



Welbilt Deutschland GmbH

Talstraße 35
82436 Eglfing
Deutschland

www.convotherm.com

Technical Data

| Model | Rated voltage | Frequency | consumption | Rated current |
|--------------|---------------|-----------|---------------|---------------|
| Cmn 6.06 pro | 208V / 240V | 60Hz | 4,7kW / 6,1kW | 13,0A / 14,7A |

articlenumber circuit diagram 5336500-10022_00
articlenumber device

Created on 15.04.2025 CONVOTHERM®
Edit date 28.05.2025 by (short name) ALTENDORF.A

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| | | | | | | | |
| higher-order Administrative Documents | &BAA | 1 | Title page / cover sheet | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| higher-order Lists (Documents concerning) | &BAB | 2 | Table of contents : &BAA/1 - ==CS1=LGT+CC1&EFS/1 | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| higher-order Lists (Documents concerning) | &BAB | 2.a | Table of contents : ==CS1=CT1+CC1&EFS/1 - ==CS1=CS1+WC1&EFS/2 | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| higher-order Explanatory Documents | &BDB | 1 | Overview functions | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| higher-order Explanatory Documents | &BDB | 2 | Overview locations | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| higher-order Explanatory Documents | &BDB | 3 | Overview document types | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| =PLC +WC1 Combi oven Control Wiring compartment | | | | | | | |
| Electrical engineering Functional overview documents | &EFA | 1 | Overview Main board complete | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| Electrical engineering Functional overview documents | &EFA | 2 | Overview Main board Network connector | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| Electrical engineering Functional overview documents | &EFA | 3 | Overview Expansion board | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| Electrical engineering Circuit documents | &EFS | 1 | Wiring overview | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| =SU1 +MT1 Combi oven Power supply Mounting panel | | | | | | | |
| Electrical engineering Circuit documents | &EFS | 1 | Power supply | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| Electrical engineering Circuit documents | &EFS | 2 | Power supply | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| =CV1 +WC1 Combi oven Convection system 1 Wiring compartment | | | | | | | |
| Electrical engineering Circuit documents | &EFS | 1 | Hot air Generation 1 | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| =IJ1 +WC1 Combi oven Water injection Wiring compartment | | | | | | | |
| Electrical engineering Circuit documents | &EFS | 1 | Sprayer | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| Electrical engineering Circuit documents | &EFS | 2 | Sprayer | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| =MOT +MT1 Combi oven Oven fan Mounting panel | | | | | | | |
| Electrical engineering Circuit documents | &EFS | 1 | Motor | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| =COL +WC1 Combi oven Condenser box Wiring compartment | | | | | | | |
| Electrical engineering Circuit documents | &EFS | 1 | Condenser box | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| =CL1 +WC1 Combi oven Cleaning 1 (Solid to Liquid) Wiring compartment | | | | | | | |
| Electrical engineering Circuit documents | &EFS | 1 | Cleaning | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| =LGT +CC1 Combi oven Oven light Oven cavity | | | | | | | |
| Electrical engineering Circuit documents | &EFS | 1 | Lamp | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |

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| | | 1 | Sensor (Option) | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| =COO +WC1 | Electrical engineering Circuit documents &EFS | Combi oven Cooling Wiring compartment | | | | | |
| | | 1 | Function | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| | | 2 | Automatic Automatic machine. Door catch | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| =HMI +MT1 | Electrical engineering Circuit documents &EFS | Combi oven HMI Mounting panel | | | | | |
| | | 1 | Control panel | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| =CS1 +WC1 | Electrical engineering Circuit documents &EFS | 2 | Control panel | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| | | Combi oven ConvoSense Wiring compartment | | | | | |
| | | 1 | ConvoSense | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |
| | Electrical engineering Circuit documents &EFS | 2 | ConvoSense | ALTENDORF.A | ALTENDORF.A | | 28.05.2025 |

Example

Description
Standards
EPLAN
Nesting

==CS1

Combi oven
Functional assignment
Functional assignment
No

=CV1

Hot air 1
Functional aspect
Function designation
No

==CS1 Combi oven

=PLC Control

=SU1 Power supply

=CV1 Convection system 1

=IJ1 Water injection

=MOT Oven fan

=COL Condenser box

=CL1 Cleaning 1 (Solid to Liquid)

| | |
|-------------|------------|
| =LGT | Oven light |
|-------------|------------|

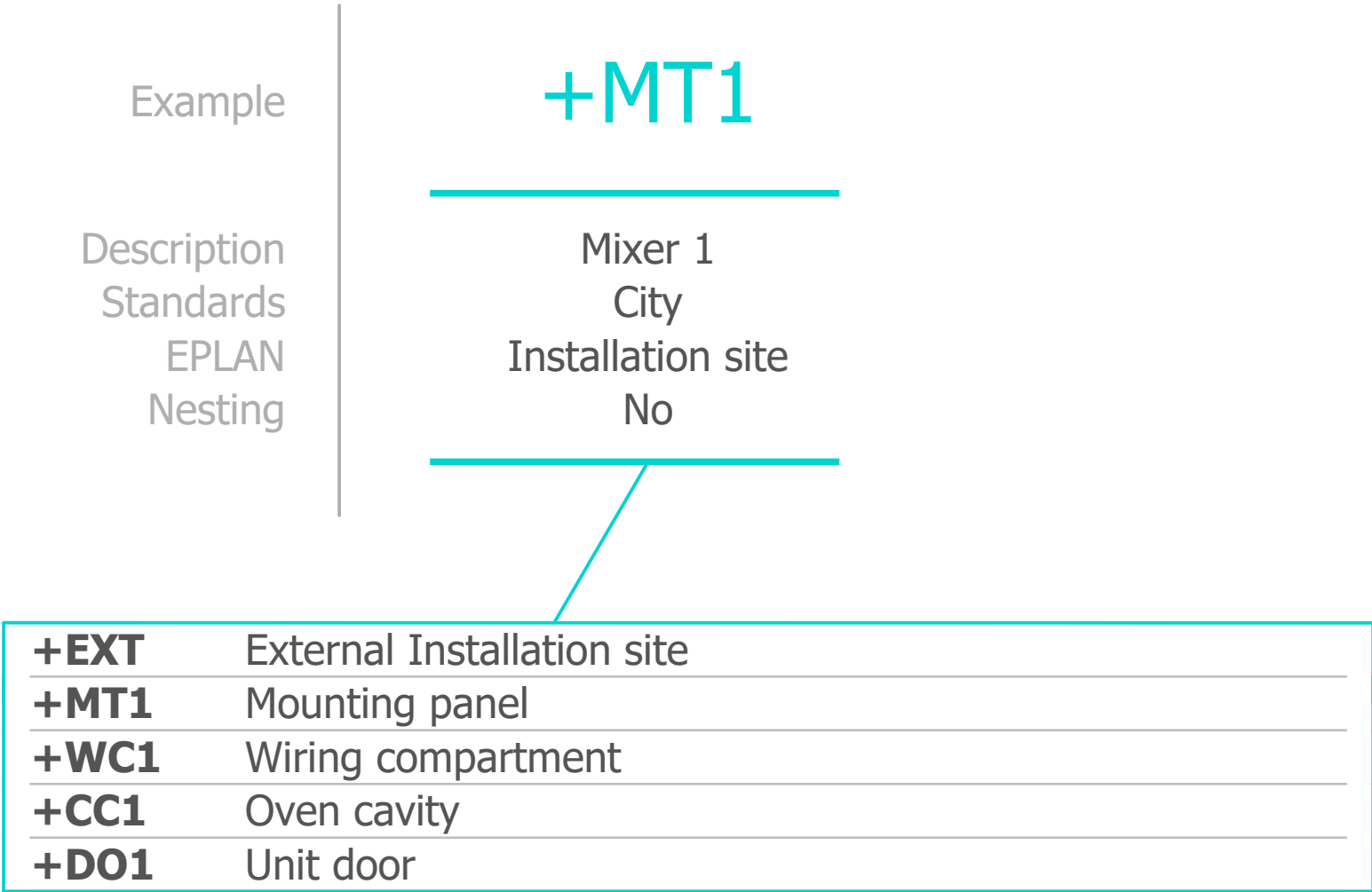
=CT1 Core temperature probe

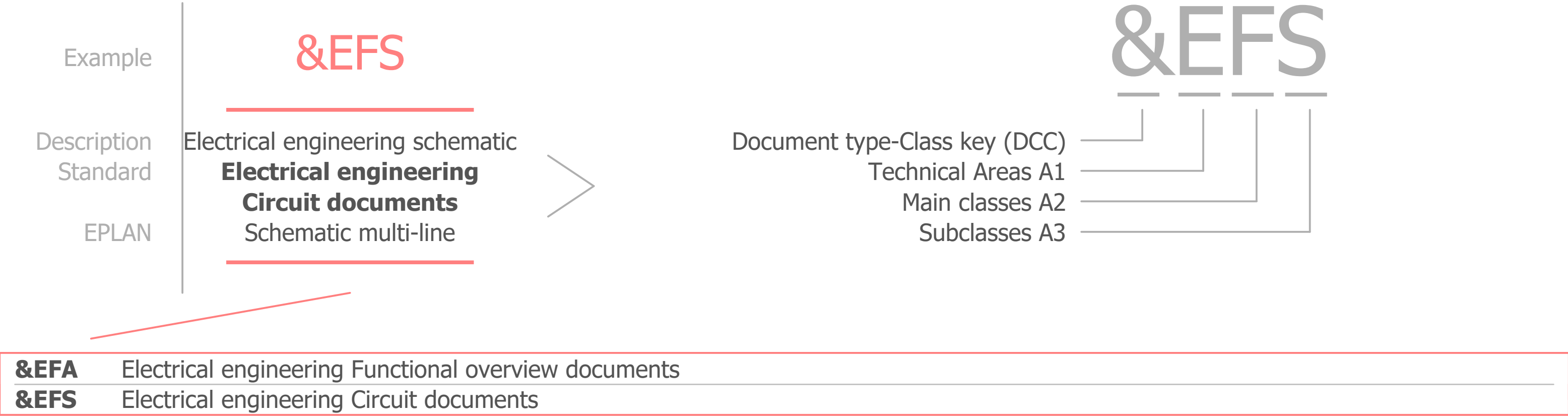
=COO Cooling

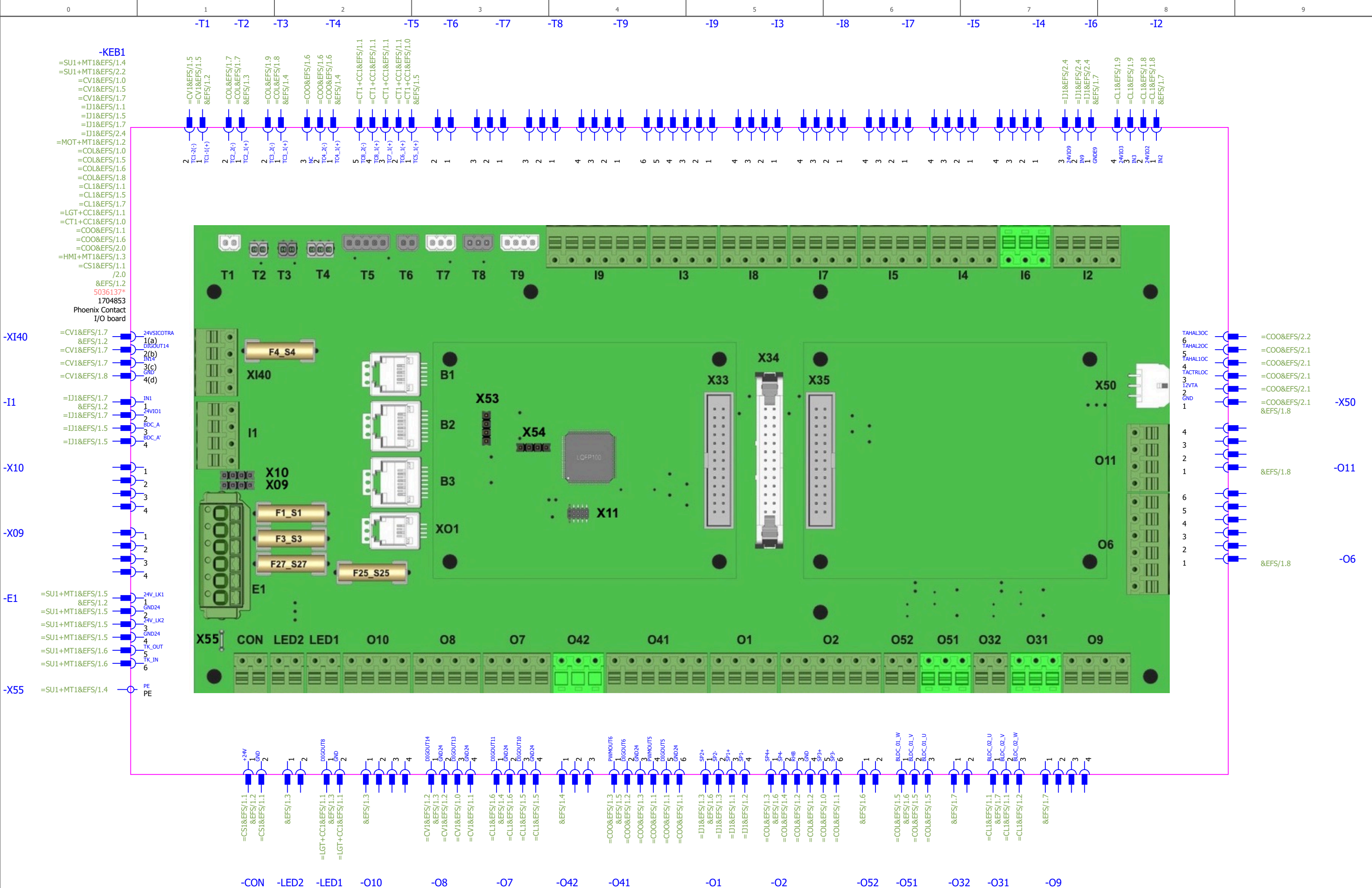
=HMI HMI

=CS1 ConvoSense

| | | | | | | | | | | | | |
|--------------|------|------|----------|-------------|---|---|--------------------|-------------------------------|--|---------------------|------------------------------------|---------|
| | | | Date | 28.05.2025 | Observe protection notices in accordance with ISO 16016 | = | Overview functions | articlenumber circuit diagram | | | == | |
| | | | Ed. | ALTENDORF,A | | | | 5336500-10022_00 | | | = | |
| | | | Appr | | | | | articlenumber device | | Project description | | + |
| Modification | Date | Name | Original | | | | | 17.0 | | - | higher-order Explanatory Documents | & BDB 1 |







* further articles see Bill of materials

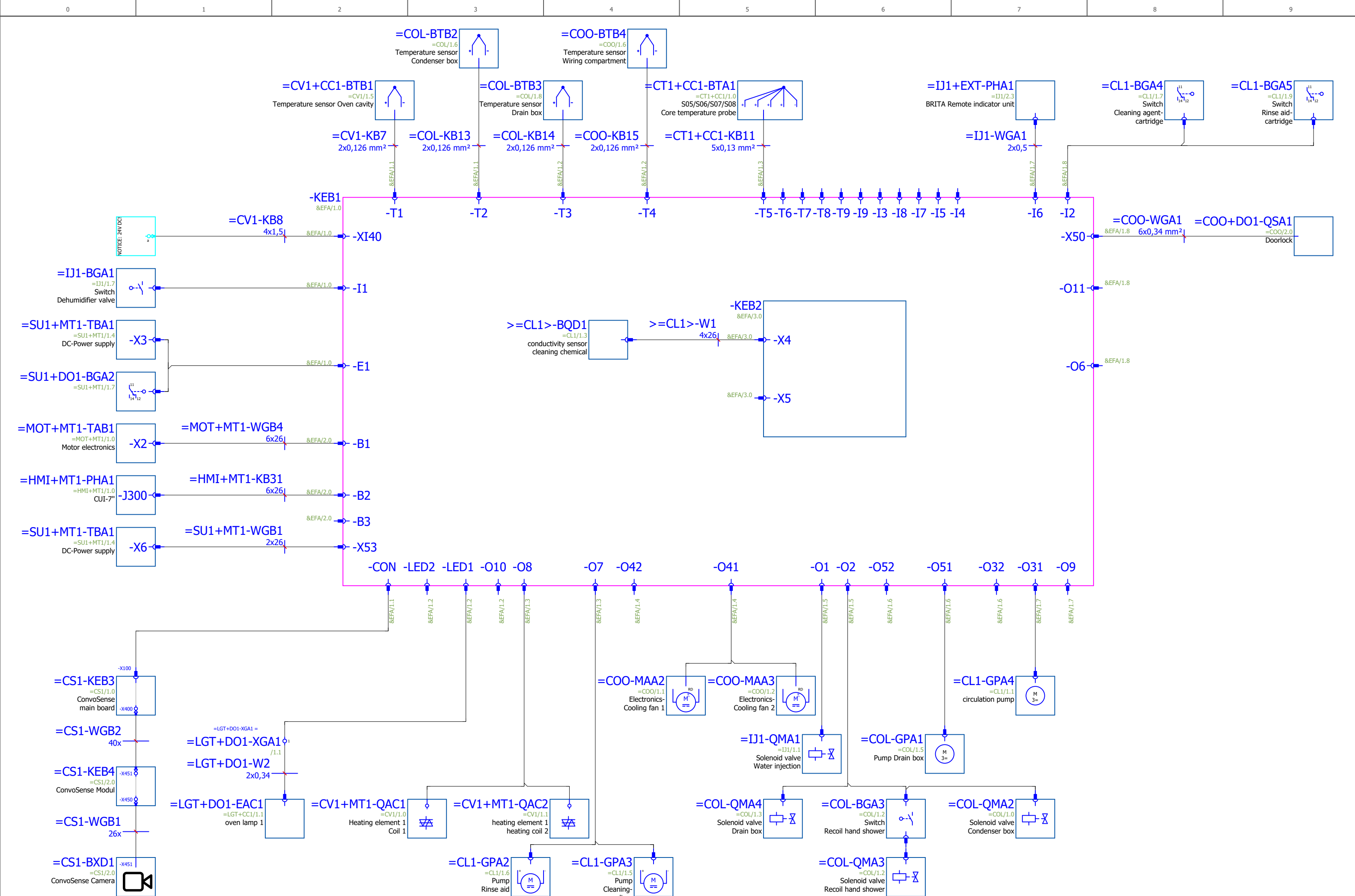
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|--------------|------|------|----------|-------------|---|---|---|-----------------------------|--|--|-------|-----|
| | | | Date | 28.05.2025 | Observe protection notices in accordance with ISO 16016 | = Control Overview Main board complete | articlenumber circuit diagram 5336500-10022_00 | Project description 17.0 | Combi oven | | = CS1 | PLC |
| | | | Ed. | ALTENDORF.A | | | | | Control | | = PLC | |
| | | | Appr | STENZEL.K | | | | | Wiring compartment | | + WC1 | |
| Modification | Date | Name | Original | | | | | | Electrical engineering Functional overview documents | | & EFA | |



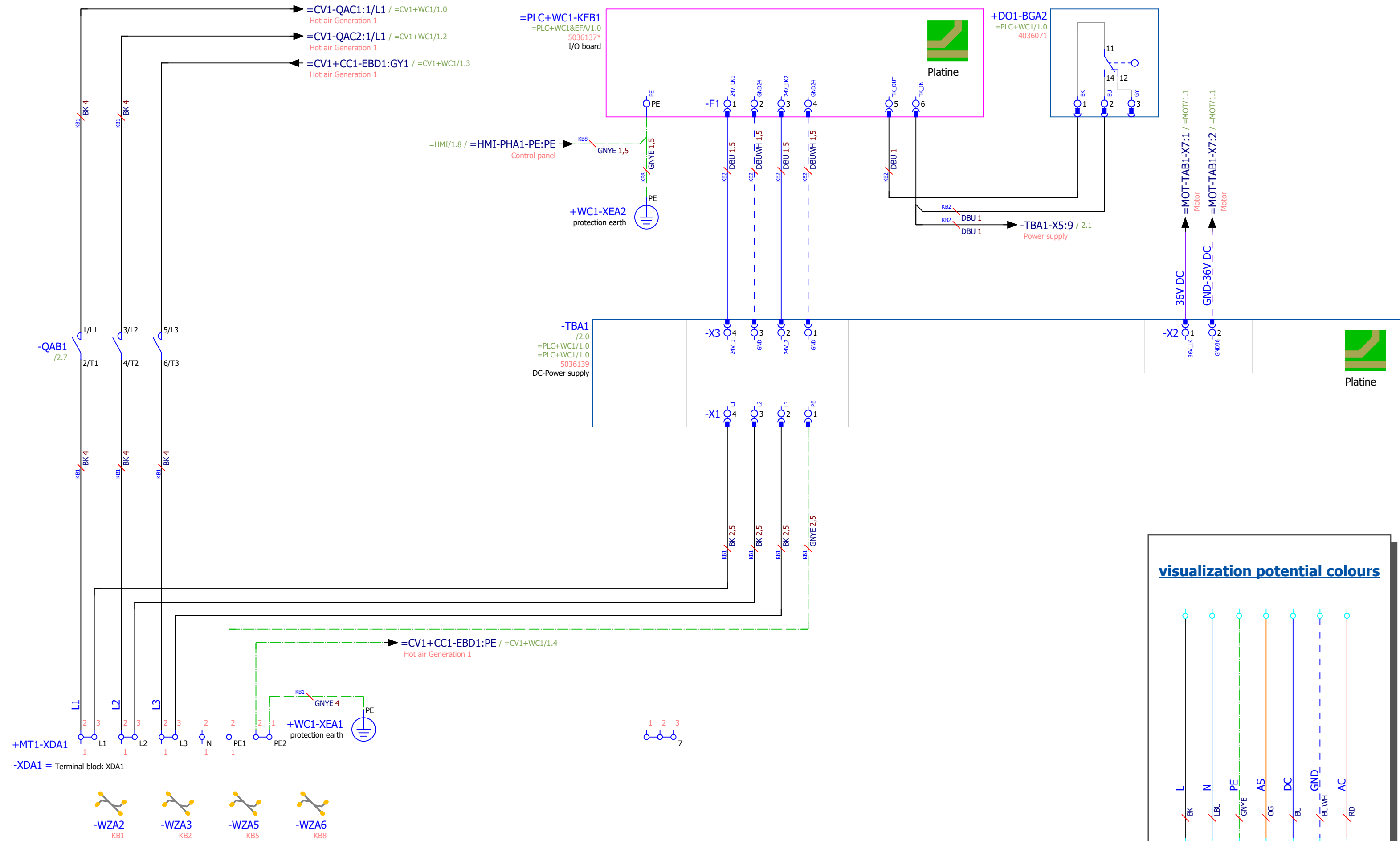
PLC



Control
Overview Expansion board



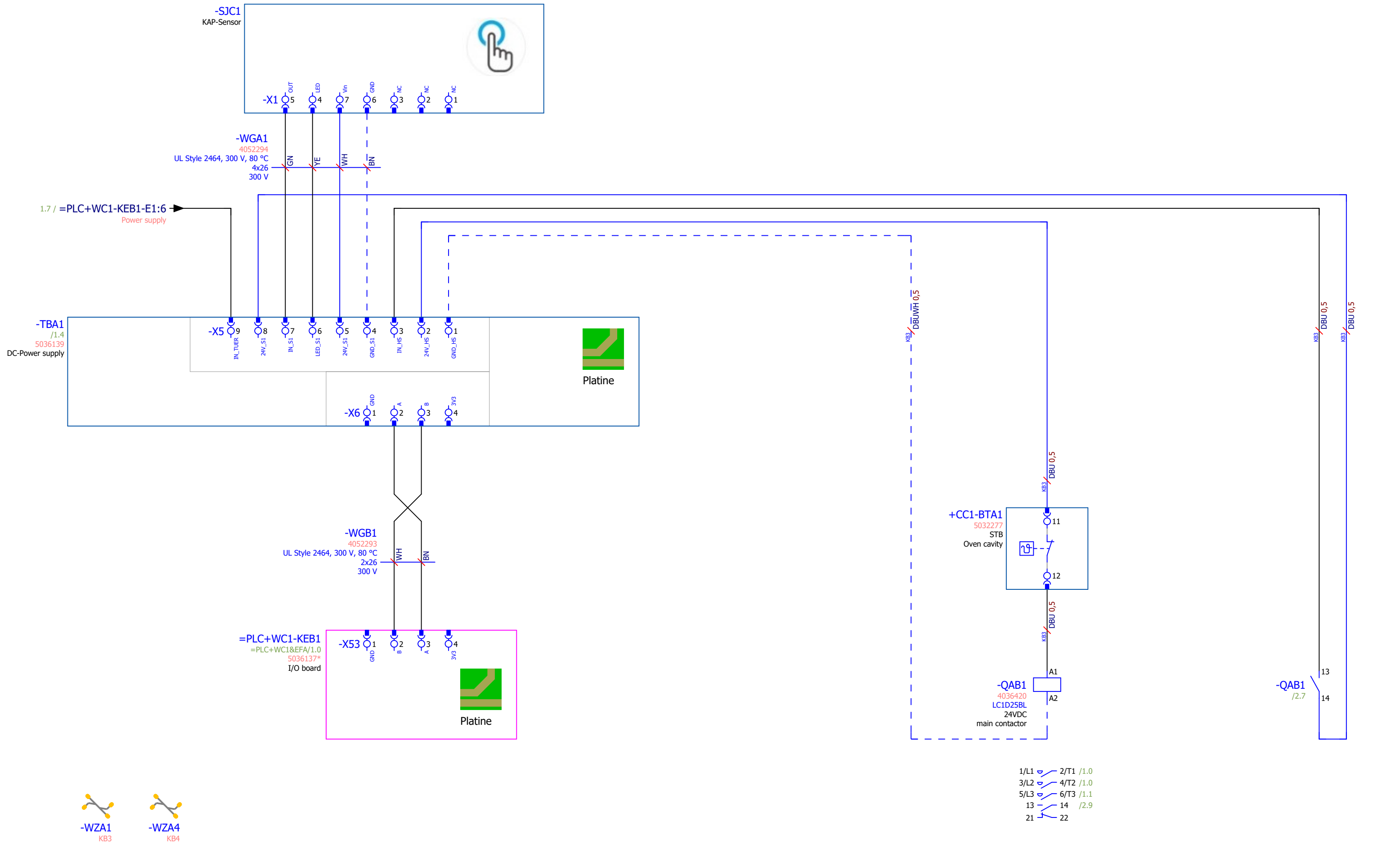
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|--------------|------|------|----------|-----------------------------|---|---------------------------|--|--|--------------------|-----|----|-----|-----|
| | | | Date | 28.05.2025 | Observe protection notices in accordance with ISO 16016 | = Control Wiring overview | articlenumber circuit diagram | | Combi oven | | == | CS1 | PLC |
| | | | Ed. | ALTENDORF.A | | | 5336500-10022_00 | | Control | | = | PLC | |
| | | | Appr | STENZEL.K | | | articlenumber device | | Wiring compartment | | + | WC1 | |
| Modification | Date | Name | Original | Project description | | | Electrical engineering Circuit documents | | & | EFS | 1 | | |



visualization potential colours

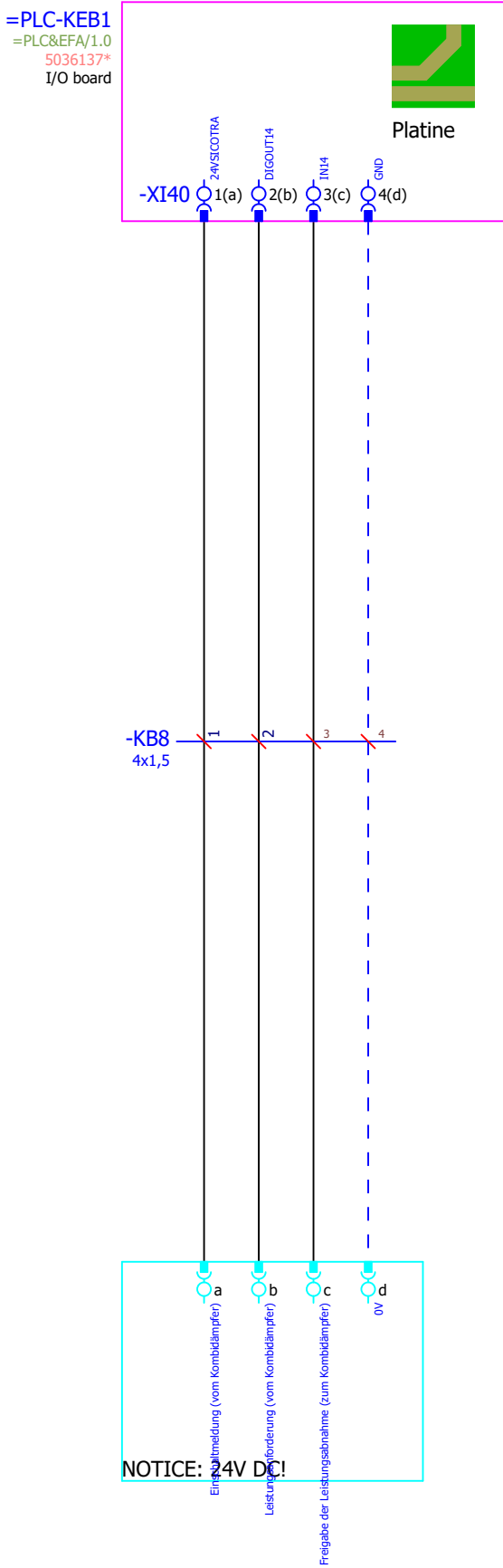
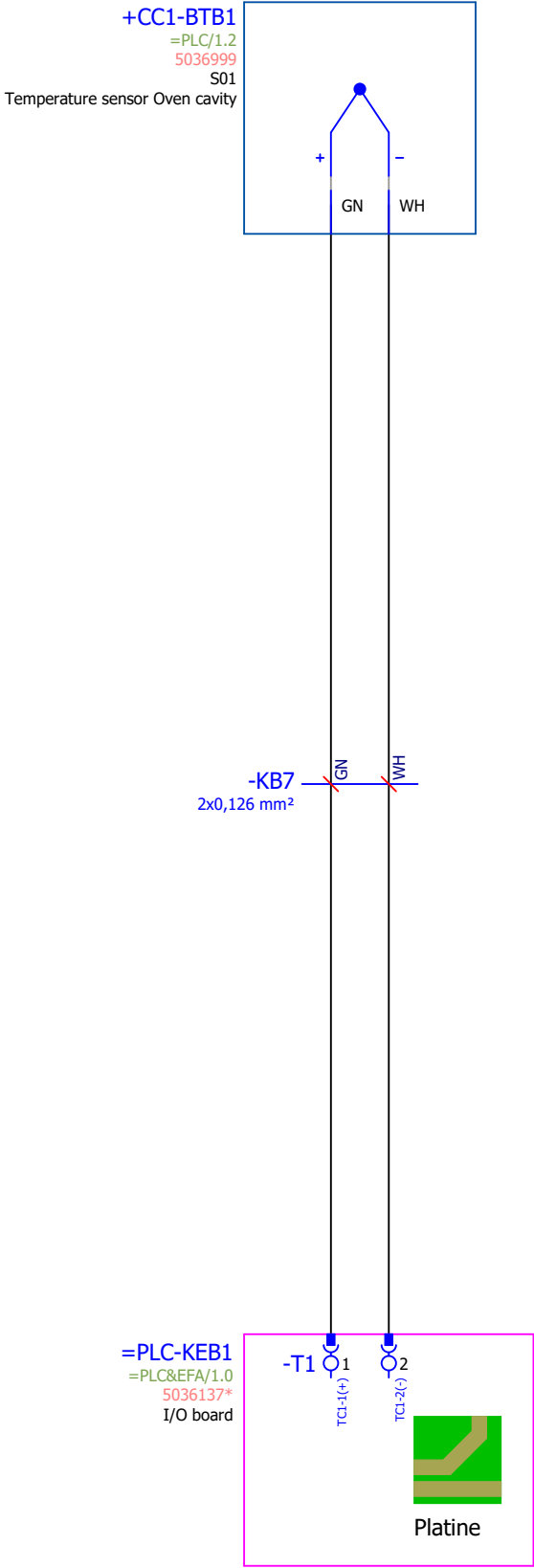
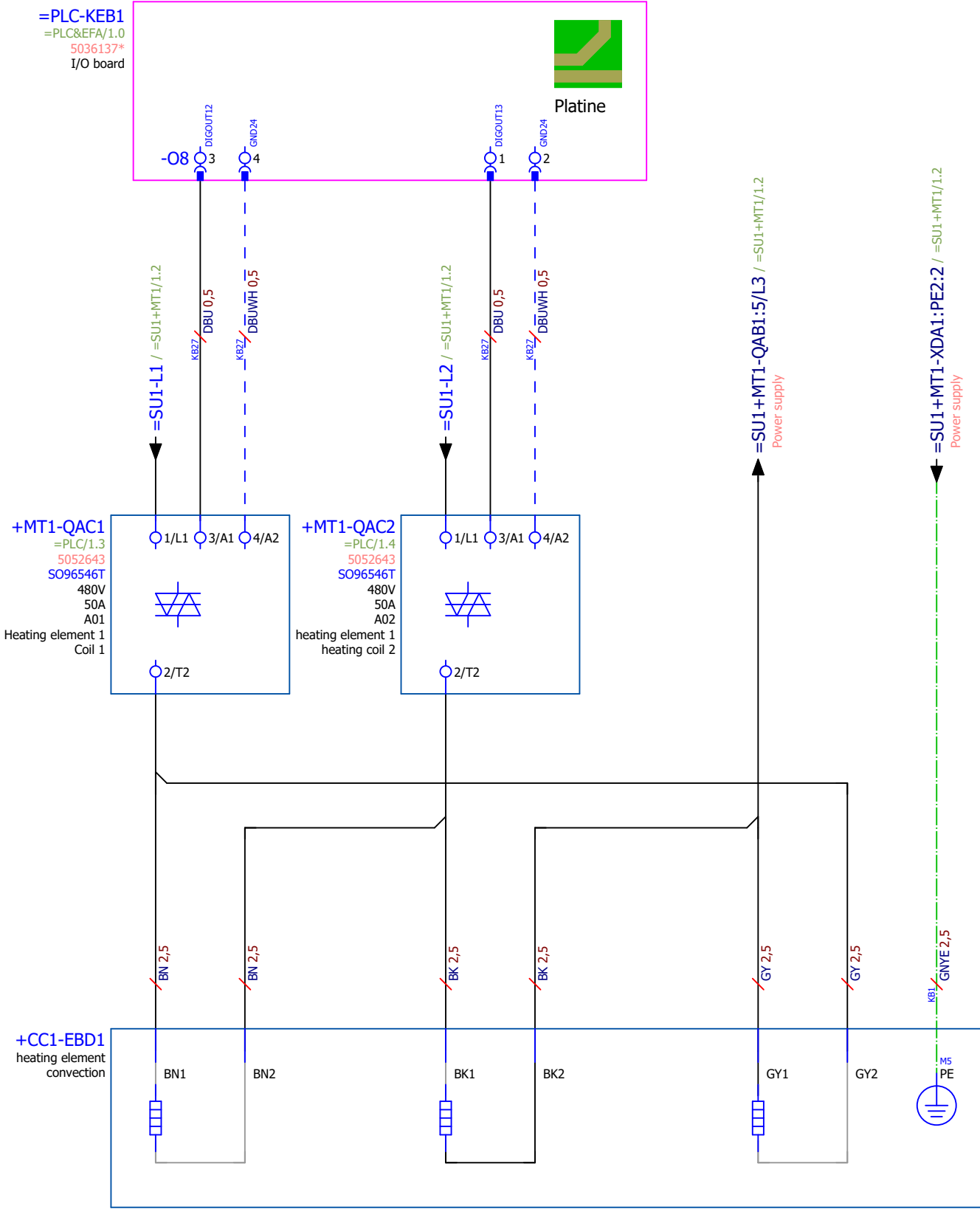
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|----|----|------|----|----|-----|----|
| L | N | PE | AS | DC | GND | AC |
| BK | LB | GNYE | OG | BU | BW | RD |

* further articles see Bill of materials



* further articles see Bill of materials

| | | | | | | | | | | |
|--------------|------|------|-----------------|---|--------------------------------|---|---------------------|--|---------|-----|
| | | | Date28.05.2025 | Observe protection notices in accordance with ISO 16016 | = Power supply Power supply | articlenumber circuit diagram 5336500-10022_00 | Project description | Combi oven | = CS1 | SU1 |
| | | | Ed. ALTENDORF.A | | | | | Power supply | = SU1 | |
| | | | Appr STENZEL.K | | | | | Mounting panel | + MT1 | |
| Modification | Date | Name | Original | | | articlenumber device | 17.0 | Electrical engineering Circuit documents | & EFS 2 | |



External Power optimization system after DIN18875

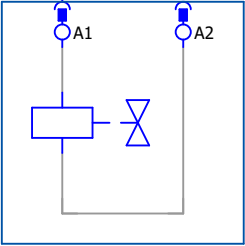
* further articles see Bill of materials

| | | | | | | | | | | | |
|--------------|------|------|----------|-------------|---|---|-------------------------------|-----------------------------|--|-------|-----|
| | | | Date | 28.05.2025 | Observe protection notices in accordance with ISO 16016 | = Convection system 1 Hot air Generation 1 | articlenumber circuit diagram | Project description 17.0 | Combi oven | = CS1 | CV1 |
| | | | Ed. | ALTENDORF.A | | | 5336500-10022_00 | | Convection system 1 | = CV1 | |
| | | | Appr | STENZEL.K | | | articlenumber device | | Wiring compartment | + WC1 | |
| Modification | Date | Name | Original | | | | | | Electrical engineering Circuit documents | & EFS | 1 |

=PLC-KEB1
=PLC&EFA/1.0
5036137*
I/O board

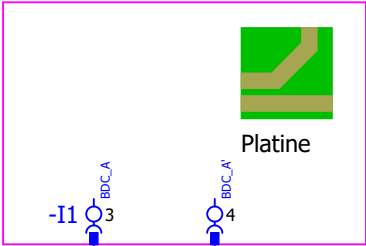


-QMA1
=PLC/1.5
A13
Solenoid valve
Water injection

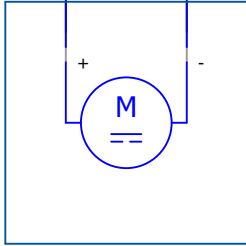


-WZA2
KB21

=PLC-KEB1
=PLC&EFA/1.0
5036137*
I/O board

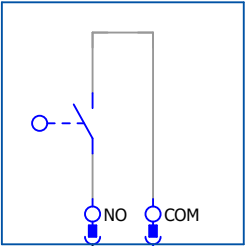


-MAA1
24V DC
A15
Dehumidifier valve

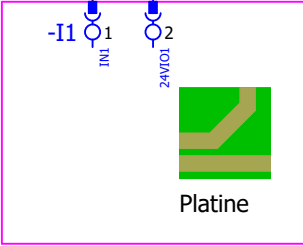


-WZA3
KB23

-BGA1
=PLC/1.0
S23
Switch
Dehumidifier valve



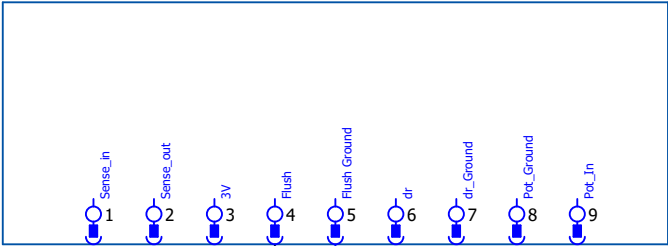
=PLC-KEB1
=PLC&EFA/1.0
5036137*
I/O board



* further articles see Bill of materials

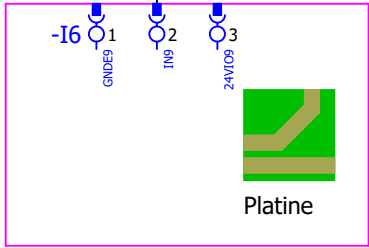
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|--------------|------|------|-----------------|---|------------------------------|-------------------------------|------------|--|---------|
| | | | Date28.05.2025 | Observe protection notices in accordance with ISO 16016 | = Water injection Sprayer | articlenumber circuit diagram | Combi oven | = CS1 | I1 |
| | | | Ed. ALTENDORF.A | | | 5336500-10022_00 | | = IJ1 | |
| | | | Appr STENZEL.K | | | articlenumber device | | + WC1 | |
| Modification | Date | Name | Original | | | Project description17.0 | E | Electrical engineering Circuit documents | & EFS 1 |

+EXT-PHA1
=PLC/1.7
BRITA Remote indicator unit

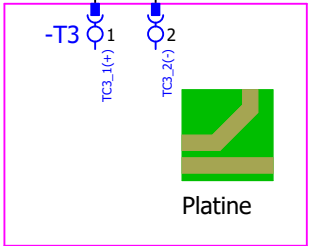
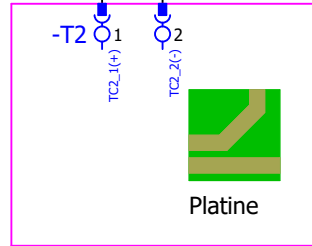
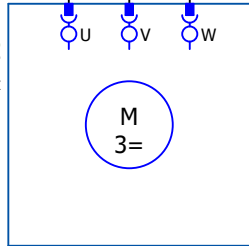
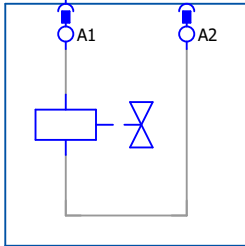
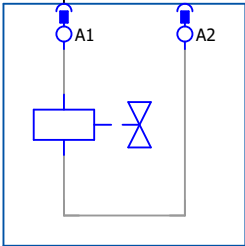
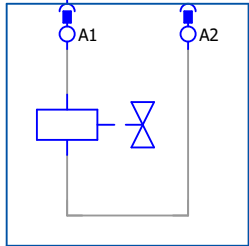
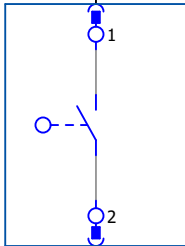
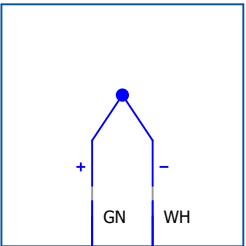
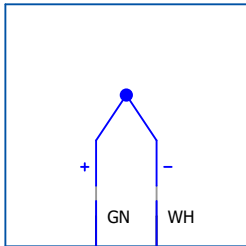
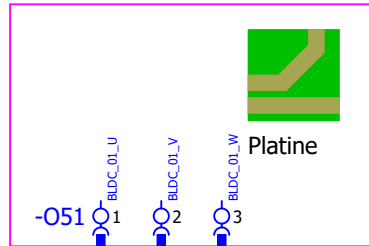
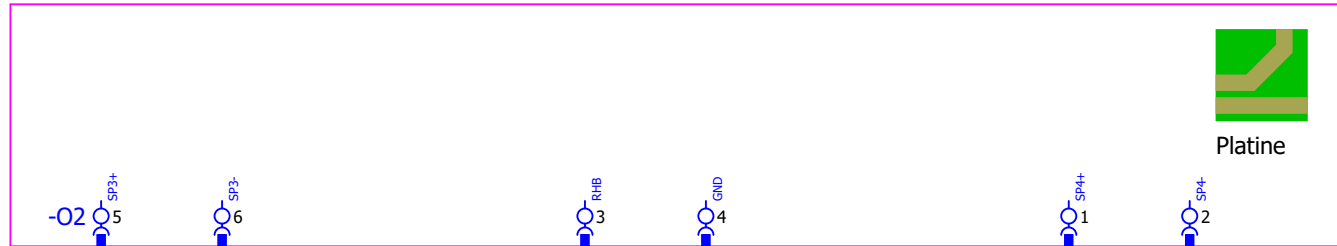


-WGA1
2x0,5

=PLC-KEB1
=PLC&EFA/1.0
5036137*
I/O board



* further articles see Bill of materials



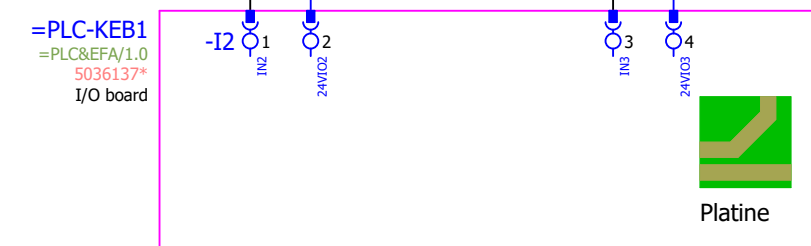
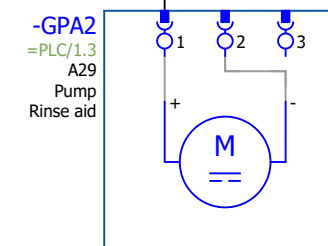
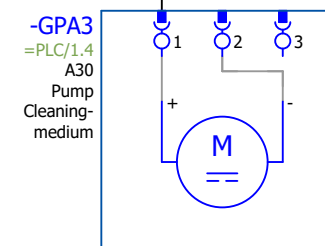
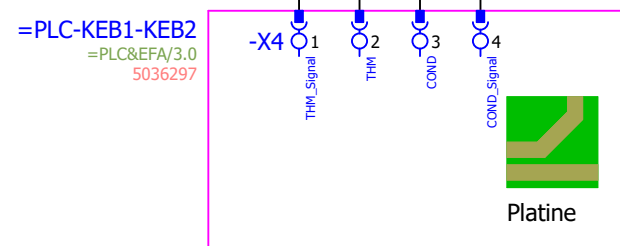
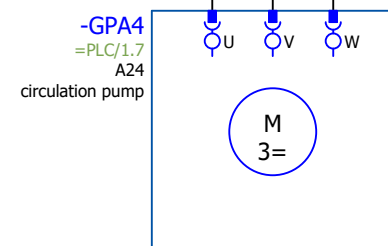
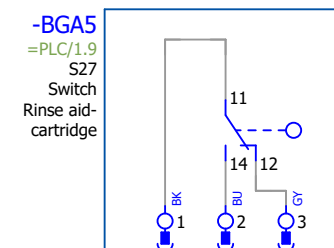
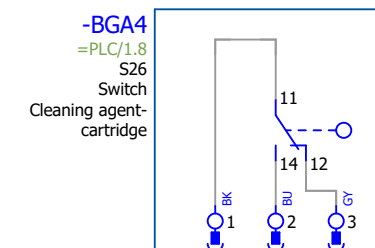
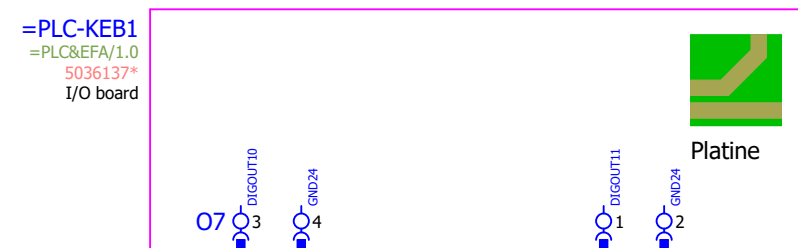
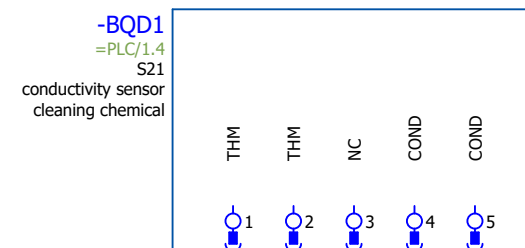
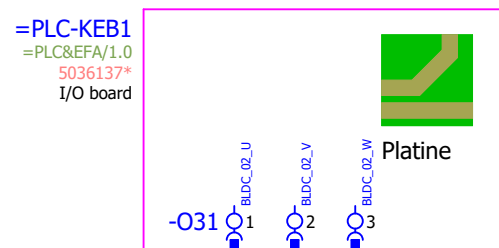
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|---|
| Observe protection notices in accordance with ISO 16016 |
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| | |
|---------------|--------|
| articlenumber | device |
|---------------|--------|

Electrical engineering Circuit documents

& EFS

COL



* further articles see Bill of materials

| | | | | | | | | | | | |
|--------------|------|------|-------------|---|--|--|-----------------------------|--|--|--------------------|------------|
| | | Date | 28.05.2025 | Observe protection notices in accordance with ISO 16016 | = Cleaning 1 (Solid to Liquid) Cleaning | artikelnr circuit diagram 5336500-10022_00 | Project description 17.0 | Combi oven | | = CS1 | CL1 |
| | | Ed. | ALTENDORF,A | | | | | Cleaning 1 (Solid to Liquid) | | = CL1 | |
| | | Appr | STENZEL,K | | | | | Wiring compartment | | + WC1 | |
| Modification | Date | Name | Original | | | | | Electrical engineering Circuit documents | | & EFS 1 | |



| | | | | | | | | | | | | | |
|--------------|------|------|-----------------|---|-------------------|-------------------------------|---|--|--|-------------|-----|-----|---|
| | | | Date 28.05.2025 | Observe protection notices in accordance with ISO 16016 | = Oven light Lamp | articlenumber circuit diagram | | Combi oven | | = | CS1 | LGT | |
| | | | Ed. ALTENDORF.A | | | 5336500-10022_00 | | Oven light | | = | LGT | | |
| | | | Appr STENZEL.K | | | articlenumber device | | Project description | | Oven cavity | | | + |
| Modification | Date | Name | Original | | | 17.0 | E | Electrical engineering Circuit documents | | & | EFS | 1 | = |



| | | | | | | | | | | | |
|--------------|------|------|-----------------|---|--|-------------------------------|--|-------------|---|-------|-----|
| | | | Date 28.05.2025 | Observe protection notices in accordance with ISO 16016 | = Core temperature probe Sensor (Option) | articlenumber circuit diagram | Combi oven | | = | CS1 | CT1 |
| | | | Ed. ALTENDORF.A | | | 5336500-10022_00 | Core temperature probe | | = | CT1 | |
| | | | Appr STENZEL.K | | | articlenumber device | Project description | Oven cavity | | + | |
| Modification | Date | Name | Original | | 17.0 | E | Electrical engineering Circuit documents | | & | EFS 1 | |



* further articles see Bill of materials

| | | | | | | | | | | | | |
|--------------|------|------|----------|-------------|---|--------------------|---|--------------------|---------------------|---|--|-----|
| | | | Date | 28.05.2025 | Observe protection notices in accordance with ISO 16016 | = Cooling Function | artikelnr circuit diagram 5336500-10022_00 | Combi oven | | = | CS1 | COO |
| | | | Ed. | ALTENDORF.A | | | | Cooling | | = | COO | |
| | | | Appr | STENZEL.K | | | | Wiring compartment | | + | WC1 | |
| Modification | Date | Name | Original | | | | | artikelnr device | Project description | | Electrical engineering Circuit documents | |
| | | | | | | 17.0 | E | | | | | |

-PHA1
=PLC+WC1/1.0
/2.0
1805533
CUI-7"



J1500 1 SPK.OUT_A 2 SPK.OUT_A 3 CGND
J300 1 RS485_Y_A_halfduplex 2 RS485_Z_B_halfduplex 3 RS485_A_halfduplex 4 RS485_B_halfduplex 5 CAN_H 6 CAN_L 7 NC 8 CGND 9 +24V_CONN_IN 10 GND_CONN 11 +24V_CONN_IN 12 GND_CONN

-KB35

5036689
UL Style 2464, 300 V, 80 °C
2x26
300 V

-XDB1

/1.1
4052418*
43640-0209

-XDB1

/1.1
4052459*
43645-0208

-KB31

5036686
UL Style 2464, 300 V, 80 °C
6x26
300 V

-PJA1

Loudspeaker

=PLC+WC1-KEB1

=PLC+WC1&EFA/1.0
5036137*
I/O board

B2 1 CAN_H 2 CAN_L 3 CAN_H_IN 4 24V_LK1_UT 5 24V_LK1_UT 6 CAN_L_IN 7 AGND 8 AGND

PE
=SUI/1.4 / =PLC+WC1-KEB1-X55:PE
Power supply



-WZA1
KB30



-WZA2
KB31



-WZA3
KB32



-WZA4
KB33



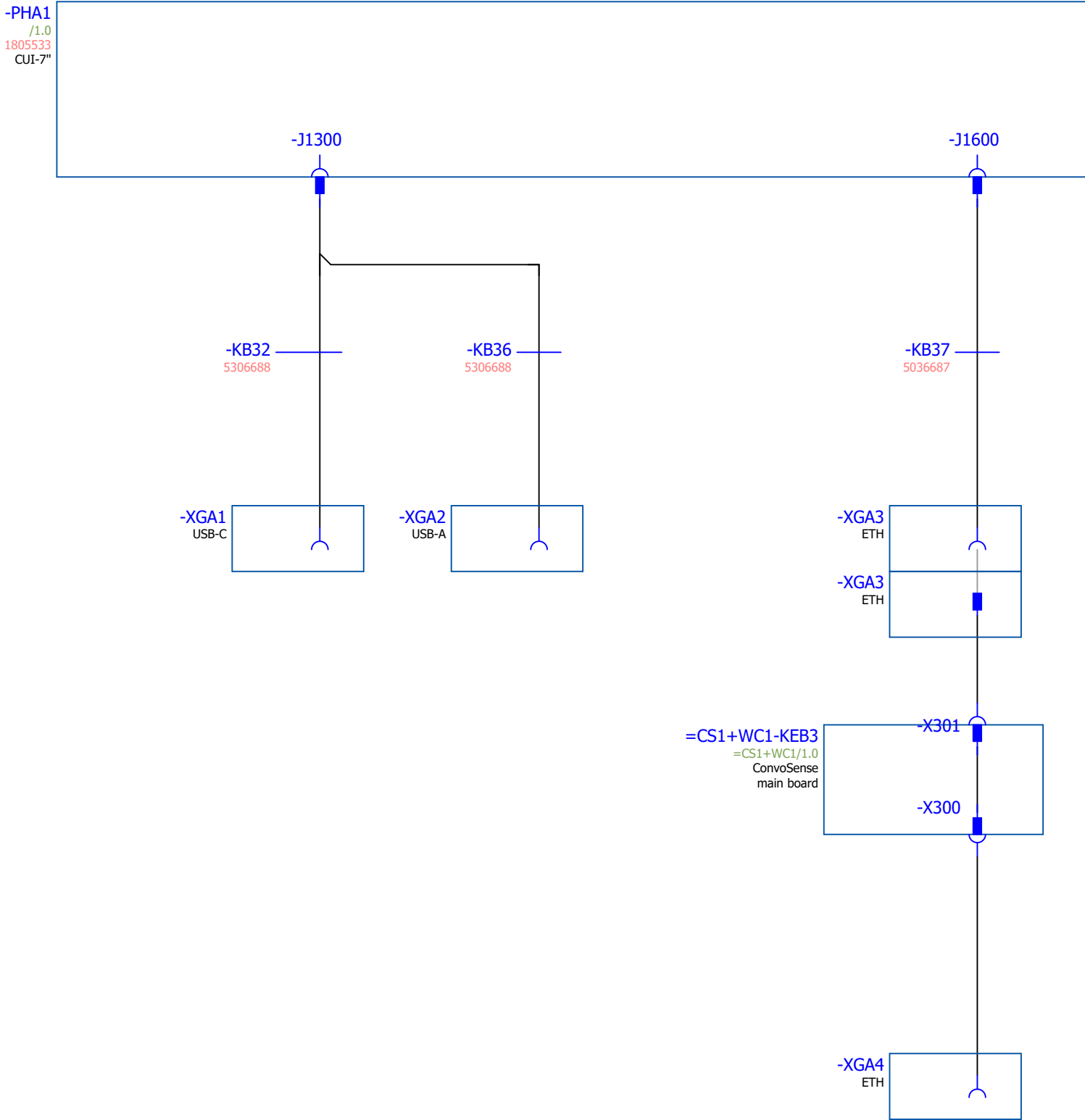
-WZA5
KB34



-WZA7
KB36

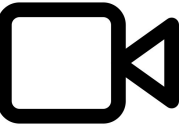
* further articles see Bill of materials

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|--------------|------|------|----------|-------------|---|------------------------|-------------------------------|--|-------|-----|
| | | | Date | 28.05.2025 | Observe protection notices in accordance with ISO 16016 | = HMI Control panel | articlenumber circuit diagram | Combi oven | = CS1 | HMI |
| | | | Ed. | ALTENDORF,A | | | 5336500-10022_00 | HMI | = HMI | |
| | | | Appr | STENZEL,K | | | articlenumber device | Mounting panel | + MT1 | |
| Modification | Date | Name | Original | | | | Project description | | & EFS | 1 |
| | | | | | | | 17.0 | Electrical engineering Circuit documents | | |



* further articles see Bill of materials

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|--------------|------|------|-----------------|---|------------------------|-------------------------------|--|---------|-----|
| | | | Date28.05.2025 | Observe protection notices in accordance with ISO 16016 | = HMI Control panel | articlenumber circuit diagram | Combi oven | = = CS1 | HMI |
| | | | Ed. ALTENDORF.A | | | 5336500-10022_00 | HMI | = HMI | |
| | | | Appr STENZEL.K | | | articlenumber device | Mounting panel | + MT1 | |
| Modification | Date | Name | Original | | | Project description17.0 E | Electrical engineering Circuit documents | & EFS 2 | |



CS1