

ABB BALDOR RELIANCE III

Customer information packet

D1802R

DC0189ATY, 2HP, 1750RPM, 180, 200, TENV, F3

Specifications

Armature Voltage	180 V
Base Speed	1750 rpm
Enclosure	TENV
Field Voltage	200 V
Frame	DC0189ATY
Output Power	2.000 HP
Agency Approvals	CCSA US
Ambient Temperature	40 °C
Armature Current	9.5 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	21.19 IN
Service Factor	1.00
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Slinger Indicator	No Slinger
Thermal Device - Bearing	None

Part Detail

Revision	-
Type	DC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	G4603A
Layout	609980-503
Eff. date	12-27-2019
CD Diagram	406770-007
Poles	00
Leads	
Proprietary	False
Created date	12-27-2019

Nameplate

000613006HP									
CAT.NO.			SPEC NO.	T18S1117					
FR	DC0189ATY	HP	2			DUTY	CONT		
ENCL.	TENV	RPM	1750			S.F.	1.0		
ENCL MOD			VOLTS	180			INSUL	F	
MAX SAFE SPEED	04500	AMPS	9.50			AMB.	40		
FIELD DATA		SER.NO.							
WINDING	STR. SHUNT		POWER CODE		2/2-230-60-0				
VOLTS	100/200		D.E. BRG.		30BC02JPP30A				
MAX AMPS @ 25 C	1.44/.72		O.D.E. BRG.		30BC02JPG30A				
HOT AMPS	1.02/.51		MIN. AMB.		0			TYPE	TR
BRUSH:419904050A									
SPLASHPROOF									

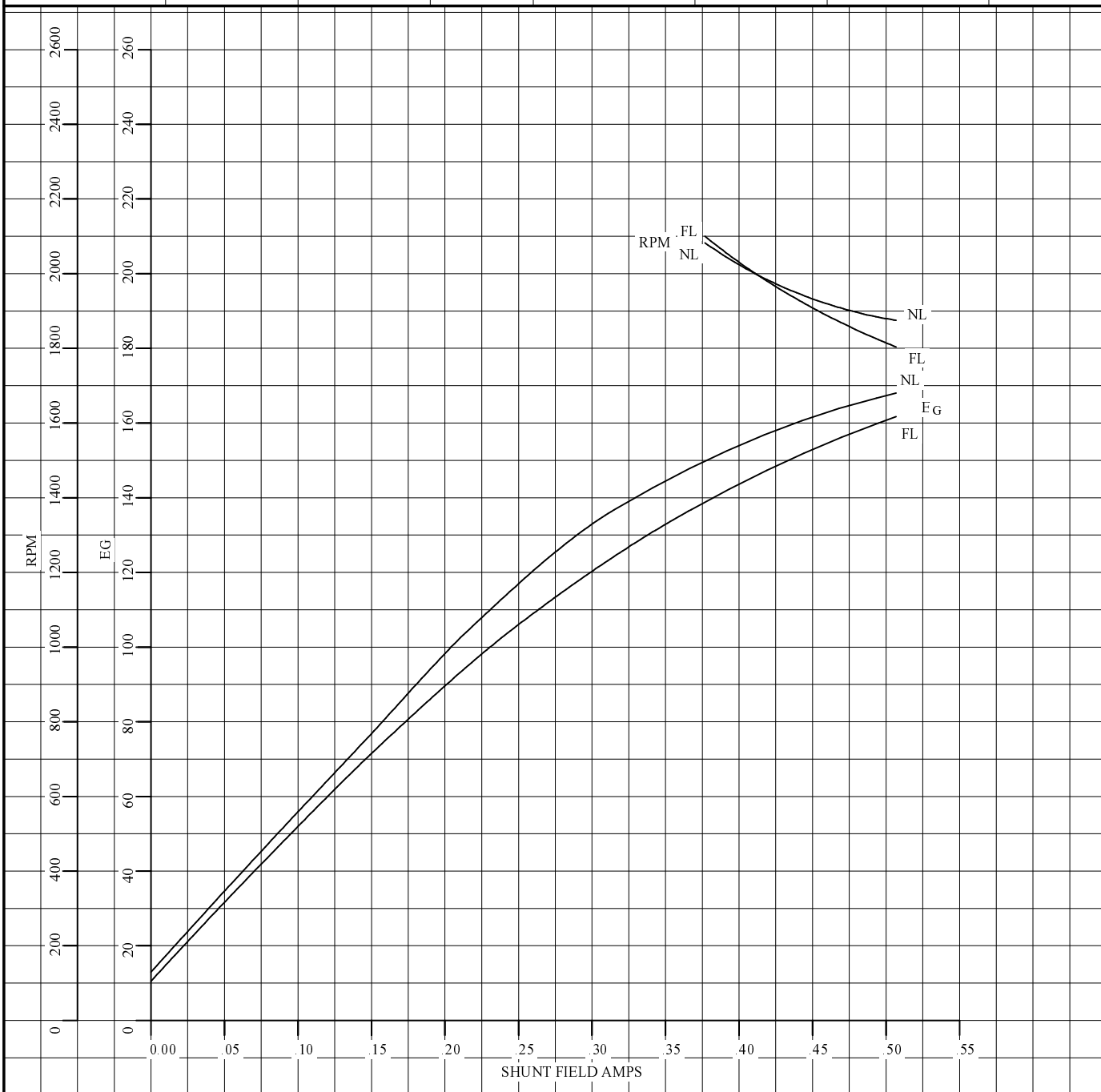
Parts List

Part number	Description	Quantity
SA377455	SA T18S1117	1.000 ea
AA018263	AA T18S1117	1.000 ea
000692000FP	NP, WARNING LIFT INSTRUCTIONS	1.000 ea
000692000FS	WARNING LABEL	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
801759066AA	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
609830005J	TBOLT METRC RP 609830-	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
034180010CA	KEY 3/16X3X16X1-1/4 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

CUSTOMER INFORMATION		MOTOR PACKET		D1802R		BASE SPEED		WINDING TYPE	
DC189AT		2.00HP				1750		STRAIGHT SHUNT	
S.F.	ENCL.	AMB ⁰ C/INSUL	DUTY	POWER CODE/FORM FACTOR			TYPE	WK ² (LB-FT ²)	
1.0	TENV	40/F	CONT	2/2 230-60-0			TR	.6247	
COOLING AIR(CFM/IN H ₂ O)		Δ (sec)	R (hot)	T _E	T _M	BASIC RPM	MAX CONT RPM	WINDER RPM	MAX. SAFE
-/-		.591	.0799	.0103	.0472	1950	2100	-	4500
WINDING	VOLTS	RESISTANCE		CURRENT		INDUCTANCE		TURNS PER COIL	
		25 ⁰ C	HOT	25 ⁰ C	HOT				
ARM CIRCUIT	180	.853	1.23	-	9.50	14.5 mH		-	
SERIES S1-S2	-	-	-	-	-	-		-	
SHUNT F1-F2	200	277	395	.722	.507	64.4 H		2500	



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



DR. BY J. MARTIN
CK. BY J. MARTIN
APP. BY T. EVON
DATE 7-8-88

D-C
APPLICATION
DATA

SG4603A

ISSUE DATE 1/30/91

REL S.O.	FRAME	RATING	RPM	ARM. VOLTS	ARM. AMPS
	DC189AT	2.00HP	1750	180	9.50
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	.6247	1.22	.721
ARM. CIR. IND. (mh)		FIELD IND. (H)	COOLING AIR(CFM/IN H ² 0)		TEST DATE
14.5		64.3	-/-		2500/.00000
LOAD PERFORMANCE					
LOAD	AMPERES	TORQUE IN LB.-FT.	OUTPUT IN HP	RPM	% EFFICIENCY
NO LOAD	.57	0	0	1861	0
1/4	2.4	1.22	.425	1835	57.8
2/4	4.8	2.79	.965	1816	71.6
3/4	7.1	4.31	1.48	1805	75.4
4/4	9.5	5.77	1.98	1800	76.5
O.L.	14	8.38	2.90	1816	76.1
RPM VS. FIELD AMPS					
FIELD AMPS	RPM N.L.	RPM F.L.	Eg N.L. @ BASE SPEED	Eg F.L. @ BASE SPEED	
.506	1861	1799	167	161	
.474	1902	1859	164	156	
.441	1944	1926	161	151	
.409	2003	2005	156	145	
.376	2082	2100	150	138	
REMARKS: TYPICAL DATA MAXIMUM SAFE SPEED = 4500 RPM SPEED REGULATOR REQUIRED FOR STABILITY					
		DR. BY J. MARTIN CK. BY J. MARTIN APP. BY T. EVON DATE 7-8-88		D-C MOTOR PERFORMANCE DATA DG4603A ISSUE DATE 1/30/91	

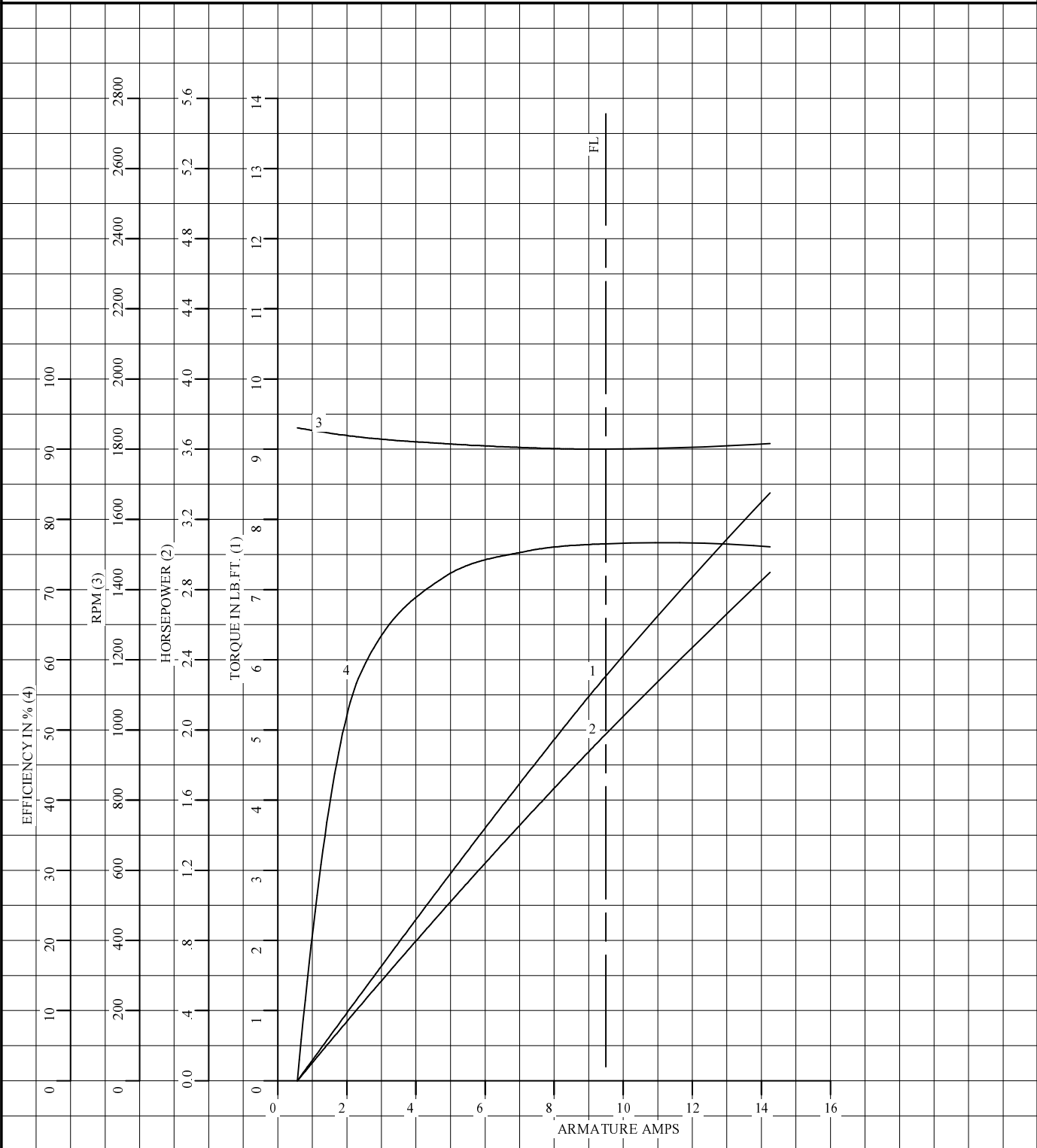
HP/KW 2.00HP
RPM 1750
ARM. VOLTS 180
WDG. TYPE STRAIGHT SHUNT

ENCL. TENV
AMB °C INSL. 40/F
ARM. AMPS 9.50
FIELD VOLTS 200

WK2(LB-FT2) .6247
HOT ARM. CIR. RES. 1.22
ARM. CIRCUIT IND(mh) 14.5
HOT FIELD RES. 394

FLD.AMPS@25 °C .721
FIELD IND (H) 64.3
CFM/IN. H₂O -/-
TEST S.O. -
TEST DATE -

POWER CODE 2/2 230-60-0



REMARKS: TYPICAL DATA SPEED REGULATOR REQUIRED FOR STABILITY



DR. BY J. MARTIN
CK. BY J. MARTIN
APP. BY T. EVON
DATE 7-8-88

**D-C
PERFORMANCE
CURVES**

PG4603A

ISSUE DATE 1/30/91



