU 329AT GENERATORS

BALDOR ROUND DC ARMATURE INSULATION B/M

 FRAME SIZE: **219**
 VOLTS: **0-300**

 CORE LENGTH: **5.62**
 #SLOTS: **24**

DESCRIPTION	#PCS	SIZE (USAGE) OR PART #	PURCHASE INFO	REMARKS
SLOT LINER	24	1.38" X 5.94" (8.2IN2)	612769207BB	4824-10-CX (.015")
TOP STICK	24	6.13" (.51')	4175320005BB	AY482409011 (24-21-15)
SHAFT INSULATION	2	NA	418020001B	4824-10-CX (.007")
COMMUTATOR INSULATION	NA	8.00"	MH1094A03	"GOLD TAPE"
NOMEX/GLASS CLOTH	NA	12.00"	FH482410150	4824-10FH
SLEEVING	NA	NA	NA	4824-13AW
			424503-002K	