

Employer  
**SAKO BRNO A.S.**

Project  
**High-efficient combined heat and power facility utilizing renewable sources (OHB II - line K1)**

Date  
**February 2021**

# **PART III, APPENDIX A17** **CONCEPT DIAGRAMS FOR** **AUTOMATION**



**PART III, APPENDIX A17  
CONCEPT DIAGRAMS FOR AUTOMATION**

Project name **High-efficient combined heat and power facility utilizing renewable sources  
(OHB II - line K1)**  
Version **1**  
Date **2021-02-25**  
Documentation **Procurement documentation – Part III – Employer’s Requirements**

Ramboll  
Hannemanns Allé 53  
DK-2300 Copenhagen S  
Denmark

T +45 5161 1000  
F +45 5161 1001  
[www.ramboll.com/energy](http://www.ramboll.com/energy)

**CONTENTS**

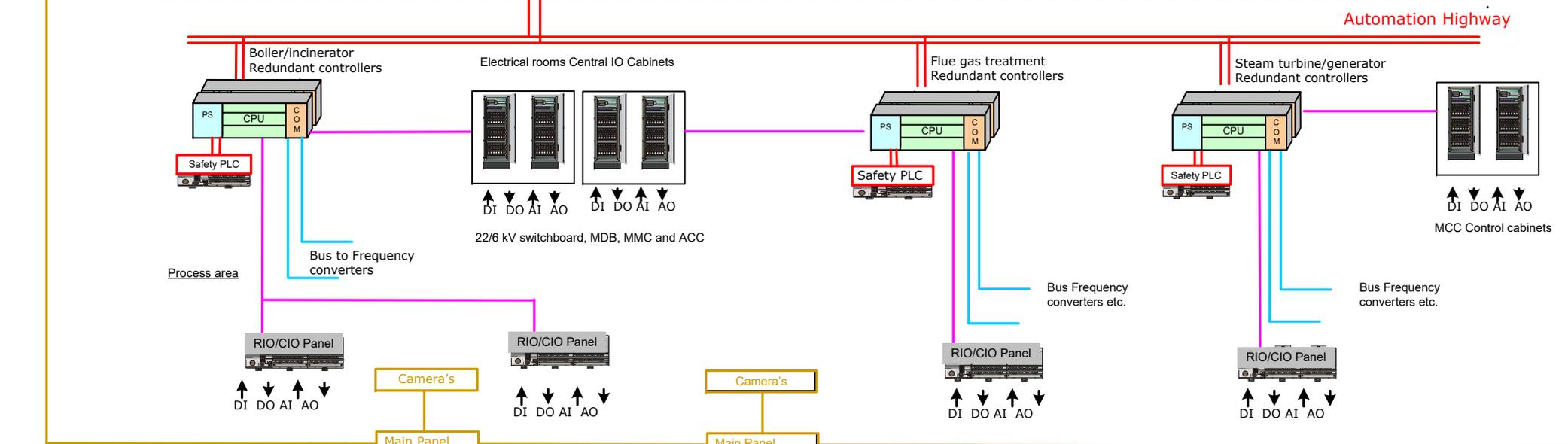
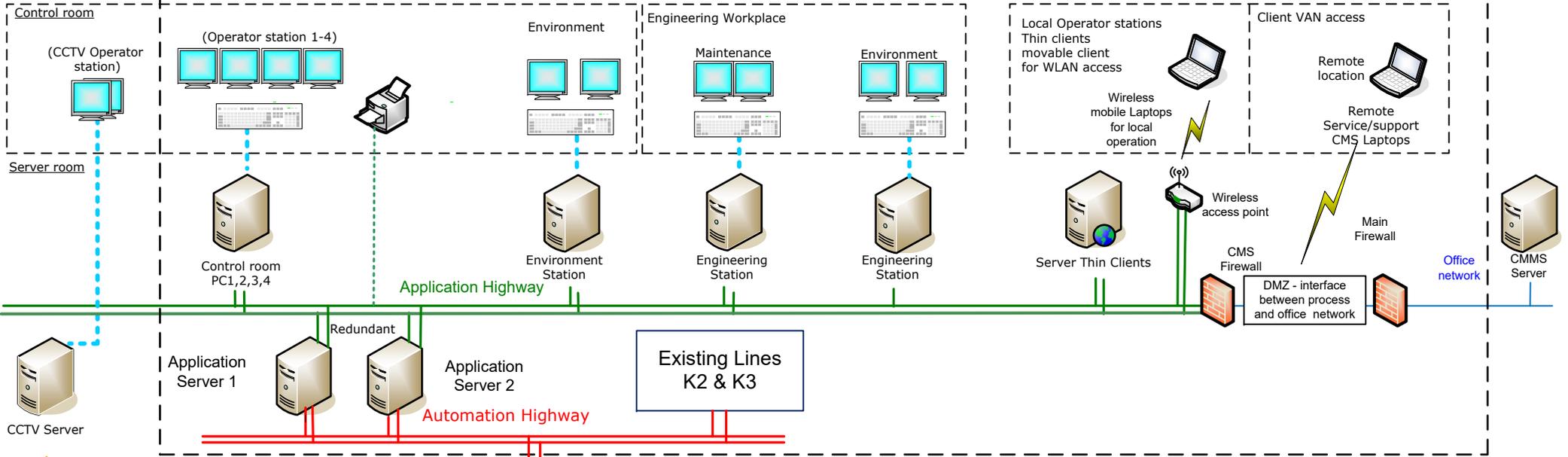
**Appendix A17.1, CMS Topology**

**Appendix A17.2, Automation Concept, Principle**

**Appendix A17.3, Standard interface between CMS and Process**

**Appendix A17.4, Principle for RIO panel**

# Existing Siemens SPPA-T3000 CMS system



## LEGEND

- Process network
- Control network
- Redundant optical fiber
- To Frequency converters
- CCTV network

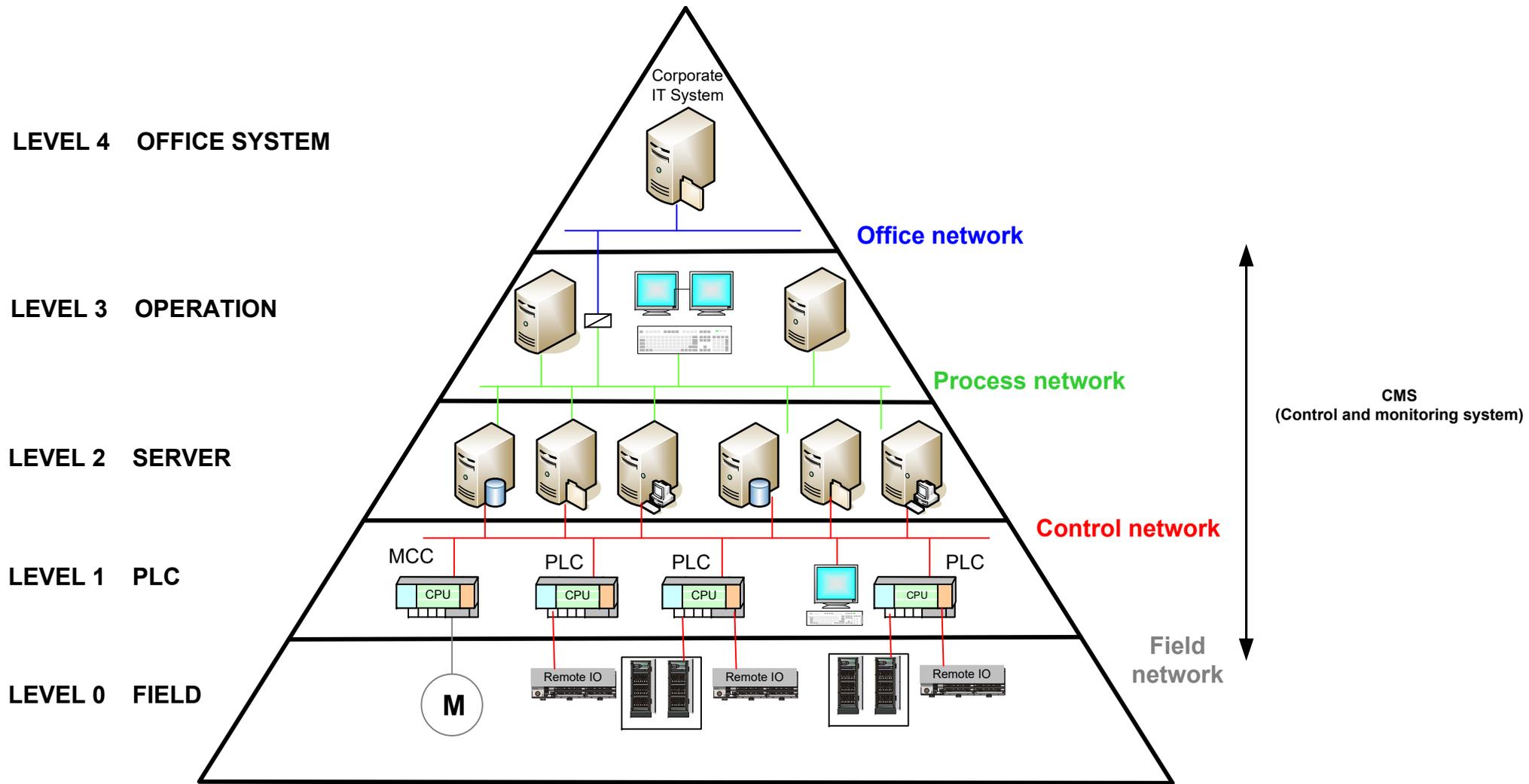
## REVISIONS

REV	DESCRIPTION	DATE	APPROVED
3	Final	2020-11-17	TRT
FILENAME Appendix 17 Concept Diagram for Automation			

**RAMBOLL**  
 Hannemanns Alle 53  
 DK-2300 København S  
 Tlf +45 51616000

## CMS Topology

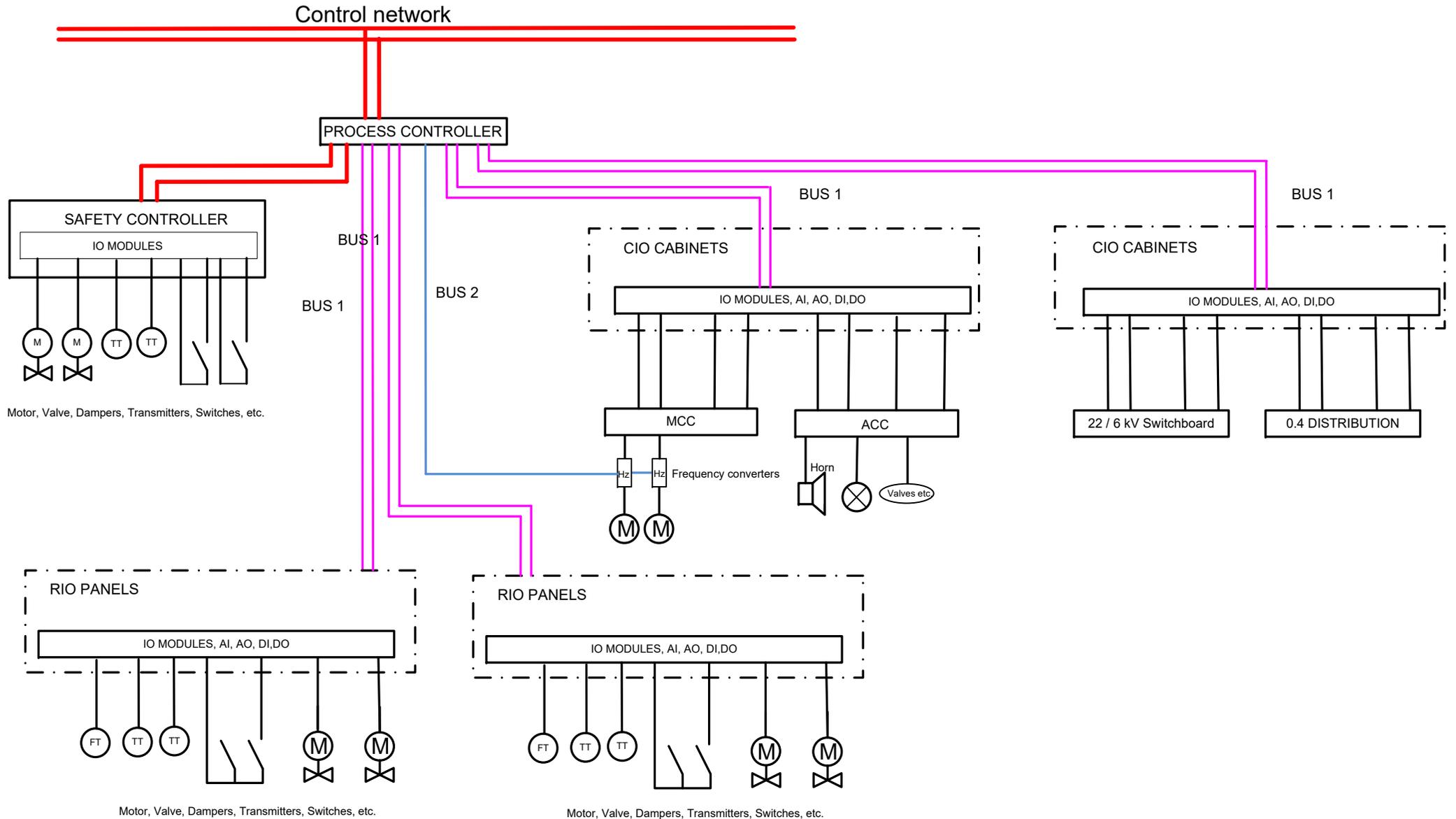
SAKO EfW Plant, Line K1			
SIZE 1	FSCM NO	DWG NO Appendix A17.1	REV 3
SCALE		PAGE 1 OF 4	



**LEGEND**

- Office network
- Process network
- Control network
- Field network

REVISIONS				 Hannemanns Alle 53 DK-2300 København S Tlf +45 51616000	Automation concept, Principle			
REV	DESCRIPTION	DATE	APPROVED		SAKO EfW Plant, Line K1			
3	Final	2020-11-17	TRT	SIZE 1	FSCM NO	DWG NO Appendix A17.2	REV 3	
FILENAME Appendix 17 Concept Diagram for Automation				SCALE		PAGE 2 OF 4		



Motor, Valve, Dampers, Transmitters, Switches, etc.

Motor, Valve, Dampers, Transmitters, Switches, etc.

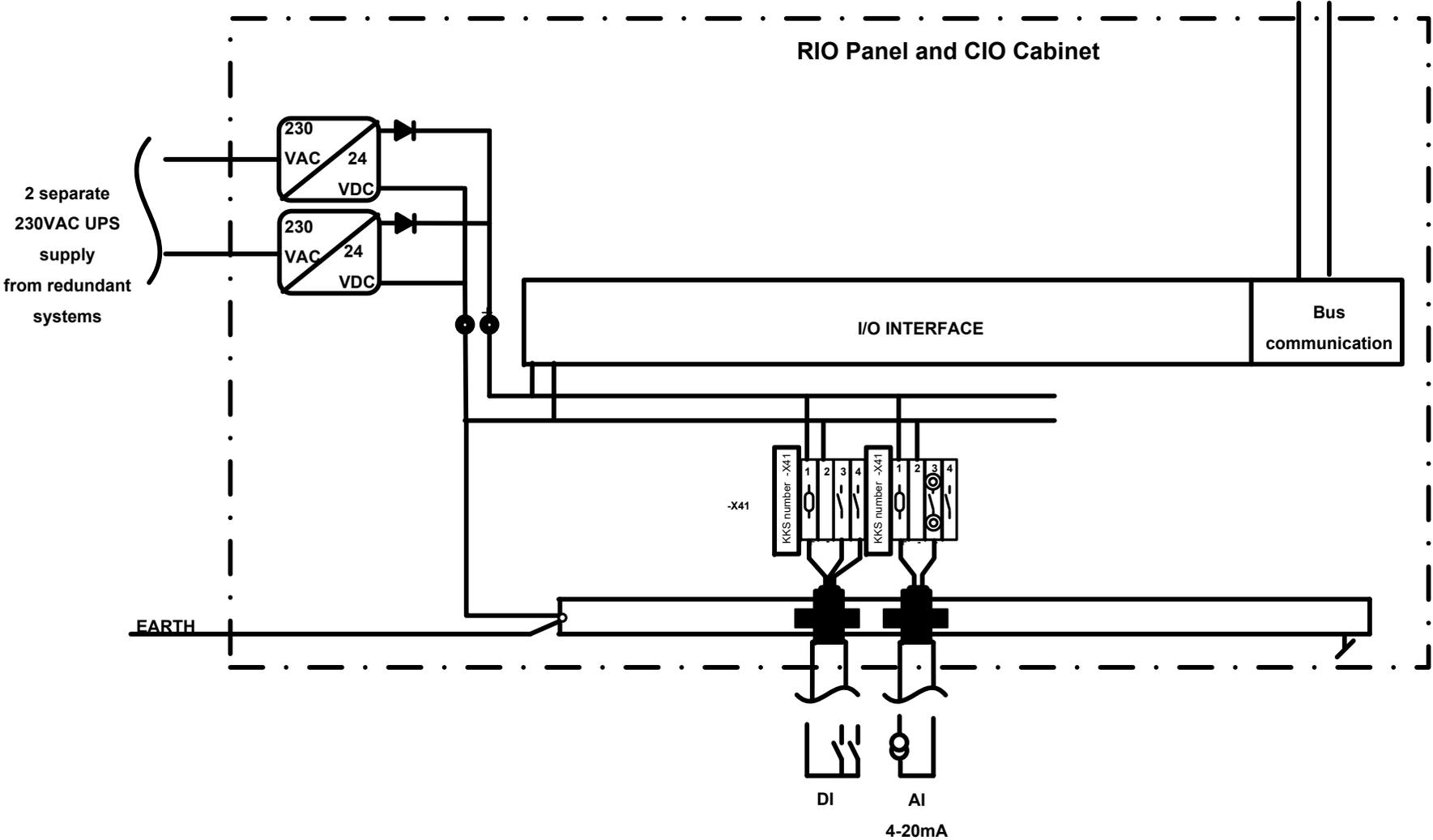
Motor, Valve, Dampers, Transmitters, Switches, etc.

**LEGEND**

- Control Network
- Bus 1: Redundant optical fiber
- Bus 2: To Frequency converters
- Hardwired signals

**MCC** Motor Control Centre  
**ACC** Auxiliary Control Center (for auxiliary equipment)

REVISIONS				 Hannemanns Alle 53 DK-2300 København S Tlf +45 51616000	Standard interface between CMS and Proces			
REV	DESCRIPTION	DATE	APPROVED		SAKO EfW Plant, Line K1			
3	Final	2020-11-17	TRT	SIZE 1	FSCM NO	DWG NO Appendix A17.3	REV 3	
FILENAME Appendix 17 Concept Diagram for Automation				SCALE		PAGE 3 OF 4		



REVISIONS				 Hannemanns Alle 53 DK-2300 København S Tlf +45 51616000	Principle for RIO panel			
REV	DESCRIPTION	DATE	APPROVED		SAKO EfW Plant, Line K1			
3	Final	2020-11-17	TRT	SIZE 1	FSCM NO	DWG NO Appendix 17.4	REV 3	
FILENAME Appendix 17 Concept Diagram for Automation				SCALE		PAGE 4 OF 4		