

# Ferlin

Rudolf Dieselstraat 15A  
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HOLLAND  
tel. 0548-745 370  
info@ferlin.nl

PROJECT:  
FERLIN GRAVIMETRIC BLENDER

SUBJECT:  
MAIN DIAGRAM 3 PHASE 400V + N

DRAWN BY: H. Wennemars  
DATE: 28-01-2015  
PROJECTNO. FGB 10-25  
PAGE: 1 OF: 13

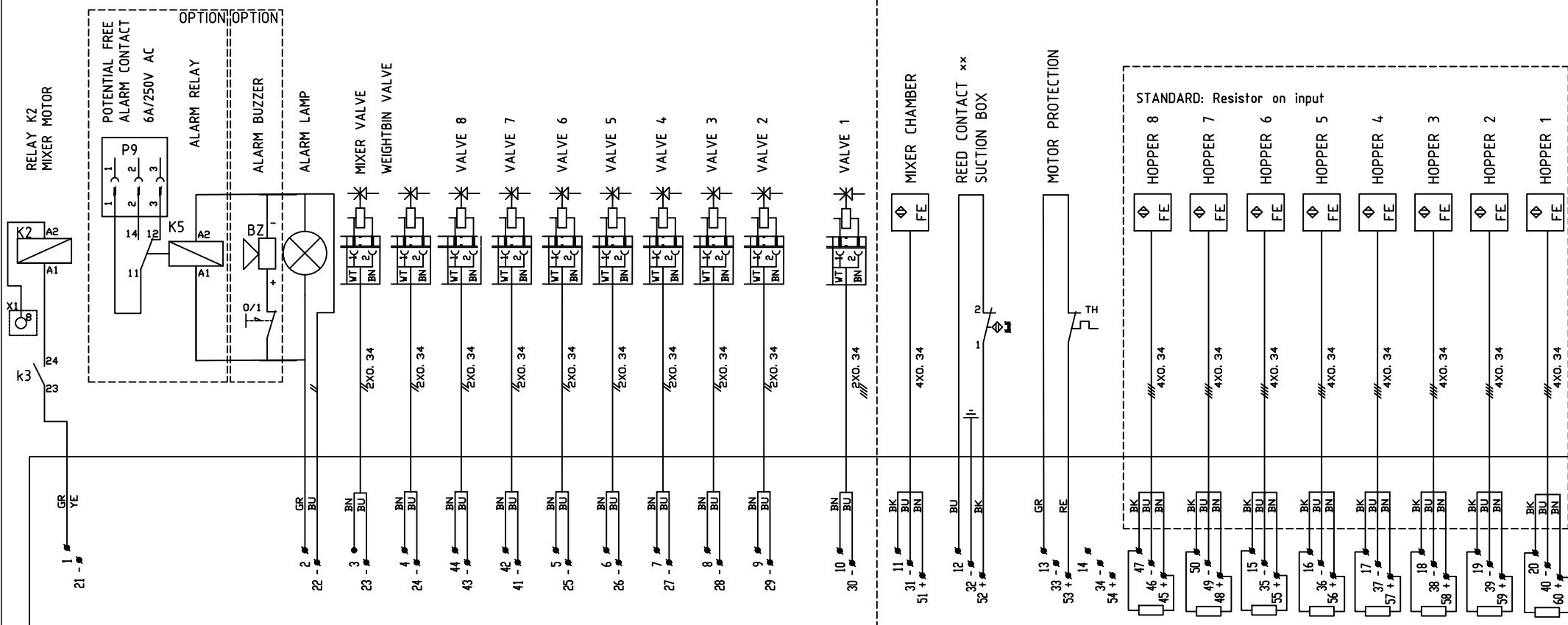
DRAWING NUMBER:  
FGB 10-25 Kg H

REVISION  
12-12-2023

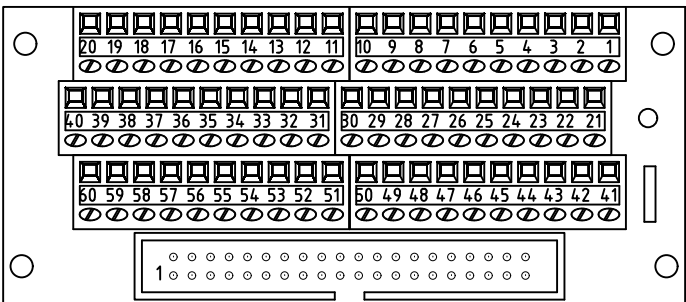
A4

24Vdc OUTPUT

24Vdc INPUT

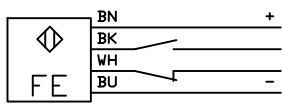


WIRING DIAGRAM INSERTED MODULE ON MAIN PCB



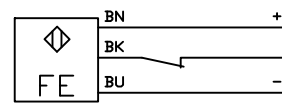
- BK=BLACK
- BU=BLUE
- BN=BROWN
- WH=WHITE
- YE=YELLOW
- RE=RED
- GR=GRAY
- GN=GREEN

Rechner KAS 80  
PNP 24VDC



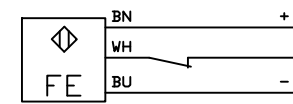
mixer or hopper sensor\*

IFM KI5083 or  
Baumer CFAM  
PNP 24VDC



mixer sensor\*

Carlo Gavazzi  
EC3025PPAPL-1



mixer sensor\*

\* = All sensors are NO except Mixer sensor is NC  
\*\* = Or machine hopper sensor.

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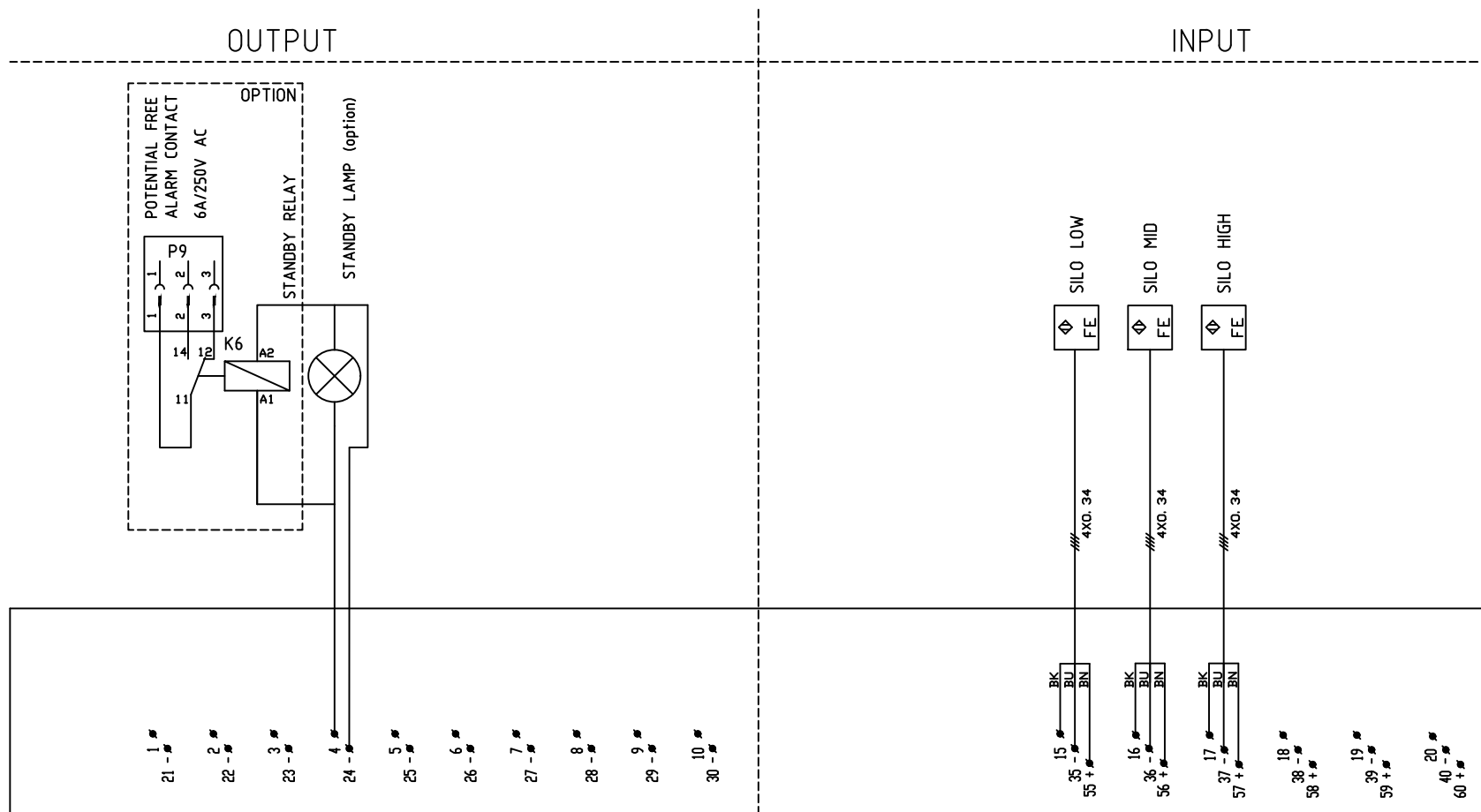
Rudolf Dieselstraat 15A  
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PROJECT:  
FERLIN GRAVIMETRIC BLENDER  
SUBJECT:  
24Vdc IN-OUTPUT X1 - X60

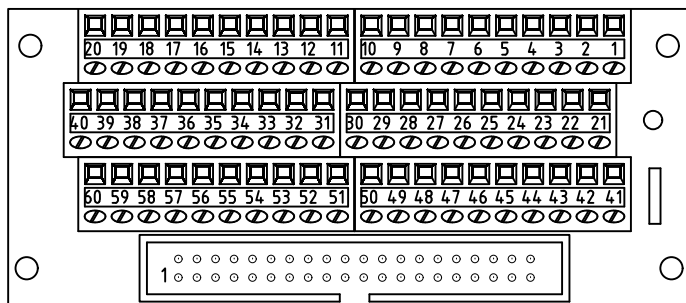
DRAWN BY: H. Wennemars  
DATE: 28-01-2015  
PROJECTNO. FGB 10-25  
PAGE: 2 OF: 13

DRAWING NUMBER:  
FGB 10-25 Kg H  
REVISION  
12-12-2023

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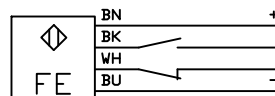


WIRING DIAGRAM EXPANSION BOARD



BK=BLACK  
 BU=BLUE  
 BN=BROWN  
 WH=WHITE  
 YE=YELLOW  
 RE=RED

Rechner KAS 80  
 PNP 24VDC



hopper or silo sensor connect as N.O.

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PROJECT: FERLIN GRAVIMETRIC BLENDER  
 SUBJECT: I/O EXPANSION

DRAWN BY: H. Wennemars

DATE: 28-01-2015

PROJECTNO. FGB 10-25

PAGE: 3 OF: 13

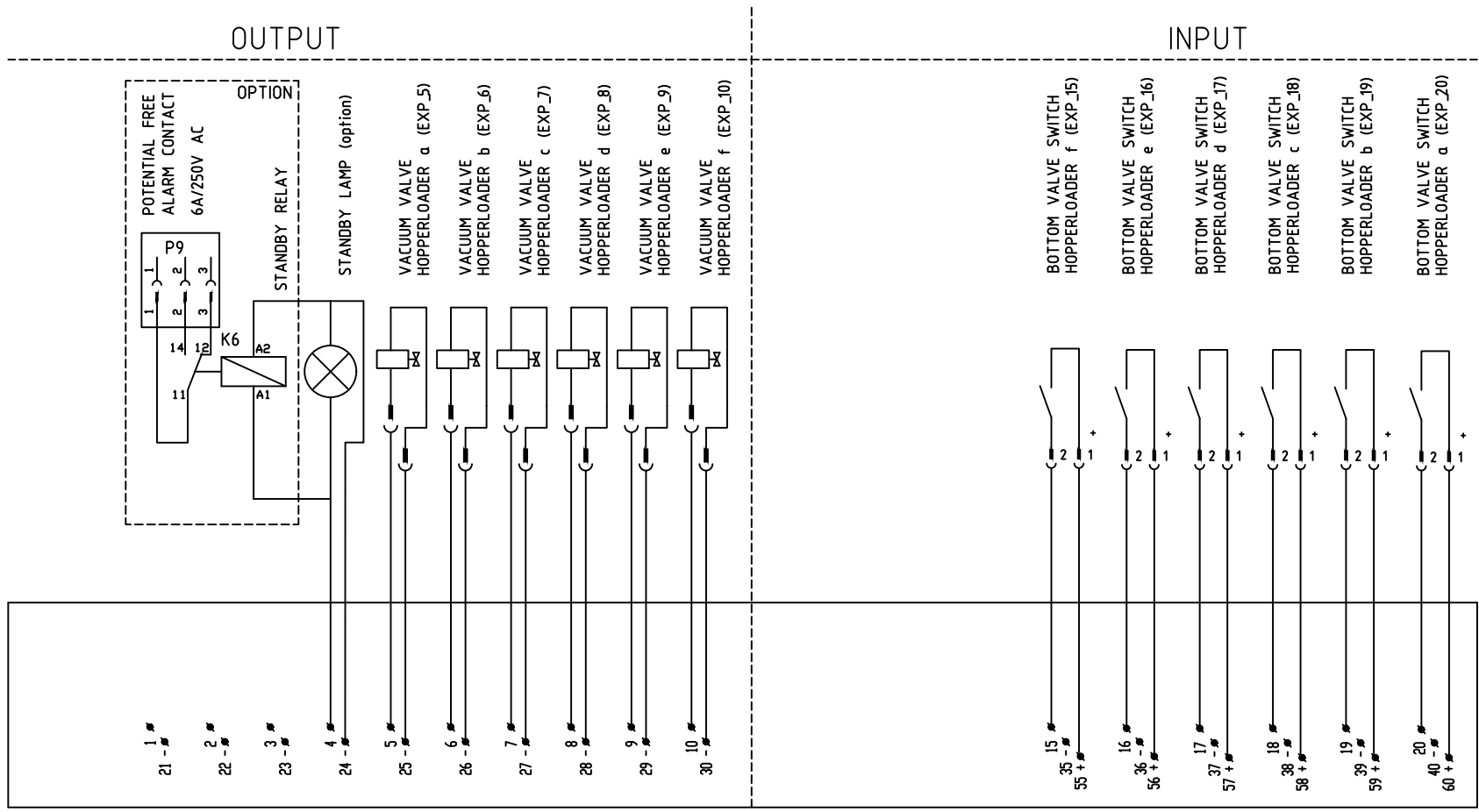
DRAWING NUMBER:

FGB 10-25 Kg H

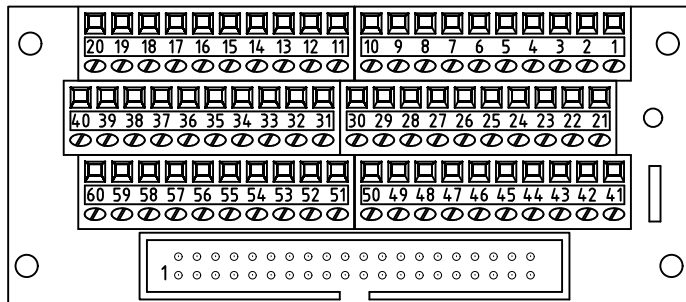
REVISION

12-12-2023

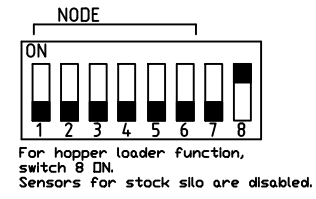
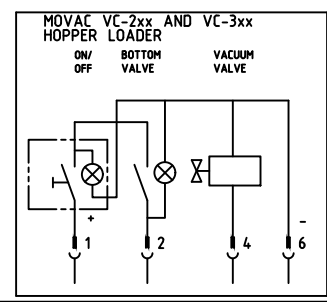
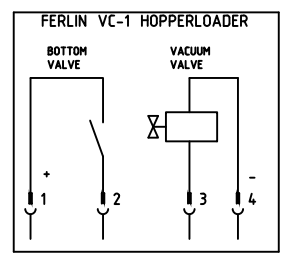
A4



WIRING DIAGRAM EXPANSION BOARD



BK=BLACK  
 BU=BLUE  
 BN=BROWN  
 WH=WHITE  
 YE=YELLOW  
 RE=RED



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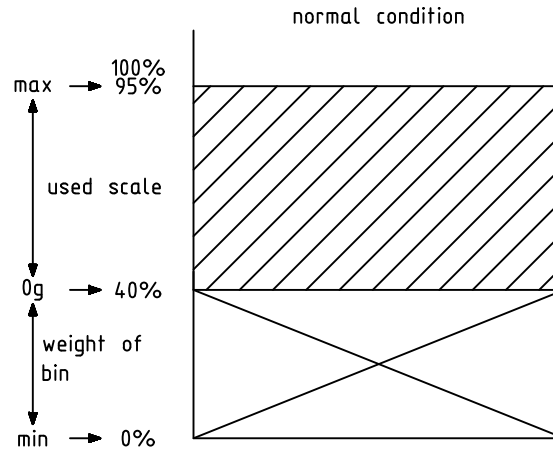
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PROJECT: FERLIN GRAVIMETRIC BLENDER  
 SUBJECT: I/O EXPANSION

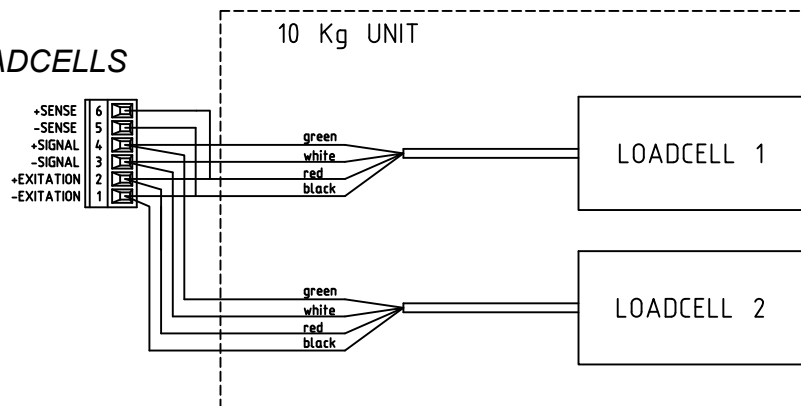
DRAWN BY: H. Wennemars  
 DATE: 28-01-2015  
 PROJECTNO. FGB 10-25  
 PAGE: 3a OF: 13

DRAWING NUMBER: FGB 10-25 Kg H  
 REVISION: 12-12-2023  
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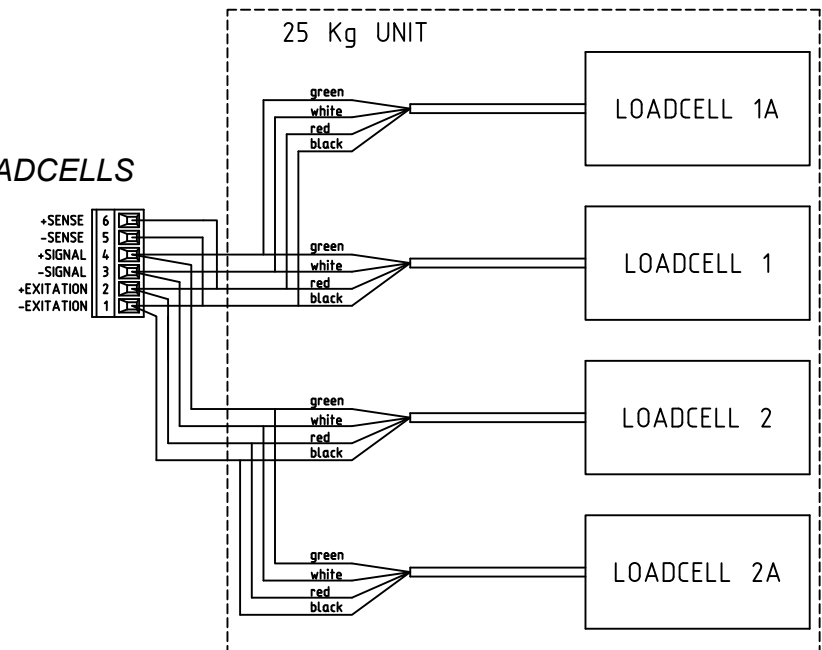
# LOADCELL SCALE



## ZEMIC LOADCELLS



## ZEMIC LOADCELLS



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PROJECT:  
FERLIN GRAVIMETRIC BLENDER

SUBJECT:  
LOADCELL CONNECTION

DRAWN BY: H. Wennemars

DATE: 28-01-2015

PROJECTNO. FGB 10-25

PAGE: 4 OF: 13

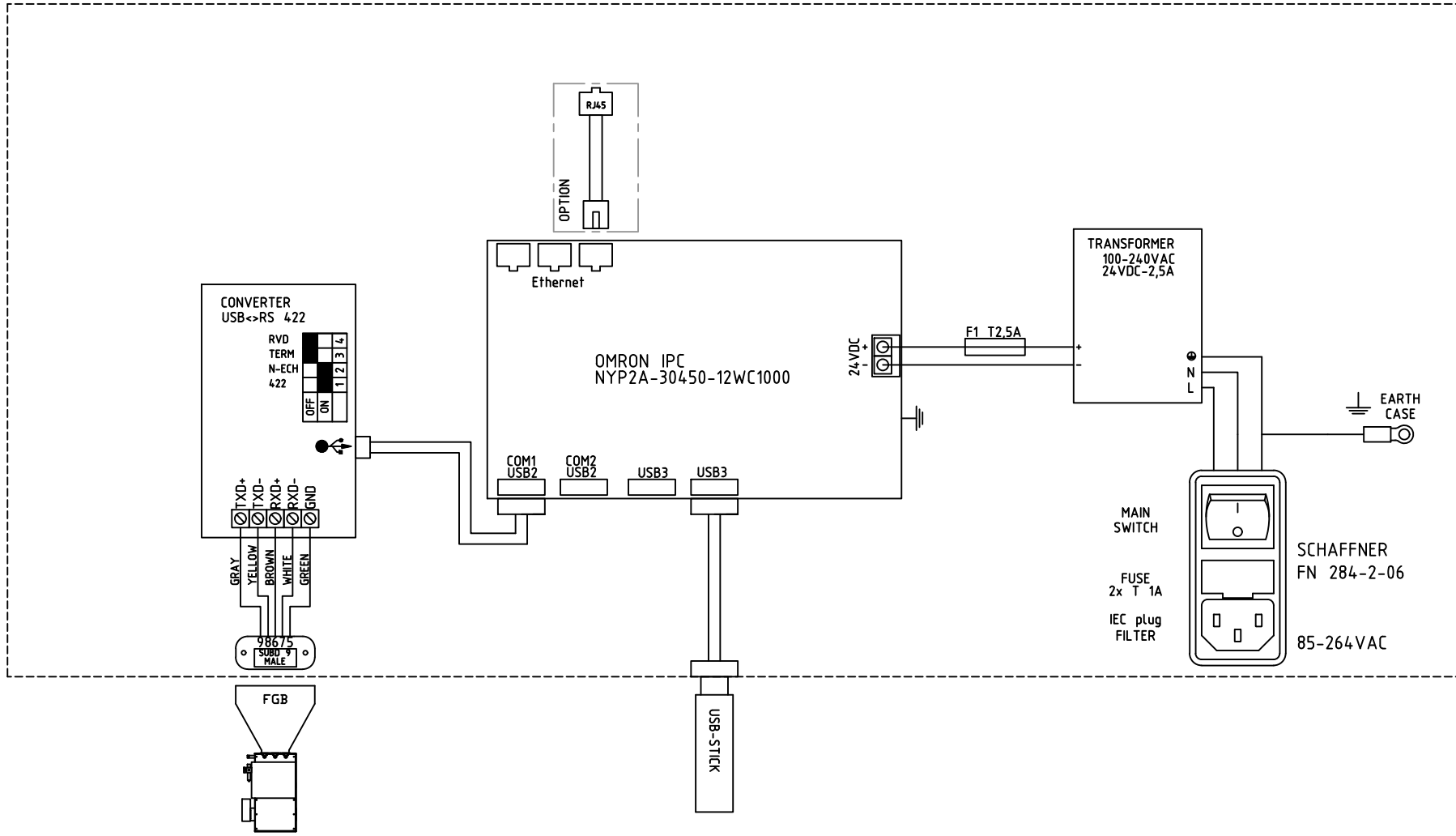
DRAWING NUMBER:

FGB 10-25 Kg H

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**PROJECT:**  
FERLIN GRAVIMETRIC BLENDER

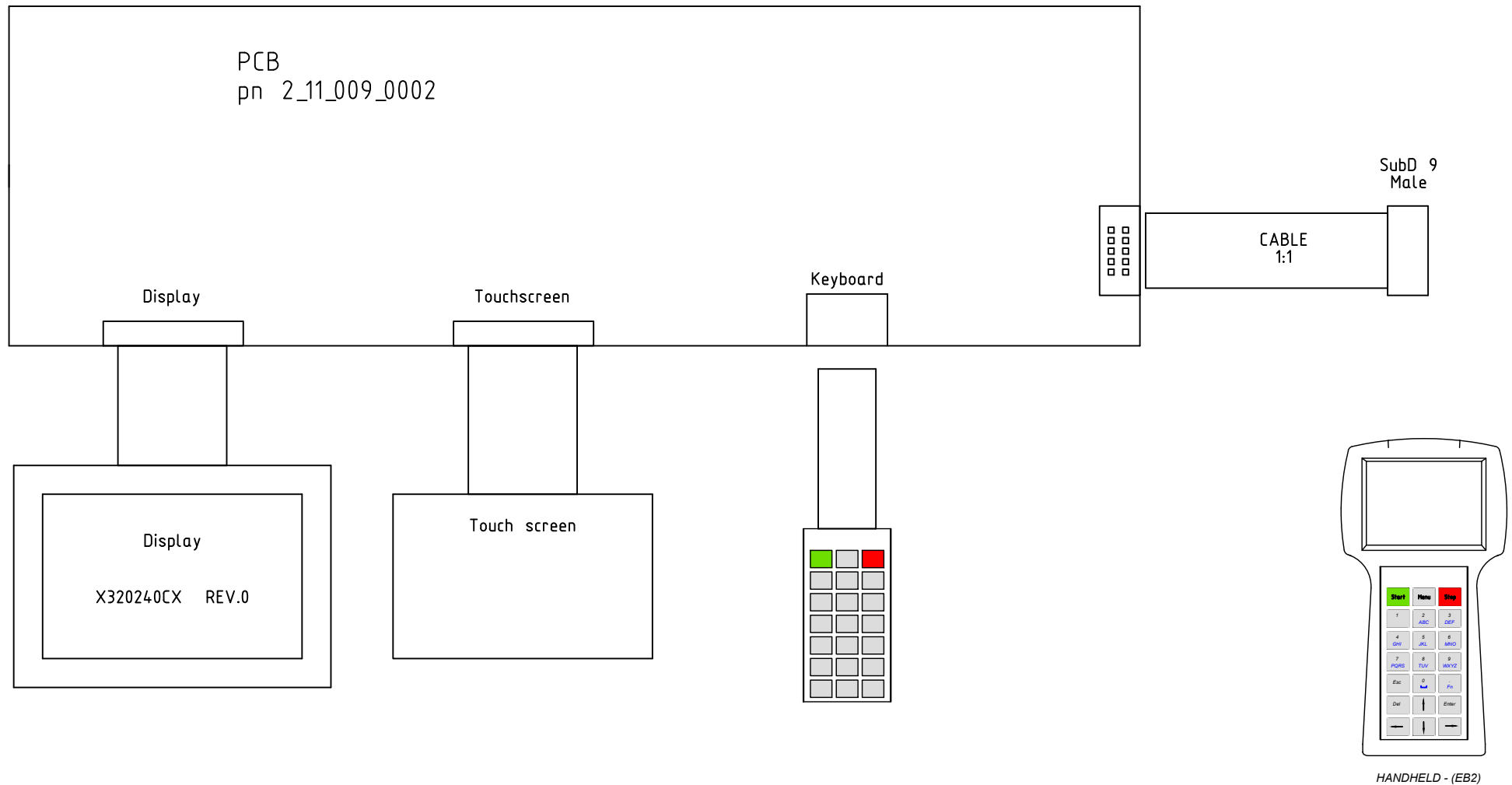
**SUBJECT:**  
IPC USER INTERFACE

**DRAWN BY:** H. Wennemars  
**DATE:** 28-01-2015  
**PROJECTNO.** FGB 10-25  
**PAGE:** 5      **OF:** 13

**DRAWING NUMBER:**  
FGB 10-25 Kg H

**REVISION**  
12-12-2023

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**PROJECT:**  
FERLIN GRAVIMETRIC BLENDER

**SUBJECT:**  
HANDHELD TERMINAL

**DRAWN BY:** H. Wennemars

**DATE:** 28-01-2015

**PROJECTNO.** FGB 10-25

**PAGE:** 6      **OF:** 13

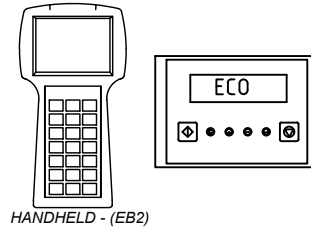
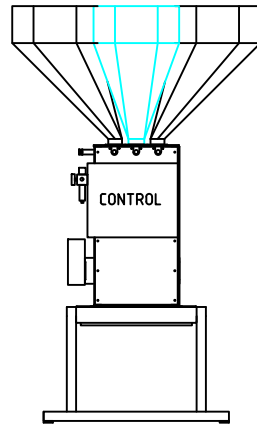
**DRAWING NUMBER:**  
FGB 10-25 Kg H

**REVISION**  
12-12-2023

**A4**

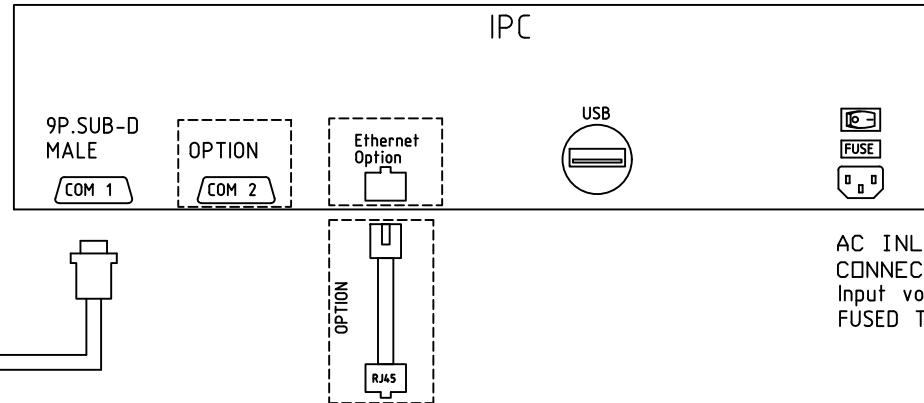
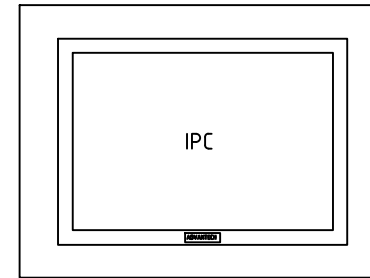
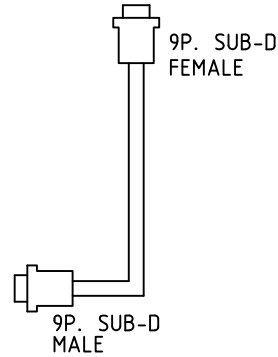
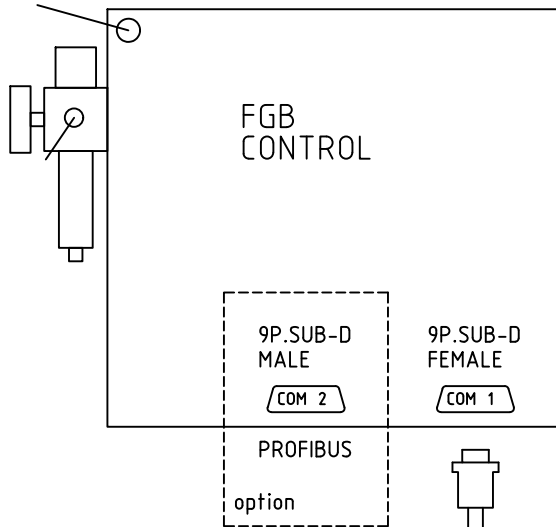




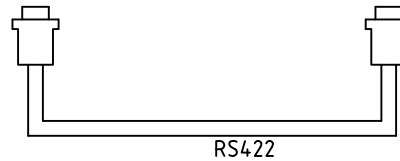


MAIN POWERCABLE  
CONNECTED BY CUSTOMER  
Input voltage: 3 X 400 Vac+GROUND  
Power consumption : max. 750 W

COMPRESSED AIR\*  
CONNECTION 1/4"



AC INLET  
CONNECTED BY CUSTOMER  
Input voltage: 100~240Vac  
FUSED T2A, 50-60Hz



\* COMPRESSED AIR SUPPLY : 6 BAR  
COMPRESSED AIR CONSUMPTION : 200 NL/h

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PROJECT:  
FERLIN GRAVIMETRIC BLENDER  
SUBJECT:  
IPC FGB CONNECTIONS

DRAWN BY: H. Wennemars

DATE: 28-01-2015

PROJECTNO. FGB 10-25

PAGE: 8 OF: 13

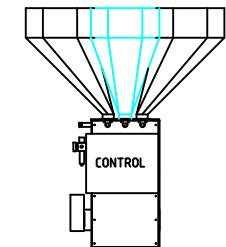
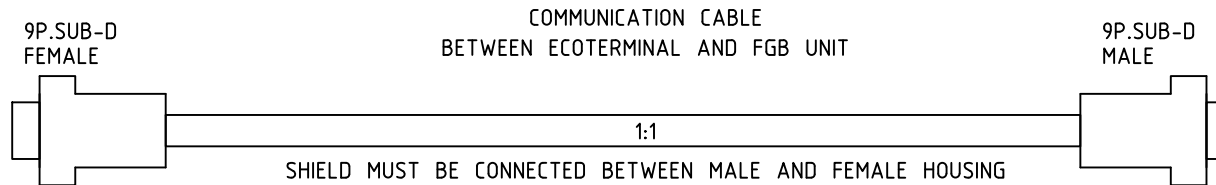
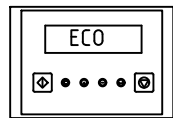
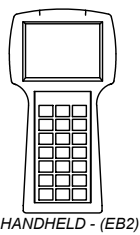
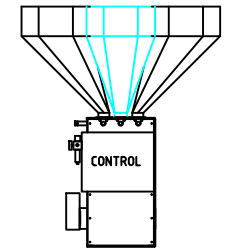
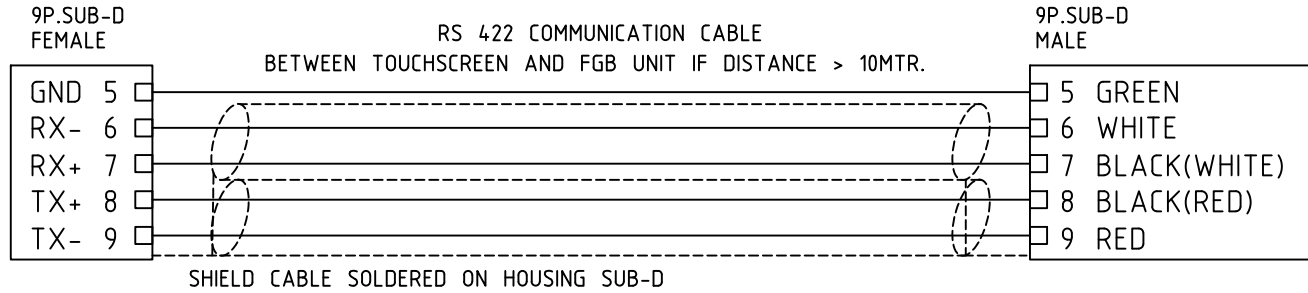
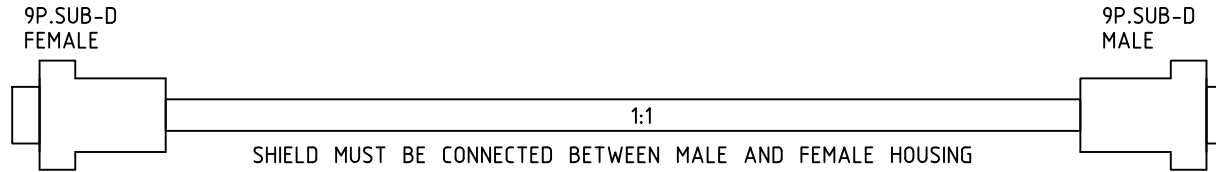
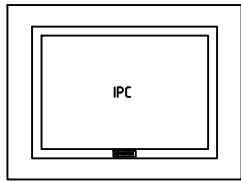
DRAWING NUMBER:

FGB 10-25 Kg H

REVISION

12-12-2023

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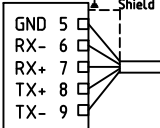
PROJECT:  
FERLIN GRAVIMETRIC BLENDER  
SUBJECT:  
COMMUNICATION CABLE

DRAWN BY: H. Wennemars  
DATE: 28-01-2015  
PROJECTNO. FGB 10-25  
PAGE: 9 OF: 13

DRAWING NUMBER:  
FGB 10-25 Kg H  
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12-12-2023

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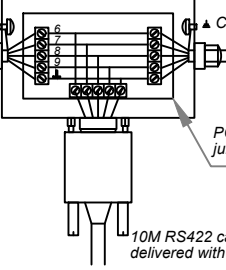
9P-SUB-D FEMALE



6 WHITE = RX-  
 7 BLACK(WHITE) = RX+  
 8 BLACK(RED) = TX+  
 9 RED = TX-  
 5 GREEN = GND

Take care of the twisted pairs  
 Rx+ and Rx- is a pair  
 Tx+ and Tx- is a pair.

Junction box 01E01.JB003

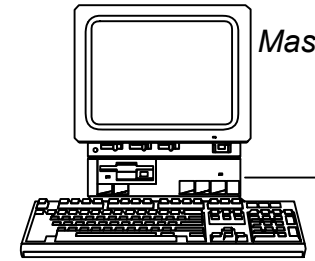


Connect the shield at the housing

RS422 twisted pair cable (3x2 wires)  
 01E49.02339

PCB must be isolated mounted in junction box with plastic bolts and spacers

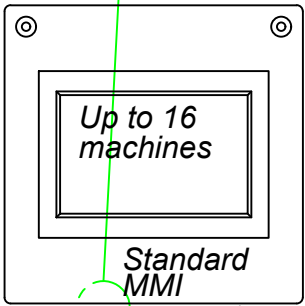
10M RS422 cable standard delivered with a FGB



Master PC/PLC

PROFIBUS DP

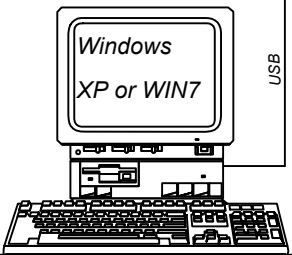
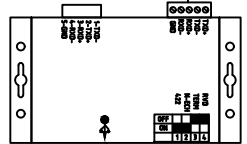
MAX. LENGTH RS 422 IS 500 MTR.



Up to 16 machines

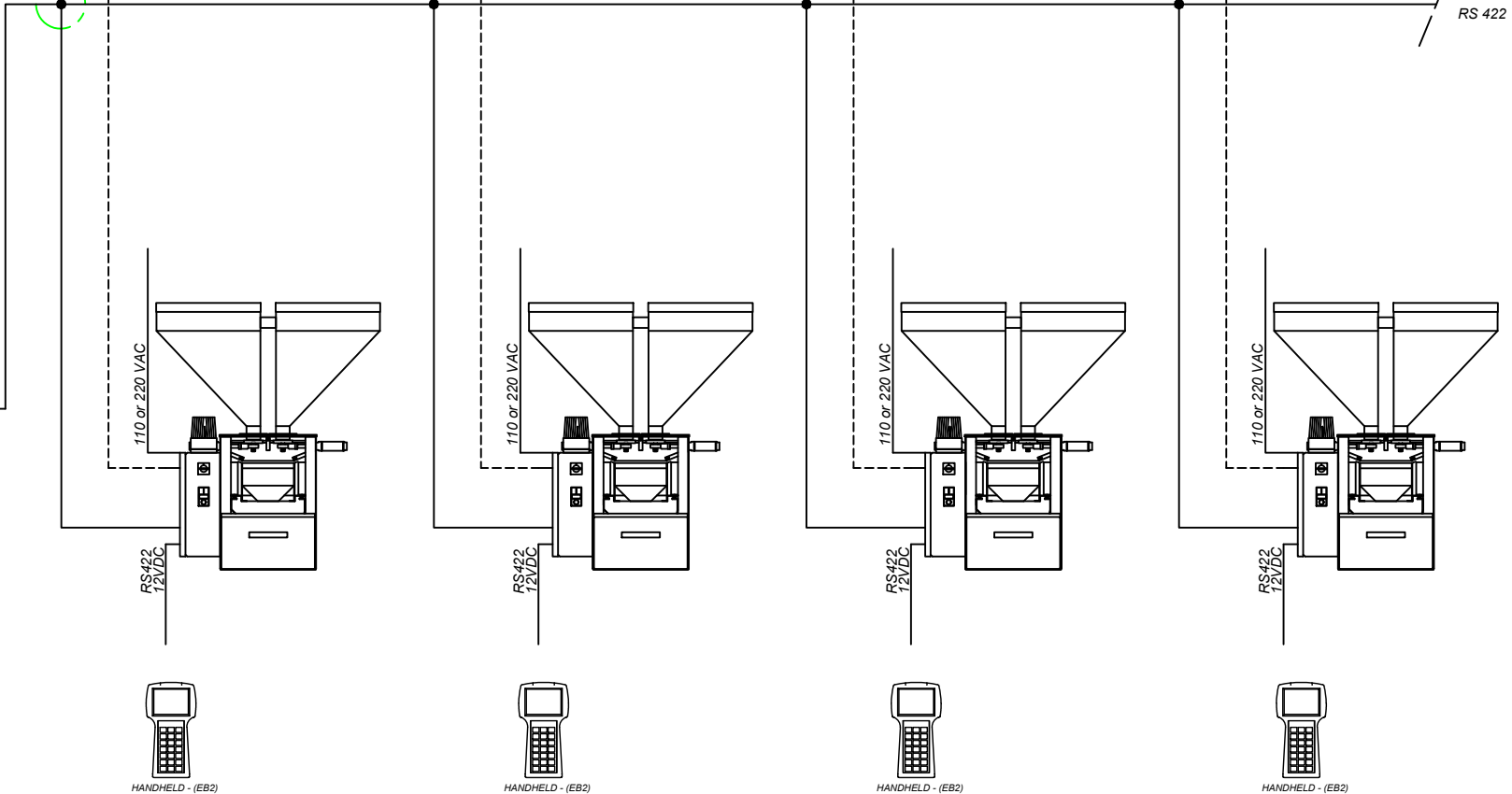
Standard MMI

85-265VAC



Windows XP or WIN7

USB



HANDHELD - (EB2)

HANDHELD - (EB2)

HANDHELD - (EB2)

HANDHELD - (EB2)

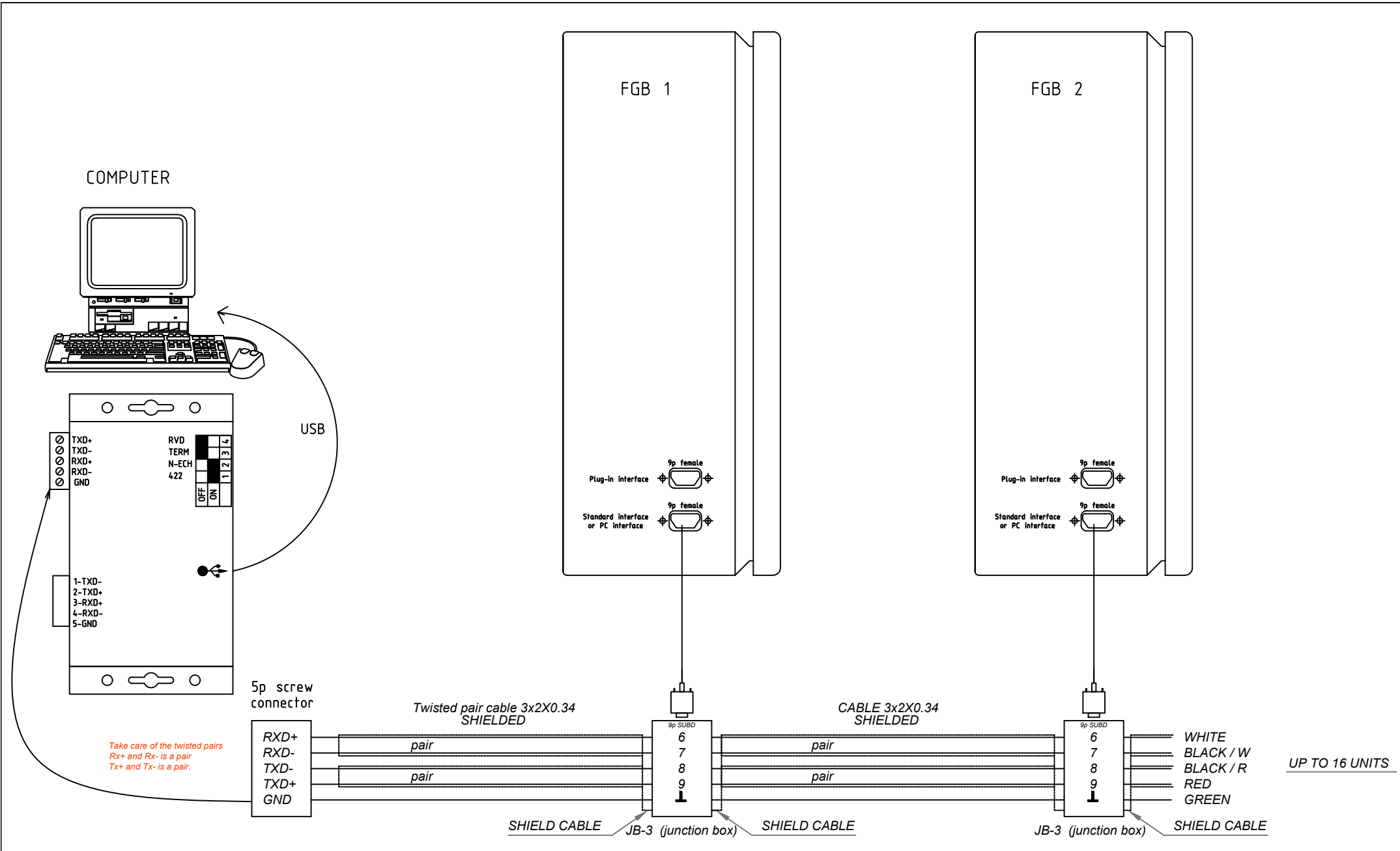
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PROJECT:	FERLIN GRAVIMETRIC BLENDER
SUBJECT:	LINKING

DRAWN BY:	H. Wennemars
DATE:	28-01-2015
PROJECTNO.	FGB 10-25
PAGE:	10 OF: 13

DRAWING NUMBER:	FGB 10-25 Kg H
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PROJECT:  
FERLIN GRAVIMETRIC BLENDER

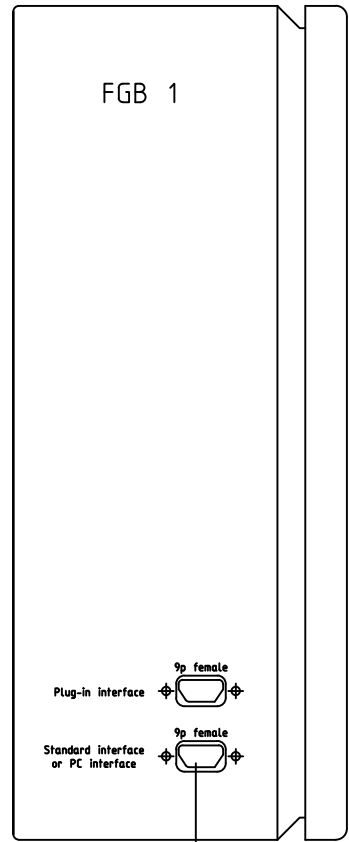
SUBJECT:  
MULTI DROP IO 01 H USB<->RS422

DRAWN BY: H. Wennemars  
DATE: 28-01-2015  
PROJECTNO. FGB 10-25  
PAGE: 11 OF: 13

DRAWING NUMBER:  
FGB 10-25 Kg H

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12-12-2023

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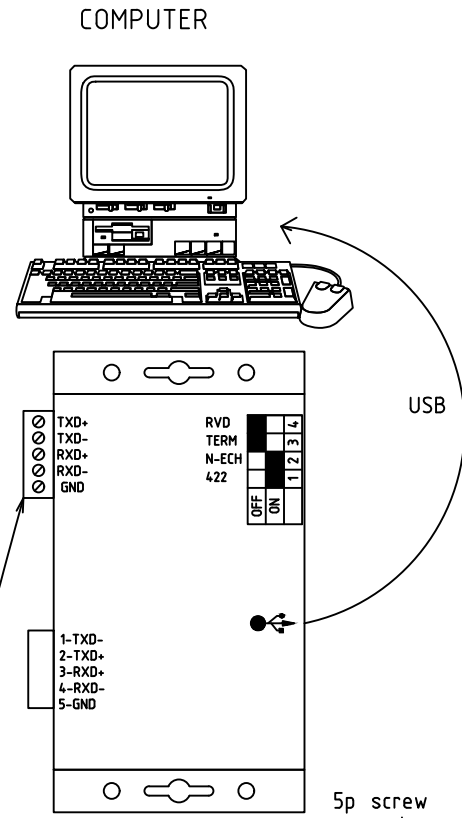


FGB 1

9p female  
Plug-in interface

9p female  
Standard interface  
or PC interface

9p SUBD  
Male

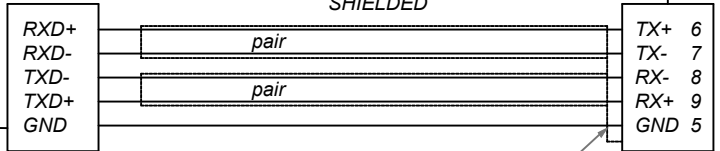


COMPUTER

USB

5p screw  
connector

Take care of the twisted pairs  
Rx+ and Rx- is a pair  
Tx+ and Tx- is a pair.



Twisted pair cable 3x2X0.34  
SHIELDED

SHIELD CABLE

- 6 WHITE
- 7 BLACK(WHITE)
- 8 BLACK(RED)
- 9 RED
- 5 GREEN = GND

**Ferlin**

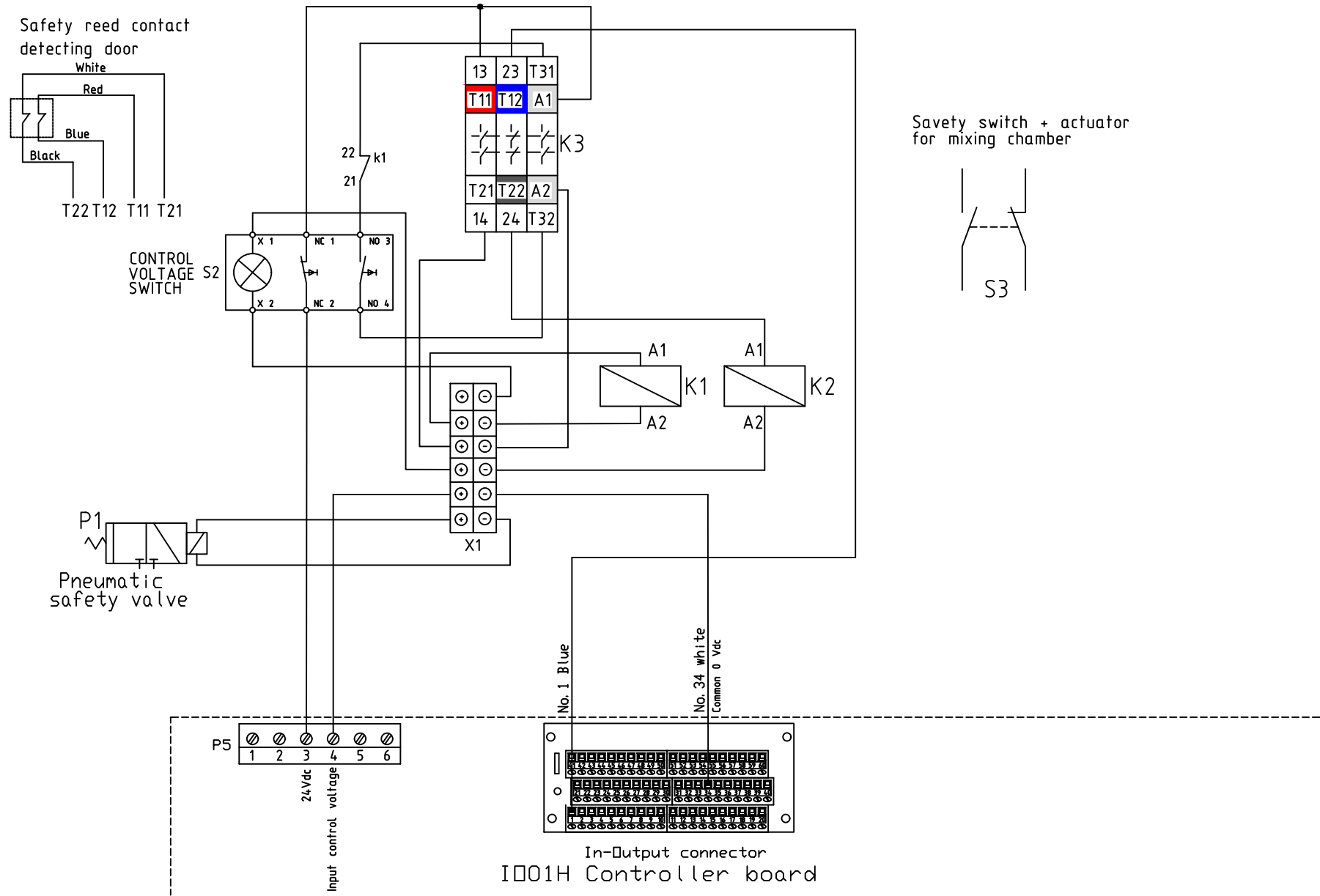
Rudolf Dieselstraat 15A  
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PROJECT: FERLIN GRAVIMETRIC BLENDER  
SUBJECT: SINGLE POINT IO 01 H USB<>RS422

DRAWN BY: H. Wennemars  
DATE: 28-01-2015  
PROJECTNO. FGB 10-25  
PAGE: 12 OF: 13

DRAWING NUMBER: FGB 10-25 Kg H  
REVISION: 12-12-2023

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PROJECT:  
FERLIN GRAVIMETRIC BLENDER

SUBJECT:  
SAFETY SWITCH

DRAWN BY: H. Wennemars

DATE: 28-01-2015

PROJECTNO. FGB 10-25

PAGE: 13 OF: 13

DRAWING NUMBER:

FGB 10-25 Kg H

REVISION

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