

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

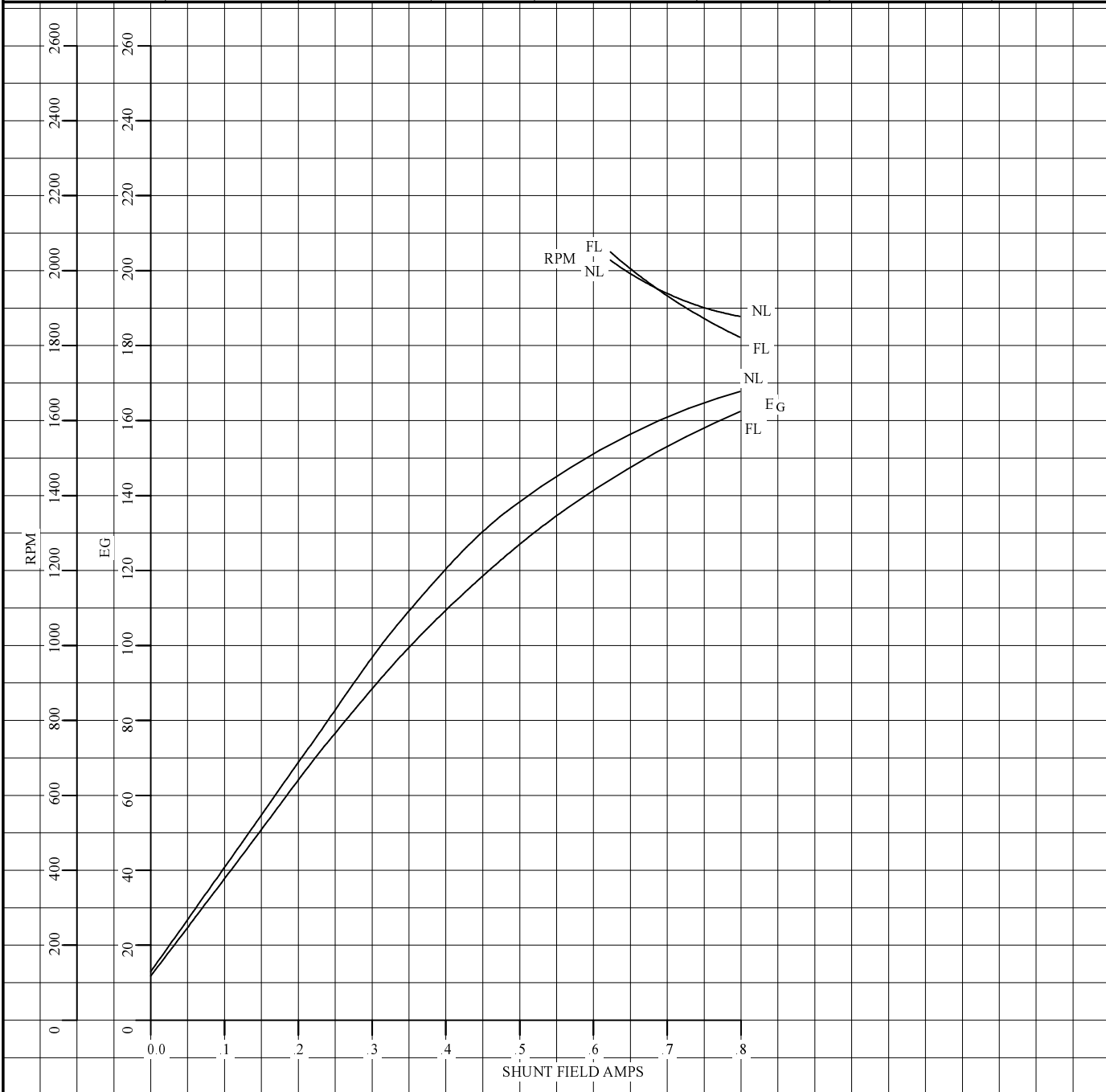
Nameplate

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									

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

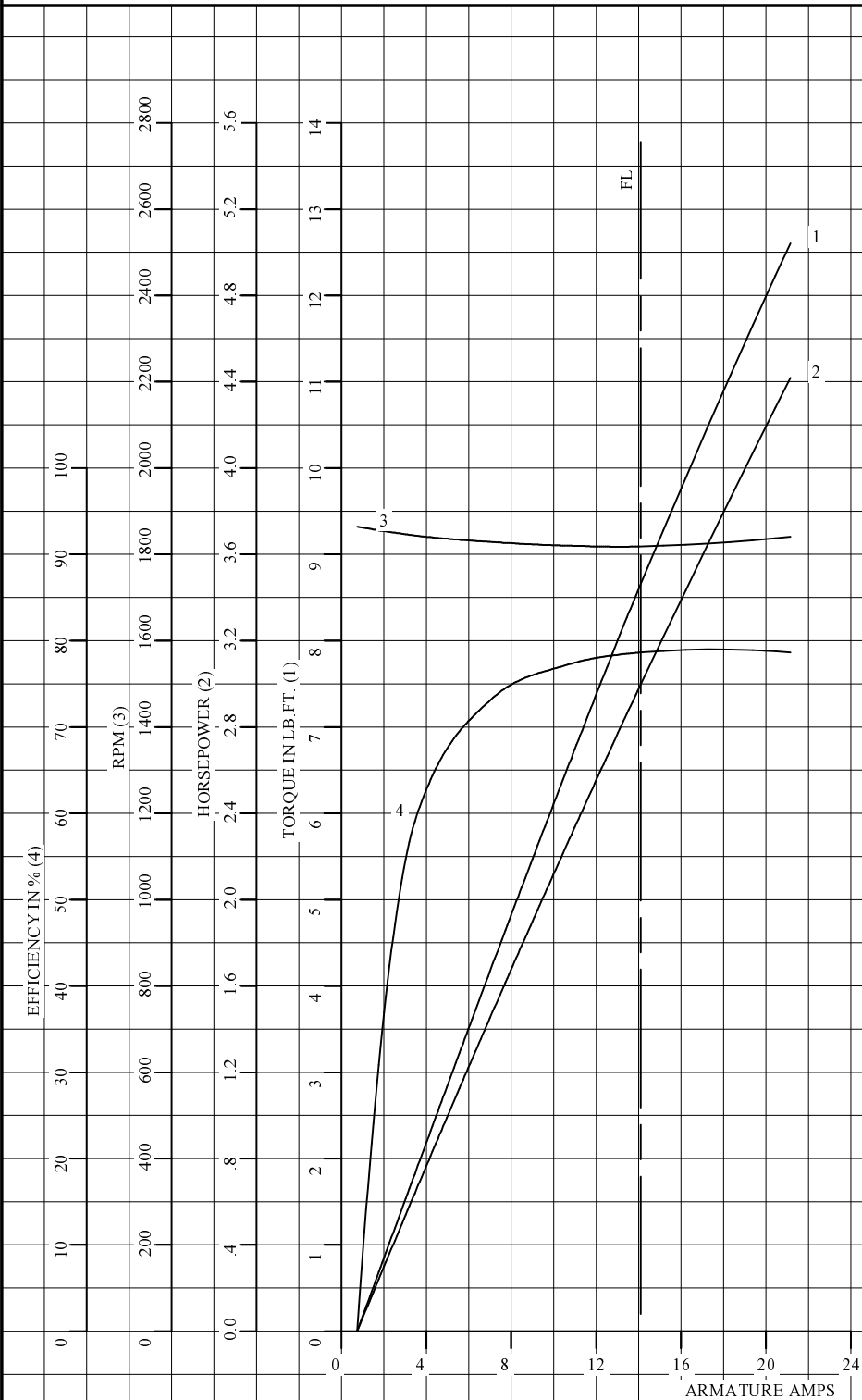
REL S.O.	FRAME	RATING	RPM	ARM. VOLTS	ARM. AMPS	
	DC1811AT	3.00HP	1750	180	14.1	
WINDING TYPE		S.F.	ENCL.	AMB °C/INSUL	DUTY	FIELD VOLTS
STRAIGHT SHUNT		1.0	TENV	40/F	CONT	200
POWER CODE	TYPE	WK ² (LB-FT ²)	HOT ARM.CIR.RES.	FLD. AMPS@25 °C	HOT FIELD RES	
2/2 230-60-0	TR	.7906	.638	1.16	250	
ARM. CIR. IND. (mh)	FIELD IND. (H)	COOLING AIR(CFM/IN H ² 0)		TURNS 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		
MAXIMUM SAFE SPEED = 4500 RPM 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 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**
WKT(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

