**PO2EBL\_ELECTRIC BLENDER**

**CYRS DOCUMENT**

**Version 0.2**

**Released**

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 1/22/2020 | 0.1 | Initial Draft, specifying Introduction, system overview and document outline. | May Alaa El-din |
| 1/23/2020 | 0.2 | Update the draft, requirements table | Mohamed Ibrahem |
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# **1 Introduction**

This section introduces the customer requirements specification (CYRS) for the KENOVO Electric Blender.

## **1.1 Specification Definition**

This specification documents the system-level requirements for the Electric Blender.

## **1.2 Specification Objectives**

The objectives of this specification are to:

* Provide a system overview of the Electric Blender including definition, goals, objectives, context, and major capabilities.
* To formally specify its associated:
* Functional requirements.
* Data requirements.
* Quality requirements.
* Constraints.

# **2 System Overview:**

## **2.1 Definition:**

The Electric Blender System is an appliance created by KENOVO. The electric blender system has 3 speeds that can be configured by the user with high safety to avoid system failure caused by unexpected voltage peaks.

## **2.2 Objective:**

The objective of the Electric Blender System is to provide the user with a high quality home appliance with high speed configurability as well as safety monitoring.

## **2.3 Hardware**

The System hardware shall be:

* The external appliance body
* Microcontroller
* DC motor
* One push button

# **3 Functional Requirements:**

|  |  |  |
| --- | --- | --- |
| **Feature** | **REQ\_ID** | **Description** |
| **Speed Levels** | REQ\_PO2EBL\_CYRS\_01\_V02 | The system has four status three speed levels and the Off status. **#imp SW** |
| **Speed Controls** | REQ\_PO2EBL\_CYRS\_02\_V02 | When the switch is first pressed the blender shall be turned on, when the switch is pressed again, the blender shall operate on the higher speed level until it reaches the maximum level, and the next press shall turn it off.  **#imp SW** |
| **Safety Monitoring** | REQ\_PO2EBL\_CYRS\_03\_V02 | The system should monitor the input voltage level to ensure the safety of the motor. If the input voltage level increases over the charted levels or decreases below it, the blender shall be turned off.  **#imp SW, HW** |
| **Monitoring Speed** | REQ\_PO2EBL\_CYRS\_04\_V02 | The system shall monitor the blender speed and turns on the corresponding led. **#imp SW** |