



GILLES Energie und Umwelttechnik GmbH & Co KG

Koaserbauerstraße 16
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Project description Woodchips / Pellets Heating System
Type HPK-RA 15-160
Job number
Software version
Hardware version GT17.1112.XXXX - GT17.1132.XXXX

Kesselserie 8, 2, 3, 10, 4

Site ref. Standard

Nya skåpet från 11-2015

Power supply 400Vac/50Hz, 3Ph+N
Max. pre-fuse 16 A
Input cable 5x2,5mm²

GILLES
Touch

Project name HPK_GT17.1131.X6XX_V3.0

Created on 22.10.2015

Edit date 19.11.2015

By (Abbreviation) krj

Number of pages 32


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						Woodchips / Pellets Heating System	HPK-RA 15-160			

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=STAP Pin-connection diagram		1	Pin-connection diagram +HR-X1	19.11.2015	krj
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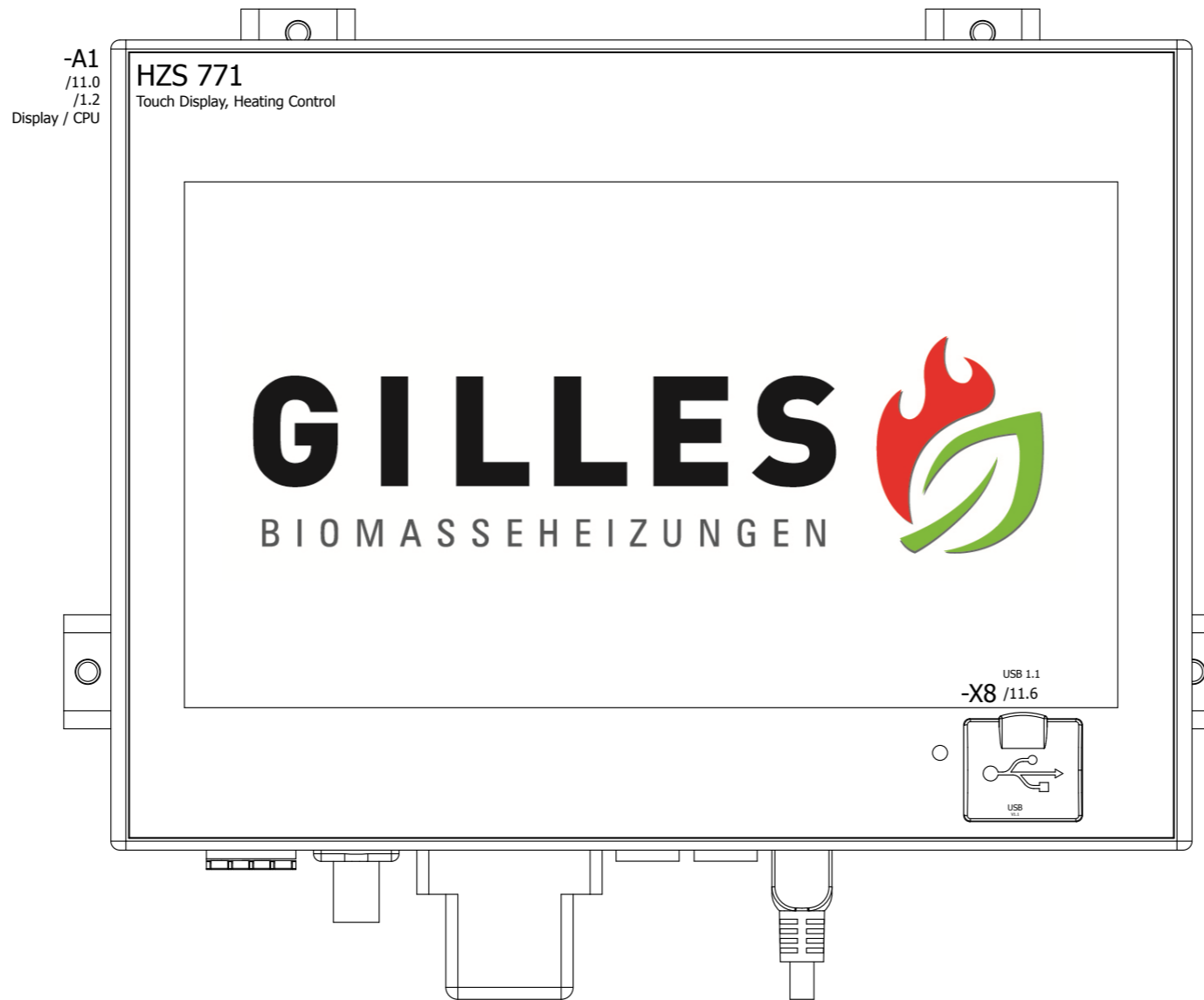
Gilles_IHV_01

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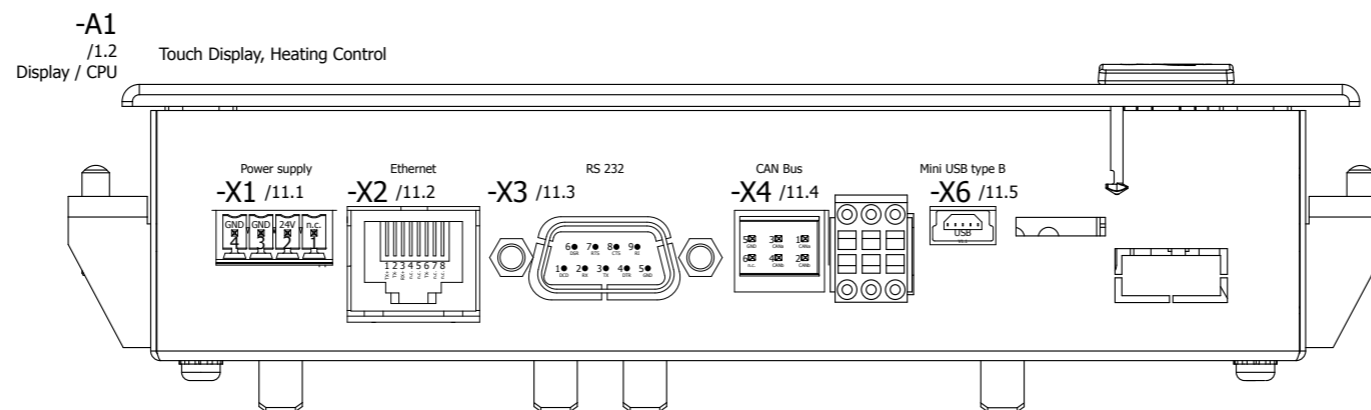
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- X1 Power supply
- X2 Ethernet
- X3 RS 232
- X4 CAN Bus
- X6 Mini USB type B
- X8 USB 1.1



=ALG+/3

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Standard
 Woodchips / Pellets Heating System

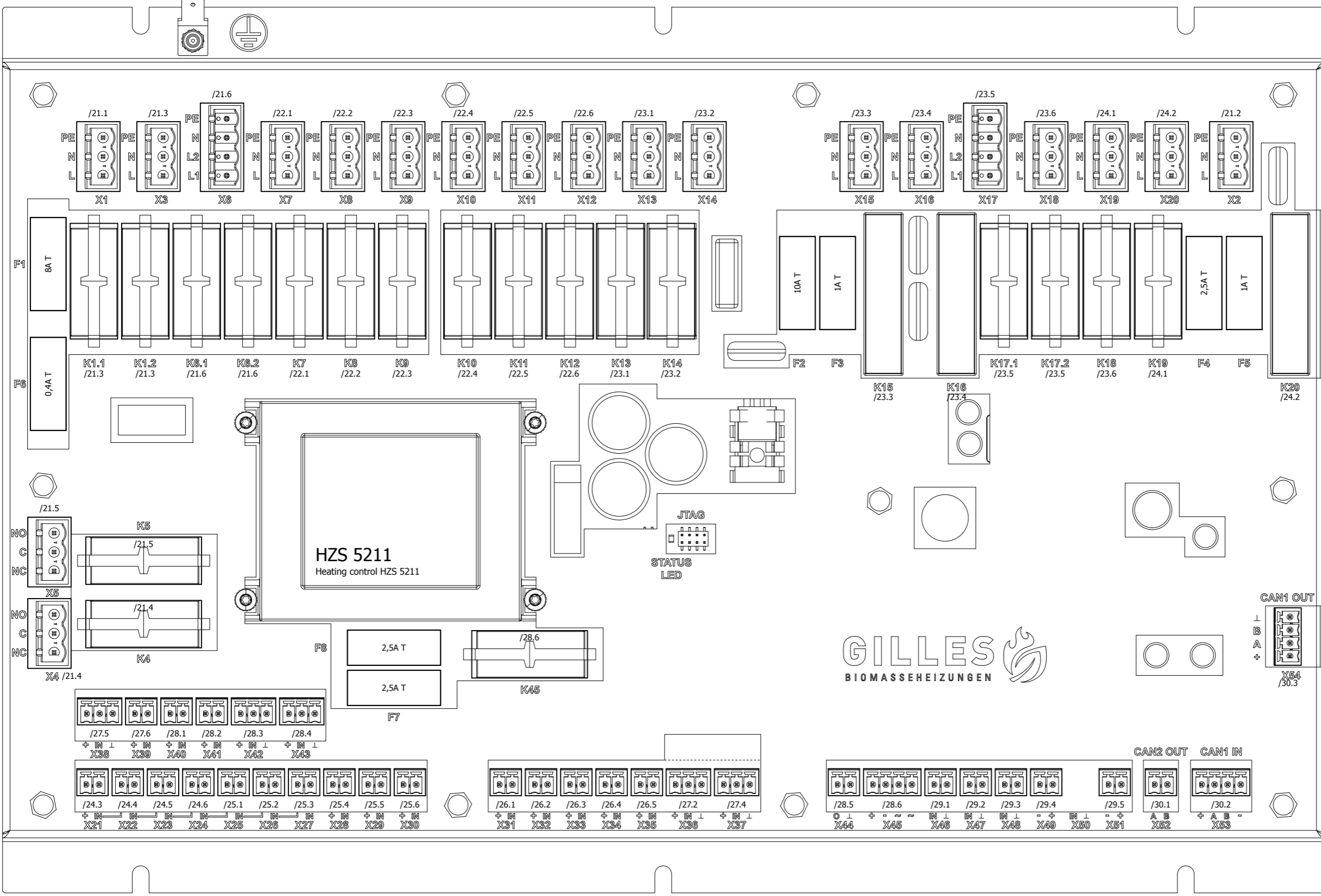
HZS 771 - Display / CPU

HPK-RA 15-160

= SLP Wiring diagram
 + EC01 Switch cabinet

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Heizungssteuerung



- X1 230V Mains
- X2 230V Mains extension
- X3 230V mains extension
- X4 Critical alarm
- X5 Signal contact configurable
- X6 Ignition blower
- X7 Auger 2
- X8 Ash discharge
- X9 Heat exchanger cleaning
- X10 Stokerauger forward
- X11 Stokerauger backwards
- X12 Dosing auger
- X13 Auger 1
- X14 Suction cup
- X15 Primary air blower
- X16 Secondary air blower
- X17 3 way diverting valve
- X18 Bypass pump
- X19 Fuel store temp. alarm
- X20 Flue gas fan
- X21 Emergency stop
- X22 High limit stat
- X23 Coverswitch
- X24 Thermal overload stoker auger
- X25 Thermal overload dosing auger
- X26 Thermal overload fuel auger 1
- X27 Thermal overload fuel auger 2
- X28 Boiler door
- X29 External enable
- X30 Customer contact
- X31 Spare
- X32 Spare
- X33 Spare
- X34 Thermal overload ash discharge
- X35 Thermal overload heat exchanger cleaning
- X36 Light Sensor Auger 1
- X37 Light Sensor Auger 2
- X38 Proximity switch stoker auger
- X39 Temperature burner
- X40 Key switch fuel store filling
- X41 Fault bypass pump
- X42 Speedrecognition Fluegasfan
- X43 Speedrecognition Stokerauger
- X44 required Speed Fluegas-Fan
- X45 Lambda probe
- X46 Boiler flow sensor
- X47 Return temp. sensor
- X48 Fuel store temp. sensor
- X49 Flue gas temp. Sensor

- X51 Combustion chamber temp. sensor
- X52 CAN2 OUT
- X53 CAN1 IN
- X54 CAN1 OUT

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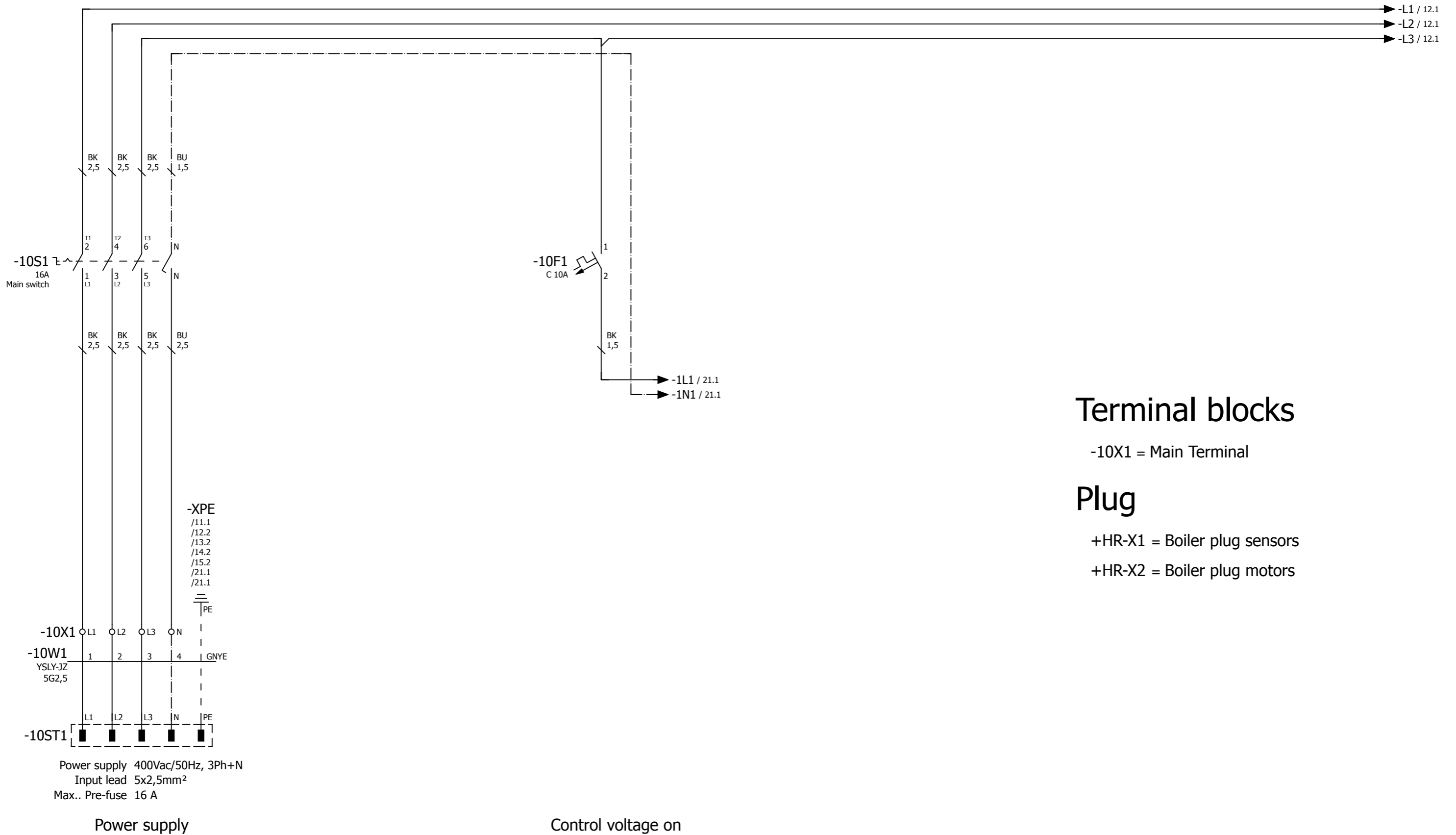
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Standard
 Woodchips / Pellets Heating System

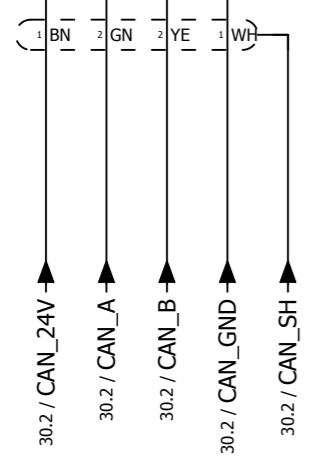
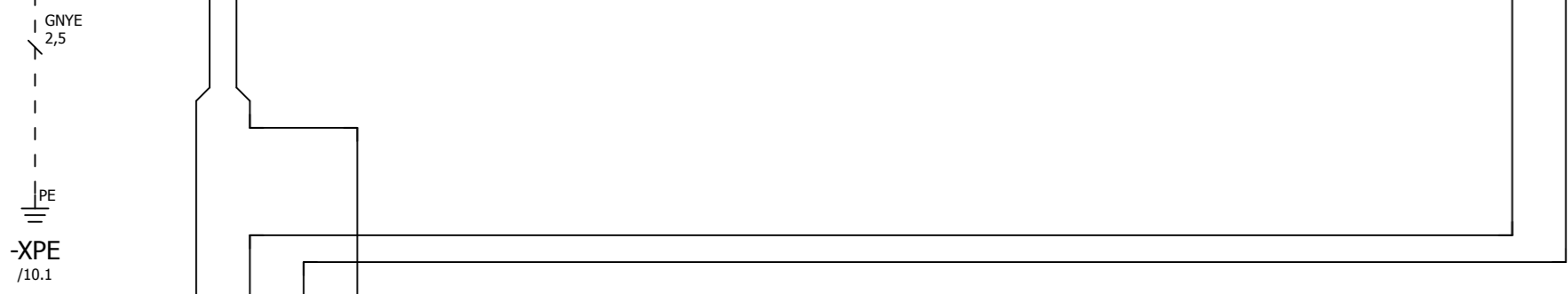
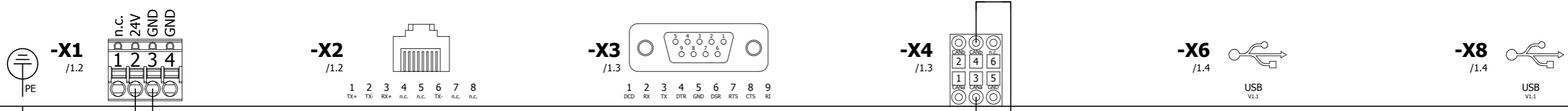
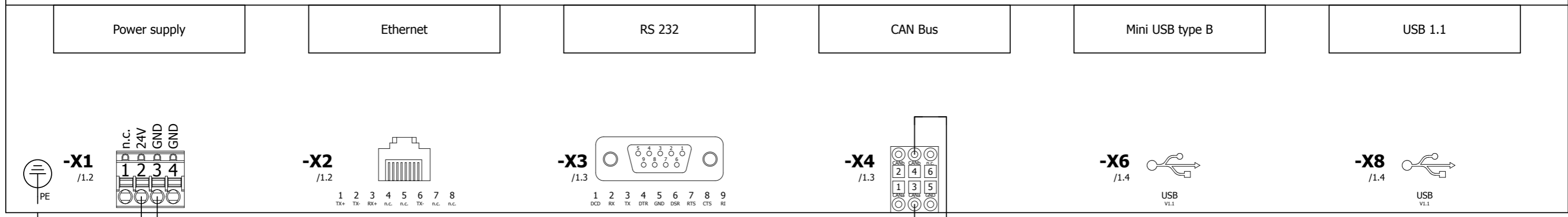
HZS 5211 - Leistungsteil

HPK-RA 15-160

= SLP Wiring diagram
 + EC01 Switch cabinet
 Page 2

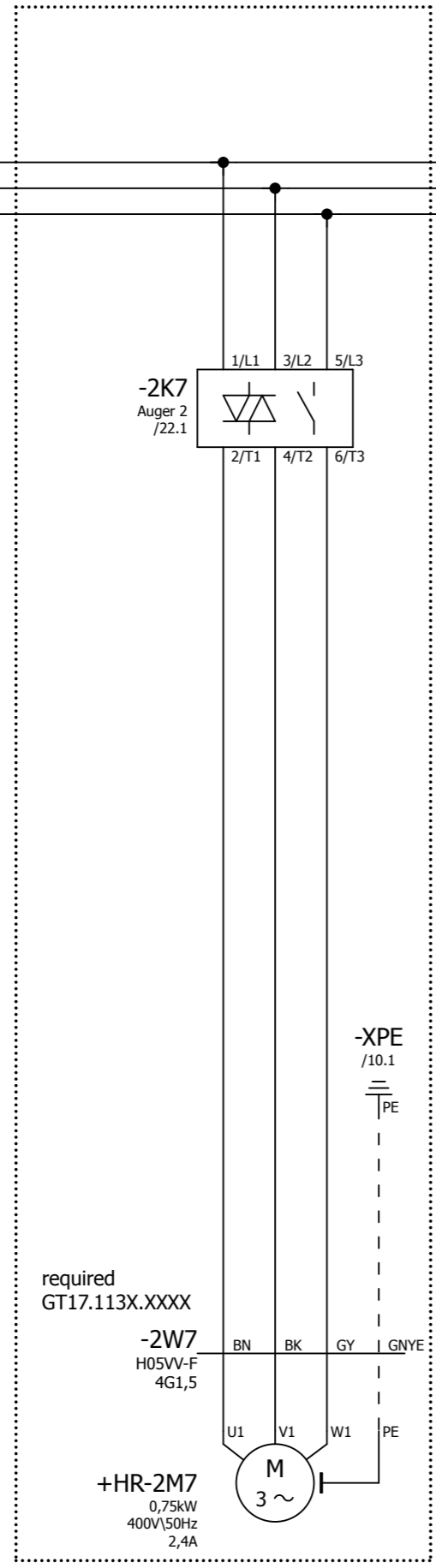
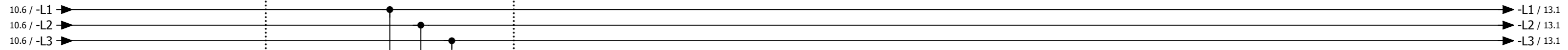


-A1 SIGMATEK HZS 771 Touch Display, Heating Control



CAN Bus

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required
GT17.113X.XXXX

-2W7
H05VV-F
4G1,5

+HR-2M7
0,75kW
400V/50Hz
2,4A

Auger 2

2K7

2,4A

PWR

Err

Iadj

ON

Reset

Auger 2

LED																
PWR																
Err																
Iadj																
ON																
Rated current	0,18A	0,25A	0,41A	0,56A	0,71A	0,87A	1,02A	1,17A	1,33A	1,48A	1,63A	1,79A	1,94A	2,09A	2,25A	2,40A
Motor										0,55kW				0,75kW		

2K7

9A

PWR

Err

Iadj

ON

Reset

Auger 2

LED																
PWR																
Err																
Iadj																
ON																
Rated current	1,50A	2,00A	2,50A	3,00A	3,50A	4,00A	4,50A	5,00A	5,50A	6,00A	6,50A	7,00A	7,50A	8,00A	8,50A	9,00A
Motor				1,1kW	1,5kW				2,2kW							4,0kW

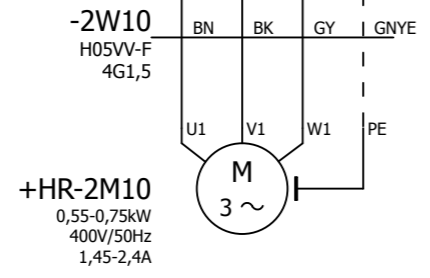
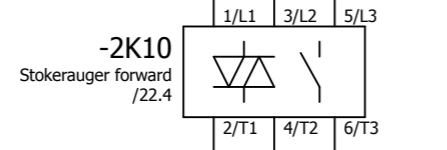
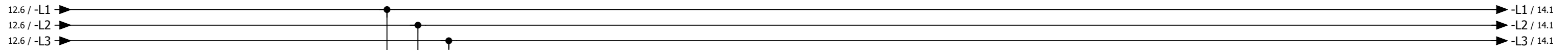
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Standard
 Woodchips / Pellets Heating System

Leistungsteil Schnecke 2

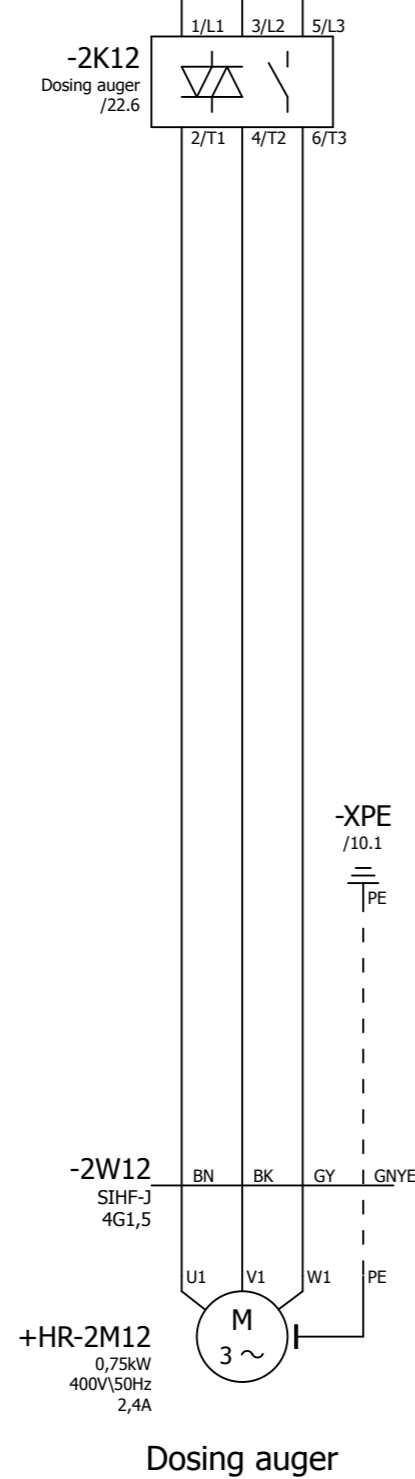
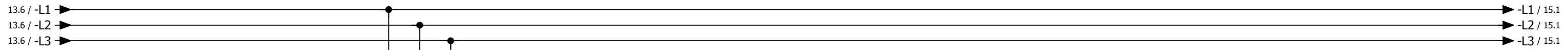
HPK-RA 15-160



Stokerauger forward

2K10

Stokerauger / Cellwheel																
LED																
PWR																
Err																
L																
R																
Rated current	0,18A	0,25A	0,41A	0,56A	0,71A	0,87A	1,02A	1,17A	1,33A	1,48A	1,63A	1,79A	1,94A	2,09A	2,25A	2,40A
Motor										0,55kW				0,75kW		



2K12

2,4A

PWR

Err

Iadj

ON

Reset

2K12

9A

PWR

Err

Iadj

ON

Reset

Dosing auger

LED																
PWR																
Err																
Iadj																
ON																
Rated current	0,18A	0,25A	0,41A	0,56A	0,71A	0,87A	1,02A	1,17A	1,33A	1,48A	1,63A	1,79A	1,94A	2,09A	2,25A	2,40A
Motor										0,55kW				0,75kW		

Dosing auger

LED																
PWR																
Err																
Iadj																
ON																
Rated current	1,50A	2,00A	2,50A	3,00A	3,50A	4,00A	4,50A	5,00A	5,50A	6,00A	6,50A	7,00A	7,50A	8,00A	8,50A	9,00A
Motor				1,1kW	1,5kW				2,2kW							4,0kW

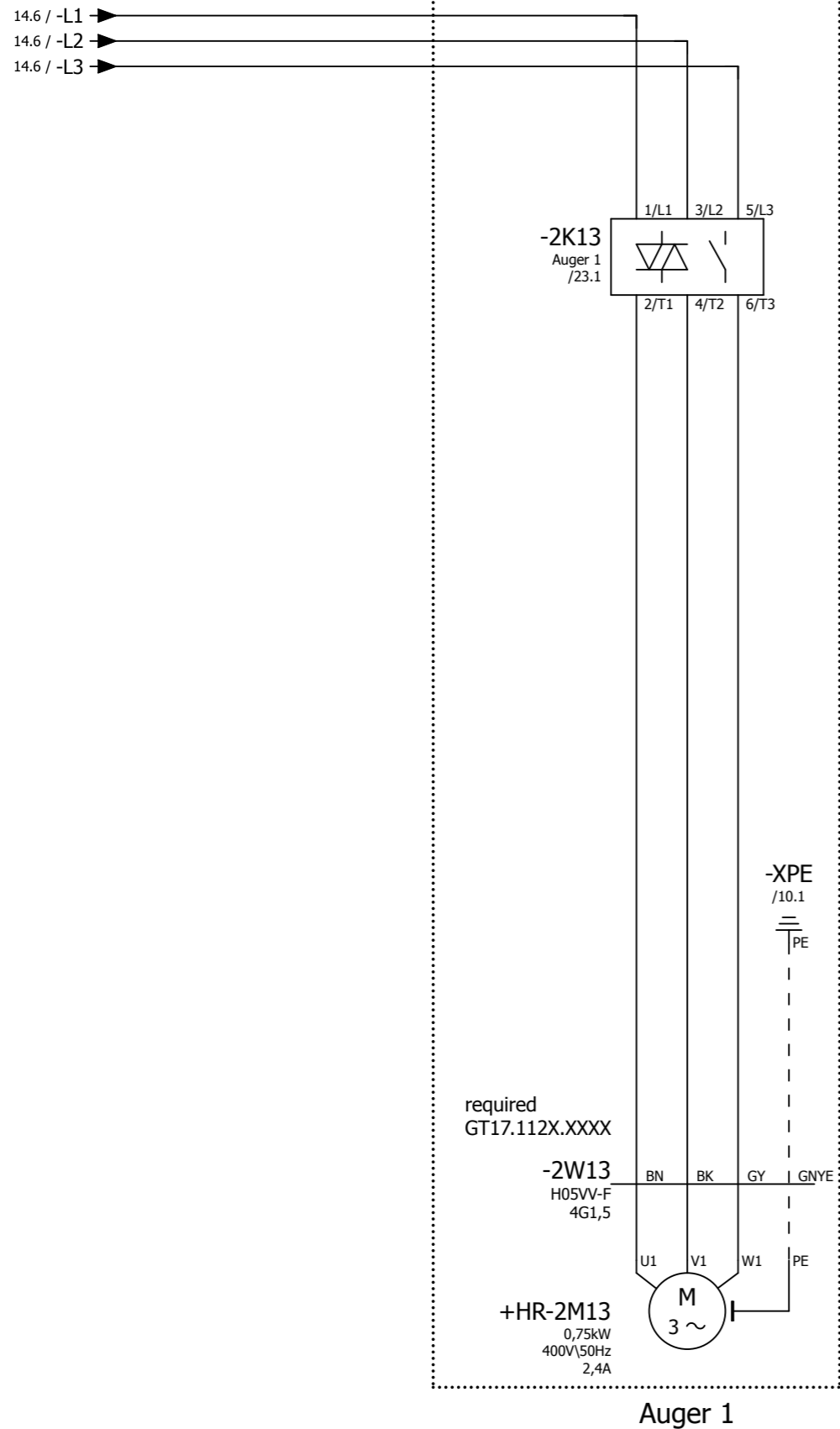
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Standard
 Woodchips / Pellets Heating System

Leistungsteil Dosierschnecke

HPK-RA 15-160



2K13

2,4A

PWR

Err

Iadj

ON

Reset

Auger 1

LED																
PWR																
Err																
Iadj																
ON																
Rated current	0,18A	0,25A	0,41A	0,56A	0,71A	0,87A	1,02A	1,17A	1,33A	1,48A	1,63A	1,79A	1,94A	2,09A	2,25A	2,40A
Motor										0,55kW				0,75kW		

2K13

9A

PWR

Err

Iadj

ON

Reset

Auger 1

LED																
PWR																
Err																
Iadj																
ON																
Rated current	1,50A	2,00A	2,50A	3,00A	3,50A	4,00A	4,50A	5,00A	5,50A	6,00A	6,50A	7,00A	7,50A	8,00A	8,50A	9,00A
Motor				1,1kW	1,5kW				2,2kW							4,0kW

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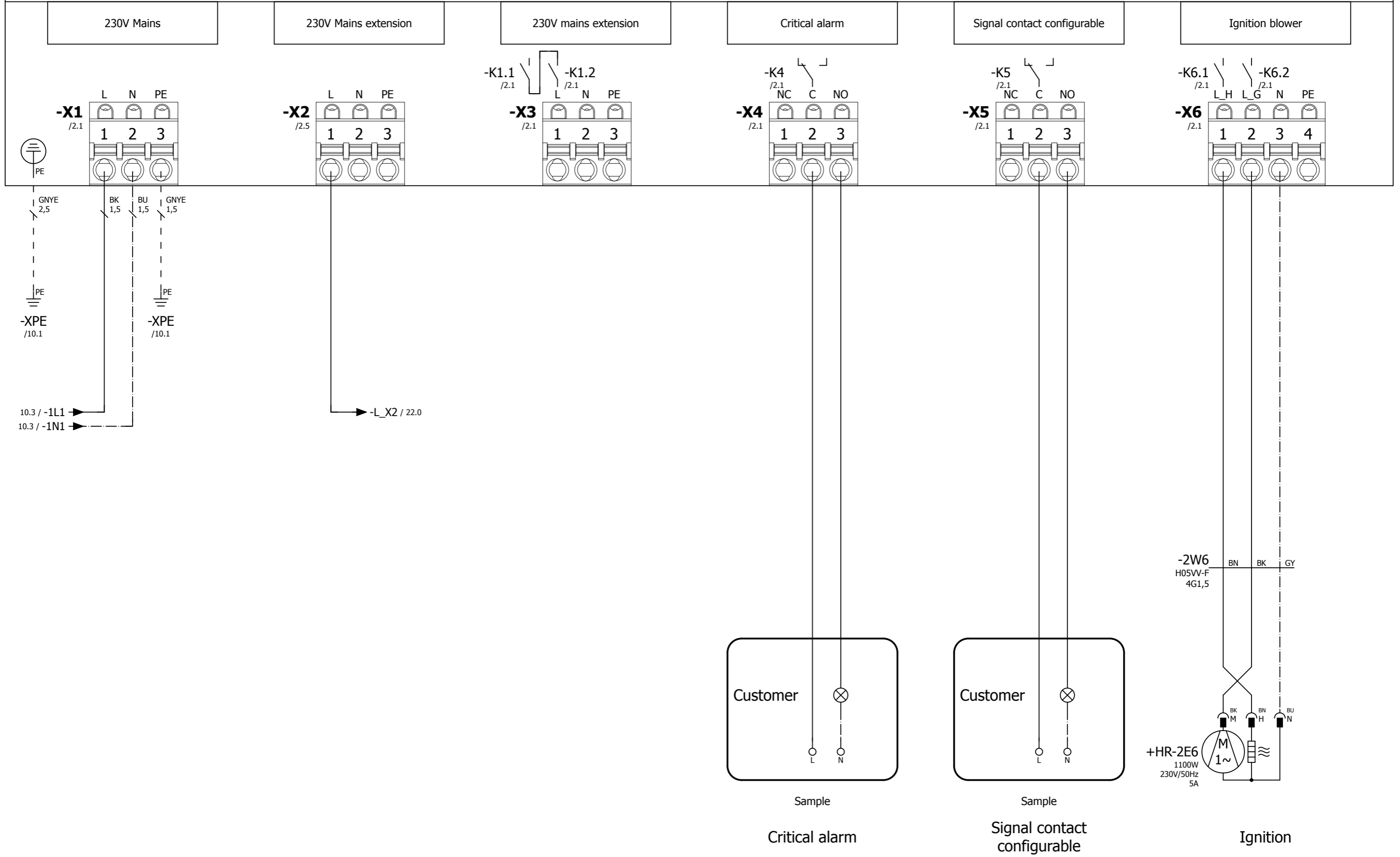
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Standard
 Woodchips / Pellets Heating System

Leistungsteil Schnecke 1

HPK-RA 15-160

-A2 SIGMATEK HZS 5211 Heating control HZS 5211



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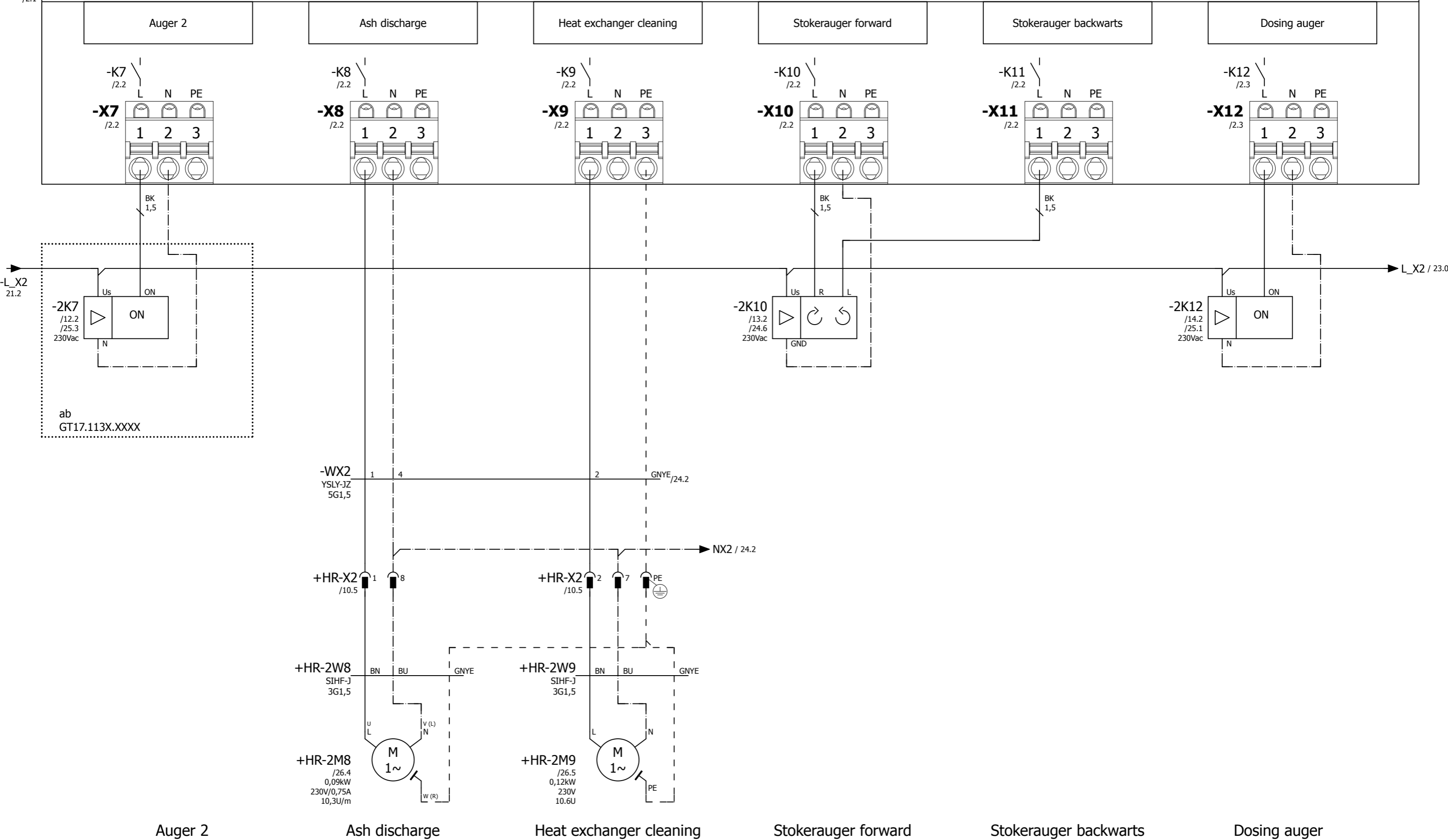
Standard
 Woodchips / Pellets Heating System

Power unit X1 - X6

HPK-RA 15-160

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SIGMATEK HZS 5211 Heating control HZS 5211



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Standard
 Woodchips / Pellets Heating System

Power unit X7 - X12

HPK-RA 15-160

= SLP Wiring diagram
 + EC01 Switch cabinet
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SIGMATEK HZS 5211 Heating control HZS 5211

Auger 1

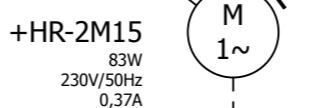
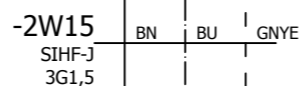
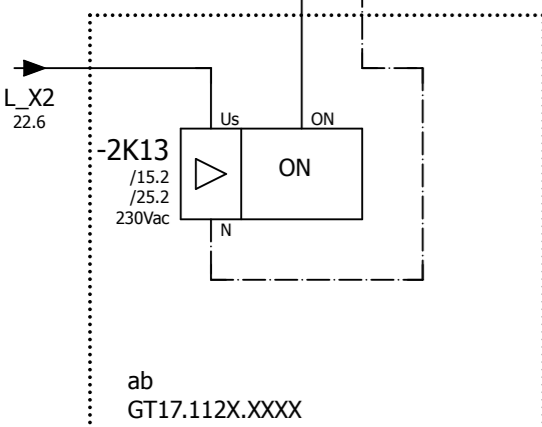
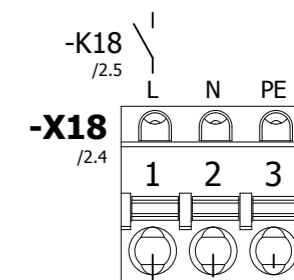
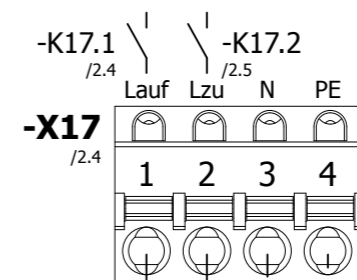
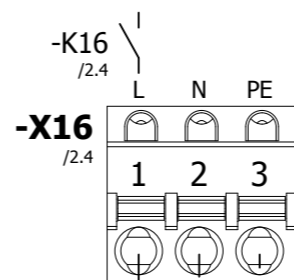
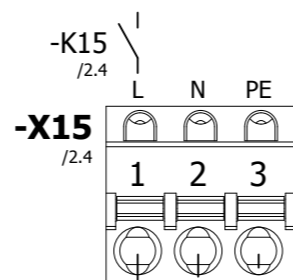
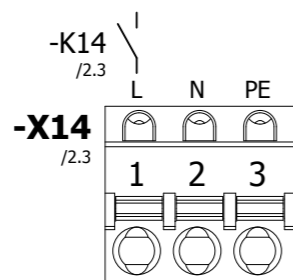
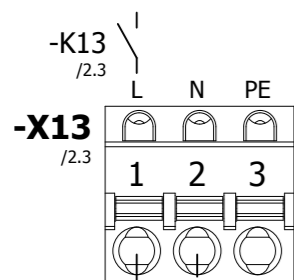
Suction cup

Primary air blower

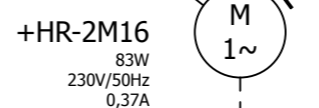
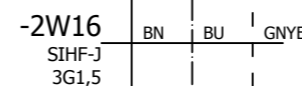
Secondary air blower

3 way diverting valve

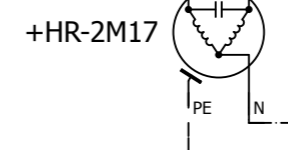
Bypass pump



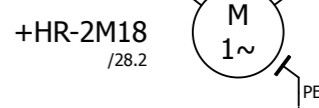
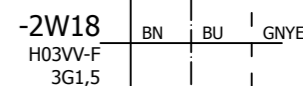
Auger 1



Secondary air blower



3 way diverting valve



Bypass pump

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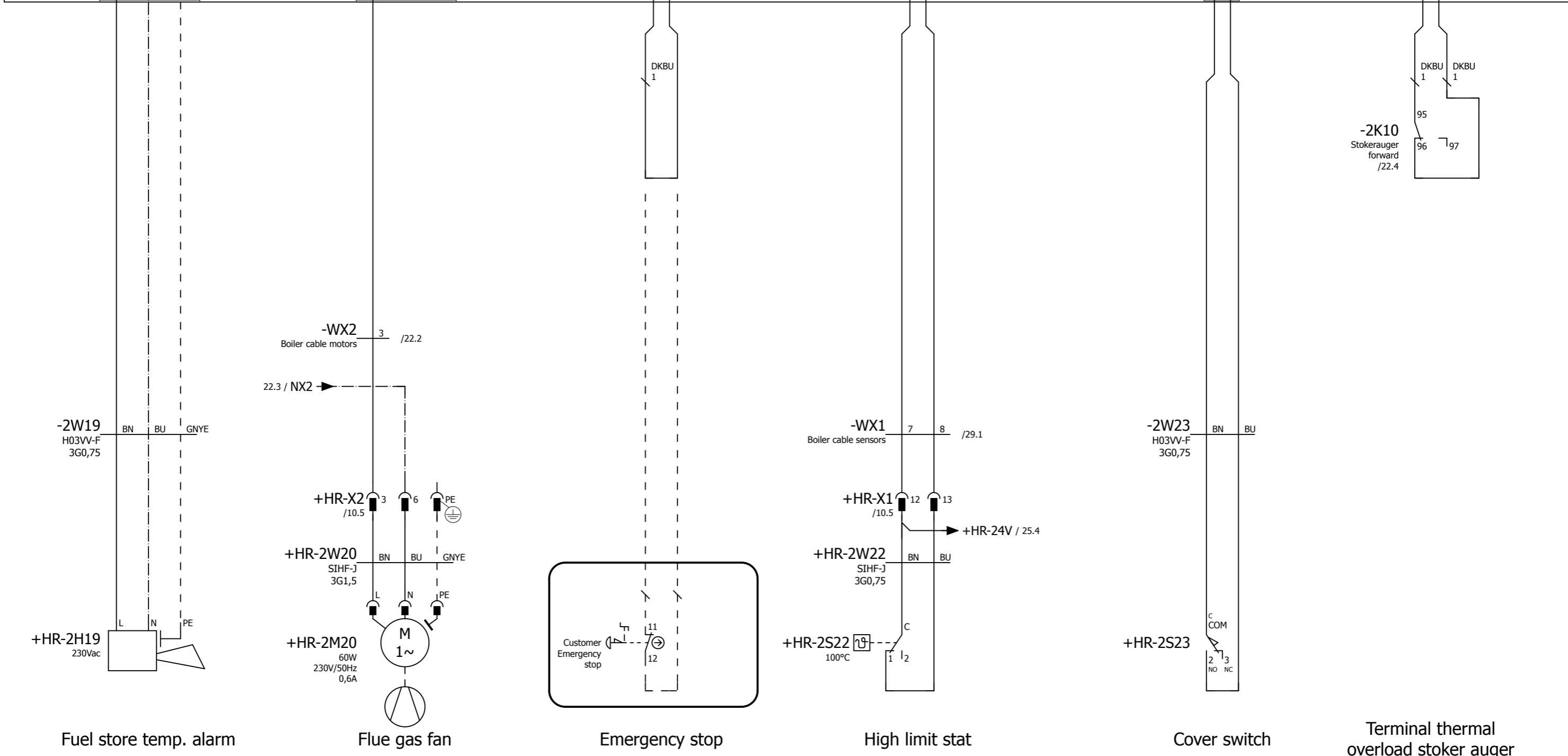
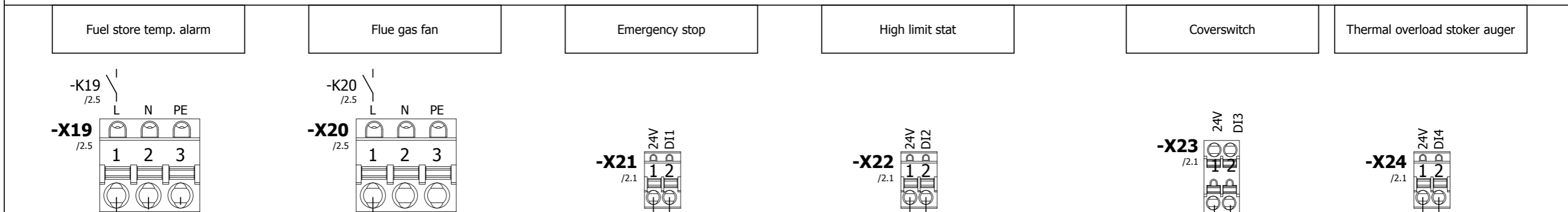
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Standard
 Woodchips / Pellets Heating System

Power unit X13 - X18

HPK-RA 15-160

SIGMATEK HZS 5211 Heating control HZS 5211



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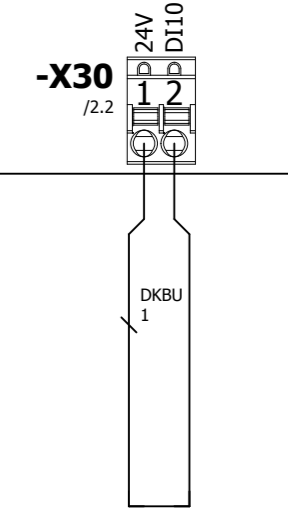
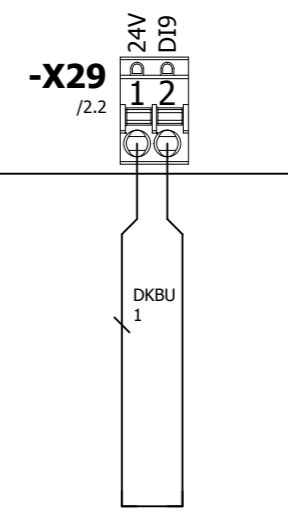
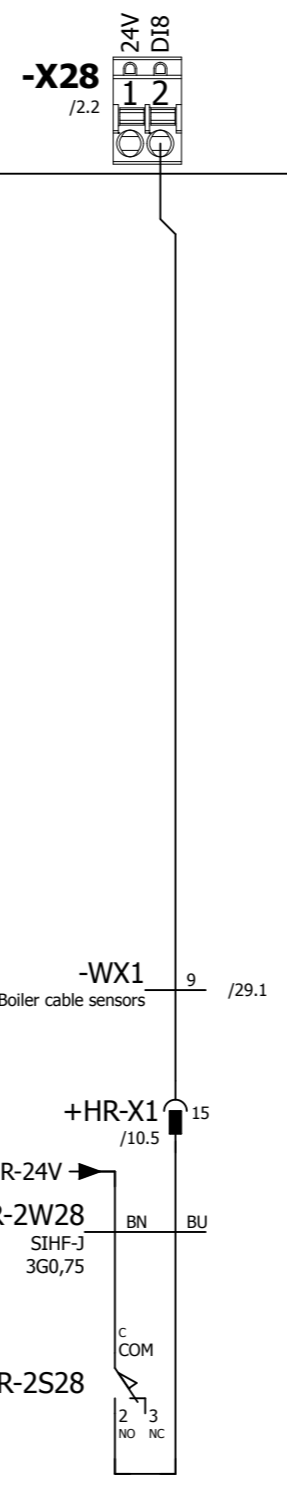
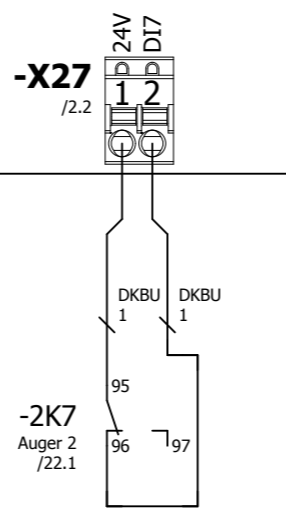
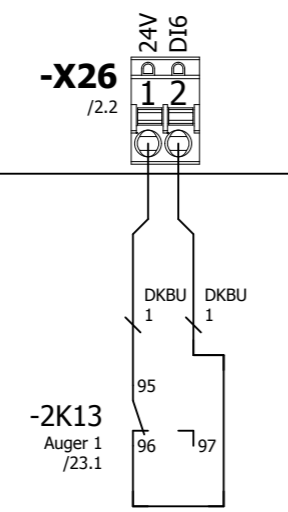
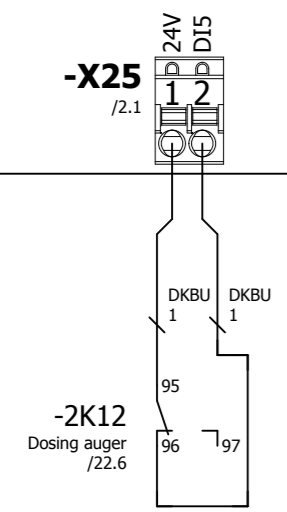
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Standard
 Woodchips / Pellets Heating System

Power unit X19 - X24

HPK-RA 15-160

SIGMATEK HZS 5211 Heating control HZS 5211



Terminal thermal overload dosing auger

Terminal thermal overload fuel auger 1

Terminal thermal overload fuel auger 2

Boiler door

External enable

Customer contact

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			Appr	
			Original	

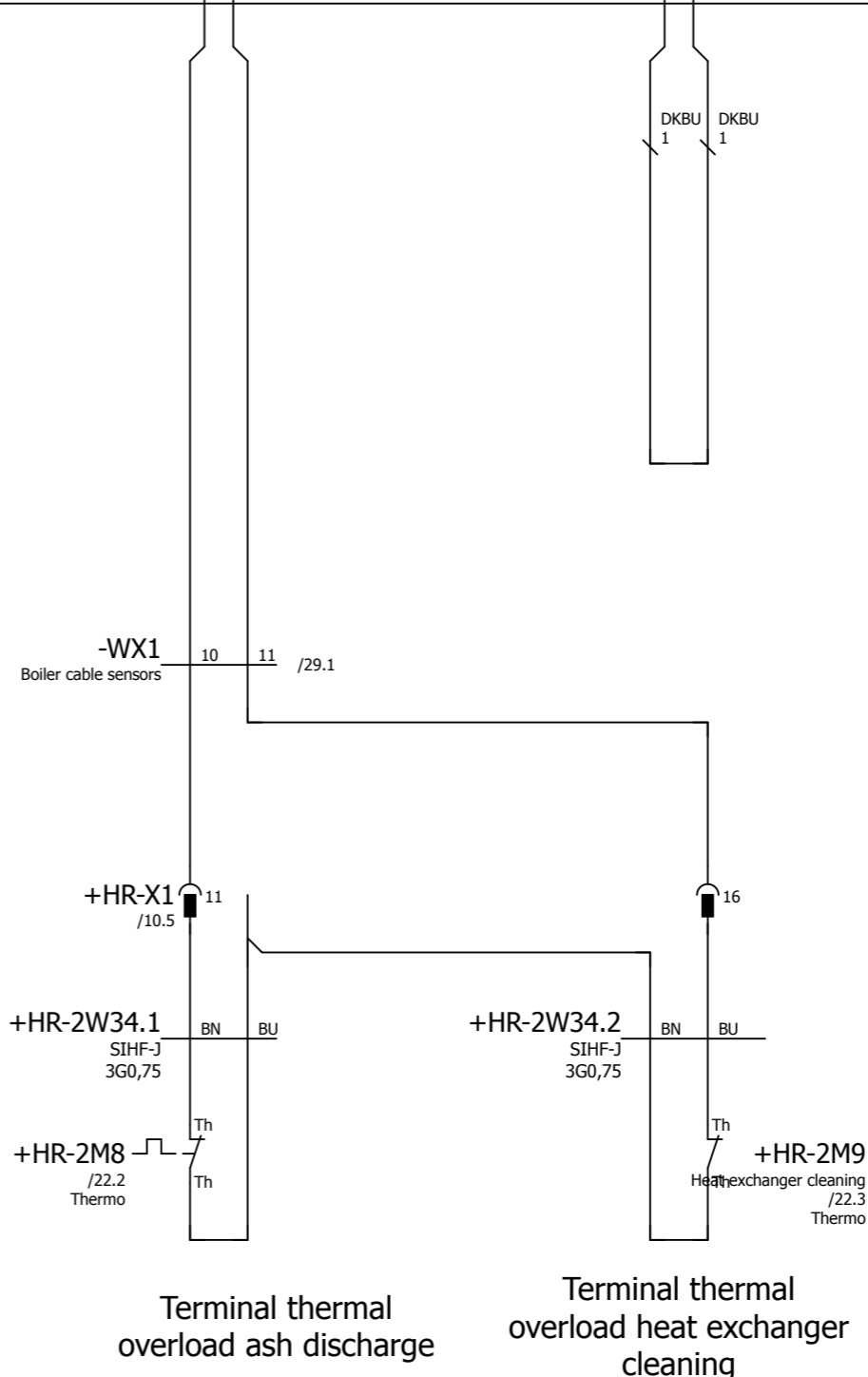
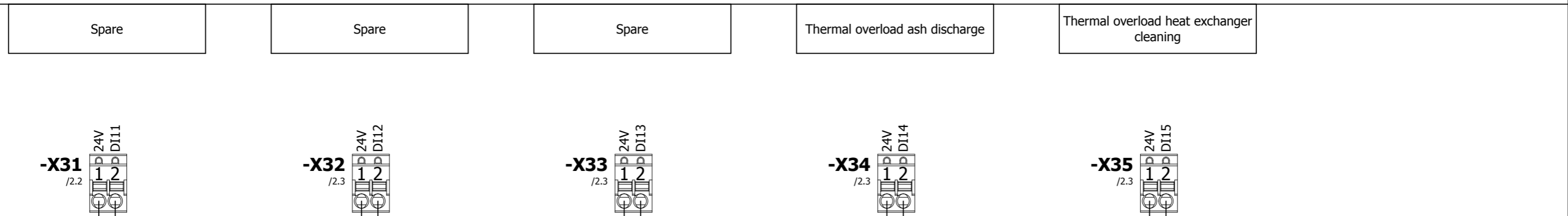
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Standard
 Woodchips / Pellets Heating System

Power unit X25 - X30

HPK-RA 15-160

SIGMATEK HZS 5211 Heating control HZS 5211



Terminal thermal overload ash discharge

Terminal thermal overload heat exchanger cleaning

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Standard
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Power unit X31 - X35

HPK-RA 15-160

SIGMATEK HZS 5211 Heating control HZS 5211

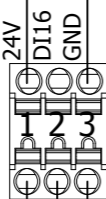
Light Sensor Auger 1

Light Sensor Auger 2

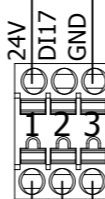
Proximity switch stoker auger

Temperature burner

-X36
/2.3



-X37
/2.3



-X38
/2.1



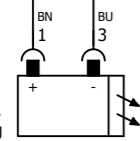
-X39
/2.1



-2W36.1
PUR-OB
4x0,34
10 m

BN BU

+HR-2B36.1
SMT 3000 HC TB-J



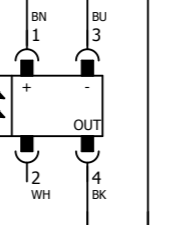
ab
GT17.112X.XXXX

Light sensor transmitter
auger 1

-2W36.2
PUR-OB
4x0,34
10 m

BN BU BK

+HR-2B36.2
SMR 3215 TB-J

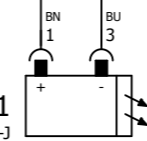


Light sensor receiver
auger 1

-2W37.1
PUR-OB
4x0,34
10 m

BN BU

+HR-2S37.1
SMT 3000 HC TB-J



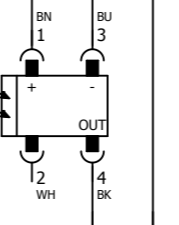
ab
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Light sensor transmitter
auger 2

-2W37.2
PUR-OB
4x0,34
10 m

BN BU BK

+HR-2S37.2
SMR 3215 TB-J

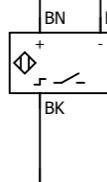


Light sensor receiver
auger 2

-2W38
PUR
4x0,22

BN BU BK

+HR-2S38



Proximity switch stoker
auger

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Standard
 Woodchips / Pellets Heating System

Power unit X36 - X39

HPK-RA 15-160

-A2
/2.1

SIGMATEK HZS 5211 Heating control HZS 5211

Key switch fuel store filling

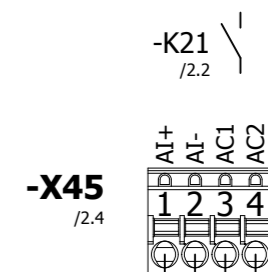
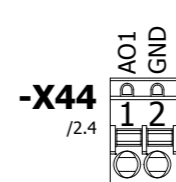
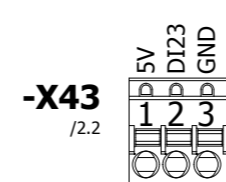
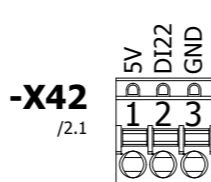
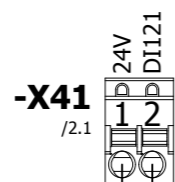
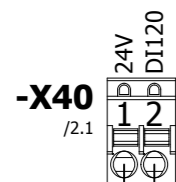
Fault bypass pump

Speedrecognition Fluegasfan

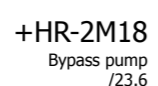
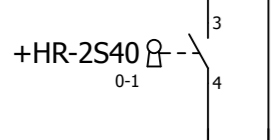
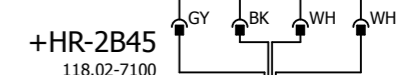
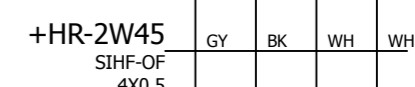
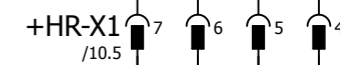
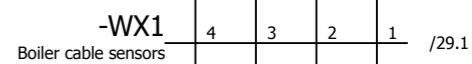
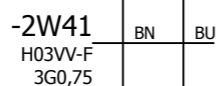
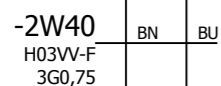
Speedrecognition Stokerauger

required Speed Fluegas-Fan

Lambda probe



-K21
/2.2



Key switch fuel store filling

Fault bypass pump

Lambda probe

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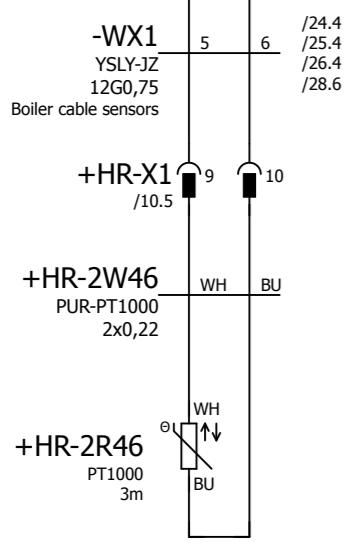
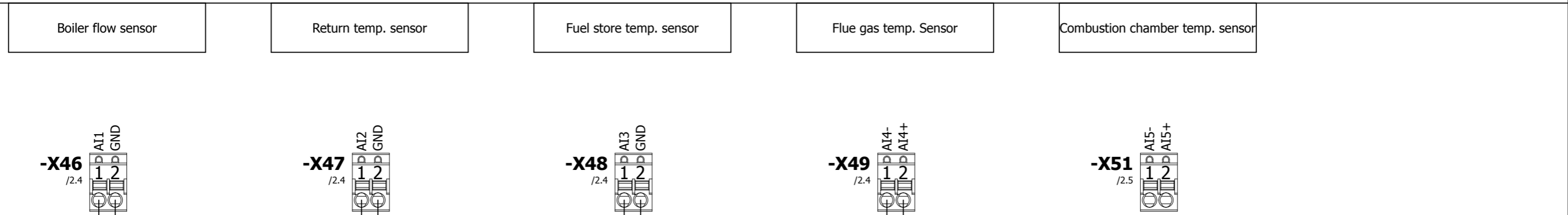
Standard
 Woodchips / Pellets Heating System

Power unit X40 - X45

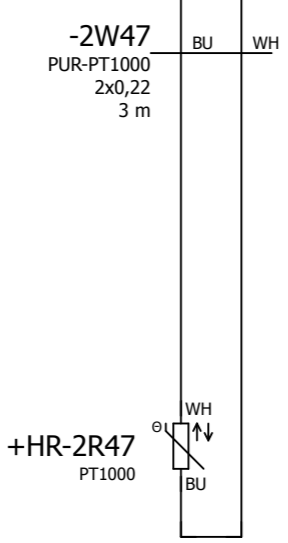
HPK-RA 15-160

= SLP Wiring diagram
 + EC01 Switch cabinet
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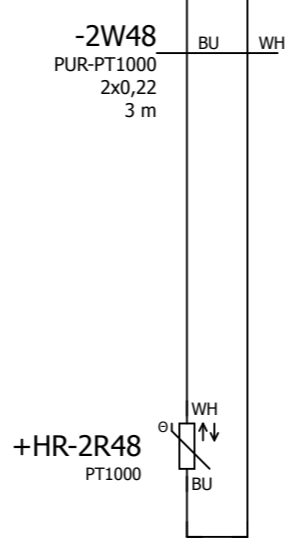
SIGMATEK HZS 5211 Heating control HZS 5211



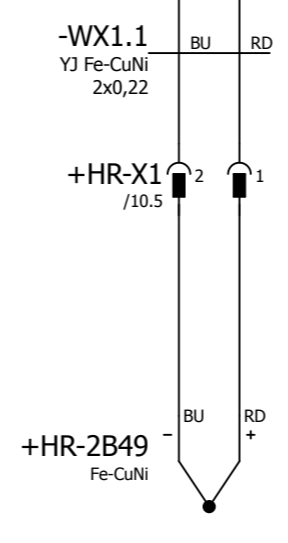
Boiler flow sensor



Return temp. sensor



Fuel store temp. sensor



Flue gas temp. Sensor

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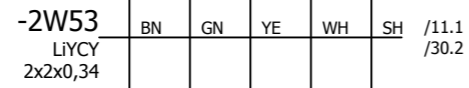
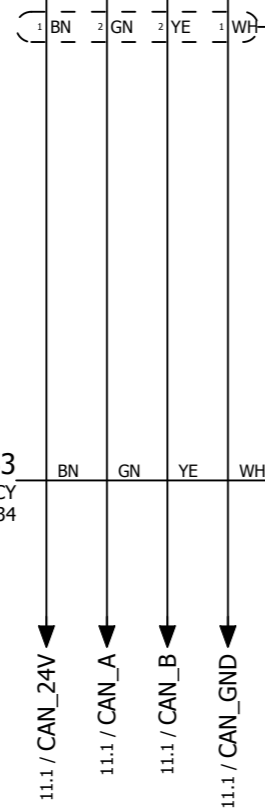
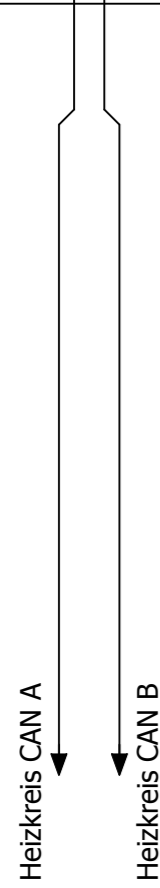
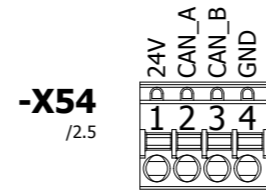
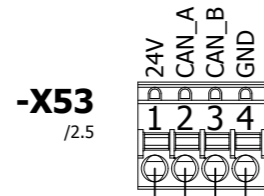
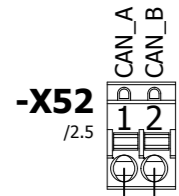
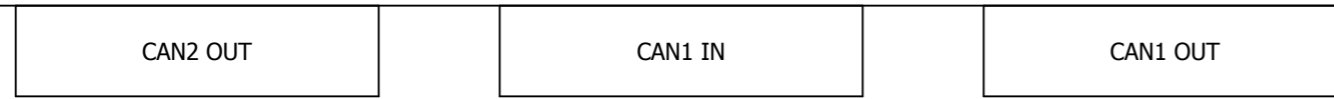
Standard
Woodchips / Pellets Heating System

Power unit X46 - X51

HPK-RA 15-160

-A2
/2.1

SIGMATEK HZS 5211 Heating control HZS 5211



CAN Bus

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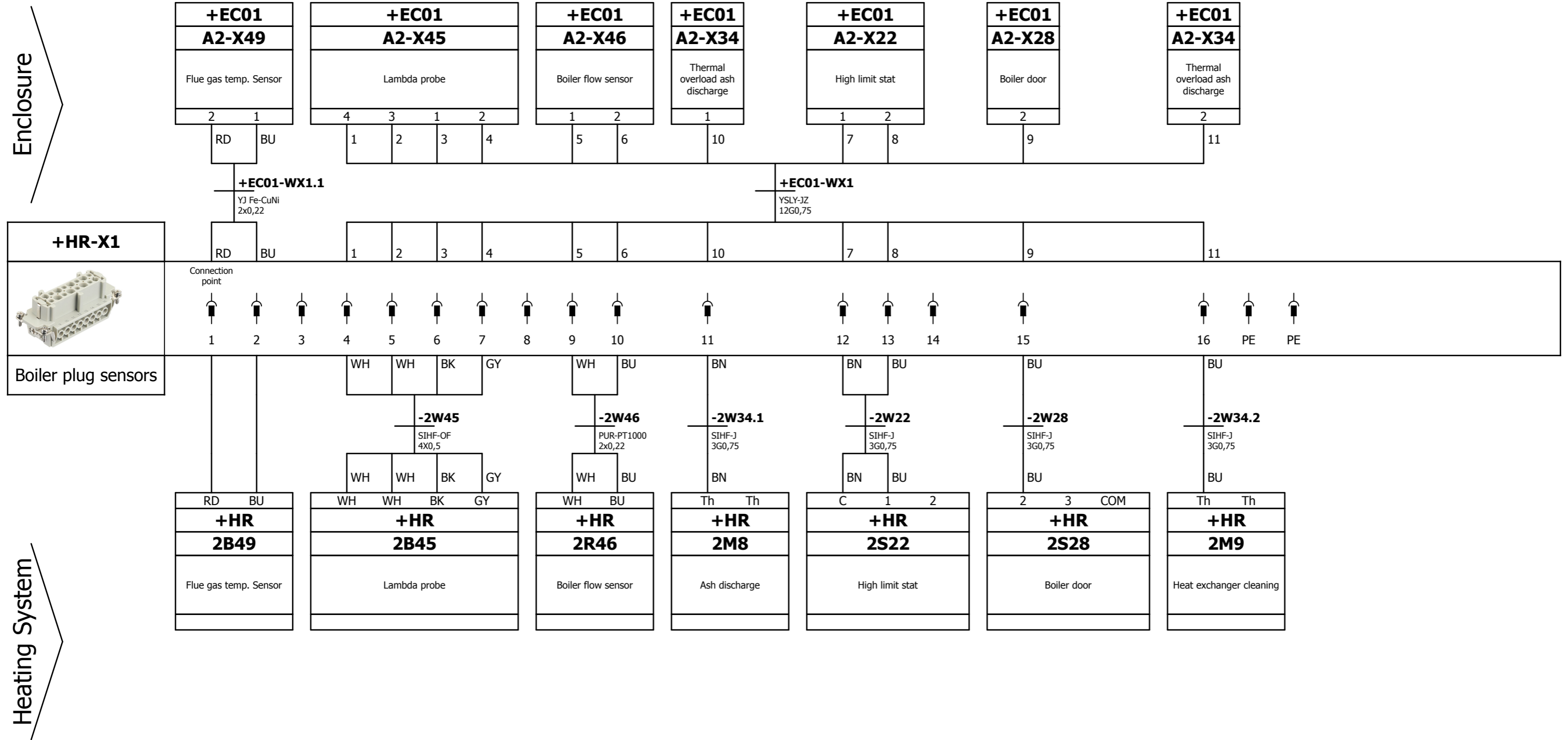
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Standard
 Woodchips / Pellets Heating System

Power unit X52 - X54

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Pin-connection diagram



=SLP+EC01/30

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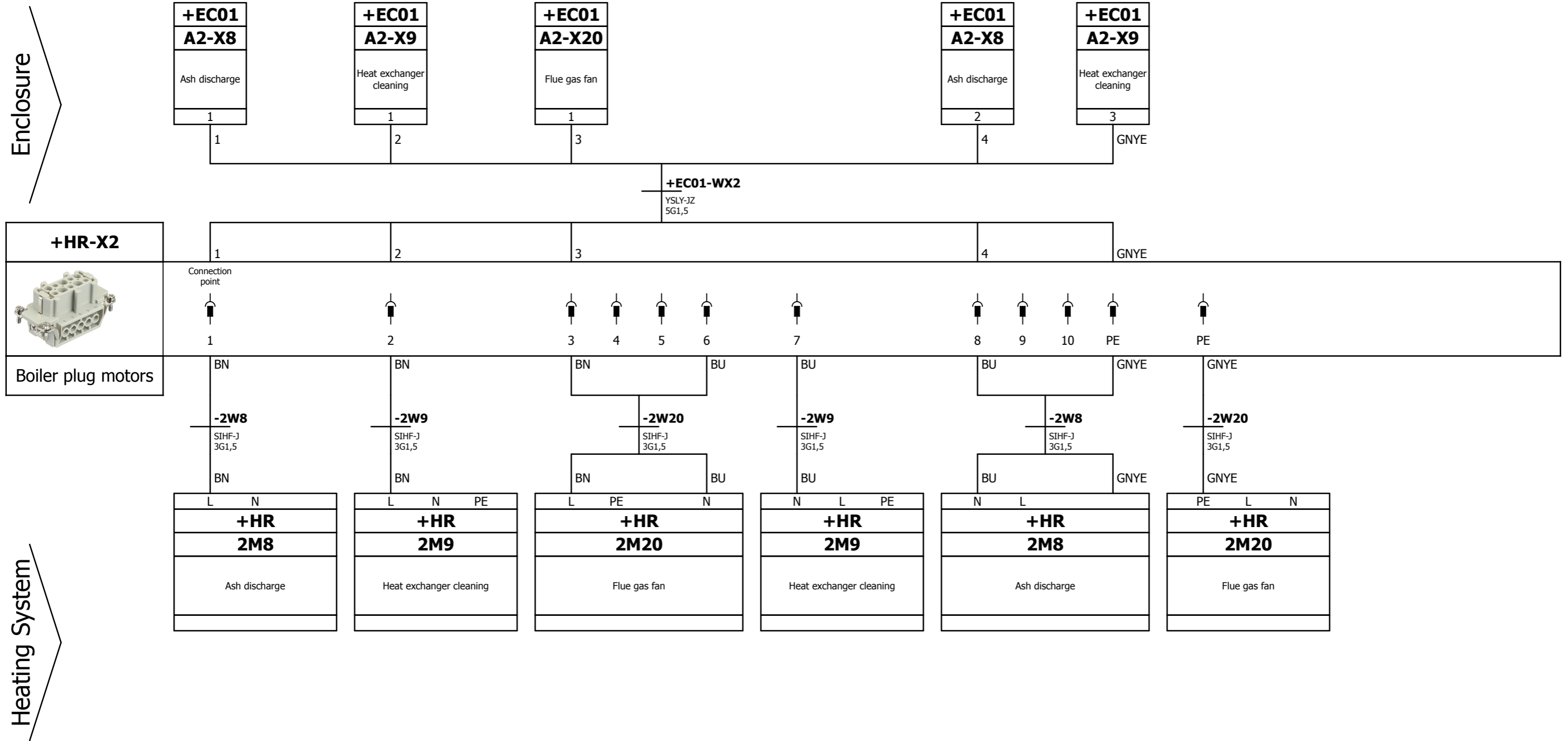
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Standard
 Woodchips / Pellets Heating System

Pin-connection diagram +HR-X1

HPK-RA 15-160

Pin-connection diagram



Date	19.11.2015	Gilles Energie u. Umwelttechnik Koaserbauerstraße 16 A - 4810 Gmunden Tel.: (+43) 7612 / 73 76 0 - 0	Standard	Pin-connection diagram +HR-X2	HPK-RA 15-160	= STAP Pin-connection diagram
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