

Service Automated Risk Assessment (SARA) Training

Grundfos Service & Solutions

INTRODUCTION TO SARA

S.A.R.A.: Service Automated Risk Assessment or what is the same, Automated Risk Analysis of Service. It is a Grundfos digital application developed to help the technician or field engineer to assess risks on a customer site through a simple and fast-to-execute methodology.

Recommended devices: iPads **Emerging devices:** iPhones or PC (Resolution Issues)

Benefits of SARA:

- Standardized methodology for risk assessment designed for service technicians/engineers in field activities.
- Immediate result of Approval/denial based on the information released by the technician/engineer.
- Automatic report generation once the evaluation is completed.
- Reduction of administrative tasks by automatically uploading the information in the SAP Service Order.

Other Benefits:

- Reducing the environmental footprint by eliminating the use of paper for manual risk assessments.
- Digital backup of information in SharePoint and SAP. (Traceability)
- Creation of Dashboard for monitoring and making strategic decisions-making based on data.

HOME PAGE / BASIC INFORMATION ASSISTANCE

Contact with the developers

Exit the app

SIMS app

GRUNDFOS

SIMS

S.A.R.A.

Service Automated Risk Assessment

Country:

United States

Language:

English

Employee's Full Name:

Justin Wall

Employee Number:

54896

Service Order Number:

64833

Customer Contact Person:

Angel Guía

Customer Emergency Contact Person (If Different):

Lucy Hughes

Site Address:

123 ABC Dr.

Job Task To Be Done:

Provide details

Next

United States

Argentina

Brazil

Canada

Chile

Colombia

México

Norway

Perú

United States

English

English

Español

Português

User information (automatic)

Service Order Number (Manual)

IMPORTANT: enter the correct number so that the app loads the information in SAP automatically.

Installation location:

You can use the GPS on the button:

You can type the address manually.

Accurate task description

This is the initial screen of SARA where we will load the basic information of the jobsite.

NOTE: It is important to correctly enter the Service order number to ensure the automatic loading of the information in SAP.
An appropriate description of the tasks to be performed will help us to understand the context of the work being performed.

PRE-TASK ANALYSIS

?

→

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Basic Safety Conditions & Permit To Work

First please double check that you have everything you need in order to complete the service task in a safe, professional way. all answers should be based on the actual conditions

Will you carry out lock-out/tag-out before starting the task?

• Yes

• No

• N/A

Do you have all the necessary tools?

• Yes

• No

• N/A

Do you have the necessary competences?

• Yes

• No

• N/A

Do you have all the necessary personal protective equipment?

• Yes

• No

• N/A

Do you have a first aid kit?

• Yes

• No

• N/A

Are covid-19 protocols in place?

• Yes

• No

Do you have permission from the site/end-user to carry out the job?

• Yes

• No

Back

Next

Do you have permission from the site/end-user to carry out the job?

• Yes

• No

What is preventing you from having permission to do the job?

The installation manager is not present.

Back

Next



WARNING - Do Not Continue With The Job

The Risk Assessment Has Been Completed

Call the office immediately to inform them that you don't have the customer authorization/approval to continue with the planned job.

Back

Submit

This section evaluates how prepared we are for the work to be performed and whether we have the necessary competency, permits, tooling, etc. to proceed with the scheduled work.

Note: It is important to maintain a fluid communication with the office in case of not having the field work permit.

PHOTOGRAPHIC COMPILATION OF THE INSTALLATION.

In this section, you can attach images of the installation and/or files that you consider pertinent to the risk assessment.



Touch button to select images and/or files you want to upload.

NOTE: We recommend you take the photos previously using SARA and then, select from the device storage. That will allow you to decrease the weight of the images and this will let the app create the report faster!

Click this button to confirm the image/file you want to upload.

You can delete the image by pressing the X in the corner.



Note: The photos that we must take will be mainly regarding the installation and the existing risks in the areas where the work will be carried out.

ON-SITE RISK ASSESSMENT

In this section we can specifically evaluate the risks we find on site.

The risks that can be evaluated with SARA are the following:

- Electricity
- Biohazard
- Partial or total imprisonment of the body
- Slips and falls
- Working at heights
- Working in a confined space
- Fixed objects
- Movement of vehicles and/or machinery
- Sharp parts or objects
- Ergonomics 1: difficult working position
- Ergonomics 2: manual handling and use of hand tools
- Pressure by work against the clock
- Pressurized systems
- Chemicals
- Extreme temperatures
- Noise
- Lifting equipment
- Other

The screenshot shows the 'Risk Assessment' app interface. At the top, there's a header with 'GRUNDFOS' and 'SIMS' icons. Below the title 'Risk Assessment', there's a list of predefined risks, each with a question mark icon, a checkbox, and a right arrow. The risks listed are: Electricity, Biological Hazard, Partial or complete imprisonment of the body, and Slips & Trips. Each risk has a checked checkbox and 'N/A' next to it. At the bottom, there are 'Back' and 'Next' buttons.

Vertical Scrolling



The screenshot shows the 'Risk Assessment' app interface, specifically the 'Other' risk category. It has the same header as the previous screenshot. Below the title 'Risk Assessment', there's a list of predefined risks, each with a question mark icon, a checkbox, and a right arrow. The risks listed are: Noise, Lifting equipment, and Other (Please specify hazard in text box). Each risk has a checked checkbox and 'N/A' next to it. Below the 'Other' risk, there's a text input field with the placeholder text 'Open text to describe the risk.' At the bottom, there are 'Back' and 'Next' buttons.

Specify the risk found and that is not within the predefined list of SARA.

COMPONENTS OF THE ON-SITE RISK ASSESSMENT

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Risk Assessment

Electricity

Are you going to be working on or near electrical equipment?

Minimum control measures: Electrical Safety Training; Lock/out Tag/out (LOTO), electrical test equipment (testers); Arc Flash PPE, proper grounding, dissipate stored energy, Ground Fault Circuit Interrupter or similar protection.

Back

Next

Risk explanations and recommended control measures

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Risk Assessment

Electricity

Biological Hazard

Partial or complete imprisonment of the body

Slips & Trips

Back

Next

Grundfos Risk Assessment Matrix

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SIMS

Risk Assessment

Electricity

Probability	Severity			
	1 Minor	2 Reversible	3 Irreversible	4 Catastrophic
1 Almost Impossible	1	2	3	4
2 Unlikely	2	4	6	8
3 Possible	3	6	9	12
4 Likely	4	8	12	16

BLACK: Extremely High Risk - Stop Immediately.

RED: High Risk - Implement Controls To Lower The Risk Before Proceeding

GREEN: Low Risk - Carry Out The Task

YELLOW: Moderate Risk - Carry Out The Task With Caution

Back

Next

RESULTS OF THE RISK REASSESSMENT WITH SARA

- If the risk assessment is **GREEN** (1-2) or **YELLOW** (3-6), the technician will be **AUTHORIZED** to continue with the activity.

If the risk assessment is **RED** (8-12) or **BLACK** (16), the technician **MAY NOT CONTINUE** with the activity and must:

- Take steps to reduce risk.
- Carry out a **REASSESSMENT** of the risk based on the measures implemented.
- Notify the client and the office about the situation.



REASSESS RISKS WITH HIGH PROBABILITY/SEVERITY (Red or Black)

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Risk-Reassessment

Electricity

16 - Black

N/A

Descripción acerca de que medidas tomaste para disminuir el riesgo.

Slips & Trips

9 - Red

N/A

Descripción acerca de que medidas tomaste para disminuir el riesgo.

Next

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Risk-Reassessment

Electricity

	Severity			
Probability	1 Minor	2 Reversible	3 Irreversible	4 Catastrophic
1 Almost Impossible	1	2	3	4
2 Unlikely	2	4	6	8
3 Possible	3	6	9	12
4 Likely	4	8	12	16

BLACK: Extremely High Risk - Stop Immediately.

RED: High Risk - Implement Controls To Lower The Risk Before Proceeding

GREEN: Low Risk - Carry Out The Task

YELLOW: Moderate Risk - Carry Out The Task With Caution

Next

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Risk-Reassessment

Electricity

6 - Yellow

N/A

Damaged extension cord was removed from service and replaced.

Slips & Trips

2 - Green

N/A

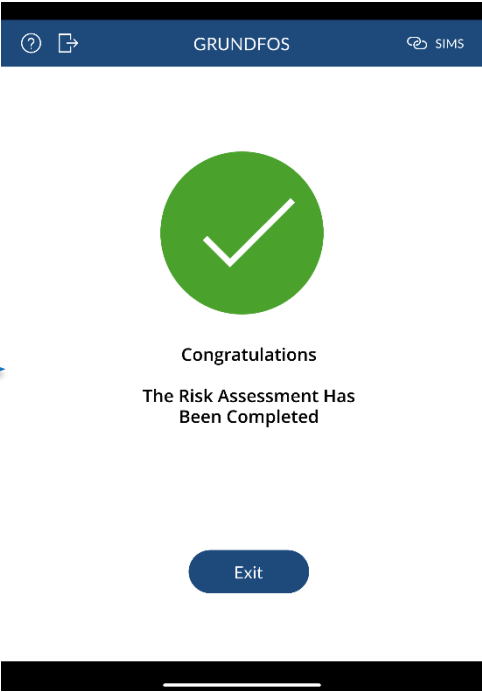
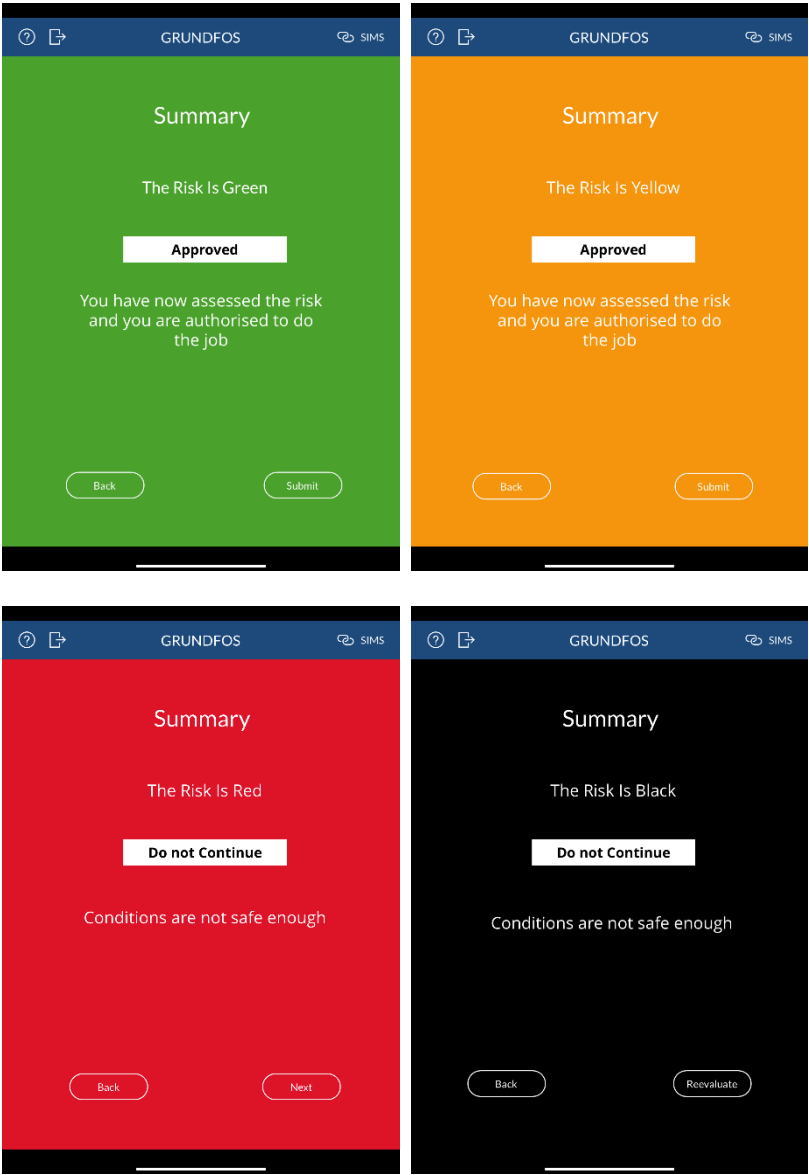
Removed unnecessary materials from the area.

Next

RESULTS OF THE RISK REASSESSMENT WITH SARA

- If the risk assessment is **GREEN** (1-2) or **YELLOW** (3-6), the technician will be **AUTHORIZED** to continue with the activity.

- If the risk assessment is **RED** (8-12) or **BLACK** (16), the technician WILL NOT BE ABLE TO CONTINUE with the activity and must contact the office to reschedule the activity when the risk has been reduced.



SARA's REPORT

1. Once the evaluation in the app is finished, SARA will send an email to the technician who performed the inspection with the report. The mail will look like this:

2. Inside the mail you will find the information uploaded in SARA and you will also find:

- SARA report in pdf
- Photos uploaded to the app

Todo No leídos Por Fecha ↑

Hoy

Angel Guía
503867789
Risk assessment result: Approved

01:18

503867789

Angel Guía
Para Service Robot; Angel Guía

Mensaje enviado con importancia Baja.
Si hay problemas con el modo en que se muestra este mensaje, haga clic aquí para verlo en un explorador web.

SARA Risk Assessment - 503867789.pdf
153 KB

SessionStorage98A91ADE-6373-4B7B-A04E-F6F6CDDF0565.jpg
57 KB

Traducir mensaje a: Español No traducir nunca del: Inglés

Risk assessment result: Approved

General information and risk assessment:

Question	Answer
Country:	United States
Language:	English
Employee's Full Name:	Angel Guía
Employee Number:	64833
Service Order Number:	503867789
Customer Contact Person:	Justin McAllen
Customer Emergency Contact Person (if Different):	Andrew Martins
Site Address:	W64F+XXQ Chicago, Illinois, EE. UU.
Job Task To Be Done:	CR pump commissioning
Will you carry out lock-out/tag-out before starting the task?	Yes
Do you have all the necessary tools?	Yes
Do you have the necessary competences?	Yes
Do you have all the necessary personal protective equipment?	Yes
Do you have a first aid kit?	Yes
Are covid-19 protocols in place?	Yes
Do you have permission from the site/end-user to carry out the job?	Yes
What is preventing you from having permission to do the job?	Nobody in site to approve the access to the pump room

Risk type assessment:

Risk	Score	Action
Electricity	3	
Biological Hazard	1	
Partial or complete imprisonment of the body	3	Action1
Slips & Trips	2	Action2
Work at height	0	
Work in a confined space	0	
Fixed objects	0	
Moving vehicles and/or machinery	0	
Sharp parts/edges	0	
Ergonomics 1: difficult working position	0	
Ergonomics 2: manual handling & use of hand tools	0	
Time pressure	0	
Pressure systems	0	
Chemicals	0	
Extreme temperatures	0	
Noise	0	
Lifting equipment	0	
Other (Please specify hazard in text box)	0	

Uploaded Pictures:

Name	Images
SessionStorage98A91ADE-6373-4B7B-A04E-F6F6CDDF0565.jpg	

3. Finally, by entering the SO in SAP, you will be able to see the following files in the attachments:

- SARA report in pdf
- Photos uploaded to the app

Display Template Service Order Contract Repair 400257461: Service Order

Order ZCS1 400257461 CMANT TESLA MAR22 - FEB23

System Status REL PCMF COOK NMAT PRC SETC User Status INIT

Service Contract SAP CS

Service Order header

Customer Address Order Address Object Address

SP Sold-to Part 9512009823 Cons. de Prop. Tesla Patricios II

Street/Hse No. v. Caseros 3039

Location 137 Buenos Aires AR 00

Telephone 54918 Fax

PartnerTimeZone 27.02.2022 09:58:35 ART

Reference Object

Functional loc. BGA-1

Equipment

Assembly

Santra

Display Template Service

Create...

Attachment list

Private note

Send

Relationships

Workflow

My Objects

Help for object services

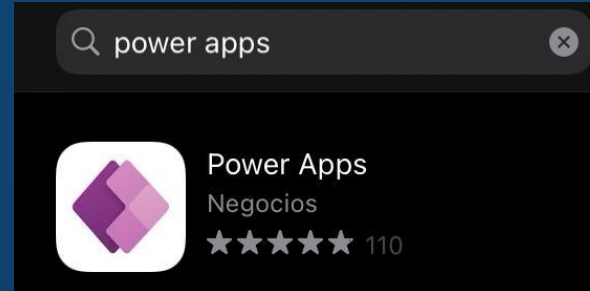
HOW TO DOWNLOAD THE SARA APP

Installation steps:

1. Open the "App Store" app



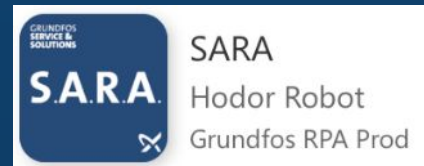
2. Find the "Power Apps" app:



3. Download the app:



4. In the "Power Apps" application, search for SARA



5. Accept the permissions it asks for the app to work. (GPS, Office, etc.)



PC version:

<https://apps.powerapps.com/play/daf76b49-6f49-472e-92b9-ee6634d9eac6?tenantId=dabd5d90-87c2-44c9-93cd-783e03236e40>