

ABB BALDOR RELIANCE III

Customer information packet

SUL50304SM

3HP, 1730RPM, 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	H
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Motor Type	M
Mounting Arrangement	V1
Number of Poles	4
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	C
Type	AC
Mech. spec.	
Base	
Status	INA/A
Elec. spec.	A00093A A 001
Layout	066930-701
Eff. date	04-27-2022
CD Diagram	
Poles	04
Leads	
Proprietary	False
Created date	11-15-2018

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-A000-0294						
HP	3.0	AMPS	17.5		VOLTS		230		DESIGN	L	
FRAME SIZE	180TY		RPM	1730		HZ	60	AMB	40	SF	1.15
D.E. BRG.	50BC02JPP30A			PH	1	DUTY		*	INSUL	F	
O.D.E. BRG.	25BC02JPG30A			TYPE	CS	ENCL	TENV		CODE	H	
SER.NO.				POWER FACTOR					NEMA-NOM-EFF		
				MAX CORR KVAR					GUARANTEED EFFICIENCY		
				NEMA NOM/CSA QUOTED EFF @						100% LOAD	
				MOTOR WEIGHT				LBS.			
	*15 MIN IN AIR ;SUB. IN										
	SEWAGE / WATER ONLY MAXDEPTH										
	IN MANUAL										

000692000MB		
CONTROL BOX 701455-23G		
MODEL # S18-A000-0294		
3 HP ; 1730 RPM ; 230 VOLTS;		
17.5 AMPS ; 60 HZ ; 1 PHASE;		
W/D 414711-1A		
FINAL CONNECT AT 230 V		
DO NOT MOUNT IN HAZARDOUS LOCATION		

000613007MR

CAT NO			SPEC NO.	S18-A000-0294							
HP	3.0	AMPS	17.5	VOLTS		230		DESIGN		L	
FRAME SIZE	180TY	RPM	1730	HZ	60	AMB	40	SF	1.15		
D.E. BRG.	50BC02JPP30A		PH	1	DUTY	*		INSUL	F		
O.D.E. BRG.	25BC02JPG30A		TYPE	CS	ENCL	TENV		CODE	H		
	POWER FACTOR						NEMA-NOM-EFF				
	MAX CORR KVAR						GUARANTEED EFFICIENCY				
					NEMA NOM/CSA QUOTED EFF @				100% LOAD		
SER.NO.					MOTOR WEIGHT				LBS.		
	*15 MIN IN AIR ;SUB. IN										
	SEWAGE / WATER ONLY MAXDEPTH										
	IN MANUAL										

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
-	180TY	3.0	CS	1/60	1730	230
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
17.5	*	40/F	1.15	-	H	SUB
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
782057	418424-54AE	-	-	.589/1.58		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	10.3	1800	26.2	0	
1/4	.75	10.9	1780	45.6	49.0	
2/4	1.50	12.5	1765	61.5	63.3	
3/4	2.25	14.7	1749	71.8	69.0	
4/4	3.00	17.5	1725	78.2	71.2	
5/4	3.75	20.7	1711	82.0	71.4	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES	
LOCKED ROTOR		0	310	28.3	89.0	
PULL UP		1300	257	23.5	61.0	
BREAKDOWN		1405	255	23.3	58.0	
FULL LOAD		1725	100	9.13	17.5	
AMPERES SHOWN FOR 230. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE REMARKS: CALCULATED DATA *15 MIN IN AIR CONT IN LIQUID						
		DR. BY	Z.M.WOLFE	A-C MOTOR PERFORMANCE A00093-A-A001 DATA ISSUE DATE 04/08/20		
		CK. BY	T.S.WILLIAMS			
		APP. BY	T.S.WILLIAMS			
		DATE	04/08/2020			

REL S.O. -

RPM 1730

S.F. 1.15

ROTOR 418424-54AE

FRAME 180TY

VOLTS 230

NEMA DESIGN -

TEST S.O. CALCULATED DATA

HP 3.0

AMPS 17.5

CODE LETTER H

TEST DATE -

TYPE CS

DUTY *

ENCLOSURE SUB

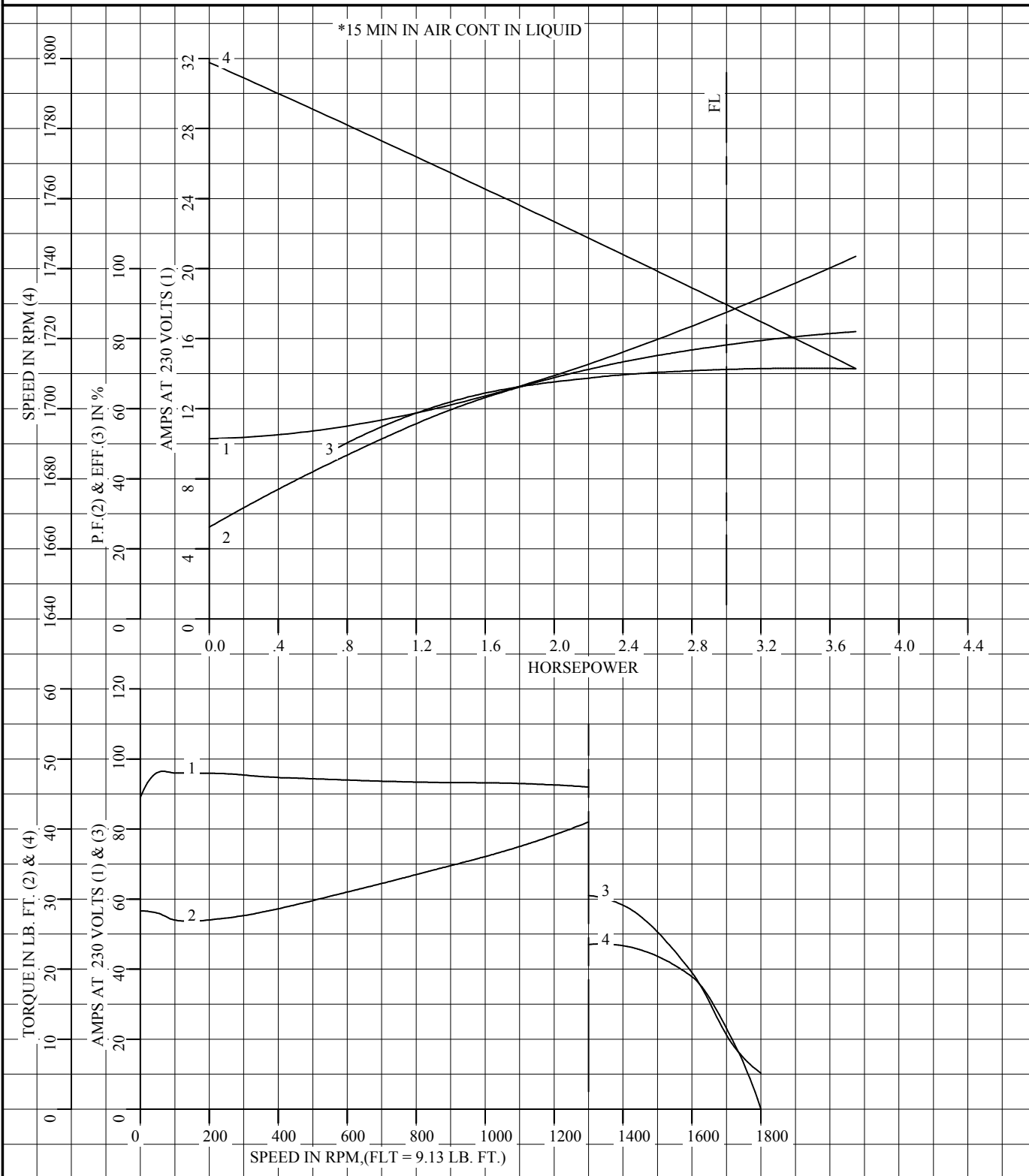
STATOR RES. @ 25 °C .589/1.58

PHASE/HERTZ 1/60

AMB °C/INSUL 40/F

E/S 782057

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 T.S.WILLIAMS
DATE 04/08/2020

**A-C MOTOR
PERFORMANCE
CURVES**

A00093-A-A001

ISSUE DATE 04/08/20

Page 8 of 9

