

ABB BALDOR RELIANCE III

Customer information packet D1815R

1.50HP, 1750RPM, DC, 189ATY, TENV,

Specifications

Armature Voltage	180 V
Base Speed	1750 rpm
Enclosure	TENV
Field Voltage	200 V
Frame	DC0189ATY
Output Power	1.500 HP
Agency Approvals	CCSA US
Ambient Temperature	40 °C
Armature Current	7.2 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.	G4604A
Layout	609980-503
Eff. date	01-02-2020
CD Diagram	406770-007
Poles	00
Leads	
Proprietary	False
Created date	12-27-2019

Nameplate

000613006HP									
CAT.NO.			SPEC NO.		T18S1119				
FR	DC0189ATY		HP	1.5		DUTY		CONT	
ENCL.	TENV		RPM	1750		S.F.		1.0	
ENCL MOD			VOLTS		180		INSUL		F
MAX SAFE SPEED	04500		AMPS		7.20		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	1.10/.55		MIN. AMB.		0		TYPE		TR
BRUSH:419904050A									
SPLASHPROOF									

ABB BALDOR RELIANCE III

CUSTOMER INFORMATION
DC189AT

PACKET
1.50HP

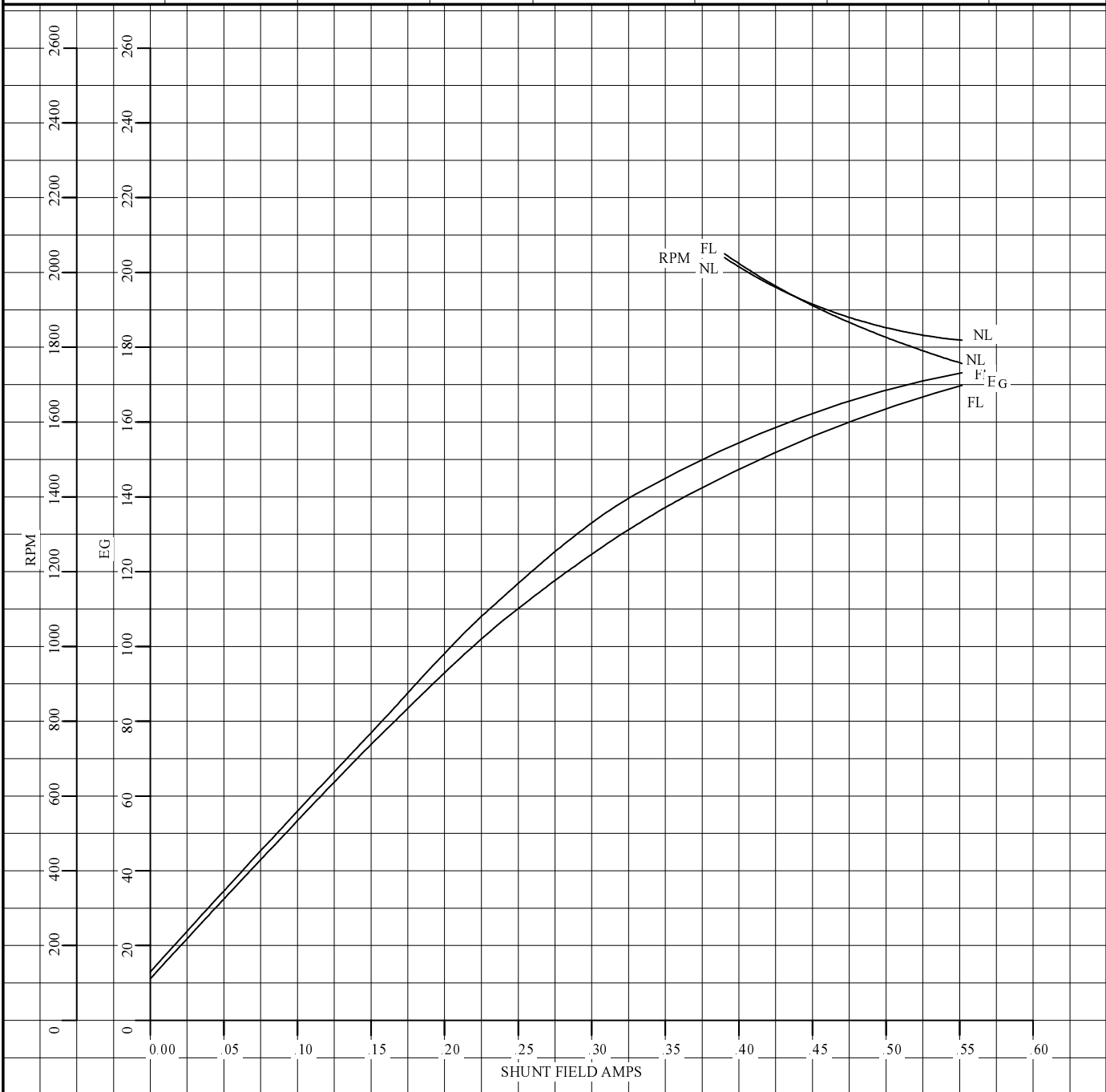
BASE SPEED
1750

WINDING TYPE
STRAIGHT SHUNT

S.F. 1.0 ENCL. TENV AMB°C/INSUL 40/F DUTY CONT POWER CODE/FORM FACTOR 2/2 230-60-0 TYPE TR WK²(LB-FT²) .6247

COOLING AIR(CFM/IN H₂O) -/- (sec) .788 R (hot) .0560 T_E .0109 T_M .0441 BASIC RPM 1950 MAX CONT RPM 2050 WINDER RPM - MAX. SAFE 4500

WINDING	VOLTS	RESISTANCE		CURRENT		INDUCTANCE	TURNS PER COIL
		25°C	HOT	25°C	HOT		
ARM CIRCUIT	180	.853	1.12	-	7.20	14.5 mH	-
SERIES S1-S2	-	-	-	-	-	-	-
SHUNT F1-F2	200	277	363	.722	.552	65.8 H	2500



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



DR. BY B. GRANT
CK. BY B. GRANT
APP. BY T. EVON
DATE 7-8-88

D-C
APPLICATION
DATA

SG4604A

ISSUE DATE 7-8-88

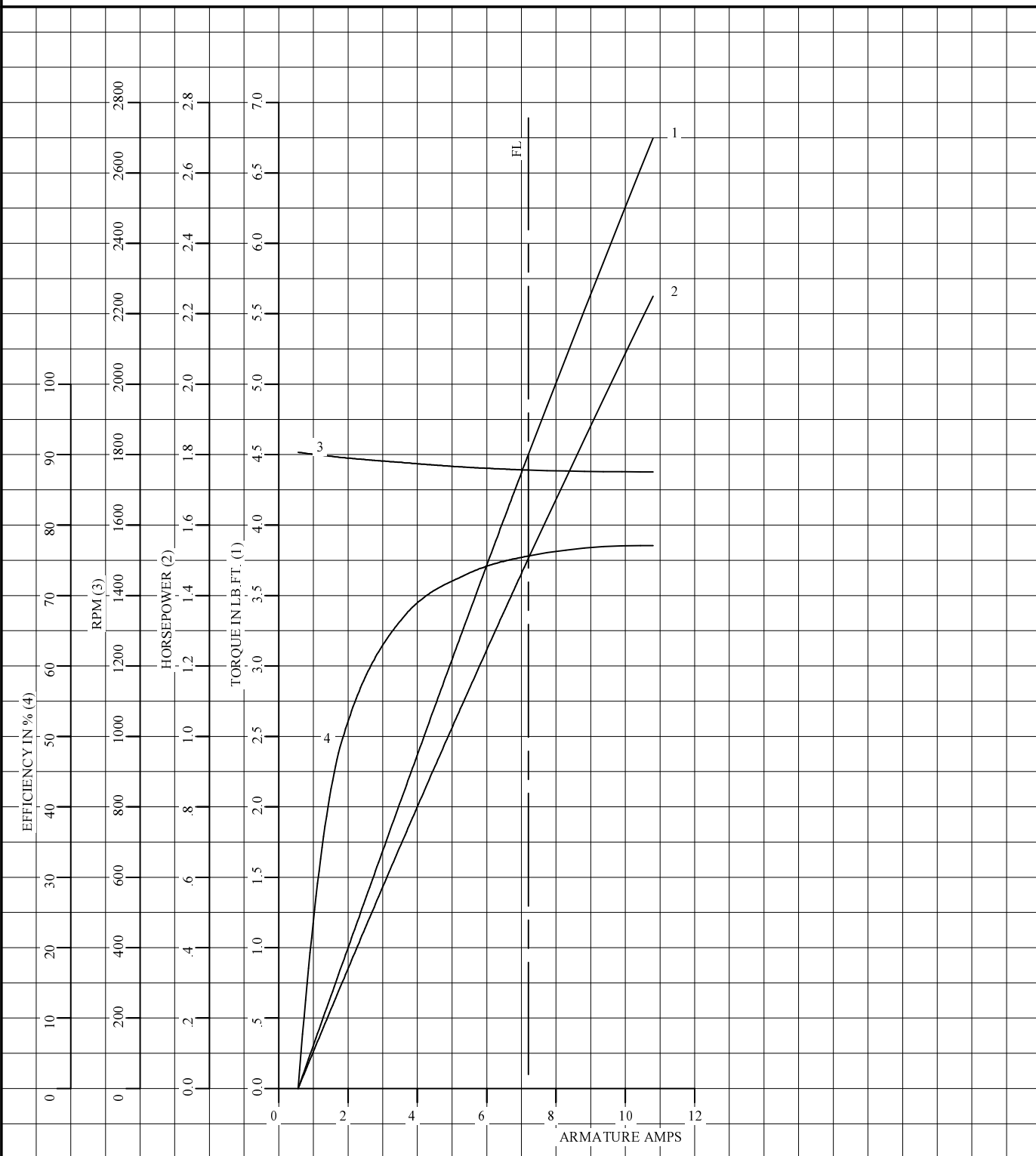
REL S.O.	FRAME	RATING	RPM	ARM. VOLTS	ARM. AMPS
	DC189AT	1.50HP	1750	180	7.20
WINDING TYPE		S.F.	ENCL.	AMB °C/INSUL	DUTY
STRAIGHT SHUNT		1.0	TENV	40/F	CONT
POWER CODE		TYPE	WK ² (LB-FT ²)	HOT ARM.CIR.RES.	FLD. AMPS@25 °C
2/2 230-60-0		TR	.6247	1.11	.721
ARM. CIR. IND. (mh)		FIELD IND. (H)	COOLING AIR(CFM/IN H ² 0)		TEST DATE
14.5		65.8	-/-		2500/.00000
LOAD PERFORMANCE					
LOAD	AMPERES	TORQUE IN LB.-FT.	OUTPUT IN HP	RPM	% EFFICIENCY
NO LOAD	.56	0	0	1807	0
1/4	1.8	.861	.294	1792	49.0
2/4	3.6	2.10	.710	1777	66.9
3/4	5.4	3.31	1.11	1764	73.0
4/4	7.2	4.50	1.50	1756	75.6
O.L.	11	6.75	2.25	1751	77.1
RPM VS. FIELD AMPS					
FIELD AMPS	RPM N.L.	RPM F.L.	Eg N.L. @ BASE SPEED	Eg F.L. @ BASE SPEED	
.551	1806	1756	173	169	
.511	1842	1809	169	164	
.470	1885	1873	165	159	
.430	1949	1951	160	152	
.390	2039	2050	153	145	
REMARKS: TYPICAL DATA MAXIMUM SAFE SPEED = 4500 RPM SPEED REGULATOR REQUIRED FOR STABILITY					
		DR. BY <u>B. GRANT</u> CK. BY <u>B. GRANT</u> APP. BY <u>T. EVON</u> DATE <u>7-8-88</u>		D-C MOTOR PERFORMANCE DATA DG4604A ISSUE DATE 7-8-88	

HP/KW 1.50HP
RPM 1750
ARM. VOLTS 180
WDG. TYPE STRAIGHT SHUNT

ENCL. TENV
AMB °C INSL. 40/F
ARM. AMPS 7.20
FIELD VOLTS 200

WK2(LB-FT2) .6247
HOT ARM. CIR. RES. 1.11
ARM. CIRCUIT IND(mh) 14.5
HOT FIELD RES. 362
POWER CODE 2/2 230-60-0

FLD.AMPS@25 °C .721
FIELD IND (H) 65.8
CFM/IN. H₂O -/-
TEST S.O. -
TEST DATE -



REMARKS: TYPICAL DATA SPEED REGULATOR REQUIRED FOR STABILITY



DR. BY B. GRANT
CK. BY B. GRANT
APP. BY T. EVON
DATE 7-8-88

**D-C
PERFORMANCE
CURVES**

PG4604A

ISSUE DATE 7-8-88



