HMD KONTRO Sealless Pumps

MOTOR DATA SHEET (INCL. CURVES)

CLIENT	:	Air Products Manufacturing LLC
PROJECT NAME/NO.	:	WEP Renewables
CLIENT PO NO	:	4505605360
HMD DOCUMENT NO	:	HMD-4505605360-C11-02
CLIENT DOCUMENT NO	:	
HMD PUMP NO	:	839917 A/B
EQUIPMENT TAG NO	:	18-P-252 A/B

2	14/12/2022	ISSUE FOR REVIEW	KW	AFS	AFS
1	13/09/2022	ISSUE FOR REVIEW	ABB	AFS	AFS
0	10/05/2022	ISSUE FOR REVIEW	AN	AFS	NW
REV	DATE	DESCRIPTION	PREPARED BY	CHECKED BY	APPROVED BY

NOTE:

RESOLUTION SHEET

Comment Number	Document Name: Motor Data Sheet		Revision from which comment first appeared	Comment Status: Open\Closed - (Date Closed:)
	CLIENT COMMENT	HMD RESPONSE	Current Rev:	
1	Inverter Duty Not applicable	Noted	1	14/12/2022
2	Space heater not applicable for this motor	Noted and Amended	1	14/12/2022
3	Typical not acceptable. Vendor shall provide curves for the given motor rating, voltage, frequency	Noted and Amended. Curves attached are correct for the given motor rating, voltage, frequency to be used on pump 18-P-252 A/B	1	14/12/2022

FLUOR

world energy

LOW VOLTAGE MOTOR (IEEE 841) DATA SHEET U.S. CUSTOMARY UNITS

APPLICABLE MOTOR SPECIFICATION
A8KM-PP-000-50670-A

Doc. No.: HMD-4505605360-C11-02

Contract:	**A8KM**		
Item No:	**18-P-252A/B (839917)**		
Revision:	**1**	**Date:**	**13-Sep-22**
Unit:	**SWSPlus Unit**		
RFQ / P.O. No.:	**4505605360**		
Sheet	1 **of** 1		

Rev

APPLICABLE TO ○ PROPOSAL ● PURCHASE AS BUILT

CLIENT: **World Energy Paramount** SERVICE **Ammonia Stripper Reflux**

PLANT: **World Energy Paramount** MOTOR TAG NO. / NO. REQ'D **18-P-252AM/BM** / **Two (2)**

SITE: **Paramount, CA** DRIVEN EQUIPMENT TYPE / TAG NO. **Centrifugal Pump** / **18-P-252A/B**

DESIGN DATA AND ACCESSORY EQUIPMENT

NAMEPLATE **15** HP **1.15** S.F. **3450** RPM POWER (VOLTAGE/PHASE/HERTZ) **460** / **3** / **60**

ROTATION (WHEN FACING MOTOR OPPOSITE DRIVE END): CW CCW **Fans shall be bi-directional**

INSULATION CLASS: ○ B ● F ○ H ○ VPI TEMP. RISE **CLASS B** / ____ °C over **40.6** **°C** **AMBIENT**

AREA CLASSIFICATION: CLASS **I** , GROUP **B/C/D** DIV. **2** T-RATING **T3C** / ____ °F

○ UNCLASSIFIED

LOCATION: ○ INDOOR ● OUTDOOR ○ SHELTERED UNUSUAL CONDITIONS: ○ DUST ○ OTHER

AMBIENT TEMPERATURE: MAX **105** °F / MIN. **35** °F ALTITUDE **69** ft

ENCLOSURE: ● TOTALLY-ENCLOSED FAN-COOLED ○ TOTALLY-ENCLOSED NONVENTILATED ○ EXPLOSION PROOF

MOUNTING METHOD: ● FOOT ○ FLANGE, TYPE:

MOUNTING ARRANGEMENT: ● HORIZONTAL ○ VERTICAL SHAFT DOWN ○ VERTICAL SHAFT UP

BEARING TYPE: ● BALL ○ ROLLER BEARING LUBRICATION: ● GREASE ○ OIL ○ PURE OIL MIST

CONNECTION TO LOAD: ● DIRECT CONNECTED ○ V-BELT ○ THROUGH GEAR ○ CLOSE COUPLED

EQUIPMENT OPERATION: ● CONTINUOUS ○ SPARED CONTINUOUS ○ INTERMITTENT-CYCLES / DAY

SOUND PRESSURE LEVEL REQUIREMENTS: **85** dBA @ **3** FEET

STARTING: ● FULL VOLTAGE ● REDUCED VOLTAGE, **80** % OF VOLTAGE **Starting Voltage Dip Allowance**

○ UNLOADED ● LOADED ○ CAPACITORS FOR POWER FACTOR CORRECTION

○ SPACE HEATERS **120** V **1** PHASE ____ °F MAX. TEMP 2

● OVERSIZE TERMINAL BOX ● DRAIN PLUGS **Terminal Box shall be the largest feasible for the motor frame.**

● SS NAMEPLATE ○ AUXILIARY NAMEPLATE

TEST ● ROUTINE ○ COMPLETE ● VIBRATION ● REPORT ● FOOT FLATNESS

REMARKS: **8.1) This data sheet applies to motors 1/2 hp through 500 hp with anti-friction bearings.**

8.2) Space heaters are required for 100 hp and above.

8.3) IP55 degree of protection is required.

8.4)Average relative humidity is 54%.

INFORMATION BELOW TO BE COMPLETED BY VENDOR

MOTOR MFR. **ABB Baldor** MODEL **09-0000-3828** SERIAL NO. 1

NAMEPLATE HP **15** FULL LOAD RPM **3522** FRAME **256T** WEIGHT **299** LB 1

MOTOR OUTLINE DRAWING NO. **09LY-001-651** 1

ROTOR CAGE MATERIAL OF CONSTRUCTION **Al** MOTOR WINDING MATERIAL **Cu** 1

BEARING MANUFACTURER **SKF** SIZE 6309 1

VERTICAL MOTOR THRUST BEARING: TYPE **N/A** CAPACITY: UP **N/A** LBS DOWN **N/A** LBS LOCATION **N/A** 1

LOAD	FULL	3/4	1/2	OTHER
AMPERES	**17.3**	**13.1**	**9.71**	**N/A**
EFFICIENCY, %	**91.2**	**91.8**	**91.1**	**N/A**
POWER FACTOR	**89**	**88**	**80**	**N/A**
SPEED, RPM	**3522**	**3544**	**2563**	**N/A**

LOCKED ROTOR AMPS*	**114**	AMPS
FULL LOAD TORQUE*	**22.4**	FT-LB
LOCKED ROTOR TORQUE*	**32.7**	FT-LB
PULL UP TORQUE*	**26**	FT-LB
BREAKDOWN TORQUE*	**87.8**	FT-LB
ACCEL. TIME W/ LOAD (0 TO FULL SPEED)*	**1.1**	SEC.
STALL TIMES AT ZERO RPM* - HOT / COLD	**18** / **37**	SEC.
NUMBER OF CONSECUTIVE STARTS*	**1 Hot / 2 Cold**	

SOUND LEVEL: GUARANTEED **<90** dBA / EXPECTED **80** dBA

FAN MATERIAL **Polypropylene MP5000** (NON-SPARKING)

* INDICATED AT RATED VOLTAGE

INFORMATION BELOW TO BE PROVIDED BY VENDOR AFTER PURCHASE (REFER TO RFQ/PO DOCUMENTS)

● SAFE TIME - CURRENT CURVE

● SPEED - TORQUE CURVE

● SAFE LOCKED ROTOR TIME HOT ____ COLD ____

MAX. SURFACE TEMP. DURING NORMAL STARING OR OPERATION OF:

○ ROTOR ____ °F ○ STATOR ____ °F ○ ENCLOSURE ____ °F

NOTES:

8.5 **Motor nameplate shall indicate service factor, area classification and T-rating. T-rating relates to both external and internal components.**

8.6 **Provide accessory loads on submittal documents, e.g. Volts, HP, kVA, etc.**

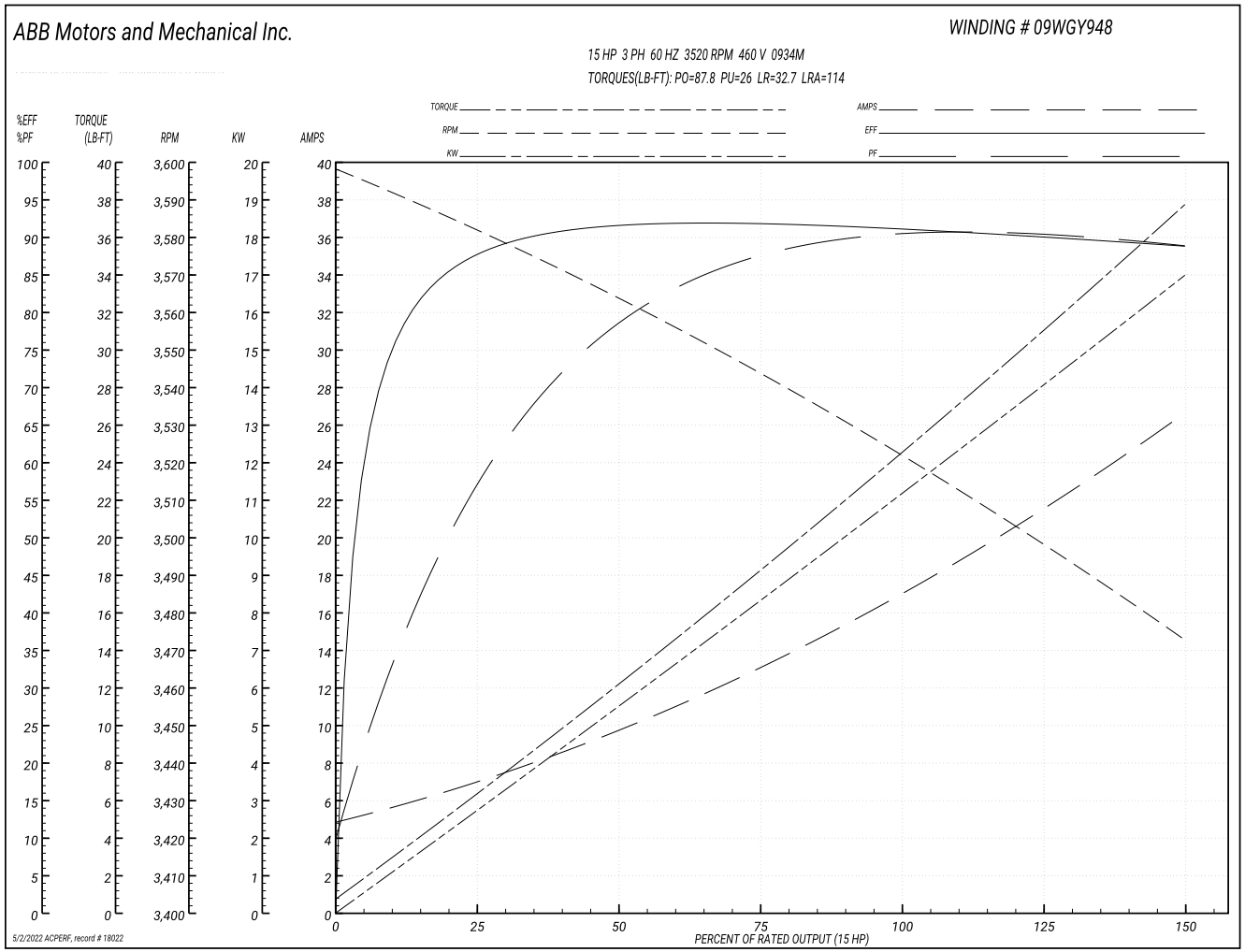
8.7 **All motors shall be rated for Cl. I, Div. 2, Gr. B,C,D and a T3C temperature code for project uniformity.**

8.8 **An oversized electrical terminations box is required.**

8.9 **Grounding provisions are required for inside and outside the motor connection box.**

BALDOR • RELIANCE

Performance Graph at 460V, 60Hz, 15.0HP



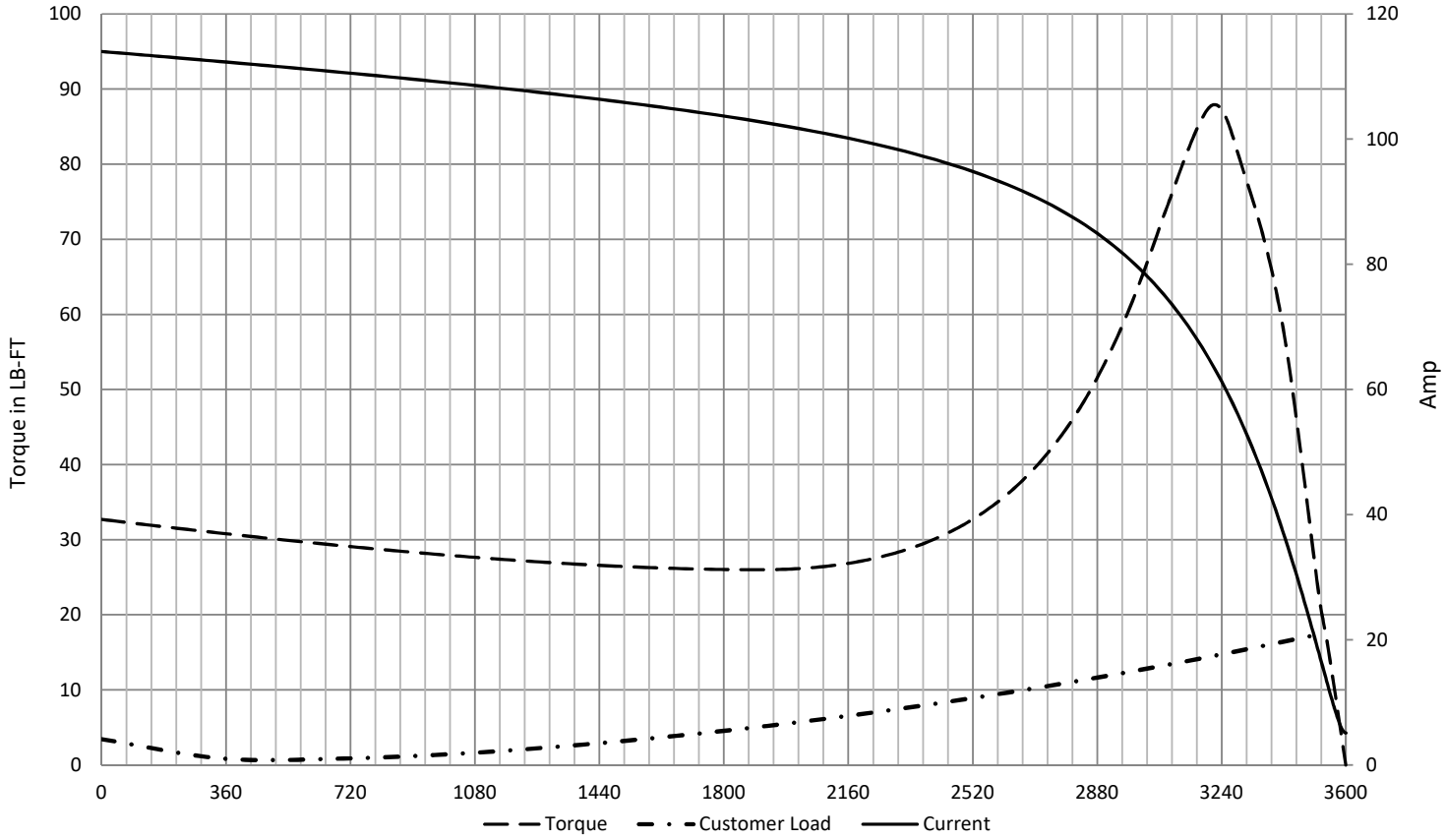
BALDOR • RELIANCE

SPEED TORQUE / SPEED CURRENT CURVE

BALDOR • RELIANCE

09WGY948

15HP 460V 60Hz



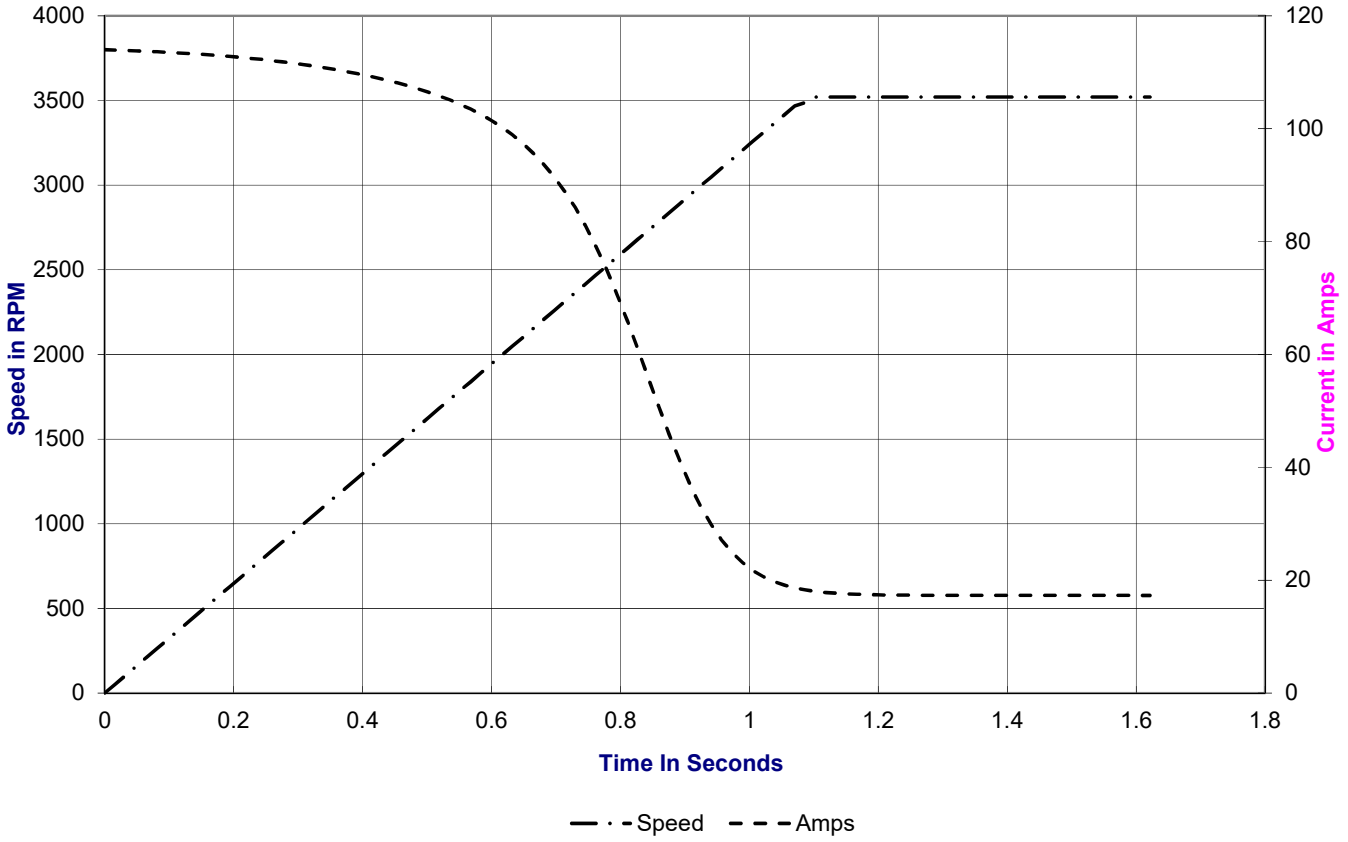
BALDOR • RELIANCE

Speed Time / Current Time Curve

BALDOR • RELIANCE

09WGY948 : Variable Torque : 4.25 lb-ft² Load Inertia

15HP 460V 60HZ

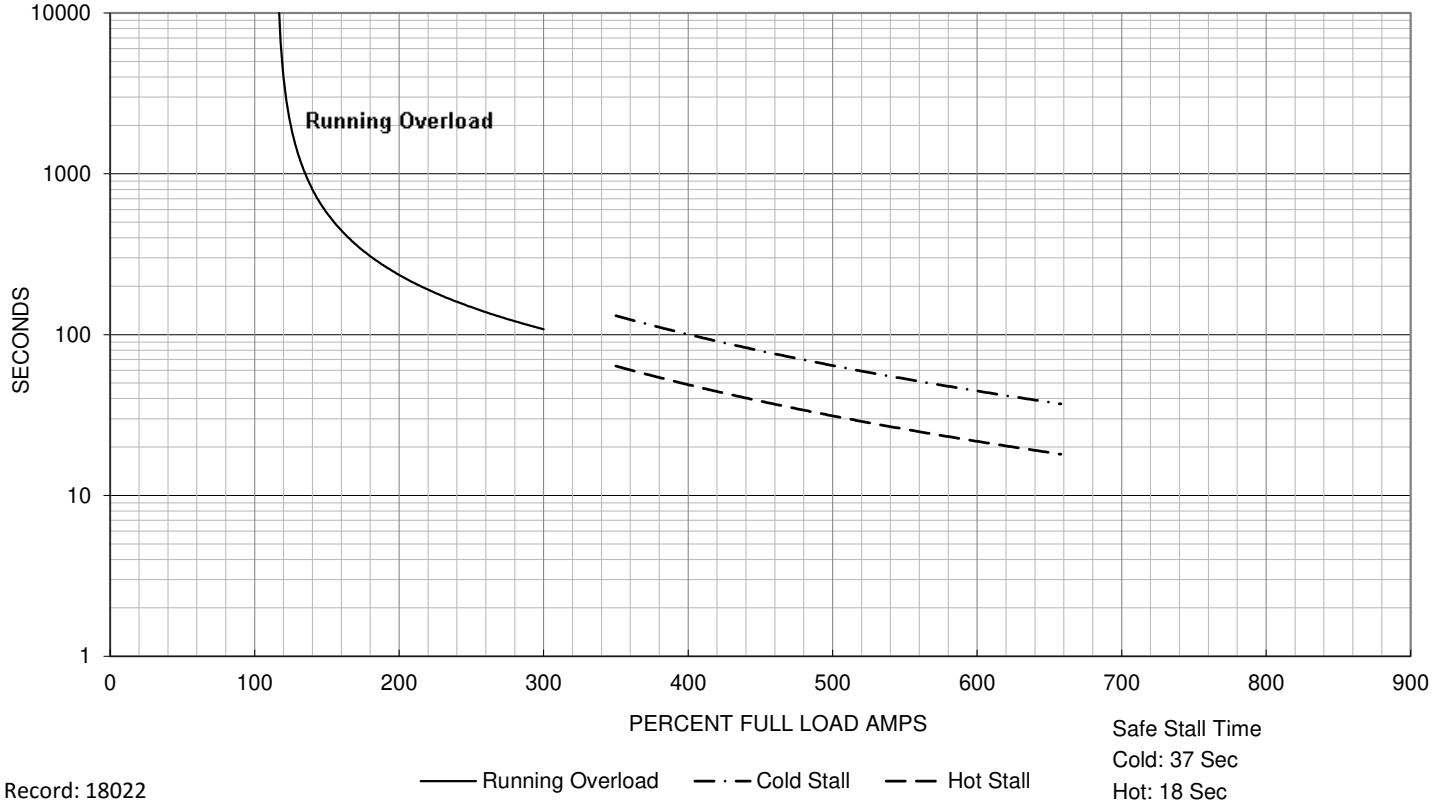


BALDOR • RELIANCE

THERMAL LIMIT CURVE

09WGY948

15HP 460V 60HZ



Record: 18022

Safe Stall Time
Cold: 37 Sec
Hot: 18 Sec