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| **Project:** | | | | | Project Name | | | | | | | | | | | |
| **Customer:** | | | | | Customer Name | | | | | **Review**  **date:** | | | | yyyy-mm-dd | | |
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| **Object to be reviewed:** | | | | | | | | | | | | | | | | |
| Document name: | | | Project\_System\_Interface\_Specification | | | | | | | | | | | | | |
| Version: | | | 1.0 | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | |
| **Participants:** | | | | | | | **Name** | | | **Org. unit** | | | | | **Review manager**  **(x)** | |
| Person responsible (author): | | | | | | | Gil-Dong, Hong | | | R&D | | | | | x | |
| System Architect: | | | | | | |  | | |  | | | | |  | |
| System Analyst: | | | | | | |  | | |  | | | | |  | |
| HW Architect: | | | | | | |  | | |  | | | | |  | |
| SW Architect: | | | | | | |  | | |  | | | | |  | |
| Other reviewer(s): | | | | | | |  | | |  | | | | |  | |
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| **Review type:** | | | | | | | | | | | | | **Project status:** | | | |
|  | | | |  | |  | |  |  | |  | | Phase: | | |  |
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| **Last review of the object to be reviewed:** | | | | | | | | | | | | | | | | |
| Performed on: | |  | | | | | | | | | | | | | | |
| Doc. name: | |  | | | | | | | | | | | | | | |
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| **Follow Up:** | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | Date: | | |  | |
|  |  | | | | | | | | | | | Date: | | |  | |

| **Checklist '** **Review Meeting'** | **OK?** | | **Action/comments** |
| --- | --- | --- | --- |
| **yes** | **no** |
| **General:** |  |  |  |
| Was the current MHE Form taken as basis for the system interface documentation? |  |  | If this checklist is not applicable, you should leave comment and 'NA'.  If you have comment then you should leave comment at this. |
| Is there a description of all chapters of the form? |  |  |  |
| Were all chapters not applicable marked accordingly and not deleted? |  |  |  |
| Is the specification incomplete? Do the respective parts bear special marks? |  |  |  |
| Was the transfer of the cross references carried out completely and clearly? |  |  |  |
| Is a list of abbreviations available? Does it contain all abbreviations used? |  |  |  |
| Is the change documentation up-to-date? |  |  |  |
| Were all variants or device varieties taken into account? |  |  |  |
| **Power supply, plus (terminal30, 15):** |  |  |  |
| Voltage range  (min./max./nominal/where was measurement taken, e.g. at the battery or control unit/...) |  |  |  |
| Max. current-carrying capacity |  |  |  |
| Quiescent current |  |  |  |
| Upstream fuse |  |  |  |
| Line length |  |  |  |
| Noise immunity:  *DIN 40839, impulses 1, 2, 3a, 3b, 4, 5, starting impulse* |  |  |  |
| Line resistance (circuit resistance) |  |  |  |
| Line cross section |  |  |  |
| Lead inductance |  |  |  |
| Internal resistance of supply terminal |  |  |  |
| Max. connector current |  |  |  |
| Effects at drop-out of plug |  |  |  |
| Tolerance ranges |  |  |  |
| Connector (pin no., name of basket) |  |  |  |
|  |  |  |  |
| **Power supply, earth:** |  |  |  |
| Line length |  |  |  |
| Max. current-carrying capacity |  |  |  |
| Line resistance |  |  |  |
| Line cross section |  |  |  |
| Max. connector current |  |  |  |
| Effects at drop-out of plug |  |  |  |
| Tolerance ranges |  |  |  |
| Connector (pin no., name of basket.) |  |  |  |
|  |  |  |  |
| **Inputs, electric, digital** |  |  |  |
| Quiescent state (potential and functional) |  |  |  |
| Sensor current (e.g.: *Switch closed: 10 mA +- 1 mA @ 25° C and 13.5 V;*  *timed: on 1 ms, off 100 ms)* |  |  |  |
| Sensor voltage |  |  |  |
| Internal resistance of sensor (e.g.: s*witch closed < 5 ohm)* |  |  |  |
| Parasitic resistances (dirt resistances) acc. Ub and GND (e.g.: *> 20 k ohm acc. GND; > 500 k ohm acc. Ub)* |  |  |  |
| Switching threshold: *30 – 70 % of Ub (terminal 15)* |  |  |  |
| Internal resistance of control unit |  |  |  |
| Earth offset (e.g.: *+- 1 V)* |  |  |  |
| Noise immunity (e.g.: *ESD: 5 kV)* |  |  |  |
| Line length to the sensor |  |  |  |
| Line cross section |  |  |  |
| Line inductance |  |  |  |
| Line resistance |  |  |  |
| Max. connector current |  |  |  |
| Filtering time |  |  |  |
| Max. response time |  |  |  |
| Fault recognition |  |  |  |
| Effects at drop-out of plug |  |  |  |
| Reaction to errors |  |  |  |
| Tolerance ranges |  |  |  |
| Connector (pin no., name of basket.) |  |  |  |
|  |  |  |  |
| **Input, electric, analogue:** |  |  |  |
| Quiescent state (potential and functional) |  |  |  |
| Sensor current |  |  |  |
| Sensor voltage |  |  |  |
| Internal resistance of the sensor |  |  |  |
| Internal resistance of control unit |  |  |  |
| Noise immunity |  |  |  |
| Line length to the sensor |  |  |  |
| Line resistance |  |  |  |
| Earth offset |  |  |  |
| Effects at drop-out of plug |  |  |  |
| Max. connector current |  |  |  |
| Line inductance |  |  |  |
| Line cross section |  |  |  |
| Short circuit prevention |  |  |  |
| Resolution |  |  |  |
| Filtering time |  |  |  |
| Max. response time |  |  |  |
| Fault recognition |  |  |  |
| Reaction to errors |  |  |  |
| Tolerance ranges |  |  |  |
| Connector (pin no., name of basket) |  |  |  |
|  |  |  |  |
| **Further physical inputs (e. g.: radio, optical, electric, magnetic, acoustic, mechanical, operational,...)** |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| **Output, electric, inductive:** |  |  |  |
| Output voltage  *(e. g.: full bridge*  *Low: < 0.1 V @ Inom*  *High: > Ub-0.1V @ Inom)* |  |  |  |
| Edge steepness |  |  |  |
| Quiescent state (potential and functional) |  |  |  |
| Starting current |  |  |  |
| Nominal current |  |  |  |
| Existing load suppression |  |  |  |
| Load temperature or overload-protected |  |  |  |
| Max. current |  |  |  |
| Internal resistance of control unit |  |  |  |
| Load inductance |  |  |  |
| Cut-off energy |  |  |  |
| Short circuit prevention |  |  |  |
| Max. strip conductor load |  |  |  |
| Noise immunity |  |  |  |
| Max. connector current |  |  |  |
| Line length load ratio |  |  |  |
| Line resistance |  |  |  |
| Line cross section |  |  |  |
| Line inductance |  |  |  |
| Driver specifications |  |  |  |
| Actuation timed |  |  |  |
| Fault recognition |  |  |  |
| Reaction to errors |  |  |  |
| Tolerance ranges |  |  |  |
| Connector (pin no., name of basket.) |  |  |  |
|  |  |  |  |
| **Output, electric, ohmic** |  |  |  |
| Quiescent state (potential and functional) |  |  |  |
| Output voltage |  |  |  |
| Edge steepness |  |  |  |
| Quiescent state (potential, functional) |  |  |  |
| Starting current |  |  |  |
| Nominal current |  |  |  |
| Load output |  |  |  |
| Internal resistance of control unit |  |  |  |
| Max. current |  |  |  |
| Max. strip conductor load |  |  |  |
| Short circuit prevention |  |  |  |
| Max. connector current |  |  |  |
| Noise immunity |  |  |  |
| Line resistance |  |  |  |
| Line length load ratio |  |  |  |
| Line cross section |  |  |  |
| Line inductance |  |  |  |
| Actuation timed |  |  |  |
| Driver specifications |  |  |  |
| Fault recognition |  |  |  |
| Reaction to errors |  |  |  |
| Tolerance ranges |  |  |  |
| Connector (pin no., name of basket.) |  |  |  |
|  |  |  |  |
| **Further physical outputs (e. g. radio, optical, electric, magnetic, acoustic, mechanical, ...)** |  |  |  |
| **Bidirectional, electric** |  |  |  |
| Interface specified |  |  |  |
| Deviations from standard documentation |  |  |  |
| **Further bidirectional interfaces (e. g. optical...)** |  |  |  |
| Interface specified |  |  |  |

|  | **Complaint / fault** | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Page/**  **Line** | **Issue** | **Safety**  **relevant** | | **Action** | | | |
| **yes** | **no** | **Solution** | **Responsible person** | **Completion deadline** | **Done**  **(🗸)** |
| 1 | 15/20 | There is no diagram for explian of module. |  | x | Add diagram for module. | Gil-Dong, Hong | yyyy-mm-dd | **🗸** |
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