# Electrical wiring diagram for ventilation unit

systemair

## Wiring for DVCompact unit with following functions:

| | |
|---|---|
| Heat exchanger: | Rotor |
| Heating: | Water (HW) |
| Cooling: | Water(CW) |
| Recirculation: | Optional |
| VAV Air control: | Optional |

| | |
|---|---|
| Revision: | 2.2 |
| Revision date: | 08.06.2015 |
| Prepared by: | GECE |

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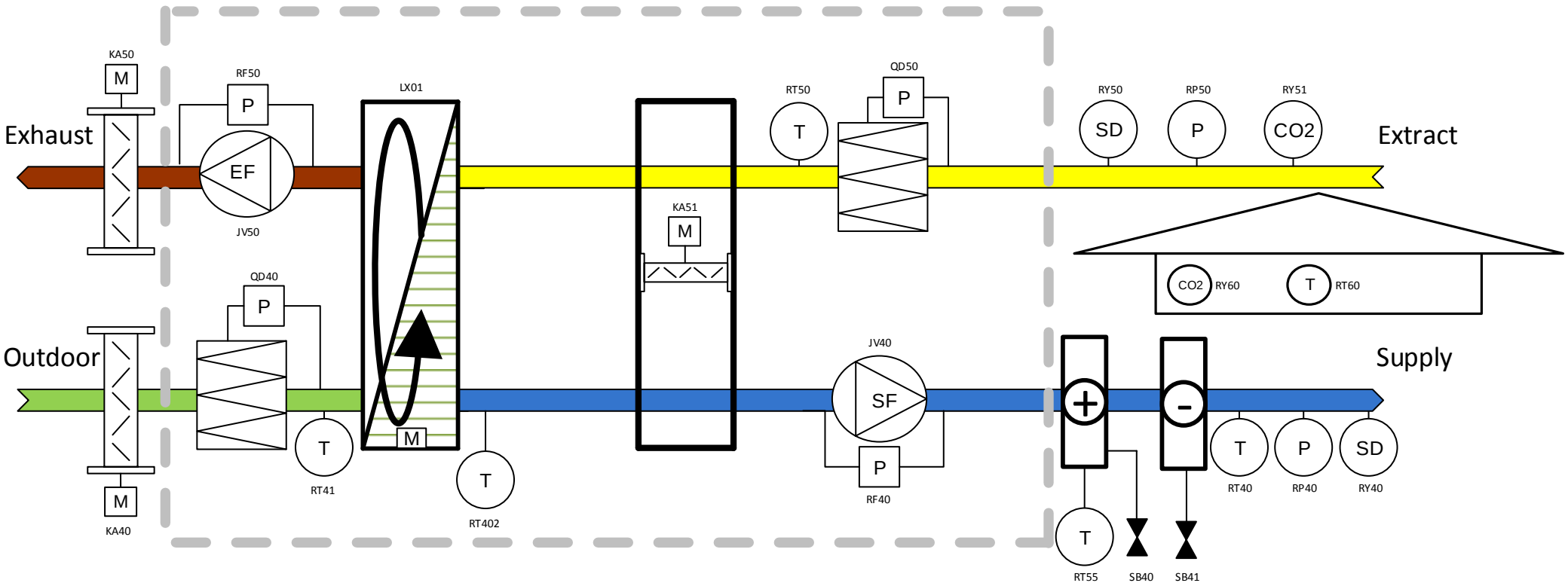
## Contents



*Picture is only for illiustration. The picture might be different from the delivered unit.




| | |
|---|---|
| JV50 | Extract Fan (EAF) |
| JV40 | Supply fan (SAF) |
| LX01 | Heat exchanger |
| KA40 | Damper, outdoor air |
| KA50 | Damper, exhaust air |
| KA41 | Damper, cross flow exchanger bypass |
| KA51 | Damper, mixing |
| SB41 | Cooling coil valve |
| SB40 | Heating coil valve |
| QT49 | El. Heater Thermostat |

| | |
|---|---|
| RT40 | Temperature sensor, supply |
| RT41 | Temperature sensor, outdoor |
| RT50 | Temperature senstor, extract |
| RT402 | Efficiency Temperature Sensor |
| RT52 | Temperature sensor, de-icing |
| RT55 | Temperature sensor , frost protection |
| RT60 | Room temp sensor |
| RY40 | Smoke detector supply |
| RY50 | Smoke detector extract |
| RY51 | CO2 duct sensor |
| RY60 | CO2 room sensor |

| | |
|---|---|
| QD40 | Supply Air filter guard |
| QD50 | Extract Air filter guard |
| RF40 | Pressure transmitter, supply fan |
| RF50 | Pressure transmitter, extract fan |
| RP40 | Pressure transmitter, supply air duct (option - VAV only) |
| RP50 | Pressure transmitter, extract air duct (option - VAV only) |

*Symbols and flowchart is exclusively for explanation.
This is not a component list for the delivered unit

| | |
|---|---|
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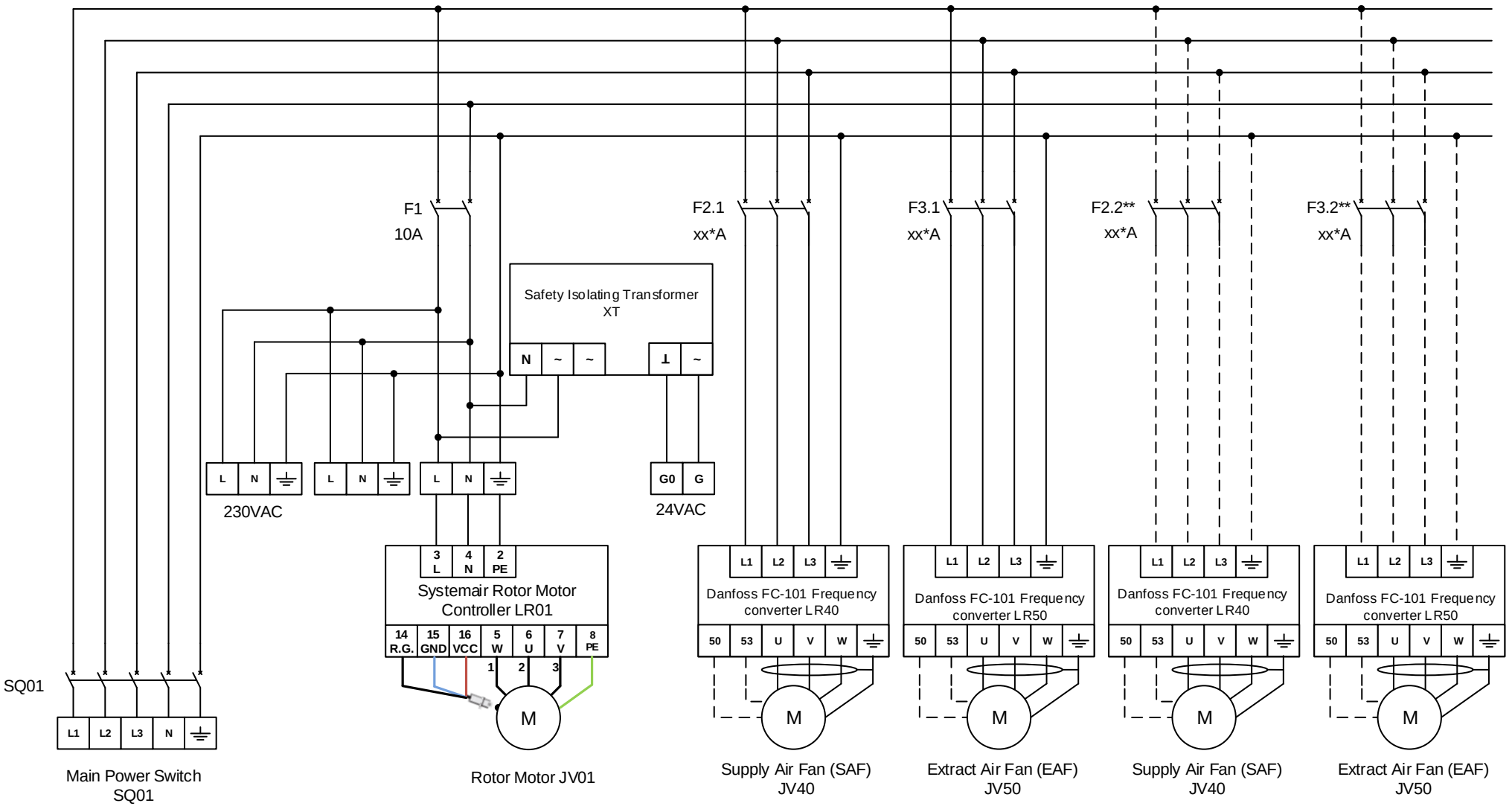
| Prepared by: | GECE |

Wiring for DVCompact unit with following functions:

| | |
|---|---|
| Heat exchanger: | Rotor |
| Heating: | Water (HW) |
| Cooling: | Water(CW) |
| Recirculation: | Optional |

Flow chart

systemair

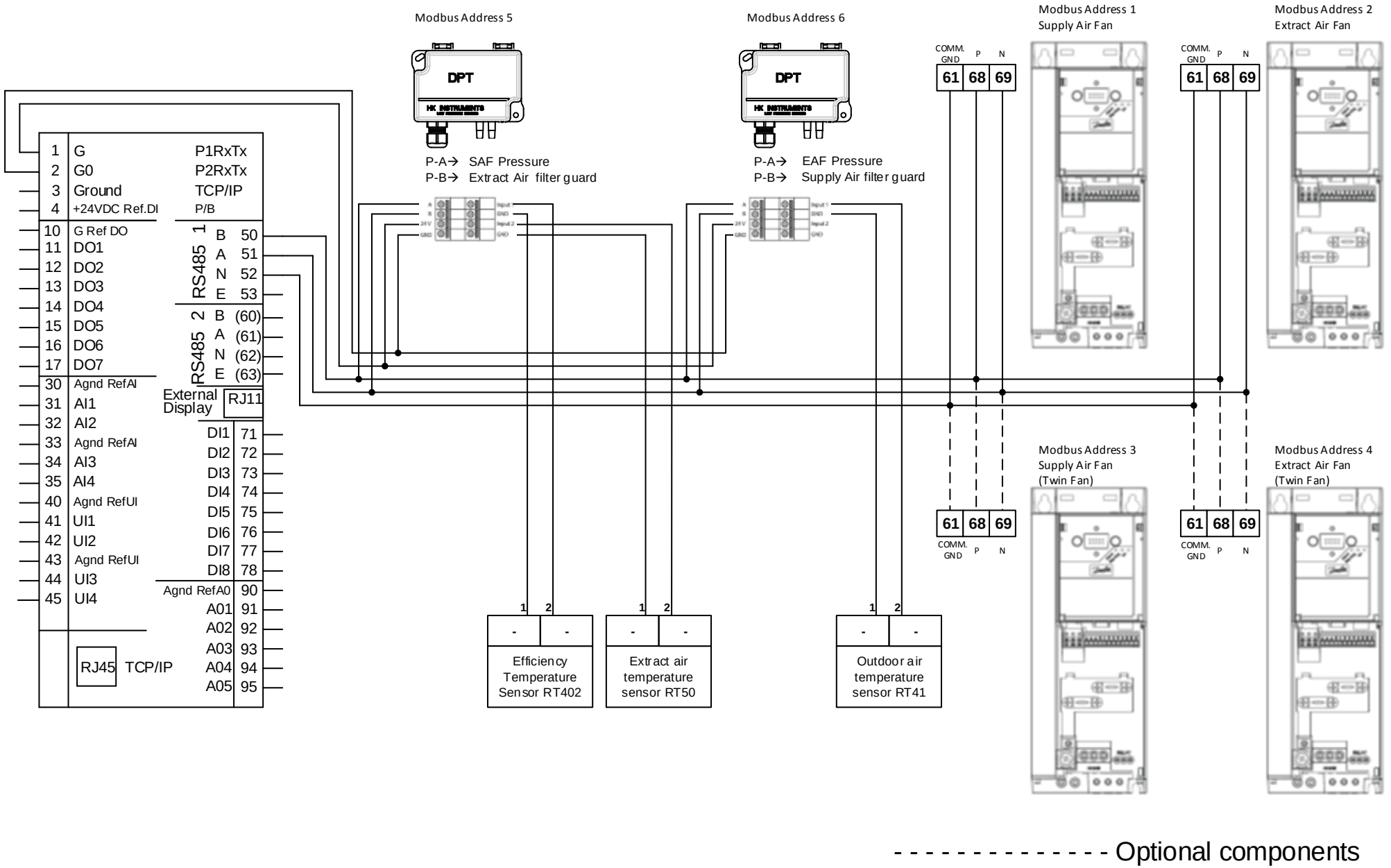



*-depends on motor power

**Twin Fan

- - - - - - - - - - - - - Optional components

| | | | | | |
|---|---|---|---|---|---|
| Revision: | 2.2 | Wiring for DVCompact unit with following functions: | | Power circuit | systemair |
| Revision date: | 08.06.2015 | | | | |
| Prepared by: | GECE | Heat exchanger: | Rotor | | |
| | | Heating: | Water (HW) | | |
| | | Cooling: | Water(CW) | | |
| | | Recirculation: | Optional | | |

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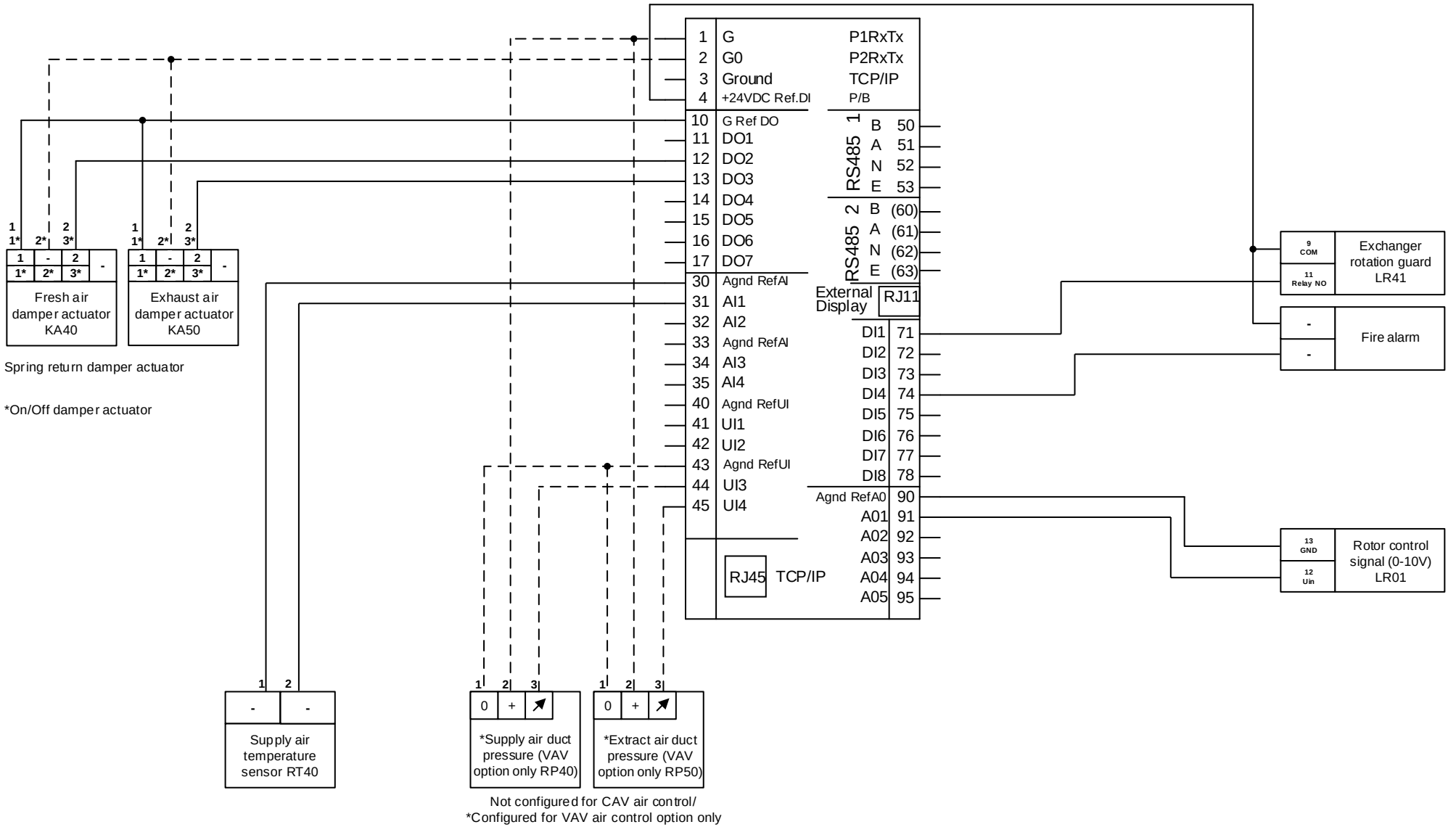
|---|---|---|---|---|---|
| Revision: | 2.2 | Wiring for DVCompact unit with following functions: | | Communication Bus | systemair |
| Revision date: | 08.06.2015 | Heat exchanger: | Rotor | | |
| Prepared by: | GECE | Heating: | Water (HW) | | |
| | | Cooling: | Water(CW) | | |
| | | Recirculation: | Optional | | Page 4/11 |

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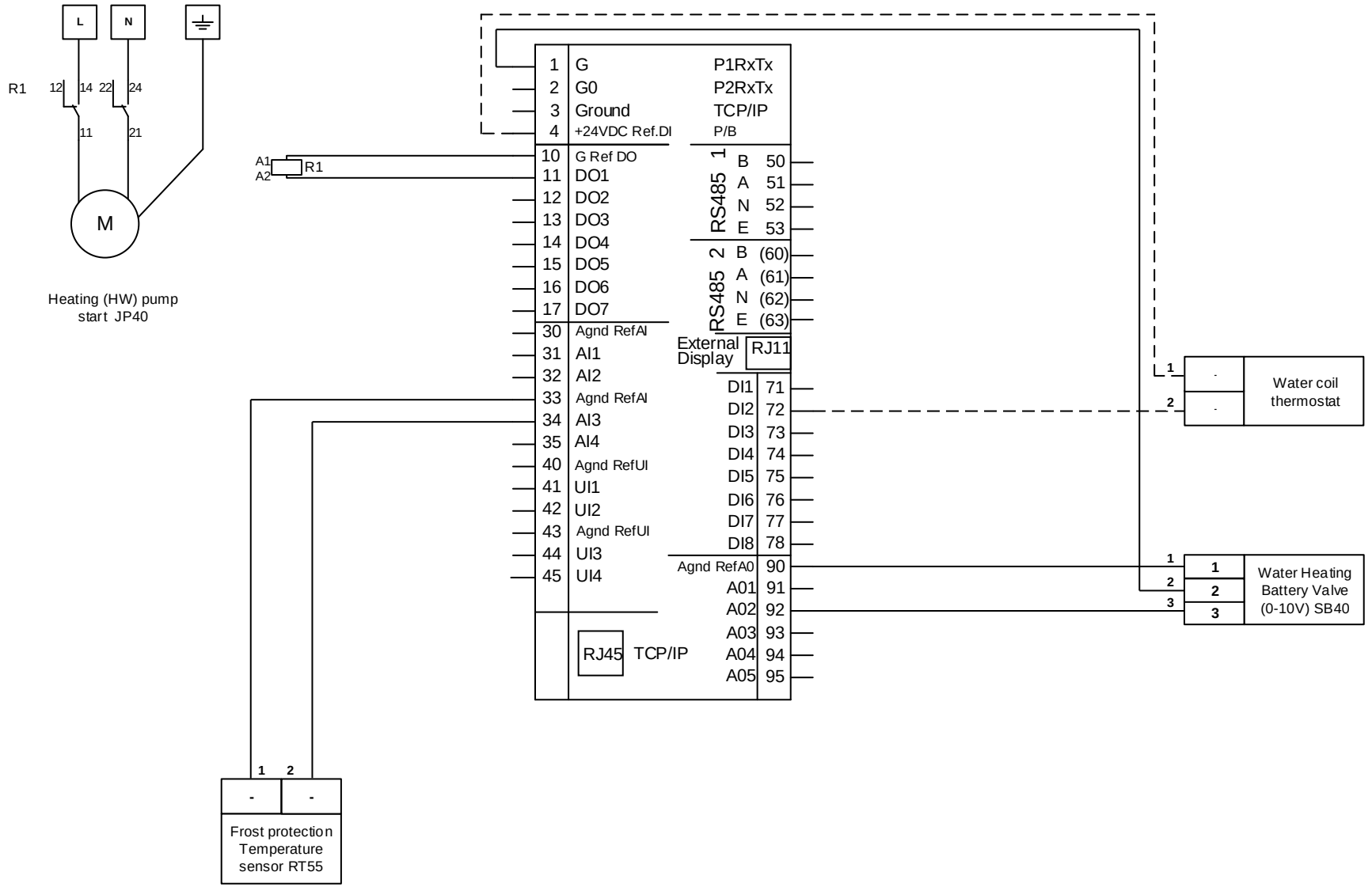
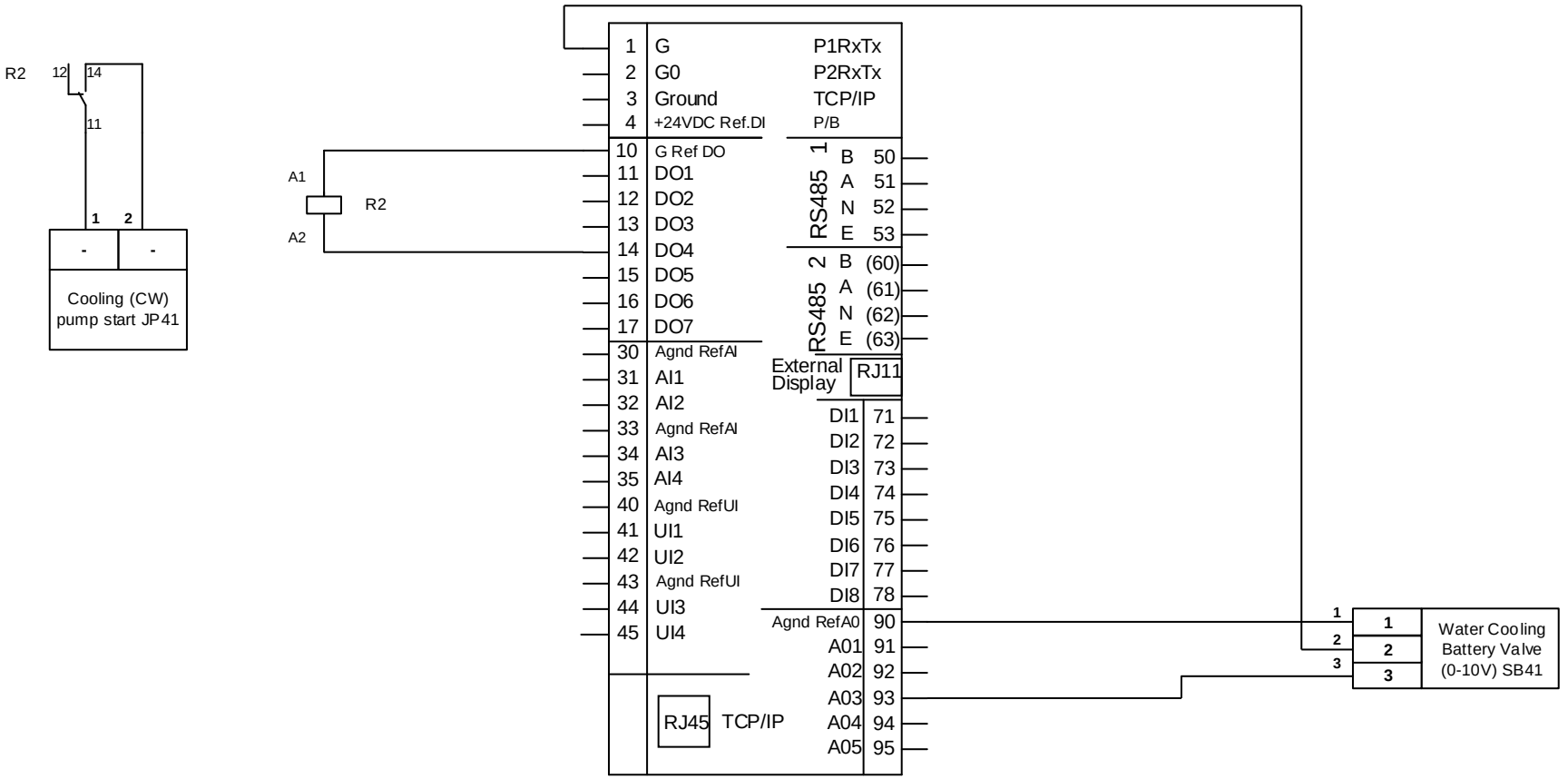
|---|---|---|---|---|---|
| Revision: | 2.2 | Wiring for DVCompact unit with following functions: | | Basic Connection | systemair |
| Revision date: | 08.06.2015 | Heat exchanger: | Rotor | | |
| Prepared by: | GECE | Heating: | Water (HW) | | Page 5/11 |
| | | Cooling: | Water(CW) | | |
| | | Recirculation: | Optional | | |

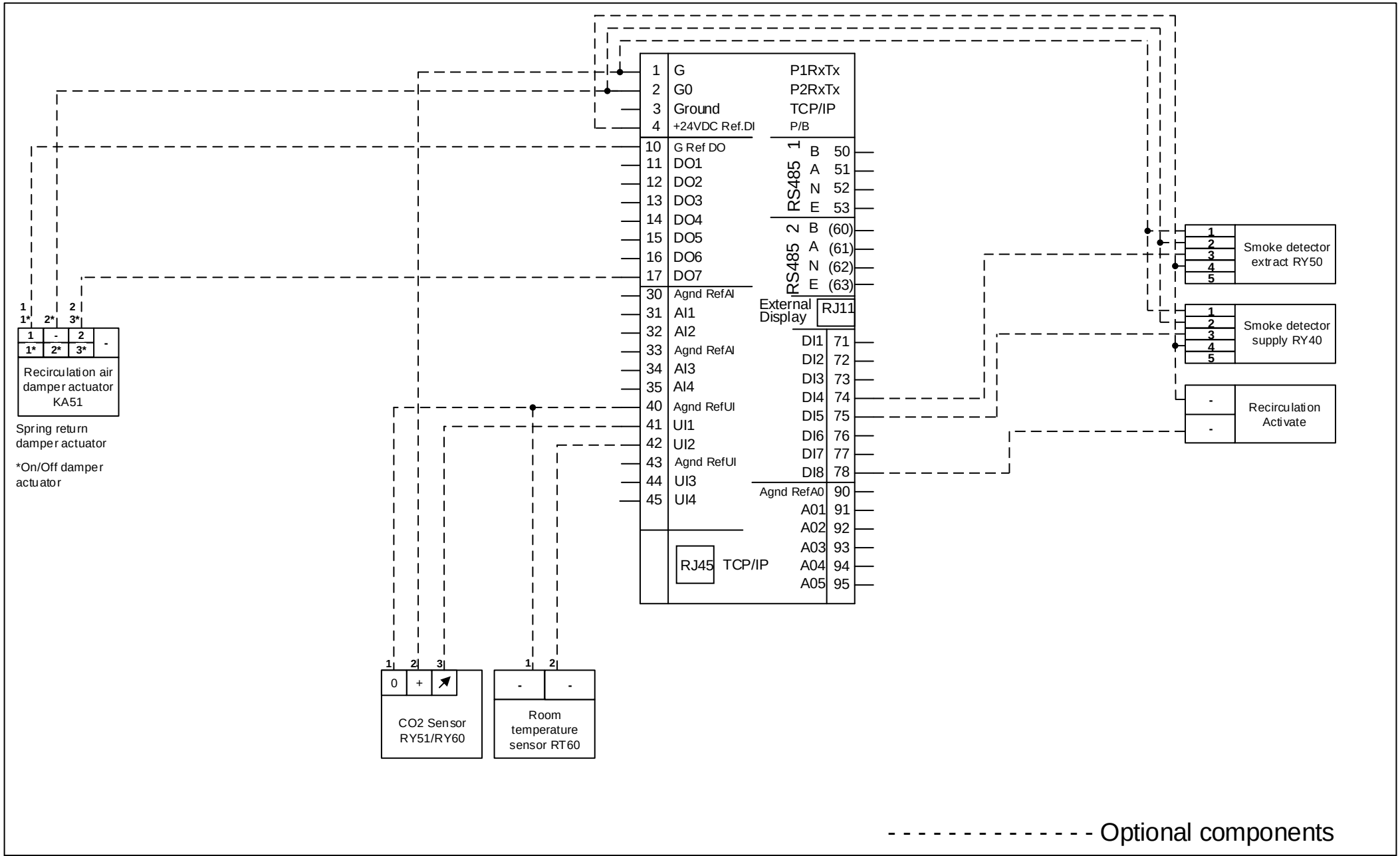



| | | | | |
|---|---|---|---|---|
| Revision: | 2.2 | Wiring for DVCompact unit with following functions: | Connection for Heating | systemair |
| Revision date: | 08.06.2015 | | | |
| Prepared by: | GECE | Heat exchanger: Rotor<br>Heating: Water (HW)<br>Cooling: Water(CW)<br>Recirculation: Optional | | Page 6/11 |




- - - - - - - - - - - - - Optional components

| | | | | |
|---|---|---|---|---|
| Revision: | 2.2 | Wiring for DVCompact unit with following functions: | Connection for Cooling | systemair |
| Revision date: | 08.06.2015 | | | |
| Prepared by: | GECE | Heat exchanger: Rotor<br>Heating: Water (HW)<br>Cooling: Water(CW)<br>Recirculation: Optional | | Page 7/11 |

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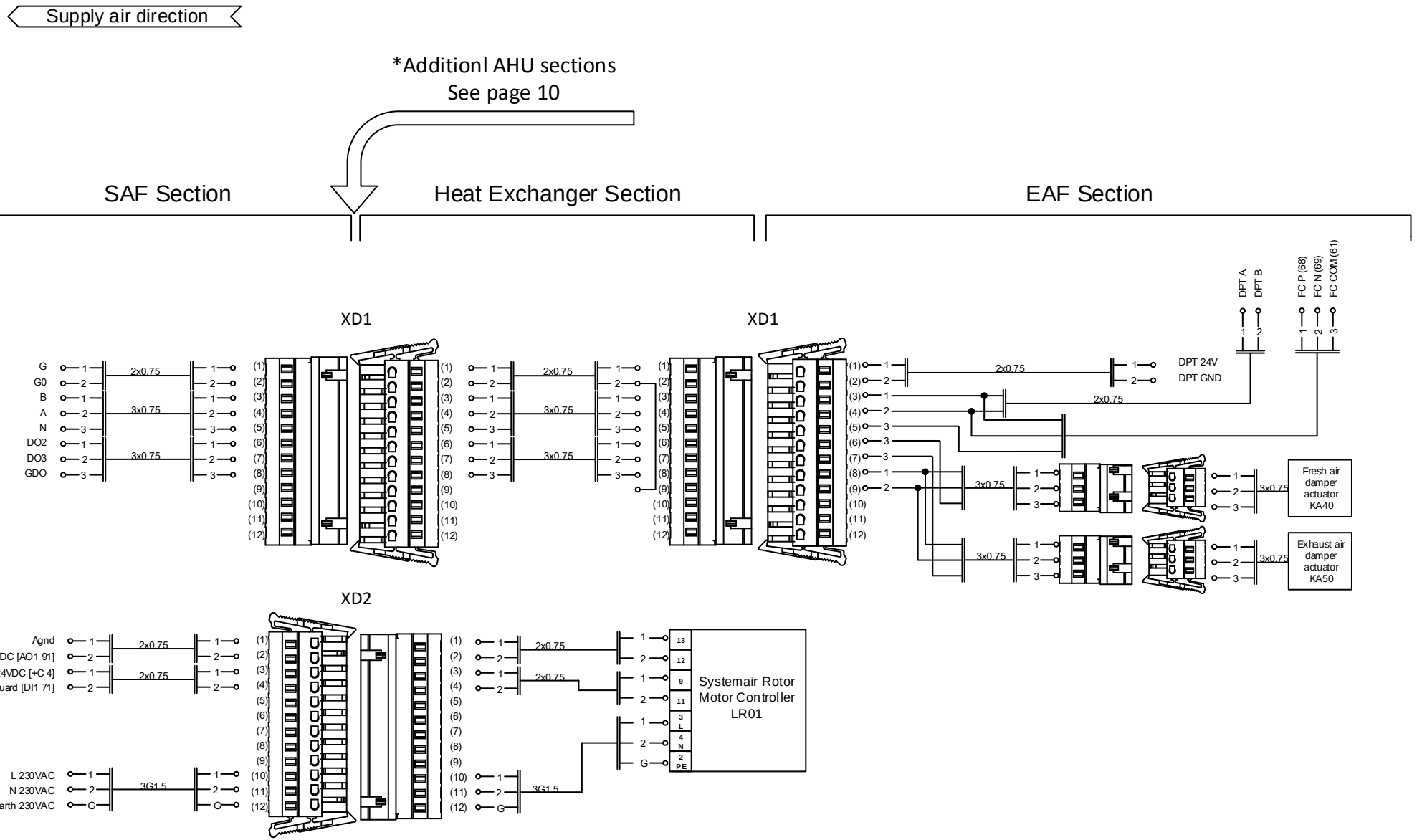
|---|---|---|---|---|---|
| Revision: | 2.2 | Wiring for DVCompact unit with following functions: | | Connection for Extra Sensors, Functions | systemair |
| Revision date: | 08.06.2015 | | | | |
| Prepared by: | GECE | Heat exchanger: | Rotor | | Page 8/11 |
| | | Heating: | Water (HW) | | |
| | | Cooling: | Water(CW) | | |
| | | Recirculation: | Optional | | |

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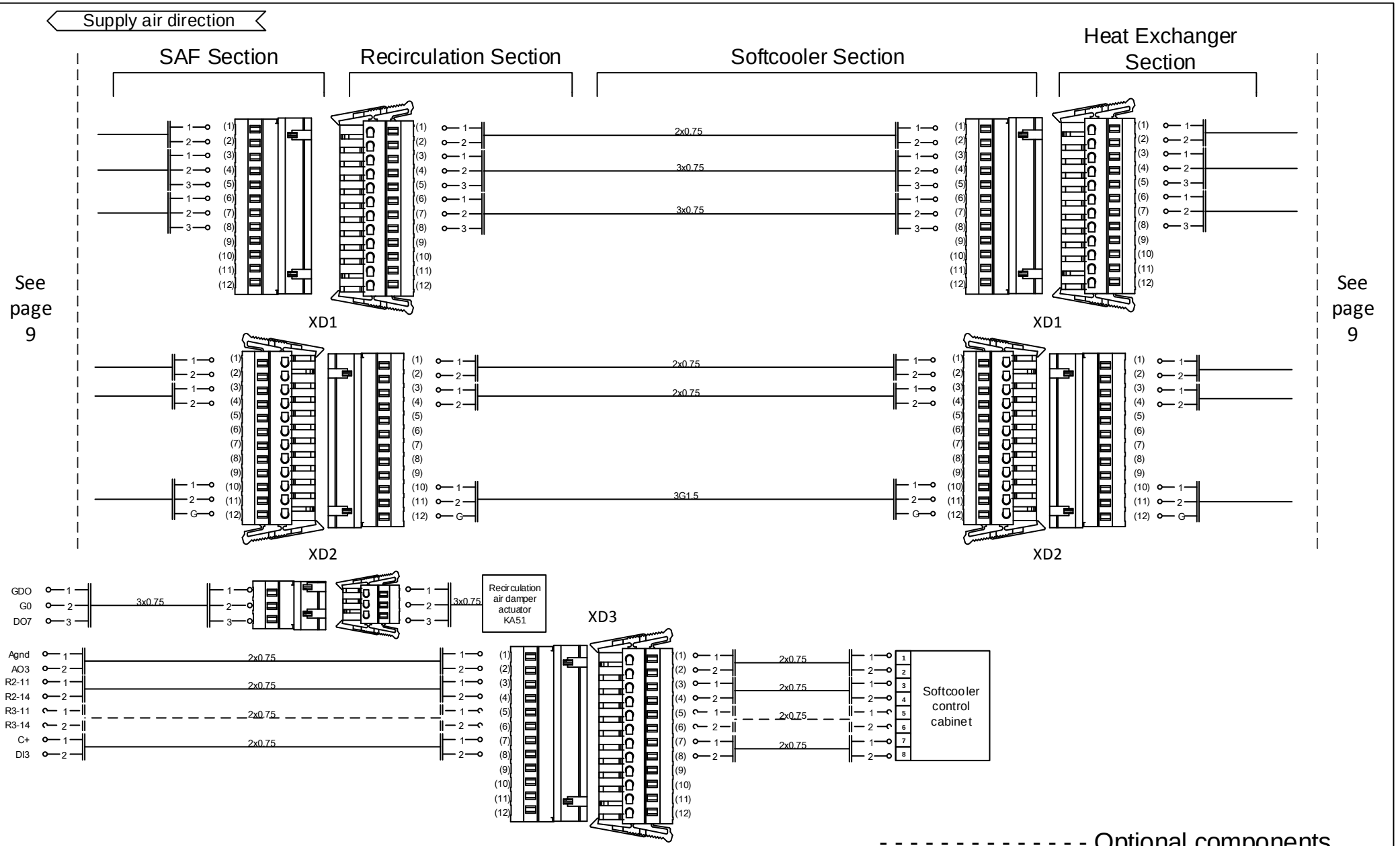
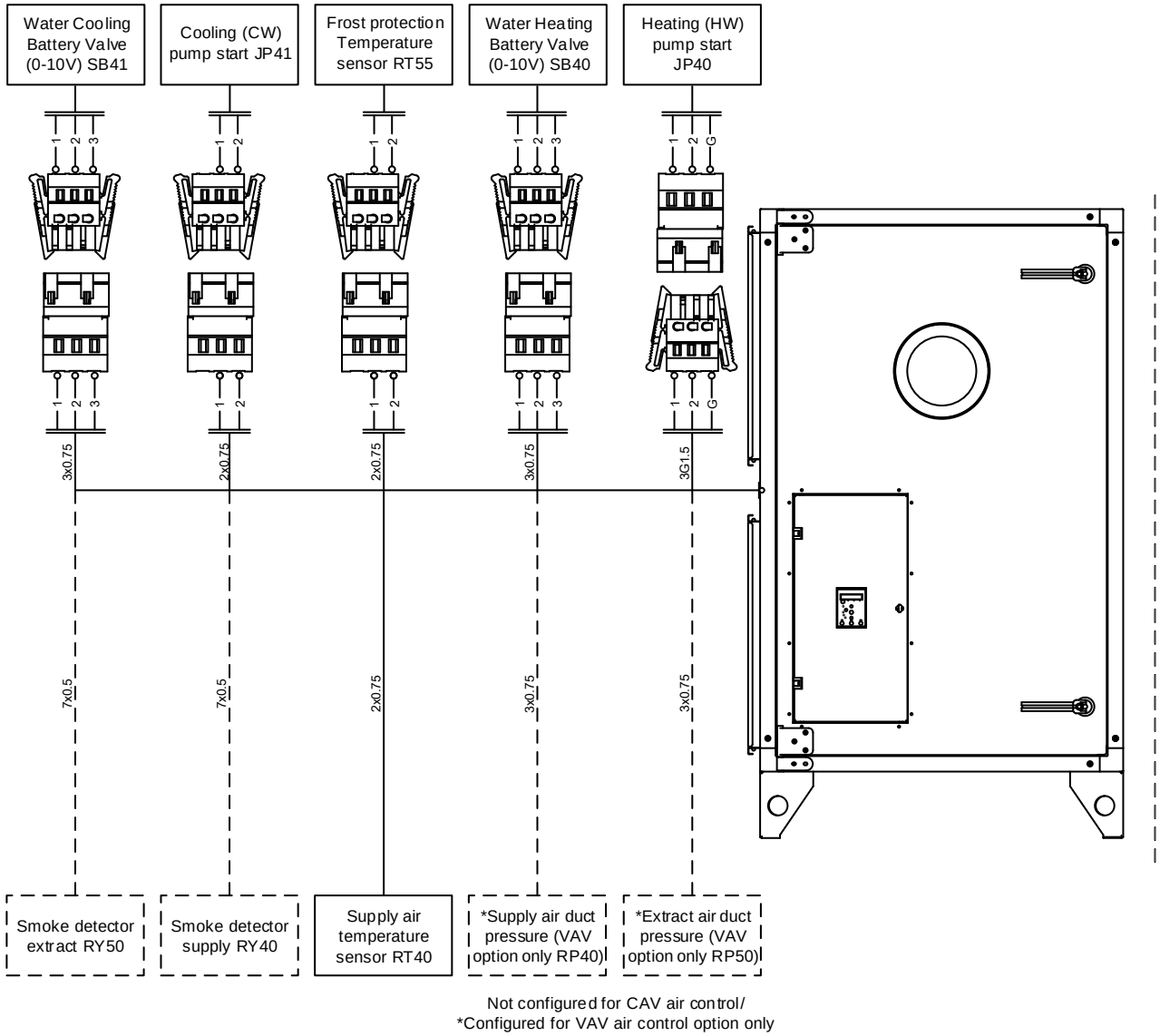
|---|---|---|---|---|
| Revision: | 2.2 | Wiring for DVCompact unit with following functions: | Sections connection wiring diagram | systemair |
| Revision date: | 08.06.2015 | | | |
| Prepared by: | GECE | Heat exchanger: Rotor<br>Heating: Water (HW)<br>Cooling: Water(CW)<br>Recirculation: Optional | | Page 9/11 |




| | | | | |
|---|---|---|---|---|
| Revision: | 2.2 | Wiring for DVCompact unit with following functions: | Sections connection wiring diagram | systemair |
| Revision date: | 08.06.2015 | | | |
| Prepared by: | GECE | Heat exchanger: Rotor<br>Heating: Water (HW)<br>Cooling: Water(CW)<br>Recirculation: Optional | | Page 10/11 |

Supply air direction




Not configured for CAV air control/
*Configured for VAV air control option only

- - - - - - - - - - - - - Optional components

| | | | | |
|---|---|---|---|---|
| Revision: | 2.2 | Wiring for DVCompact unit with following functions: | External connections | systemair |
| Revision date: | 08.06.2015 | | | |
| Prepared by: | GECE | Heat exchanger: Rotor<br>Heating: Water (HW)<br>Cooling: Water(CW)<br>Recirculation: Optional | | Page 11/11 |