

ABB BALDOR RELIANCE III

Customer information packet

SUL50156SM

1.5HP, 1160RPM, 1PH, 60HZ, 180TY, XPNV, V1

Class - CLI GP C,D

Division - Not Applicable

Specifications

Enclosure	XPNV
Frame	180TY
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Phase	1
Agency Approvals	CCSA US
	CSA
	UL
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Cable Length	25 FOOT
Design Code	L
Drip Cover	No Drip Cover
Duty Rating	CONT
Haz Area Temp Code	T3C
Heater Indicator	No Heater
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Motor Type	M
Mounting Arrangement	V1
Number of Poles	6
Product Family	Pump - Centrifugal
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	0.875 IN

Part Detail

Revision	B
Type	AC
Mech. spec.	
Base	
Status	INA/A
Elec. spec.	A00094A A 002
Layout	066930-701
Eff. date	04-27-2022
CD Diagram	
Poles	06
Leads	
Proprietary	False
Created date	11-13-2018

Shaft Rotation	Fixed Opposite Standard
Shaft Slinger Indicator	No Slinger
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

000613007MN											
CAT NO			SPEC NO.		S18-A000-0291						
HP	1.50	AMPS	11.7		VOLTS	230		DESIGN	L		
FRAME SIZE	180TY		RPM	1160		HZ	60	AMB	40	SF	1.15
D.E. BRG.	50BC02JPP30A			PH	1	DUTY	15MIN		INSUL	F	
O.D.E. BRG.	25BC02JPG30A			TYPE	CS	ENCL	TENV		CODE	J	
SER.NO.				POWER FACTOR			NEMA-NOM-EFF				
				MAX CORR KVAR			GUARANTEED EFFICIENCY				
				NEMA NOM/CSA QUOTED EFF @						100% LOAD	
				MOTOR WEIGHT				256	LBS.		
				*15 MIN IN AIR ;SUB. IN							
			SEWAGE / WATER ONLY MAXDEPTH								
			IN MANUAL								

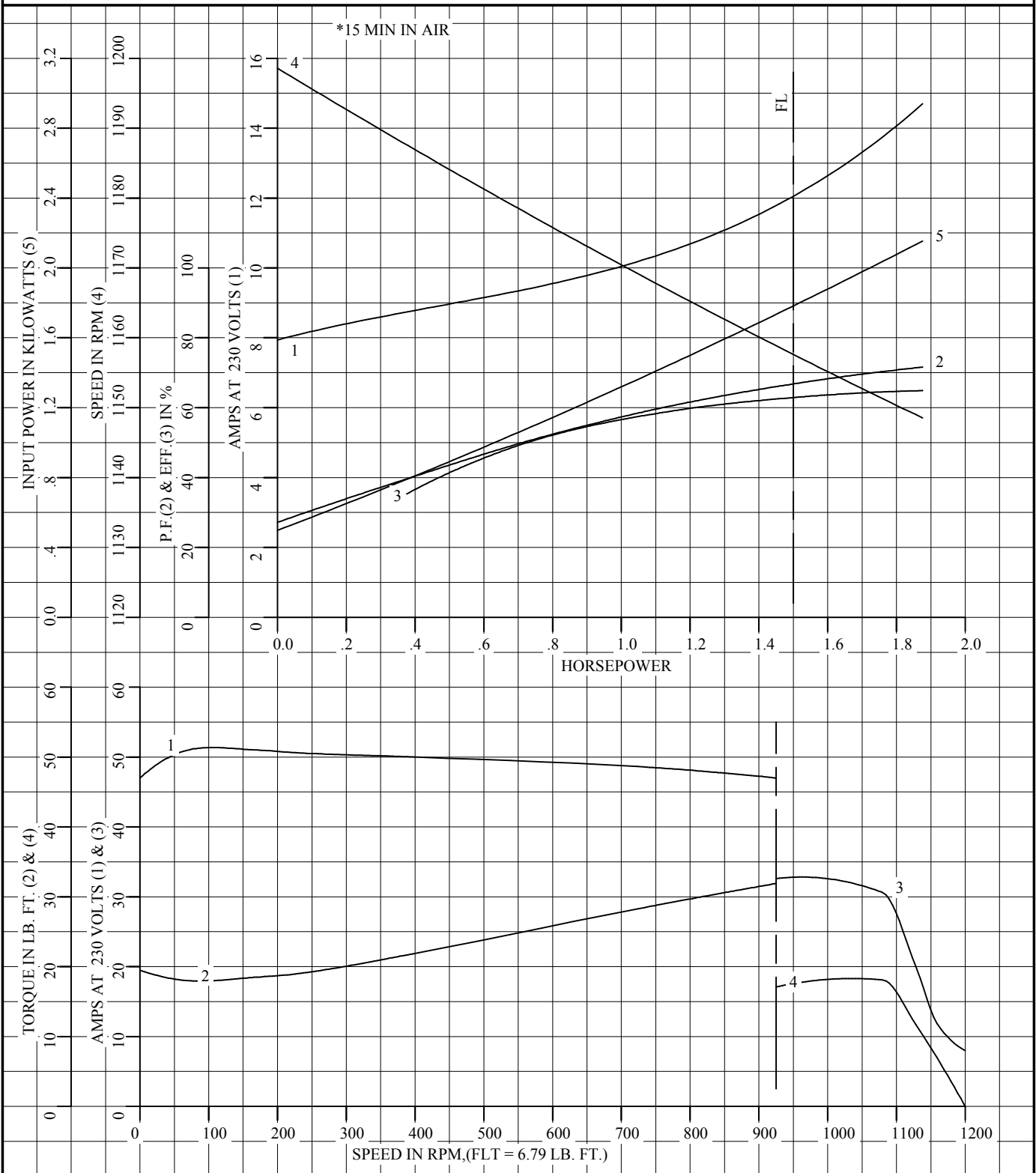
000692000MB		
CONTROL BOX 701455-23J		
MODEL # S18-A000-0291		
1.5 HP ; 1160 RPM ; 230 VOLTS;		
11.7 AMPS ; 60 HZ ; 1 PHASE;		
W/D 41471-101A		
FINAL CONNECT AT 230V		
DO NOT MOUNT IN HAZARDOUS LOCATION		

000613007MR

CAT NO		SPEC NO.	S18-A000-0291							
HP	1.50	AMPS	11.7	VOLTS	230	DESIGN		L		
FRAME SIZE	180TY	RPM	1160	HZ	60	AMB	40	SF	1.15	
D.E. BRG.	50BC02JPP30A		PH	1	DUTY	15MIN		INSUL	F	
O.D.E. BRG.	25BC02JPG30A		TYPE	CS	ENCL	TENV		CODE	J	
		POWER FACTOR				NEMA-NOM-EFF				
		MAX CORR KVAR				GUARANTEED EFFICIENCY				
		NEMA NOM/CSA QUOTED EFF @				100% LOAD				
SER.NO.		MOTOR WEIGHT		256	LBS.					
	*15 MIN IN AIR ;SUB. IN									
	SEWAGE / WATER ONLY MAXDEPTH									
	IN MANUAL									

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
-	X180TY	1.5	CS	1/60	1160	230
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
11.7	*	40/F	1.15	-	J	SUB
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES.@25 °C OHMS (BETWEEN LINES)		
782058	418424-54AE	-	-	1.192/3.022		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	INPUT KW	% POWER FACTOR	% EFFI- CIENCY
NO LOAD	0	8.0	1200	.495	27.2	0
1/4	.38	8.6	1185	.792	39.6	35.3
2/4	.75	9.4	1177	1.10	51.1	50.8
3/4	1.12	10.8	1169	1.43	60.1	58.7
4/4	1.50	11.7	1160	1.78	66.8	62.9
5/4	1.88	14.8	1148	2.16	71.6	64.9
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES	
LOCKED ROTOR		0	287	19.5	47.0	
PULL UP		925	252	17.1	32.6	
BREAKDOWN		1080	267	18.1	30.6	
FULL LOAD		1160	100	6.79	11.7	
AMPERES SHOWN FOR 230. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE						
REMARKS: TYPICAL DATA *15 MIN IN AIR						
		DR. BY Z.M.WOLFE		A-C MOTOR PERFORMANCE A00094-A-A002 DATA ISSUE DATE 01/20/21		
		CK. BY T.S.WILLIAMS				
		APP. BY Z.M.WOLFE				
		DATE 01/20/21				

REL S.O. -	RPM 1160	S.F. 1.15	ROTOR 418424-54AE
FRAME X180TY	VOLTS 230	NEMA DESIGN -	TEST S.O. TYPICAL DATA
HP 1.5	AMPS 11.7	CODE LETTER J	TEST DATE -
TYPE CS	DUTY *	ENCLOSURE SUB	STATOR RES. @ 25 °C 1.192/3.022
PHASE/HERTZ 1/60	AMB °C/INSUL 40/F	E/S 782058	OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 230 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

BALDOR
A MEMBER OF THE ABB GROUP

DR. BY Z.M.WOLFE
CK. BY T.S.WILLIAMS
APP. BY Z.M.WOLFE
DATE 01/20/21

**A-C MOTOR
PERFORMANCE
CURVES**

A00094-A-A002

ISSUE DATE 01/20/21 Page 8 of 9

