

# Ferlin

Galileistraat 29  
7701 SK  
Dedemsvaart  
HOLLAND  
tel. 0523-613439  
fax 0523-616587

PROJECT:  
FERLIN GRAVIMETRIC BLENDER

SUBJECT:  
MAIN DIAGRAM 1 PHASE 110/240V

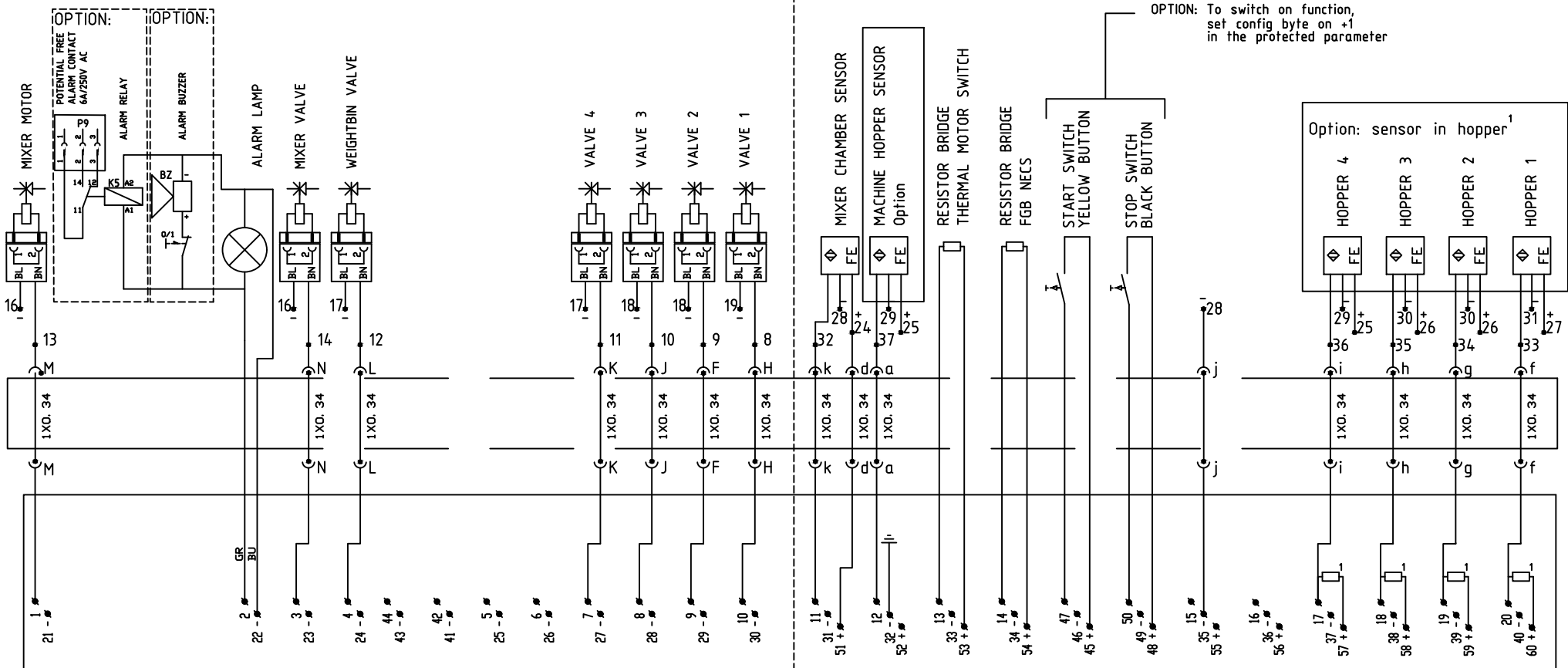
DRAWN BY: H. Wennemars  
DATE: 28-01-2015  
PROJECTNO. FGB MECS  
PAGE: 1 OF: 13

DRAWING NUMBER:  
FGB NECS H  
REVISION  
13-10-2023

A4

OUTPUT

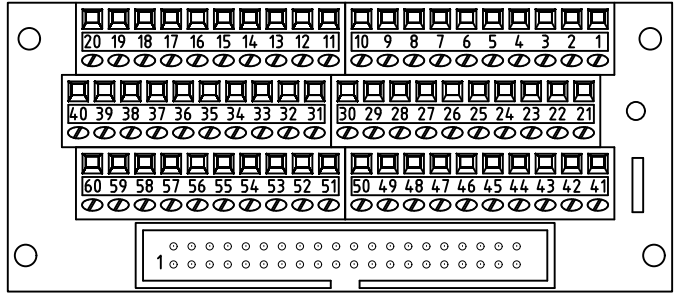
INPUT



OPTION: To switch on function, set config byte on +1 in the protected parameter

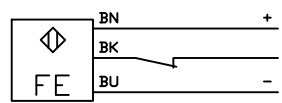
Option: sensor in hopper<sup>1</sup>

WIRING DIAGRAM INSERTED MODULE ON MAIN PCB



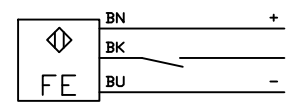
BK=BLACK  
 BU=BLUE  
 BN=BROWN  
 WH=WHITE  
 YE=YELLOW  
 RE=RED  
 GR=GRAY

IFM M30 KI5083  
 PNP 24VDC



Mixer chamber sensor\*

IFM KG5066  
 PNP 24VDC



Hopper Level sensor\*

All sensors are NO except Mixer sensor is NC

1= If hopper sensor is connected, remove the resistor at the input.

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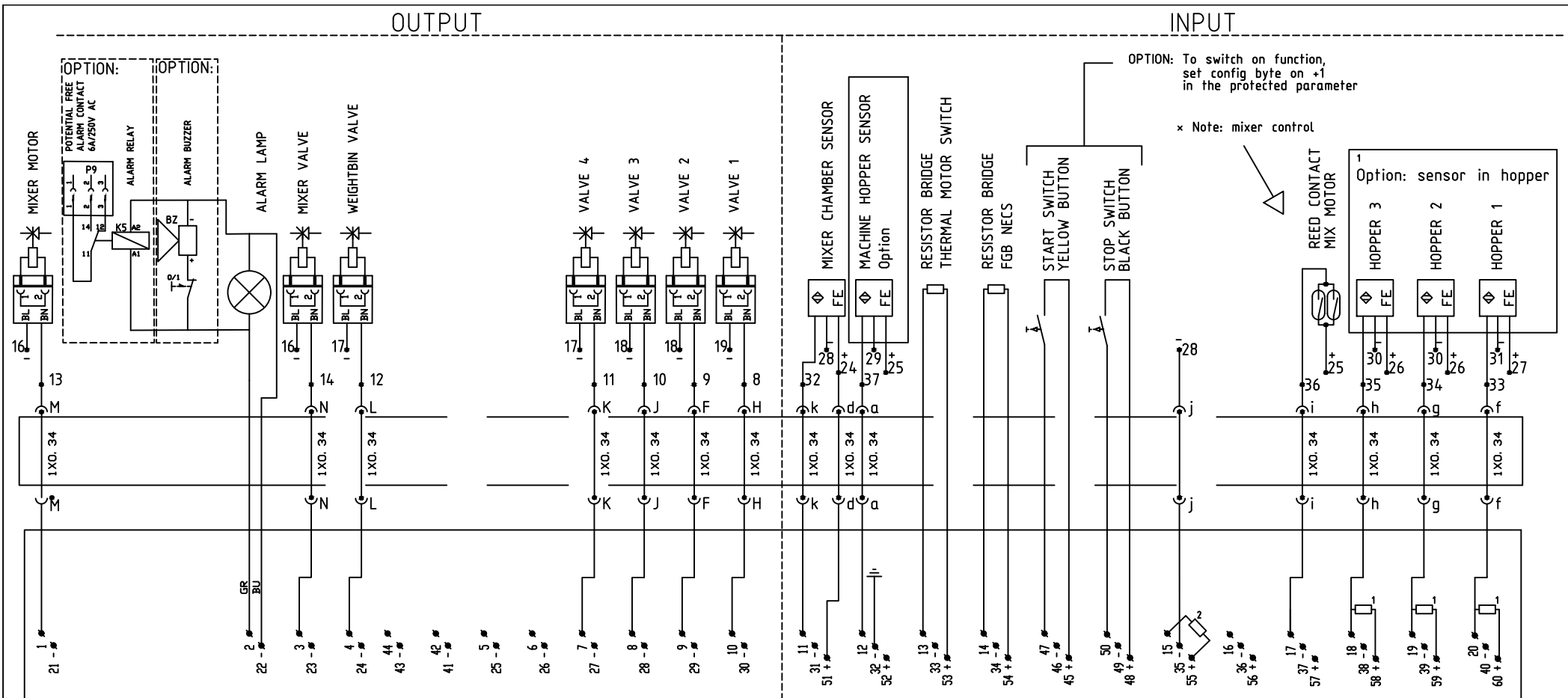
Gabilestraat 29  
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PROJECT:	FERLIN GRAVIMETRIC BLENDER
SUBJECT:	24Vdc IN-OUTPUT X1 - X60

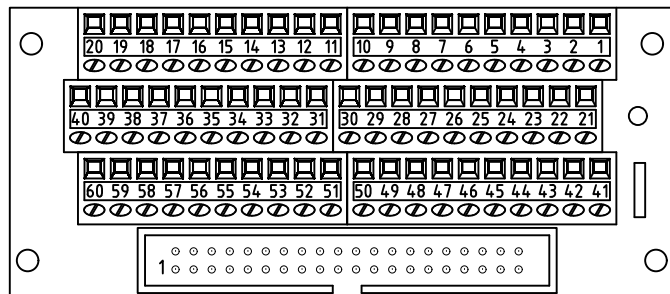
DRAWN BY:	H. Wennemars
DATE:	28-01-2015
PROJECTNO.	FGB MECS
PAGE:	2 OF: 13

DRAWING NUMBER:	FGB NECS H
REVISION	13-10-2023

A4

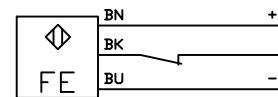


WIRING DIAGRAM INSERTED MODULE ON MAIN PCB



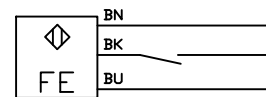
BK=BLACK  
 BU=BLUE  
 BN=BROWN  
 WH=WHITE  
 YE=YELLOW  
 RE=RED  
 GR=GRAY

IFM M30 KI5083  
 PNP 24VDC



Mixer chamber sensor\*

IFM KG5066  
 PNP 24VDC



Hopper level sensor\*

All sensors are NO except Mixer sensor is NC

1= If hopper sensor is connected, remove the resistance at the input.

2= If resistance is set between 15 and 55, pneumatic mix motor is checked. at input 17.

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PROJECT:  
 FERLIN GRAVIMETRIC BLENDER

SUBJECT:  
 24Vdc IN-OUTPUT MIXER CONTROL \*

DRAWN BY: H. Wennemars

DATE: 28-01-2015

PROJECTNO. FGB MECS

PAGE: 2a OF: 13

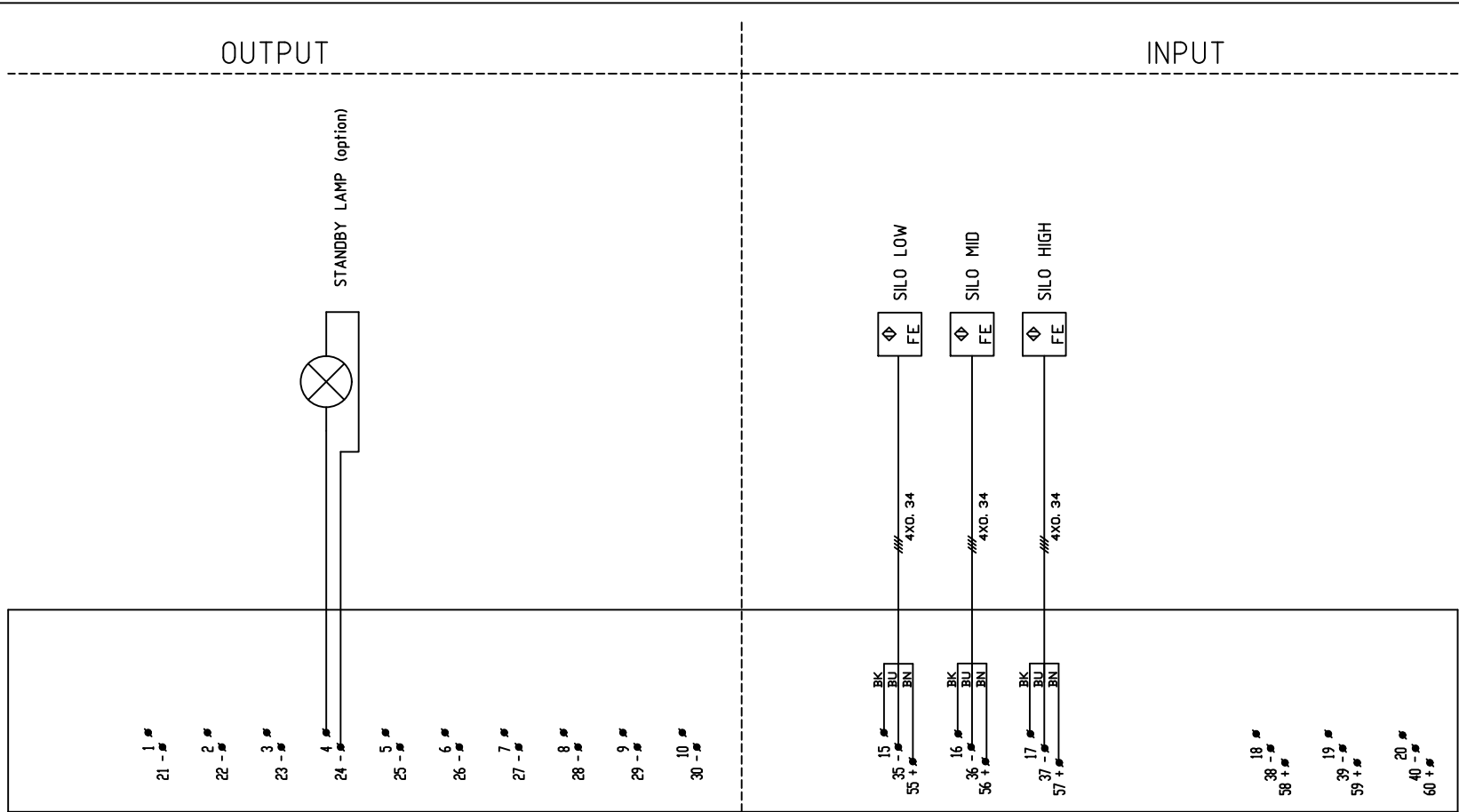
DRAWING NUMBER:

FGB NECS H

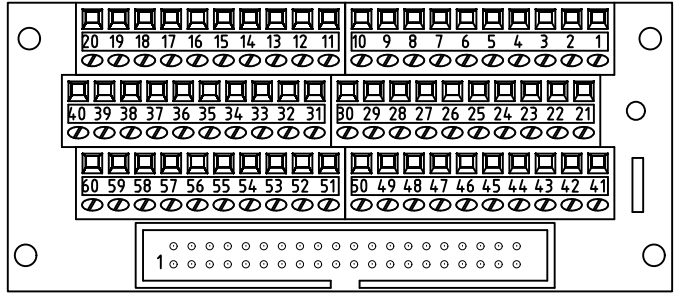
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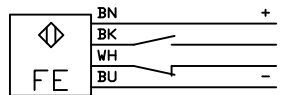


WIRING DIAGRAM EXPANSION BOARD



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

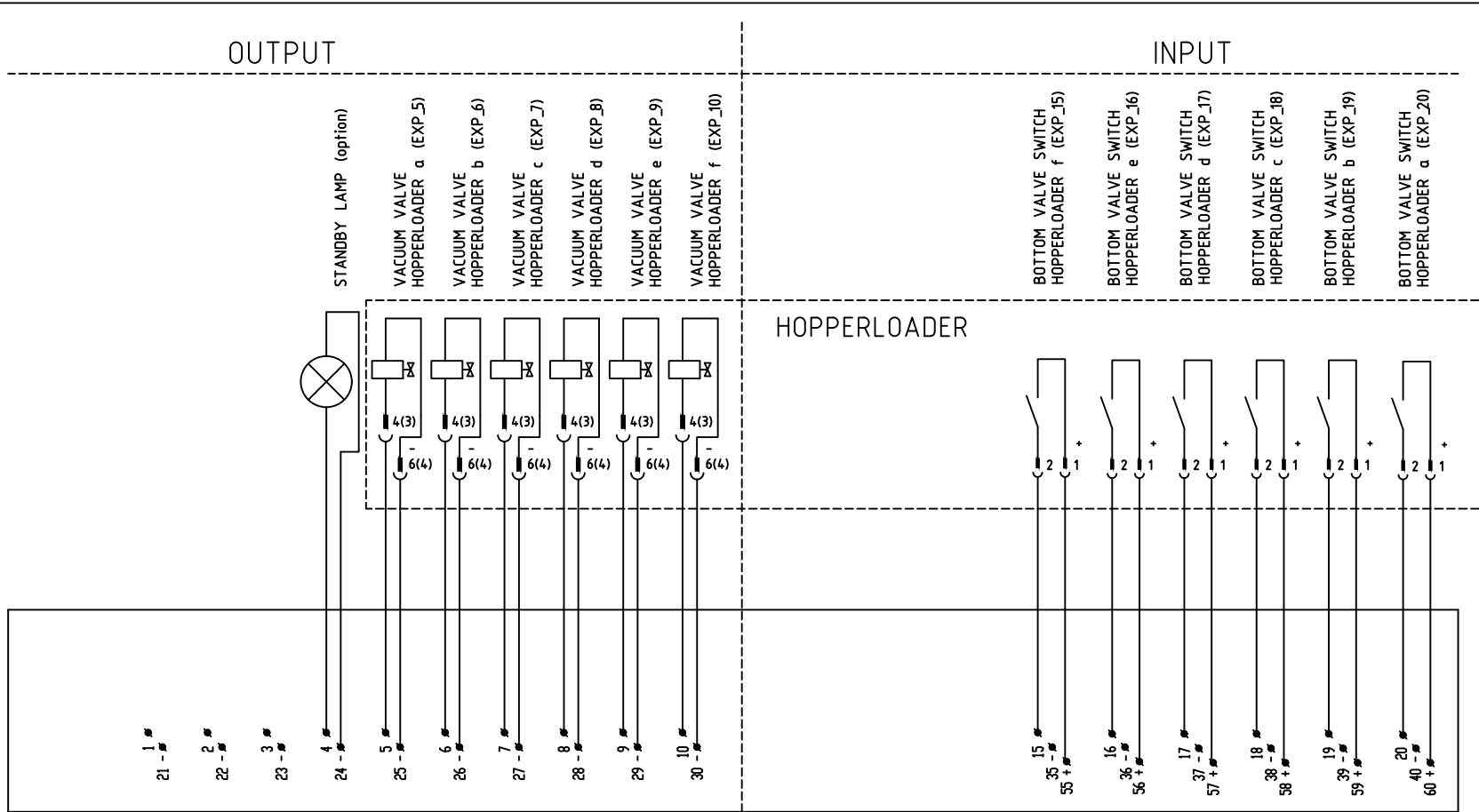
**DRAWN BY:** H. Wennemars  
**DATE:** 28-01-2015

**PROJECTNO.** FGB MECS  
**PAGE:** 3 **OF:** 13

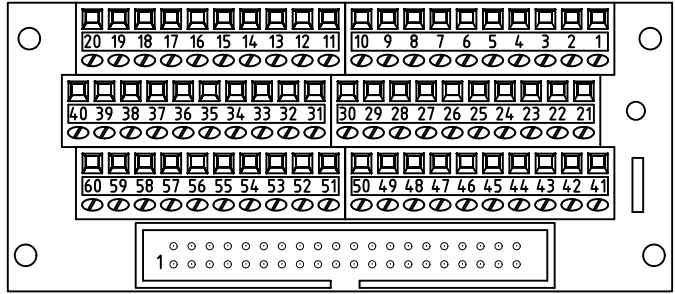
**DRAWING NUMBER:**  
 FGB NECS H

**REVISION**  
 13-10-2023

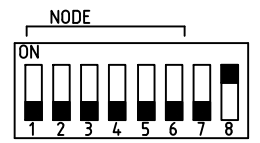
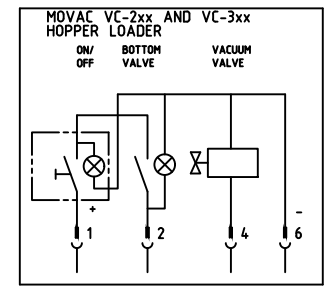
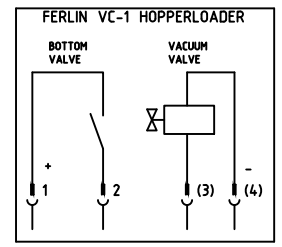
**A4**



WIRING DIAGRAM EXPANSION BOARD



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



For hopper loader function, switch 8 ON. Sensors for stock silo are disabled.

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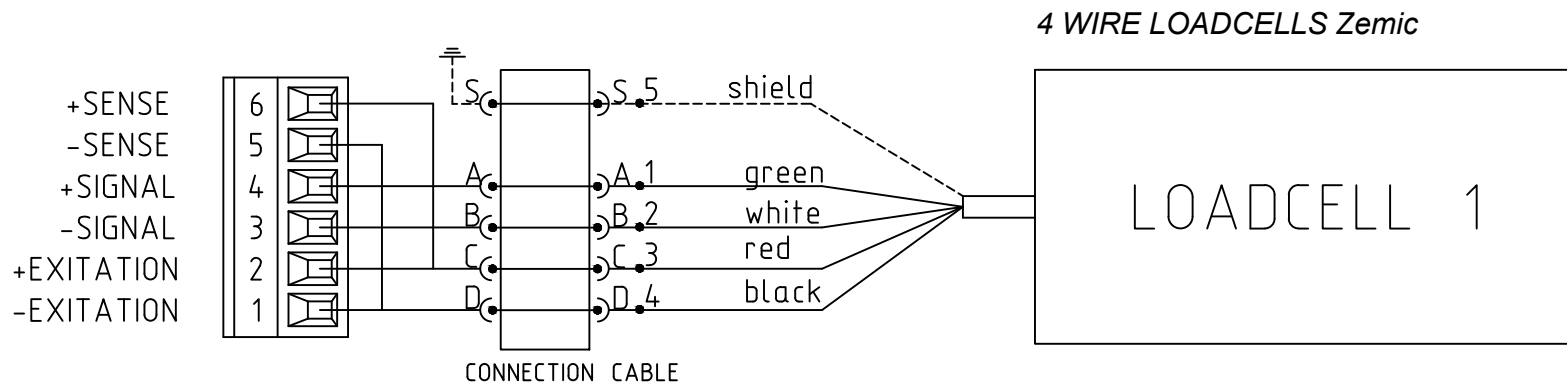
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PROJECT: FERLIN GRAVIMETRIC BLENDER  
 SUBJECT: I/O EXPANSION

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

DRAWING NUMBER: FGB NECS H  
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A4



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**PROJECT:**  
FERLIN GRAVIMETRIC BLENDER

**SUBJECT:**  
LOADCELL CONNECTION

**DRAWN BY:** H. Wennemars

**DATE:** 28-01-2015

**PROJECTNO.** FGB MECS

**PAGE:** 4 **OF:** 13

**DRAWING NUMBER:**

FGB NECS H

**REVISION**

13-10-2023

A4

A	⊗	1	⊗	LOADCELL GREEN
B	⊗	2	⊗	LOADCELL WHITE
C	⊗	3	⊗	LOADCELL RED
D	⊗	4	⊗	LOADCELL BLACK
S	⊗	5	⊗	LOADCELL SHIELD
T	⊗	6	⊗	SAFETY VALVE +
U	⊗	7	⊗	SPARE
H	⊗	8	⊗	VALVE 1 ( gray )
F	⊗	9	⊗	VALVE 2 ( yellow )
J	⊗	10	⊗	VALVE 3 ( pink )
K	⊗	11	⊗	VALVE 4 ( red )
L	⊗	12	⊗	WEIGHTBIN VALVE ( black )
M	⊗	13	⊗	PNEUMATIC MIXER MOTOR ( purple )
N	⊗	14	⊗	MIXER VALVE * ( pink/gray )
G	⊗	15	●	VALVE - ( blue )
	⊗	16	●	VALVE -
	⊗	17	●	VALVE -
	⊗	18	●	VALVE -
	⊗	19	●	VALVE -
b	⊗	20	⊗	DOOR SAFETY SWITCH ( blue/red )
m	⊗	21	⊗	DOOR SAFETY SWITCH ( brown /green )
c	⊗	22	⊗	DOOR SAFETY SWITCH ( white/green )
e	⊗	23	⊗	DOOR SAFETY SWITCH ( pink/brown )
+d	⊗	24	●	SENSOR + ( brown/gray )
	⊗	25	●	SENSOR + x
	⊗	26	●	SENSOR + x
	⊗	27	●	SENSOR + x
-j	⊗	28	●	SENSOR - ( brown ) or ( blue/white )
	⊗	29	●	SENSOR - x
	⊗	30	●	SENSOR - x
	⊗	31	●	SENSOR - x
k	⊗	32	⊗	SENSOR MIXER ( pink/white )
f	⊗	33	⊗	SENSOR HOPPER 1* ( white )
g	⊗	34	⊗	SENSOR HOPPER 2* ( green )
h	⊗	35	⊗	SENSOR HOPPER 3* ( white / yellow )
i	⊗	36	⊗	SENSOR HOPPER 4* ( yellow/brown )
d	⊗	37	⊗	SENSOR MACHINE * ( white/gray )

x  
OPTIONS

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PROJECT:  
FERLIN GRAVIMETRIC BLENDER

SUBJECT:  
CONNECTION BOX

DRAWN BY: H. Wennemars

DATE: 28-01-2015

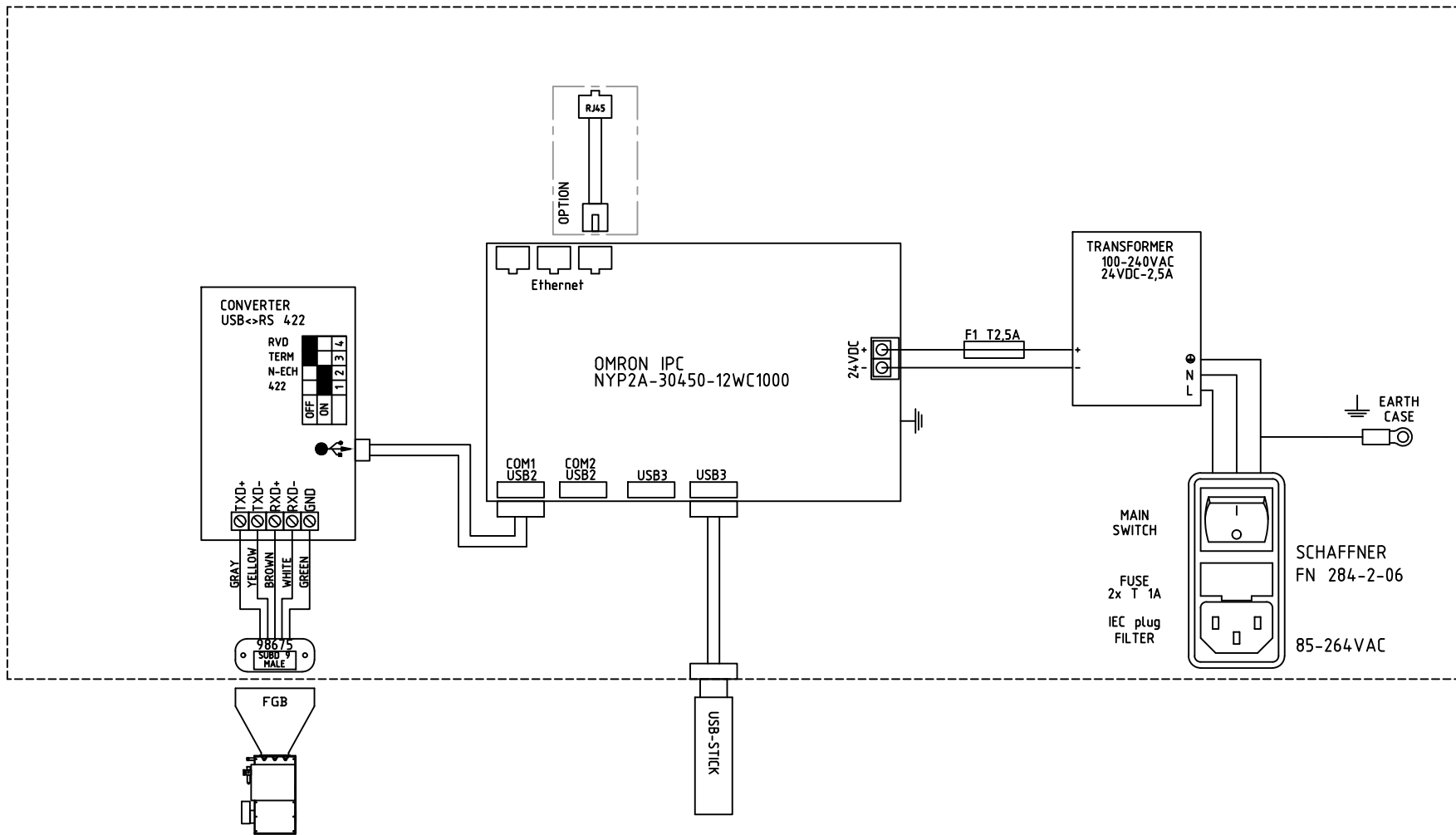
PROJECTNO. FGB MECS

PAGE: 5 OF: 13

DRAWING NUMBER:  
FGB NECS H

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13-10-2023

A4



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**PROJECT:**  
FERLIN GRAVIMETRIC BLENDER

**SUBJECT:**  
IPC USER INTERFACE

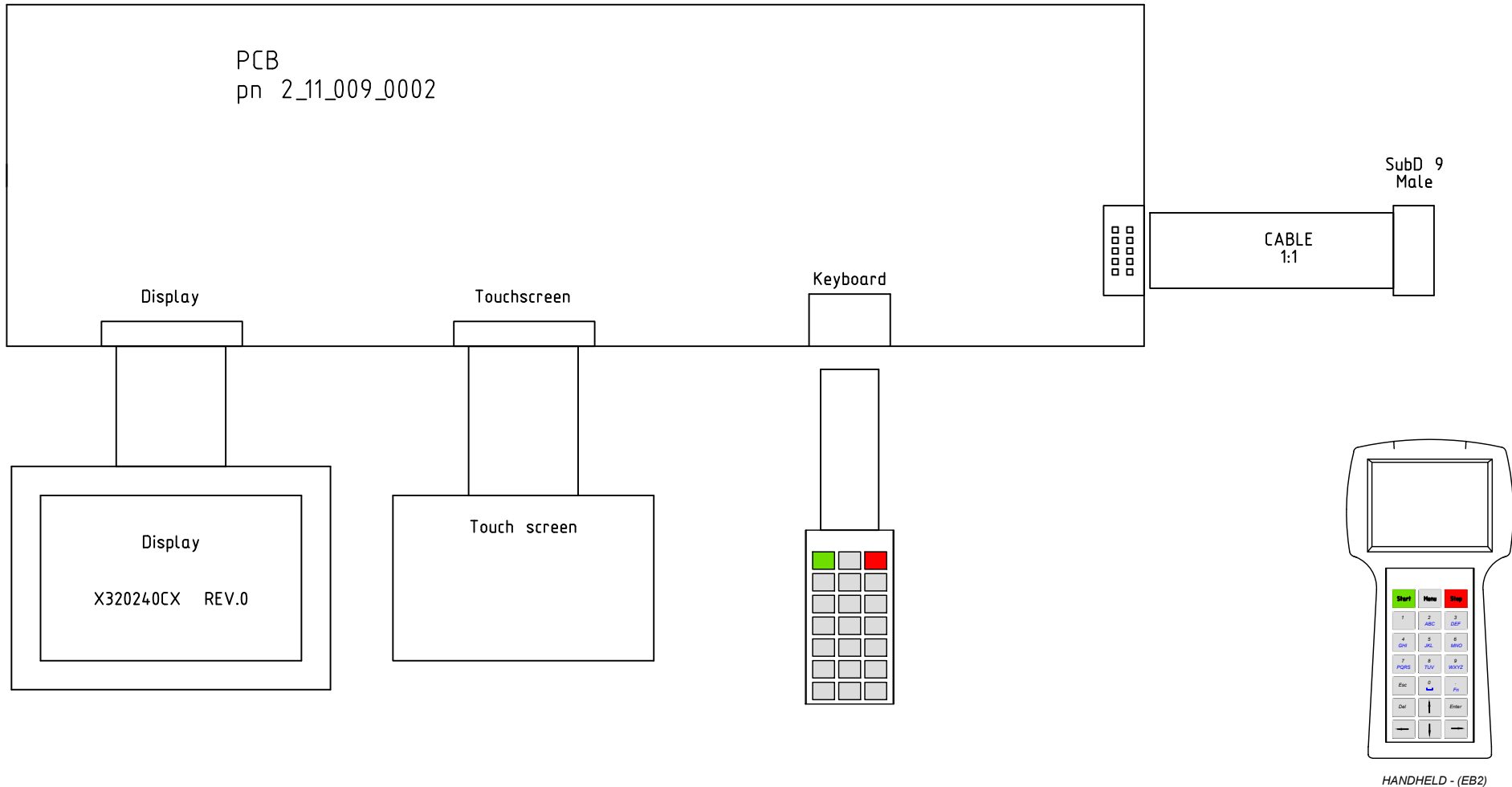
**DRAWN BY:** H. Wennemars  
**DATE:** 28-01-2015  
**PROJECTNO.** FGB MECS  
**PAGE:** 6 **OF:** 13

**DRAWING NUMBER:**  
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**PROJECT:**  
FERLIN GRAVIMETRIC BLENDER

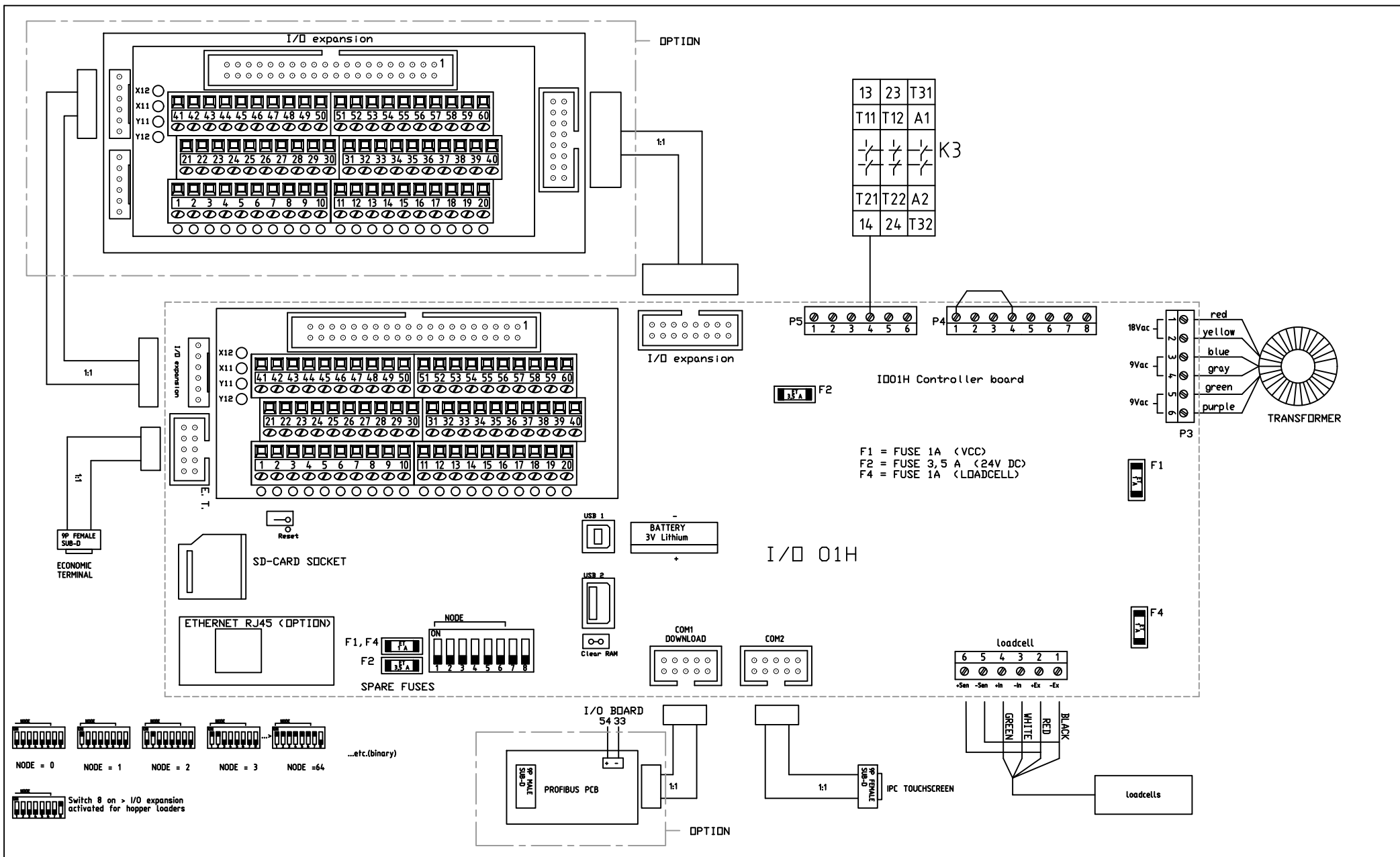
**SUBJECT:**  
HANDHELD TERMINAL

**DRAWN BY:** H. Wennemars  
**DATE:** 28-01-2015  
**PROJECTNO.** FGB MECS  
**PAGE:** 7 **OF:** 13

**DRAWING NUMBER:**  
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13-10-2023

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**PROJECT:**  
FERLIN GRAVIMETRIC BLENDER

**SUBJECT:**  
I/O 01H CONNECTIONS

**DRAWN BY:** H. Wennemars

**DATE:** 28-01-2015

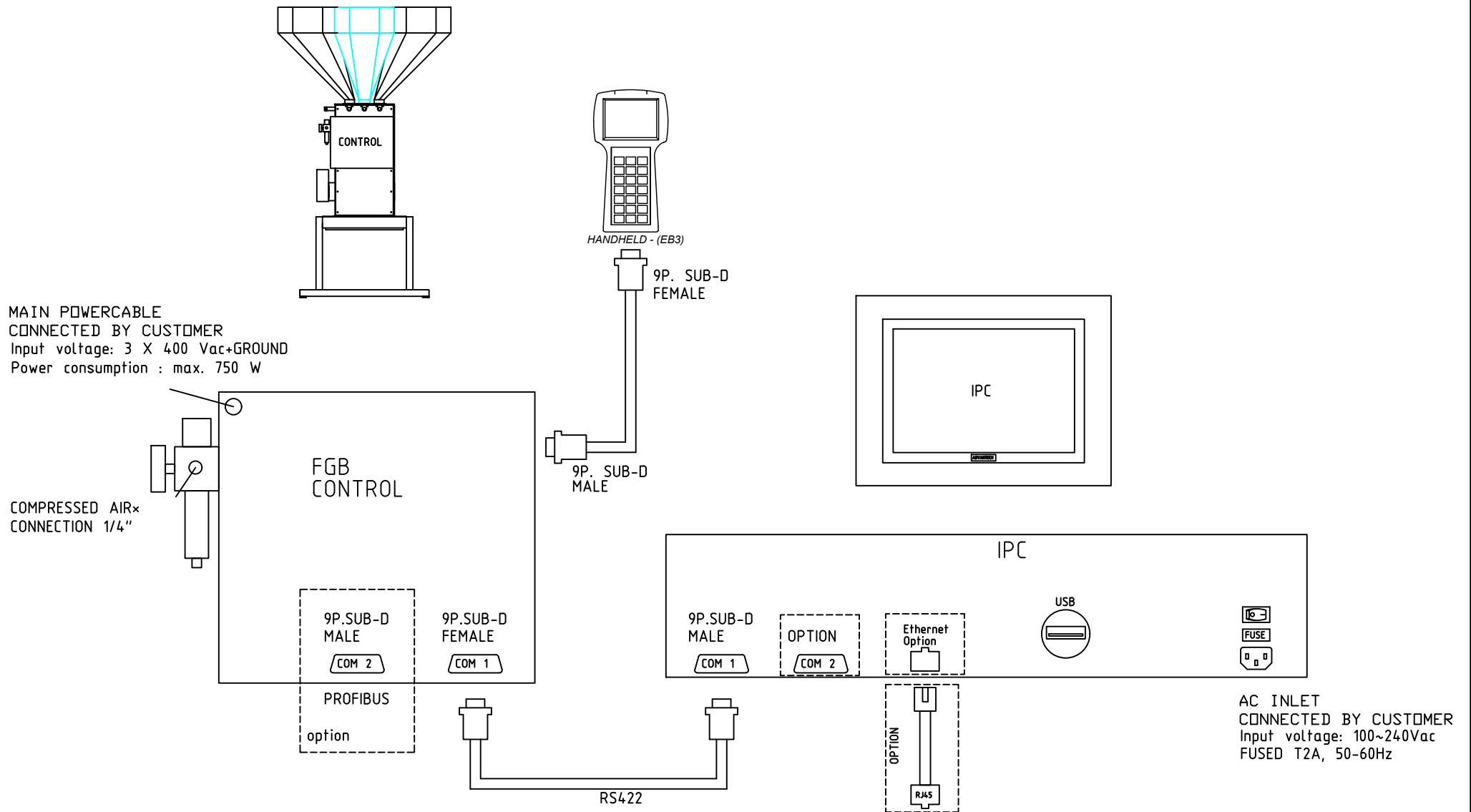
**PROJECTNO.** FGB MECS

**PAGE:** 8 **OF:** 13

**DRAWING NUMBER:**  
FGB NECS H

**REVISION**  
13-10-2023

**A4**



× COMPRESSED AIR SUPPLY : 6 BAR  
COMPRESSED AIR CONSUMPTION : 200 NL/h

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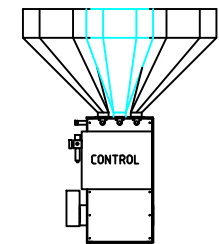
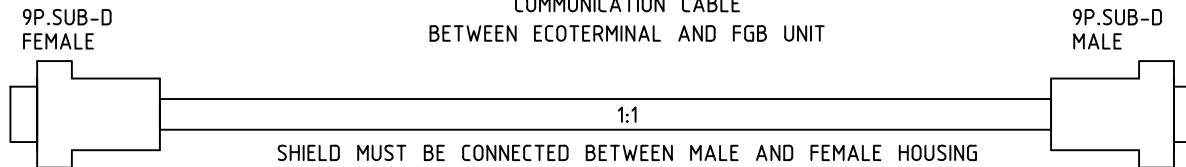
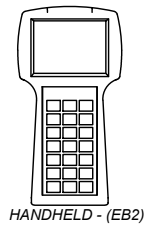
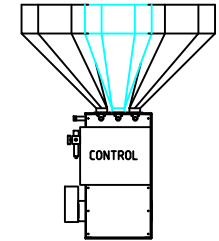
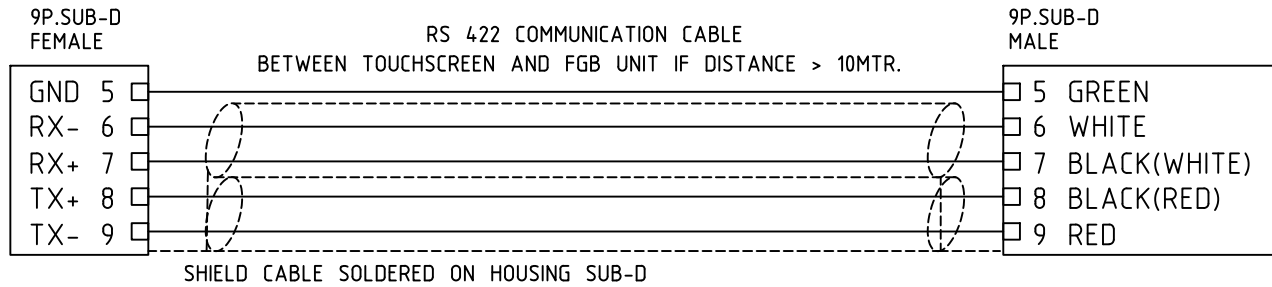
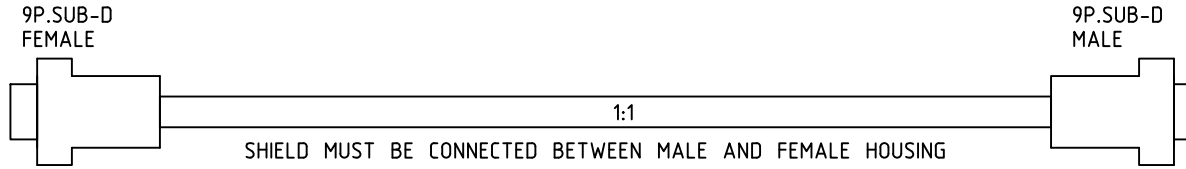
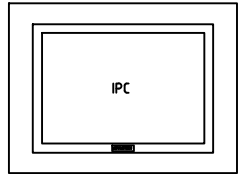
**PROJECT:**  
FERLIN GRAVIMETRIC BLENDER

**SUBJECT:**  
IPC FGB CONNECTIONS

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

**DRAWING NUMBER:**  
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13-10-2023

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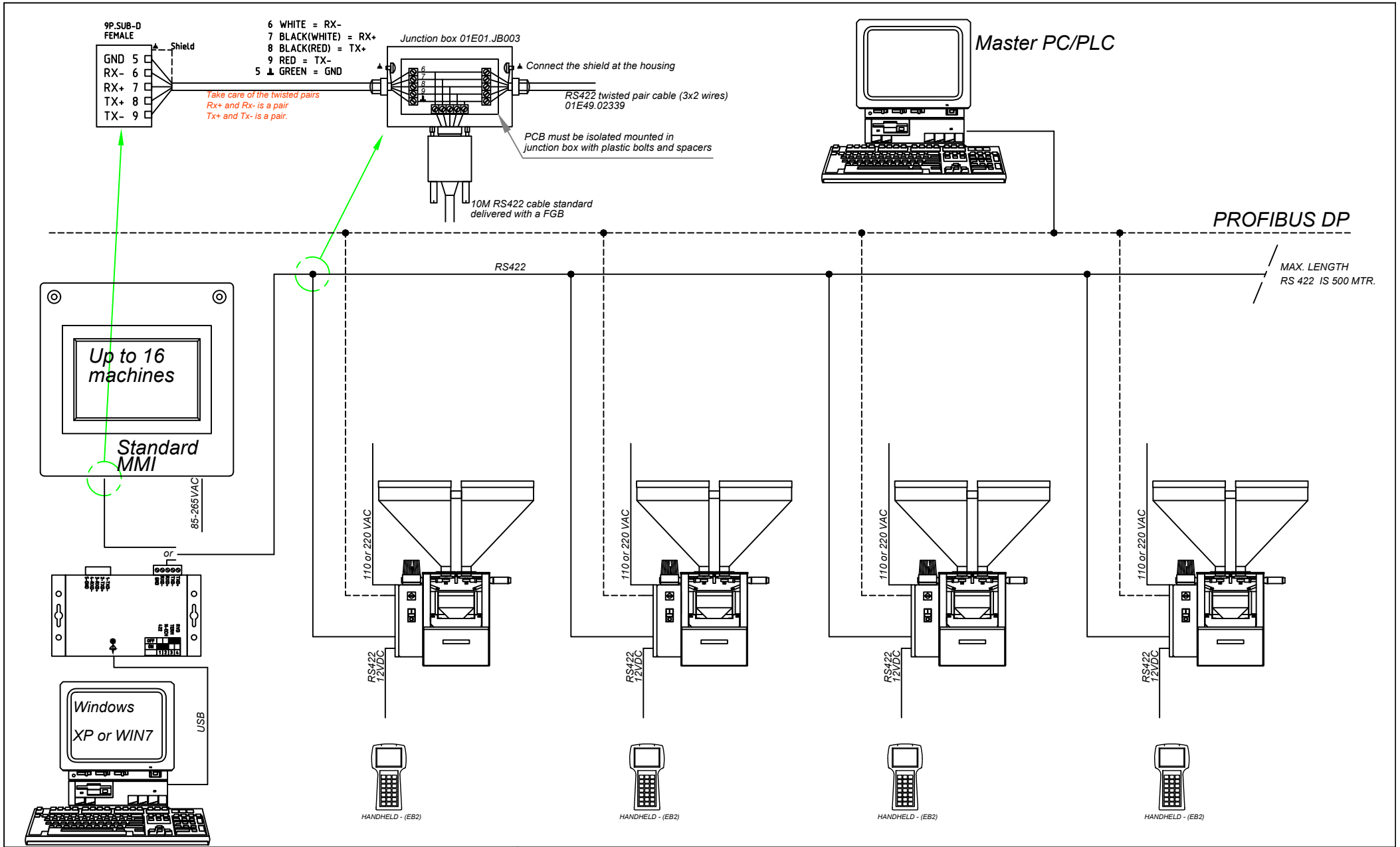
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PROJECT:  
FERLIN GRAVIMETRIC BLENDER  
SUBJECT:  
COMMUNICATION CABLE

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

DRAWING NUMBER:  
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13-10-2023

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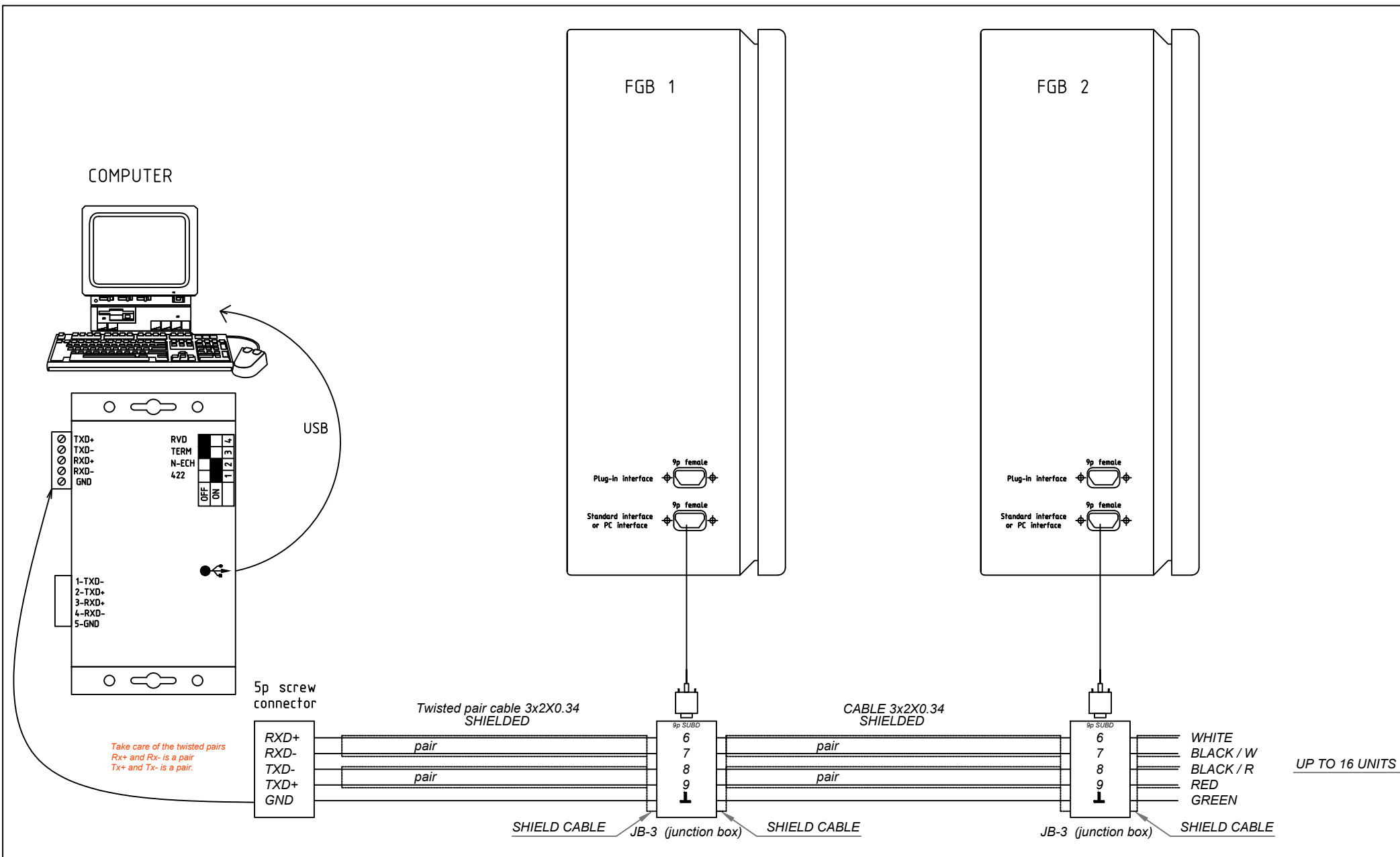
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PROJECT:  
FERLIN GRAVIMETRIC BLENDER  
SUBJECT:  
LINKING

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

DRAWING NUMBER:  
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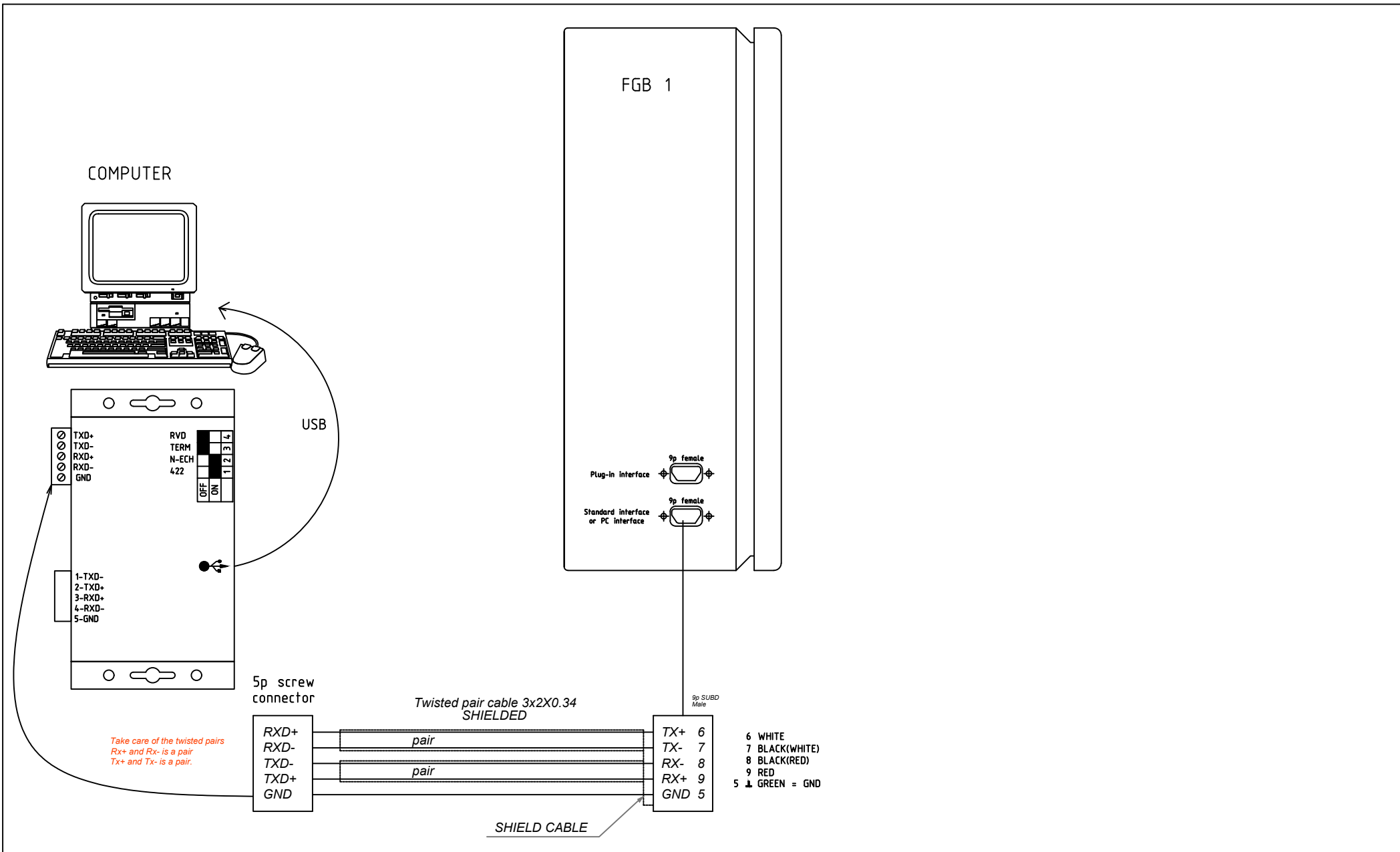
PROJECT:  
FERLIN GRAVIMETRIC BLENDER

SUBJECT:  
MULTI DROP IO 01 H USB<>RS422

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

DRAWING NUMBER:  
FGB NECS H  
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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 MECS  
**PAGE:** 13 **OF:** 13

**DRAWING NUMBER:**  
FGB NECS H  
**REVISION**  
13-10-2023

A4