

ABB BALDOR RELIANCE III

Customer information packet

CD1803R

DC1811ATCZ, 3HP, 1750RPM, 180, 200, TENV, F3

Specifications

Armature Voltage	180 V
Base Speed	1750 rpm
Enclosure	TENV
Field Voltage	200 V
Frame	DC1811ATCZ
Output Power	3.000 HP
Agency Approvals	CCSA US
Ambient Temperature	40 °C
Armature Current	14.1 a
Drip Cover	No Drip Cover
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Field Winding Type	STR. SHUNT
Frame Prefix	DC
Heater Indicator	No Heater
Insulation Class	F
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Mounting Arrangement	F3
Overall Length	21.69 IN
Service Factor	1.00
Shaft Diameter	1.125 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.	G4610A
Layout	609980-503
Eff. date	08-30-2024
CD Diagram	406770-007
Poles	00
Leads	
Proprietary	False
Created date	11-12-2019

Nameplate

000613006HP									
CAT.NO.	CD1803R	SPEC NO.		T18S1102					
FR	DC1811ATCZ	HP	3	DUTY		CONT			
ENCL.	TENV	RPM	1750	S.F.		1.0			
ENCL MOD		VOLTS	180	INSUL		F			
MAX SAFE SPEED	04500	AMPS	14.10	AMB.		40			
FIELD DATA		SER.NO.							
WINDING	STR. SHUNT	POWER CODE		K					
VOLTS	200/100	D.E. BRG.		30BC02JPP30A					
MAX AMPS @ 25 C	1.17	O.D.E. BRG.		30BC02JPG30A					
HOT AMPS	.80	MIN. AMB.		0		TYPE		TR	
BRUSH:419904050A						SPLASHPROOF			
FLD. DATA FOR HIGH VOLTS									

Parts List

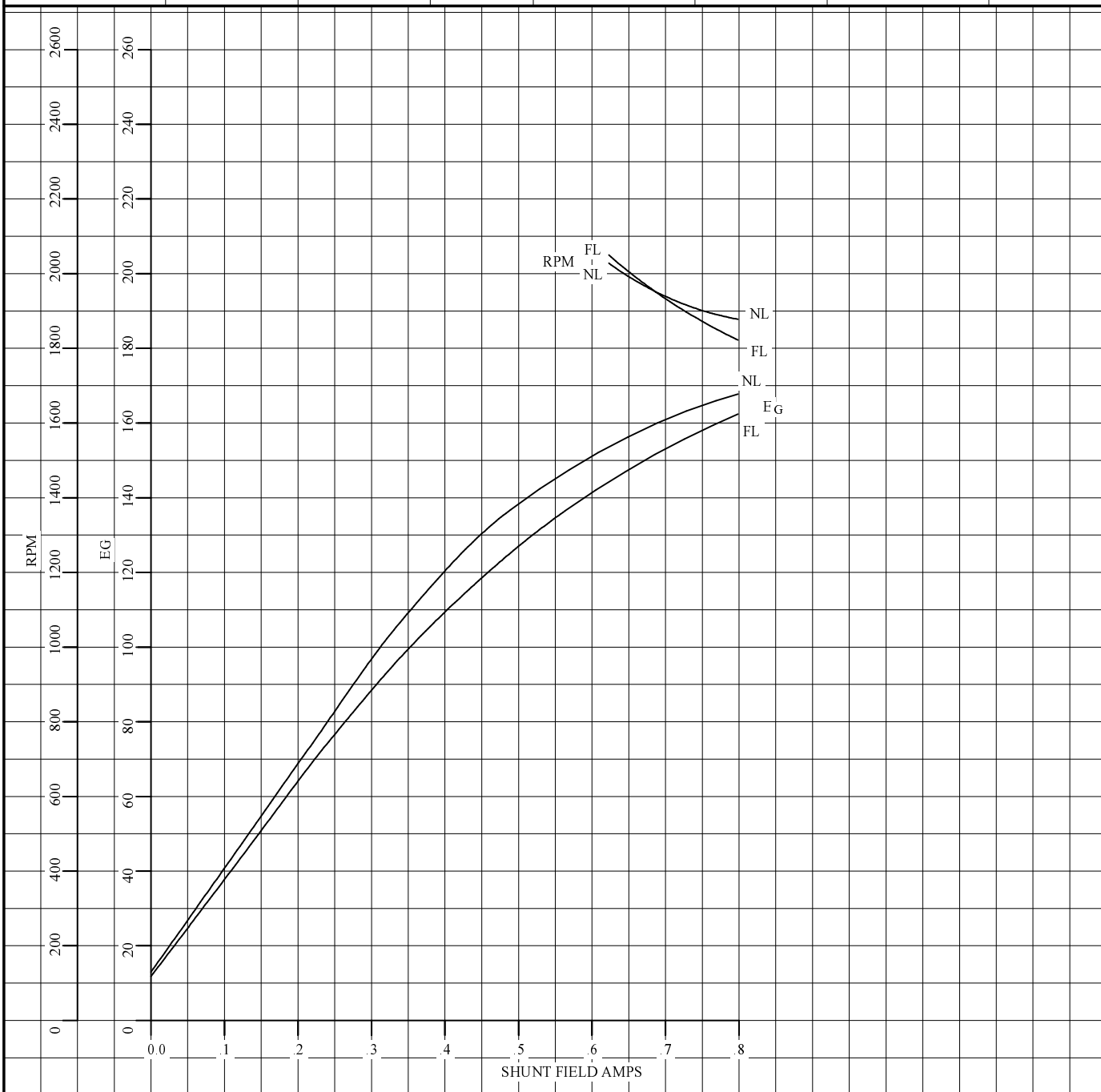
Part number	Description	Quantity
SA375990	SA T18S1102	1.000 ea
AA018171	AA T18S1102	1.000 ea
000692000FS	WARNING LABEL	1.000 ea
000692000FP	NP, WARNING LIFT INSTRUCTIONS	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	8.000 ea
000613006HP	NAMEPLATE - RPM III D-C MOTOR W/CSA LOGO	1.000 ea
422908009B	SLVNG EXTRA SLVG LENGT	28.000 ea
609844002A	BALANCE RING	1.000 ea
036000012HB	HHCS M6X12MM LONG PLATED	1.000 ea
036010010GB	M5-.8 X 10 HXWHD SCREW	2.000 ea
610470003R	BRASY METRIC	1.000 ea
419904050A	BRUSH N	2.000 ea
801758061A	BRKT,ODE,DC180	1.000 ea
801759067AA	BRKT,DE,DC180	1.000 ea
004824015A	GREASE POLYREX EM	0.100 lb
036000050HB	MHHCS M6X50MM PLATED	2.000 ea
400638001C	WSHR	1.000 ea
036500009AB	METRIC NUTM8-1.25PLTD-360	4.000 ea
036500009AB	METRIC NUTM8-1.25PLTD-360	4.000 ea
609830005L	TBOLT METRIC RP609830-	4.000 ea
415000103A	T/LUG #14AWG-#4AWG W/HOLE FOR .250 BOLT	1.000 ea
033520003JE	SHWHS	1.000 ea
417733003A	GASKT	1.000 ea
418018074A	GROUND LABEL G100 METRIC 160 D.C.	1.000 ea
036620008AB	M6 METRIC EXT LOCKWASHER	1.000 ea
032018004CK	HHCS 3/8-16X1/2L PLATED	4.000 ea
422919199	CVRKT FE	1.000 ea
422919200	HHCVR KIT,DC180,ODE,SOLID	1.000 ea
422919200	HHCVR KIT,DC180,ODE,SOLID	1.000 ea
422919200	HHCVR KIT,DC180,ODE,SOLID	1.000 ea
706310300A	COND BOX	1.000 ea

06CB3500	BALDOR CONDUIT BOX LID	1.000 ea
06GS1001	BALDOR CONDUIT BOX GASKET	1.000 ea
033518006LB	HWHMS, .75IN 1/4-20	2.000 ea
036000010HB	MHHCS M6-1.0X10L PLATED	4.000 ea
406770007	C/D TAG	1.000 ea
706305020A	GUARD, SHAFT	1.000 ea
034180014DA	KEY 1/4X1/4X1-3/4 L	1.000 ea
000640000P	TAG WINDING THERMOST	1.000 ea
000692000NF	NP 2POLE METRIC LABEL	1.000 ea
004824007K	SPECIAL PAINT	0.100 ea

ABB BALDOR RELIANCE III

CD1803 BASE SPEED 1750 WINDING TYPE 200, TENV, F3
 MOTOR INFORMATION DC1811AT 3.00HP STRAIGHT SHUNT

S.F. 1.0	ENCL. TENV	AMB ⁰ C/INSUL 40/F	DUTY CONT	POWER CODE/FORM FACTOR 2/2 230-60-0			TYPE TR	WK ² (LB-FT ²) .7906	
COOLING AIR(CFM/IN H ₂ O) -/-		J (sec) .498	R (hot) .0645	T _E .0122	T _M .0322	BASIC RPM 1950	MAX CONT RPM 2050	WINDER RPM -	MAX. SAFE 4500
WINDING		VOLTS	RESISTANCE		CURRENT		INDUCTANCE	TURNS PER COIL	
			25 ⁰ C	HOT	25 ⁰ C	HOT			
ARM CIRCUIT		180	.428	.639	-	14.1	9.48 mH	-	
SERIES S1-S2		-	-	-	-	-	-	-	
SHUNT F1-F2		200	171	250	1.17	.799	40.2 H	1650	



REMARKS: TYPICAL DATA SPEED REGULATOR REQUIRED FOR STABILITY
 CURVES VALID FOR NAMEPLATE SPEED RANGE ONLY



DR. BY R.ERLACHER
 CK. BY R.ERLACHER
 APP. BY T.S.EVON
 DATE 08-04-88

D-C
 APPLICATION
 DATA

SG4610A

ISSUE DATE 08-04-88

REL S.O.	FRAME	RATING	RPM	ARM. VOLTS	ARM. AMPS
	DC1811AT	3.00HP	1750	180	14.1
WINDING TYPE		S.F.	ENCL.	AMB °C/INSUL	DUTY
STRAIGHT SHUNT		1.0	TENV	40/F	CONT
POWER CODE		TYPE	WK ² (LB-FT ²)	HOT ARM.CIR.RES.	FLD. AMPS@25 °C
2/2 230-60-0		TR	.7906	.638	1.16
ARM. CIR. IND. (mh)	FIELD IND. (H)	COOLING AIR(CFM/IN H ² 0)		URNS PER COIL SHUNT/SERIES	TEST DATE
9.47	40.2	-/-		1650/.00000	-
LOAD PERFORMANCE					
LOAD	AMPERES	TORQUE IN LB.-FT.	OUTPUT IN HP	RPM	% EFFICIENCY
NO LOAD	.75	0	0	1865	0
1/4	3.5	1.87	.656	1843	59.6
2/4	7.0	4.20	1.46	1829	73.2
3/4	11	6.48	2.24	1820	77.2
4/4	14	8.66	3.00	1818	78.6
O.L.	21	12.6	4.42	1841	78.6
RPM VS. FIELD AMPS					
FIELD AMPS	RPM N.L.	RPM F.L.	Eg N.L. @ BASE SPEED	Eg F.L. @ BASE SPEED	
.798	1864	1818	167	162	
.754	1898	1867	165	158	
.710	1929	1918	161	154	
.666	1972	1979	158	149	
.622	2027	2050	154	144	
REMARKS: TYPICAL DATA MAXIMUM SAFE SPEED = 4500 RPM SPEED REGULATOR REQUIRED FOR STABILITY					
		DR. BY R. ERLACHER CK. BY R. ERLACHER APP. BY T. S. EVON DATE 08-04-88		D-C MOTOR PERFORMANCE DATA DG4610A ISSUE DATE 08-04-88	

**BALDOR
RELIANCE**

HP/KW **3.00HP**
RPM **1750**
ARM. VOLTS **180**
WDG. TYPE **STRAIGHT SHUNT**

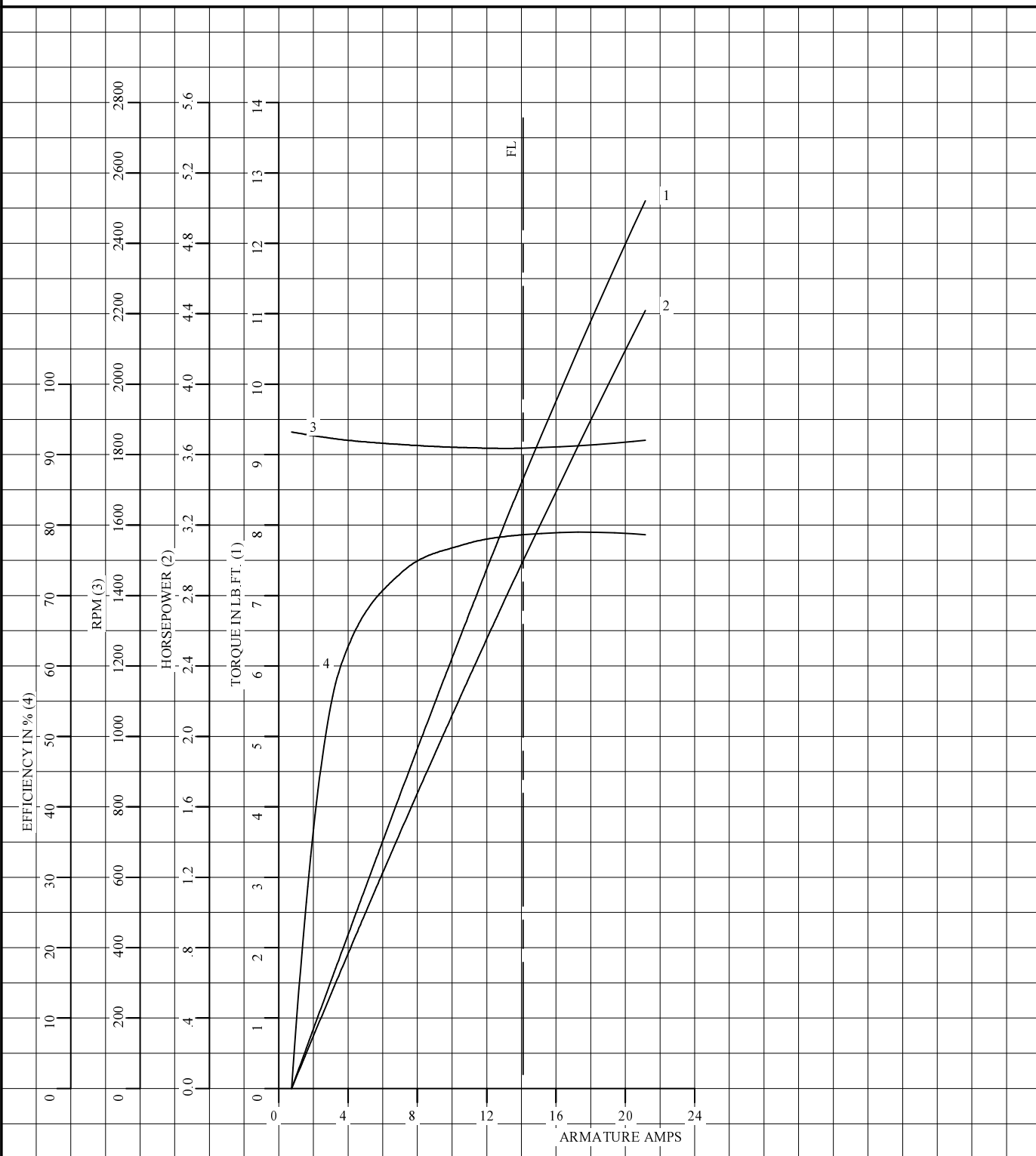
CUSTOMER INFORMATION PACKET

ENCL. TENV
AMB °C INSL. **40/F**
ARM. AMPS **14.1**
FIELD VOLTS **200**

TYPE **TR** DC1811ATCZ, 3HP, 1750RPM, S.C., 200, TENV, F3

WK2(LB-FT²) **.7906**
HOT ARM. CIR. RES. **.638**
ARM. CIRCUIT IND(mh) **9.47**
HOT FIELD RES. **250**
POWER CODE **2/2 230-60-0**

FLD.AMPS@25 °C **1.16**
FIELD IND (H) **40.2**
CFM/IN. H₂O **-/-**
TEST S.O. **-**
TEST DATE **-**



REMARKS: TYPICAL DATA SPEED REGULATOR REQUIRED FOR STABILITY



DR. BY R.ERLACHER
CK. BY R.ERLACHER
APP. BY T.S.EVON
DATE 08-04-88

**D-C
PERFORMANCE
CURVES**

PG4610A

ISSUE DATE 08-04-88

