

Ferlin

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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

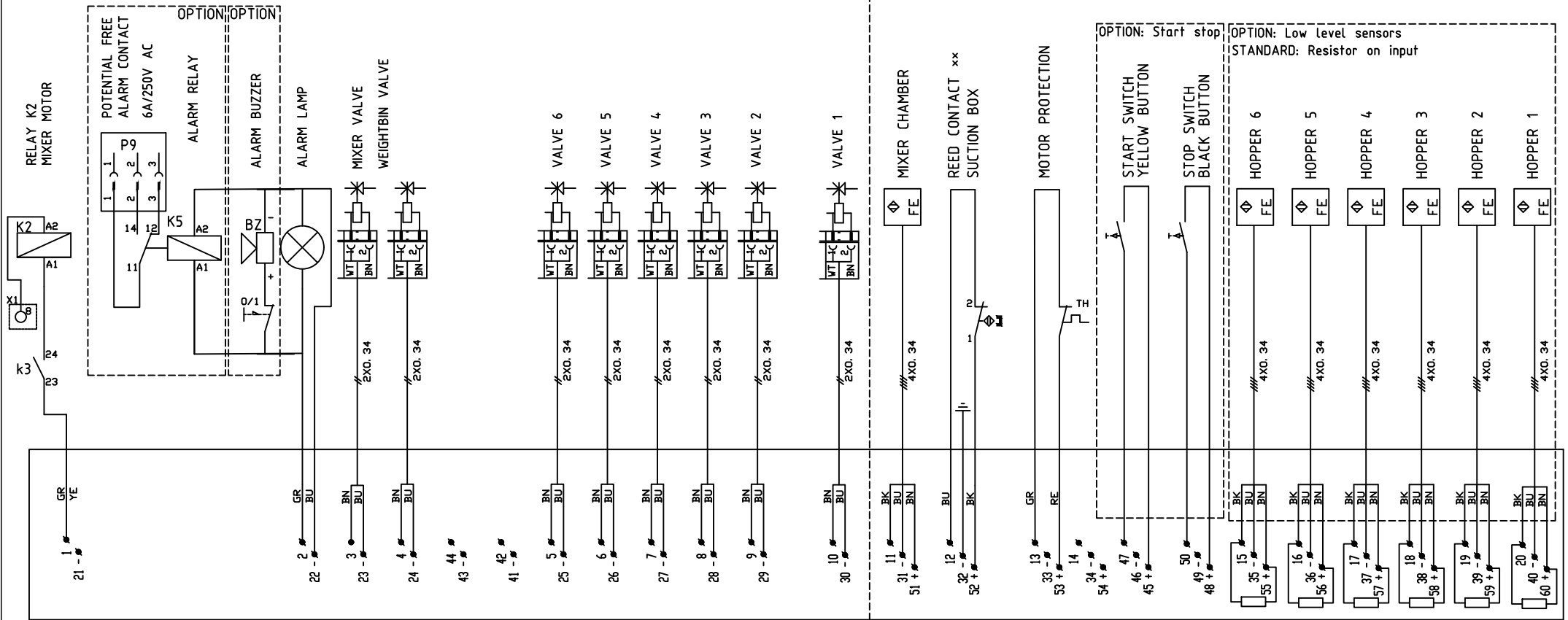
DRAWING NUMBER:
FGB 10-25 Kg H

REVISION
12-12-2023

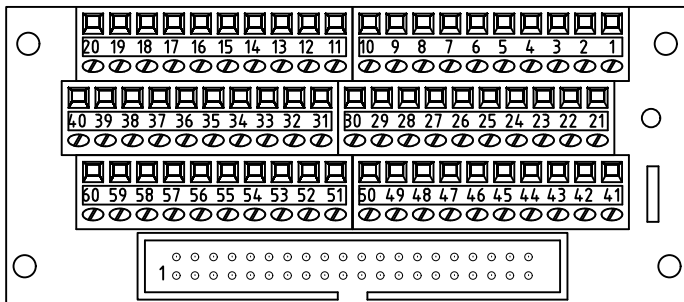
A4

24Vdc OUTPUT

24Vdc INPUT

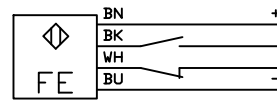


WIRING DIAGRAM INSERTED MODULE ON MAIN PCB



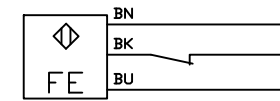
BK=BLACK
 BU=BLUE
 BN=BROWN
 WH=WHITE
 YE=YELLOW
 RE=RED
 GR=GRAY
 GN=GREEN

Rechner KAS 80
 PNP 24VDC



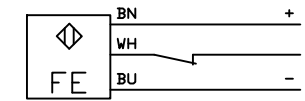
mixer or hopper sensor*

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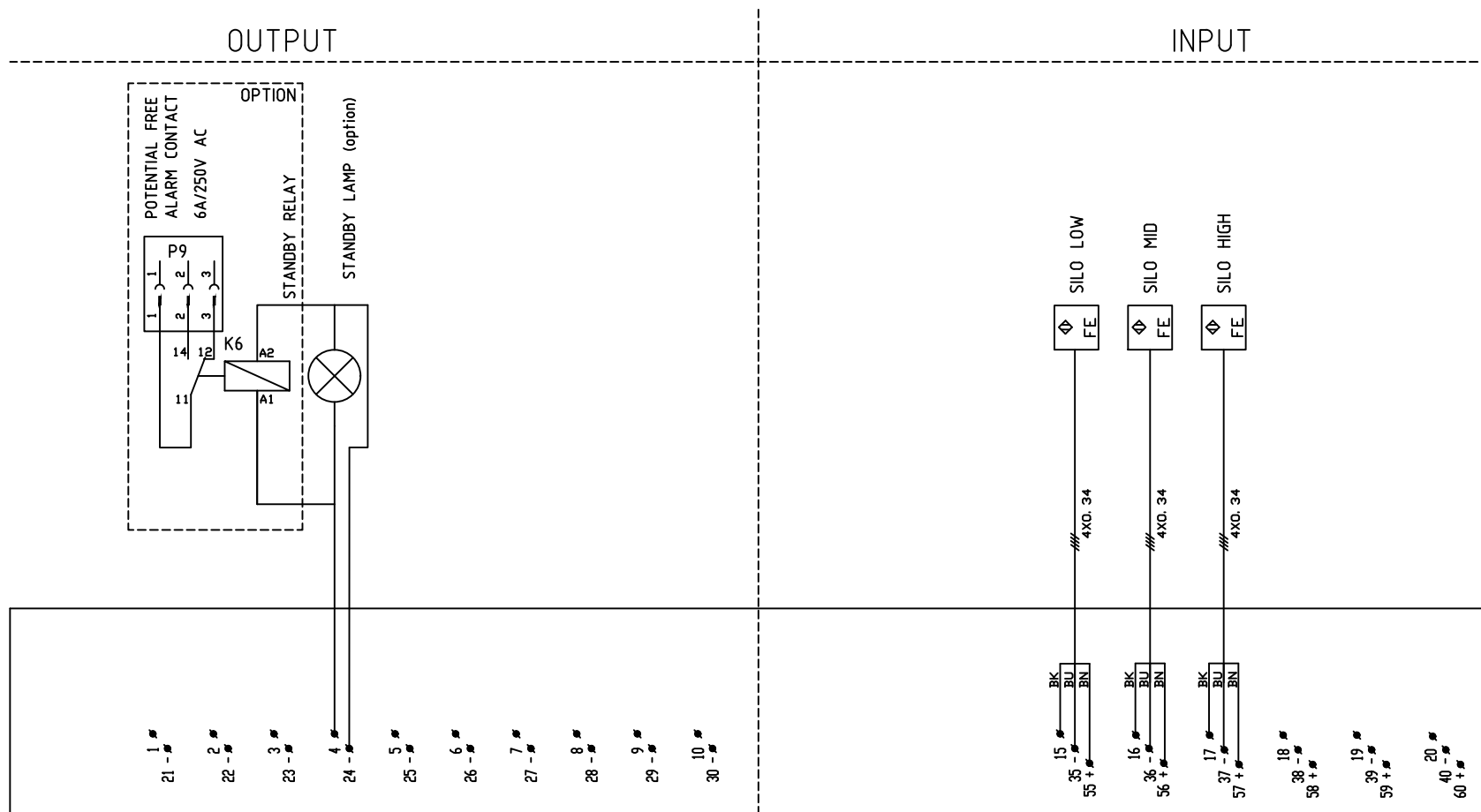
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PROJECT:
 FERLIN GRAVIMETRIC BLENDER
 SUBJECT:
 24Vdc IN-OUTPUT X1 - X60

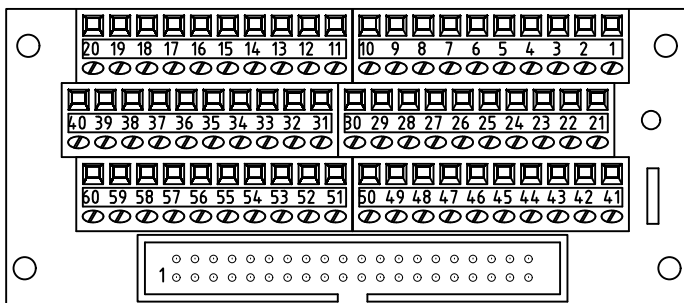
DRAWN BY: H. Wennemars
 DATE: 28-01-2015
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DRAWING NUMBER:
 FGB 10-25 Kg H
 REVISION
 12-12-2023

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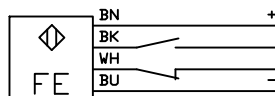


WIRING DIAGRAM EXPANSION BOARD



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

Rechner KAS 80
 PNP 24VDC

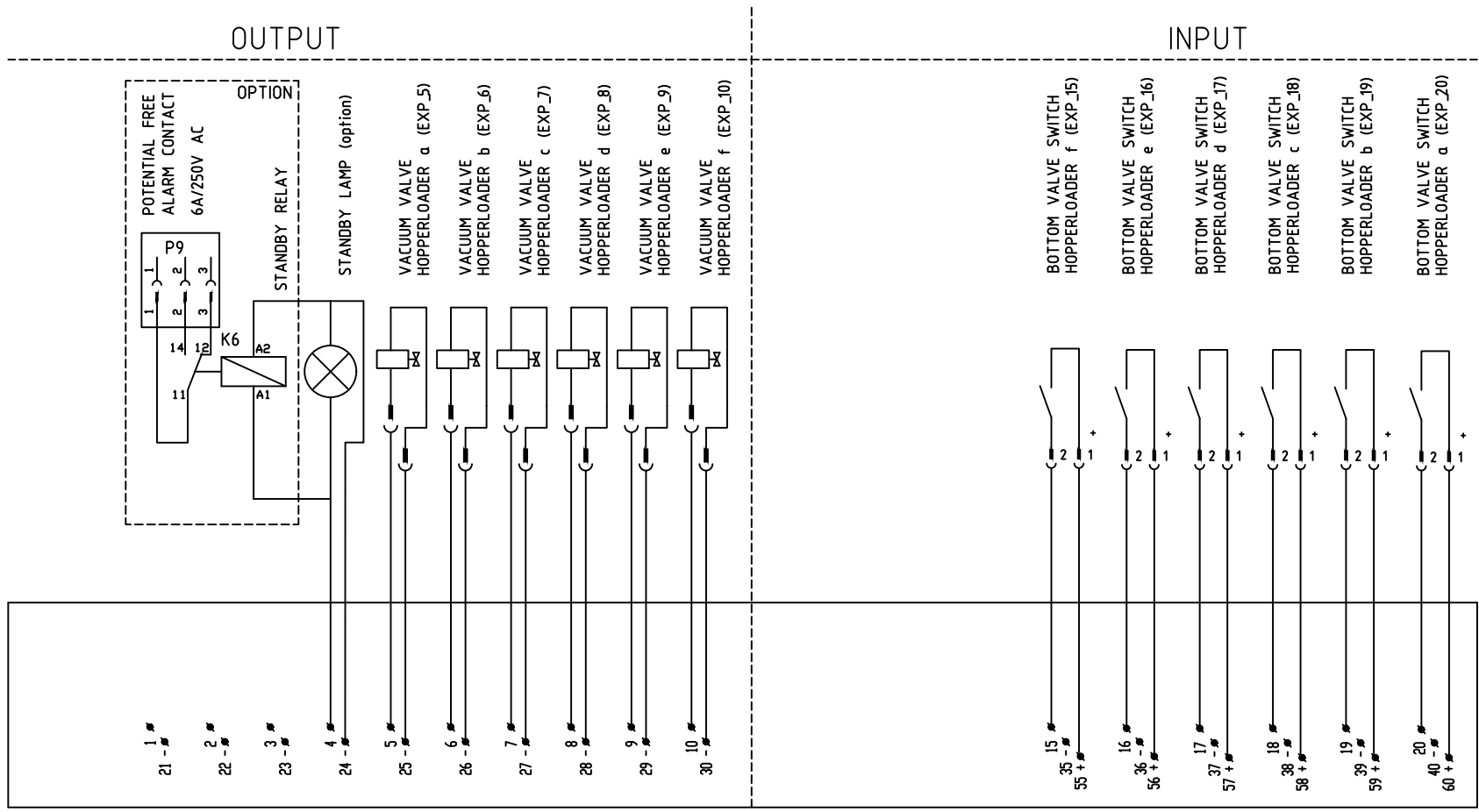


hopper or silo sensor connect as N.O.

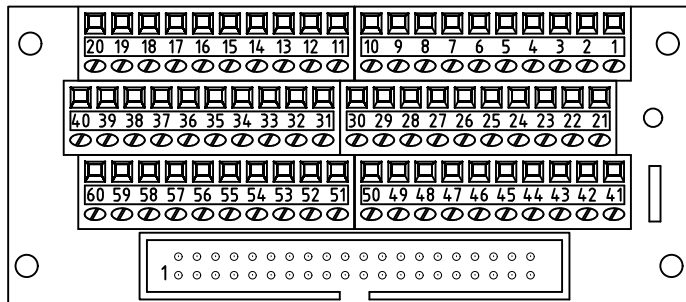
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PROJECT:
 FERLIN GRAVIMETRIC BLENDER
 SUBJECT:
 I/O EXPANSION

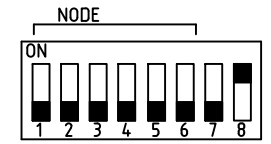
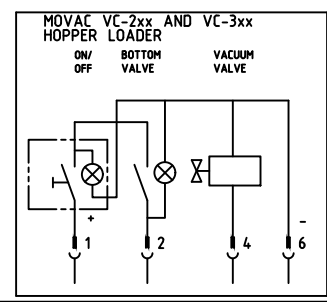
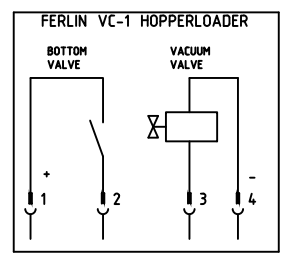
DRAWN BY: H. Wennemars		DRAWING NUMBER: FGB 10-25 Kg H	
DATE: 28-01-2015		REVISION	
PROJECTNO. FGB 10-25		12-12-2023	
PAGE: 3	OF: 13	A4	



WIRING DIAGRAM EXPANSION BOARD



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

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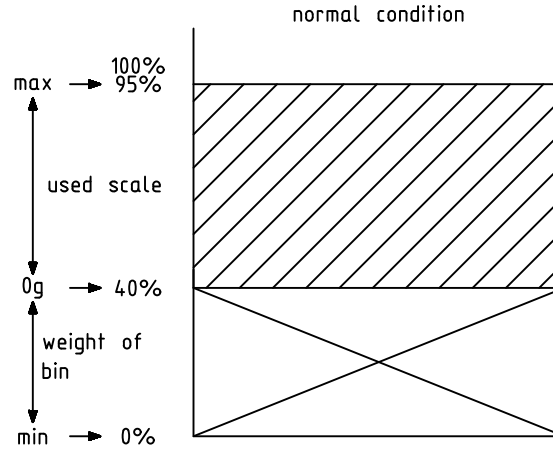
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PROJECT: FERLIN GRAVIMETRIC BLENDER
 SUBJECT: I/O EXPANSION

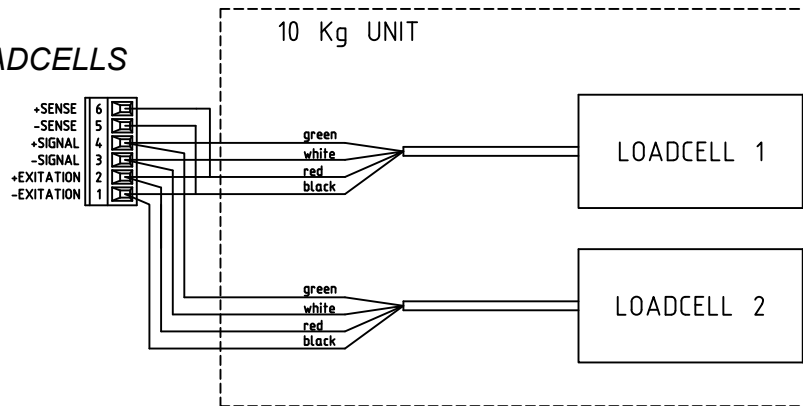
DRAWN BY: H. Wennemars
 DATE: 28-01-2015
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 PAGE: 3a OF: 13

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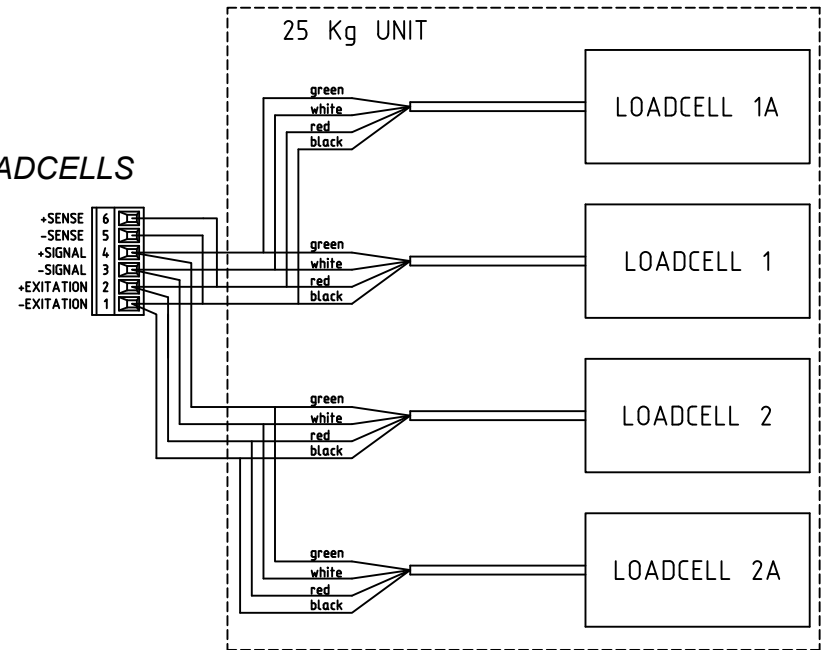
LOADCELL SCALE



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

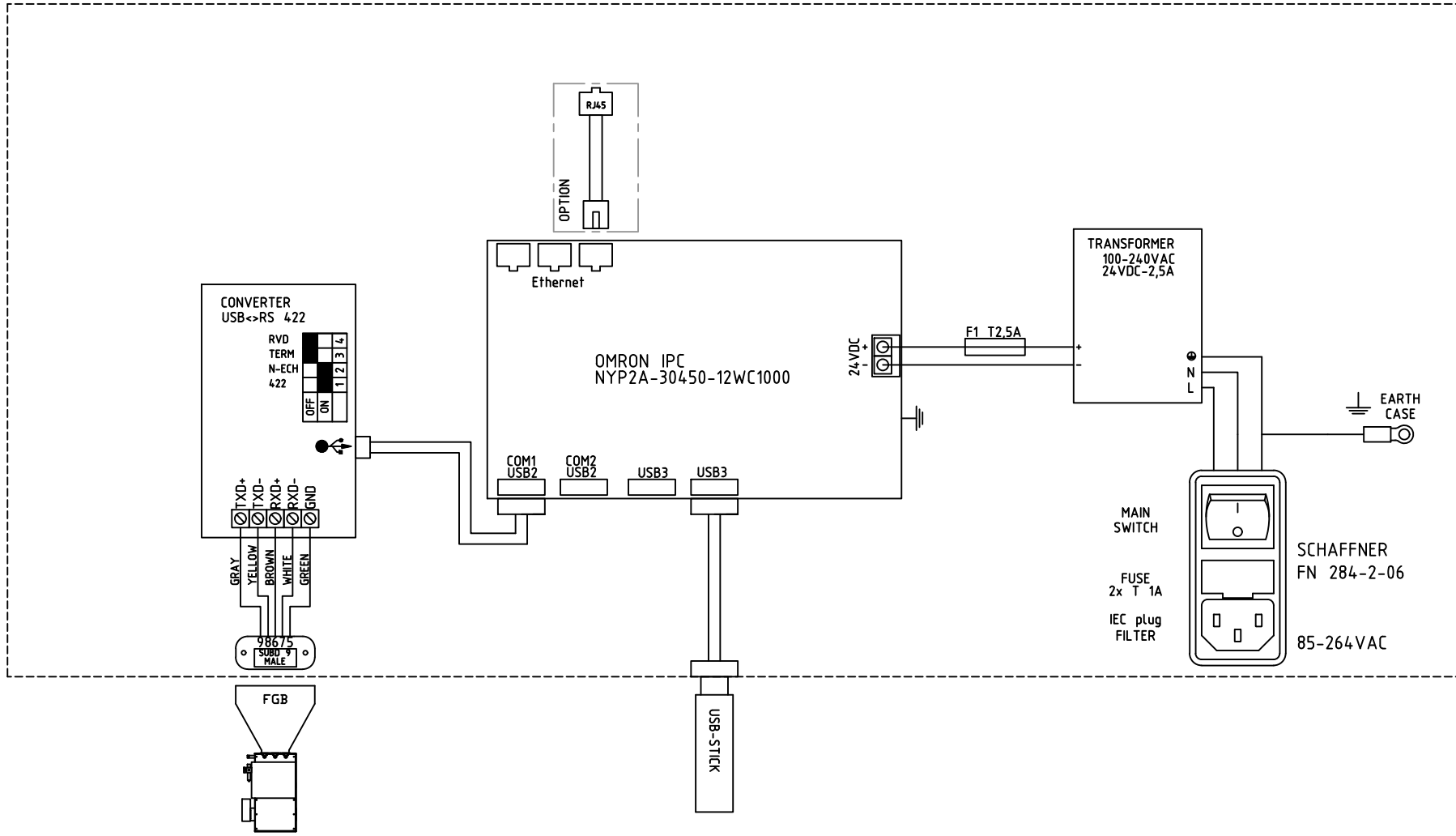
DRAWING NUMBER:

FGB 10-25 Kg H

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12-12-2023

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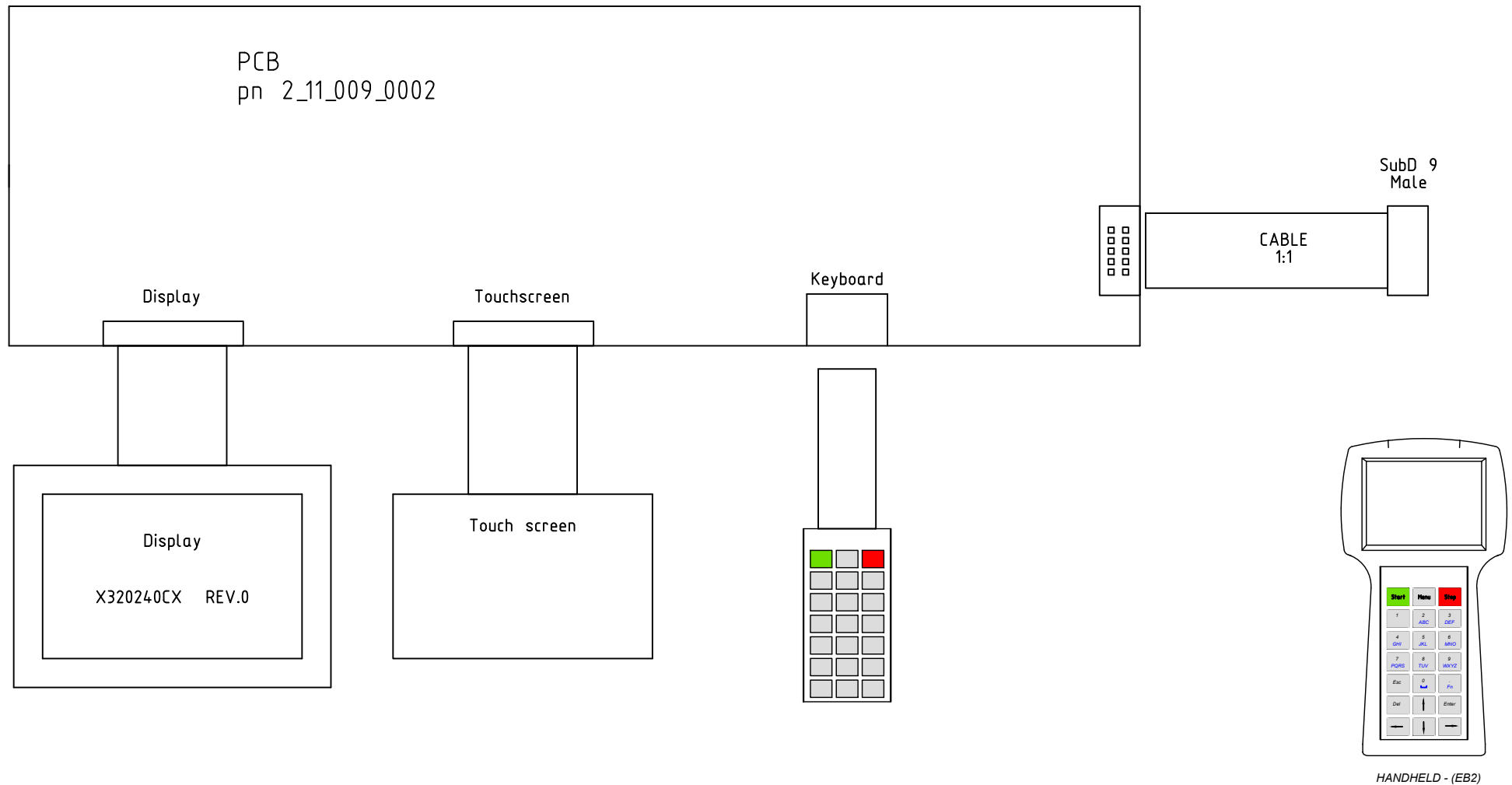
SUBJECT:
IPC USER INTERFACE

DRAWN BY: H. Wennemars
DATE: 28-01-2015
PROJECTNO. FGB 10-25
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DRAWING NUMBER:
FGB 10-25 Kg H

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12-12-2023

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PROJECT:
FERLIN GRAVIMETRIC BLENDER

SUBJECT:
HANDHELD TERMINAL

DRAWN BY: H. Wennemars

DATE: 28-01-2015

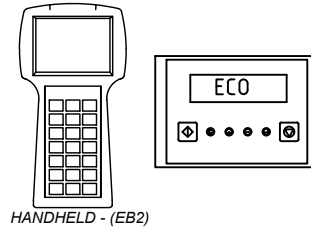
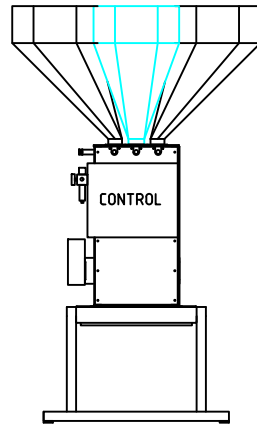
PROJECTNO. FGB 10-25

PAGE: 6 **OF:** 13

DRAWING NUMBER:
FGB 10-25 Kg H

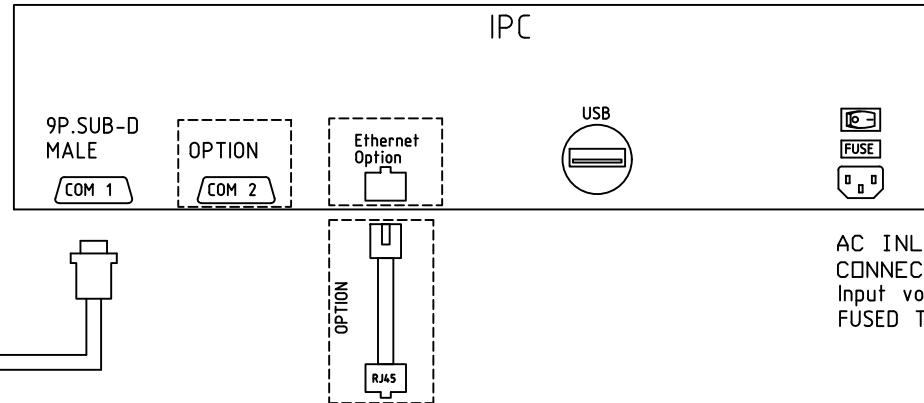
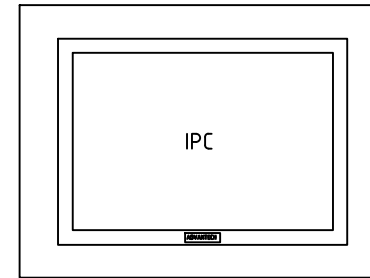
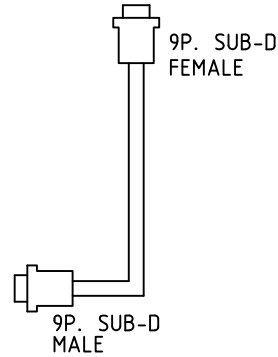
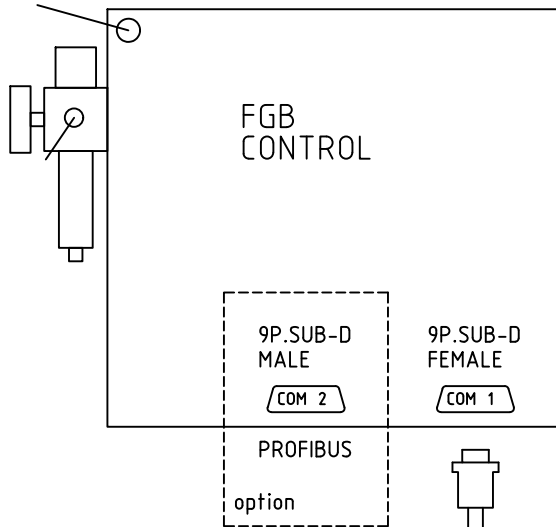
REVISION
12-12-2023

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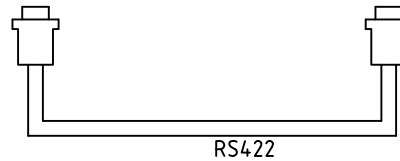


MAIN POWERCABLE
CONNECTED BY CUSTOMER
Input voltage: 3 X 400 Vac+GROUND
Power consumption : max. 750 W

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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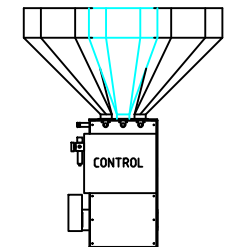
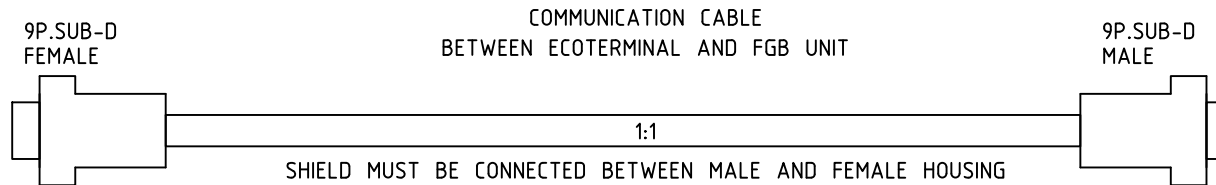
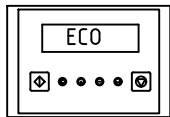
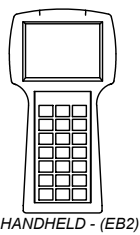
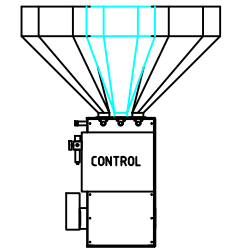
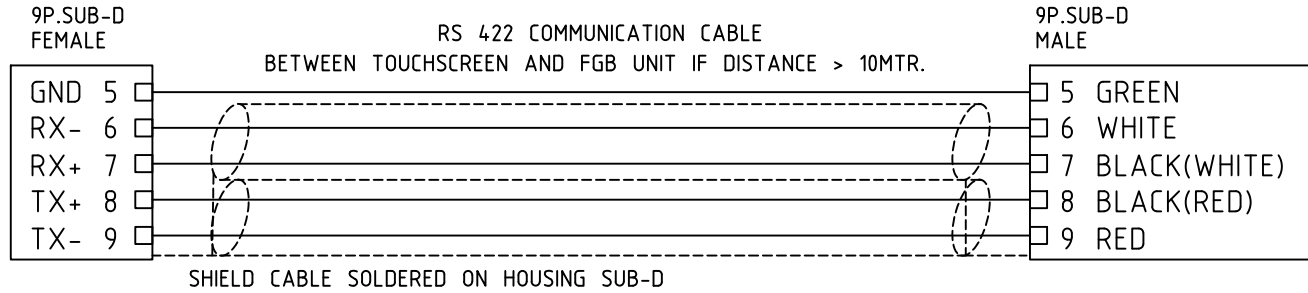
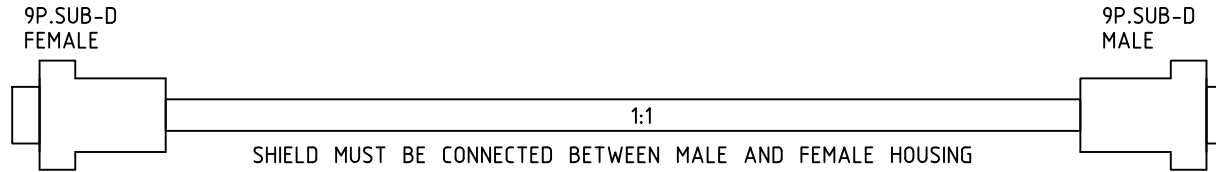
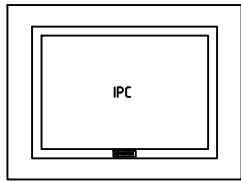
Rudolf Dieselstraat 15A
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PROJECT:
FERLIN GRAVIMETRIC BLENDER
SUBJECT:
IPC FGB CONNECTIONS

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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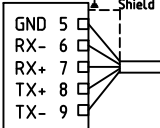
PROJECT: FERLIN GRAVIMETRIC BLENDER
SUBJECT: COMMUNICATION CABLE

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

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

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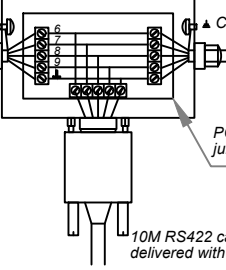
9P-SUB-D FEMALE



- 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

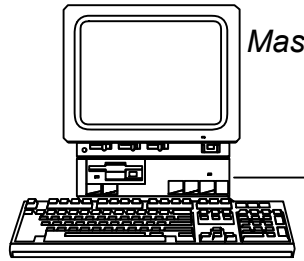


Connect the shield at the housing

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

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

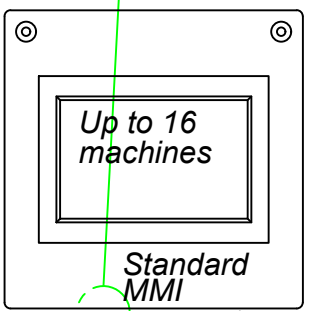
10M RS422 cable standard delivered with a FGB



Master PC/PLC

PROFIBUS DP

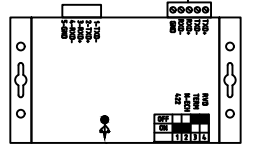
MAX. LENGTH RS 422 IS 500 MTR.



Up to 16 machines

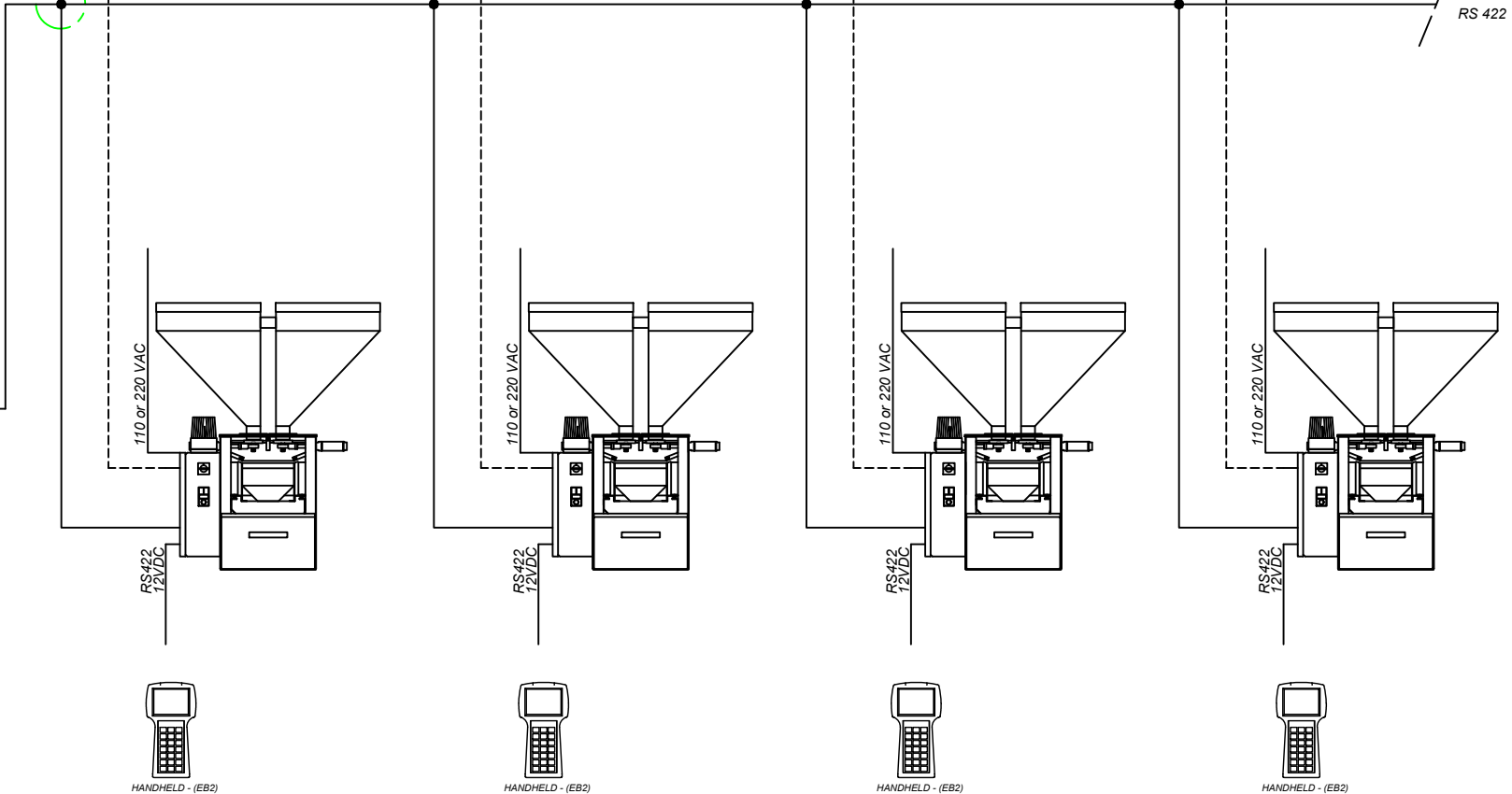
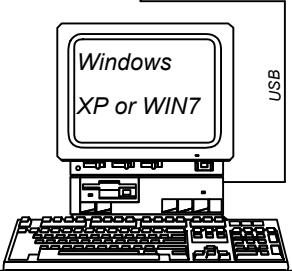
Standard MMI

85-265VAC



Windows XP or WIN7

USB



HANDHELD - (EB2)

HANDHELD - (EB2)

HANDHELD - (EB2)

HANDHELD - (EB2)

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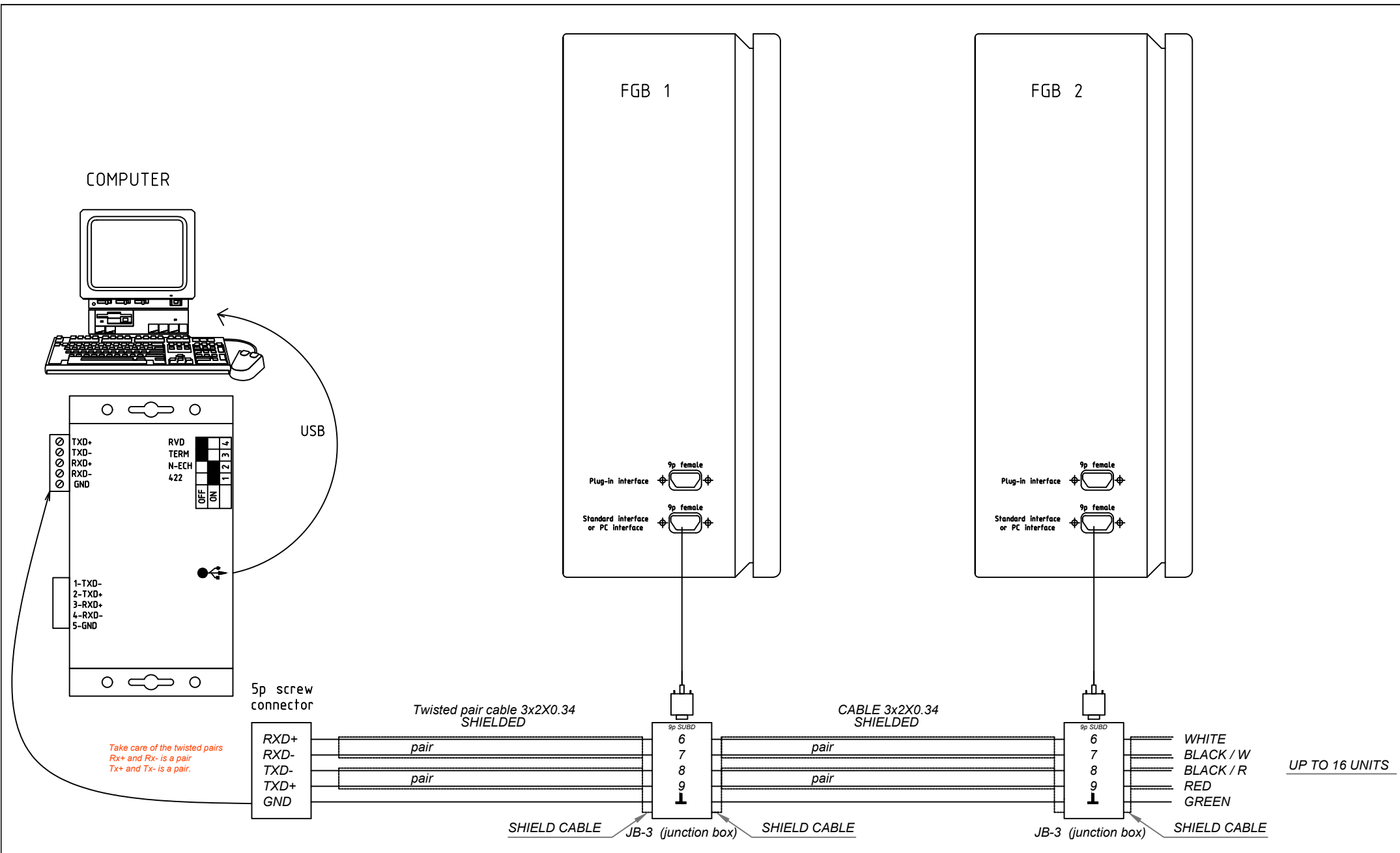
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PROJECT:	FERLIN GRAVIMETRIC BLENDER
SUBJECT:	LINKING

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

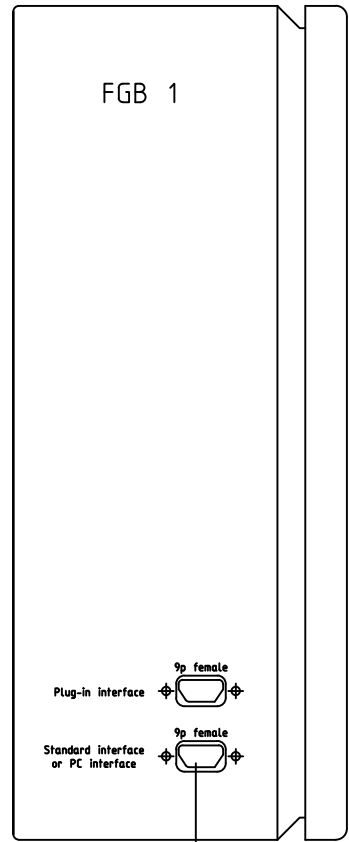
SUBJECT:
MULTI DROP IO 01 H USB<->RS422

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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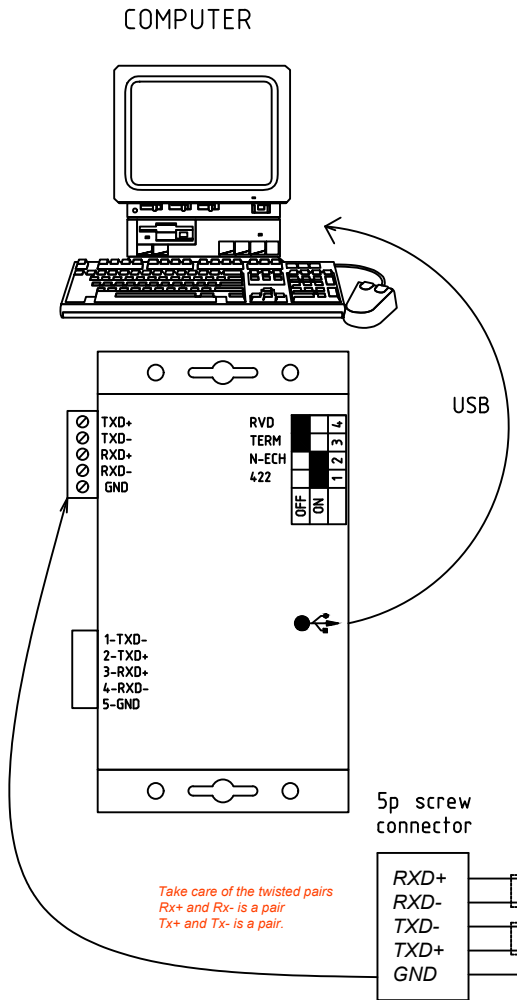
FGB 1

9p female
Plug-in interface

9p female
Standard interface or PC interface

9p SUBD
Male

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



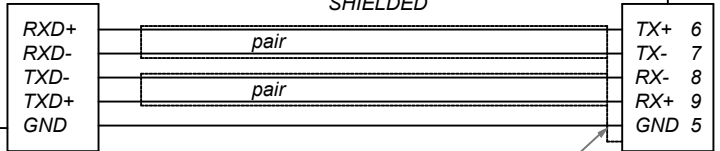
COMPUTER

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

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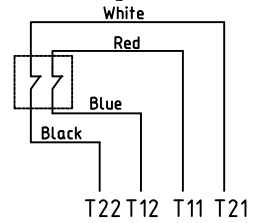
PROJECT:	FERLIN GRAVIMETRIC BLENDER
SUBJECT:	SINGLE POINT IO 01 H USB<->RS422

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

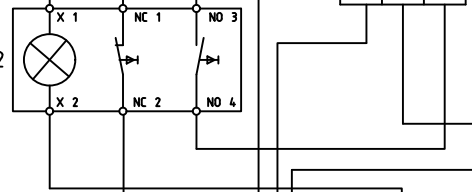
DRAWING NUMBER:	FGB 10-25 Kg H
REVISION	12-12-2023

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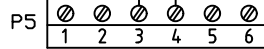
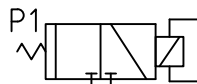
Safety reed contact detecting door



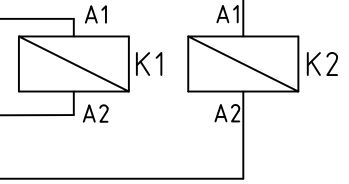
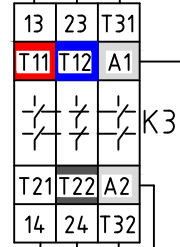
CONTROL VOLTAGE SWITCH S2



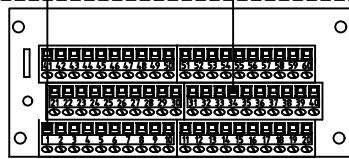
P1
Pneumatic safety valve



24Vdc
Input control voltage

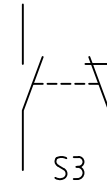


No. 1 Blue
No. 34 white
Common 0 Vdc



In-Output connector
ID01H Controller board

Safety switch + actuator for mixing chamber



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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:

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