

Ferlin

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

PROJECT: FERLIN GRAVIMETRIC BLENDER
 SUBJECT: MAIN DIAGRAM 3 PHASE 400V + N

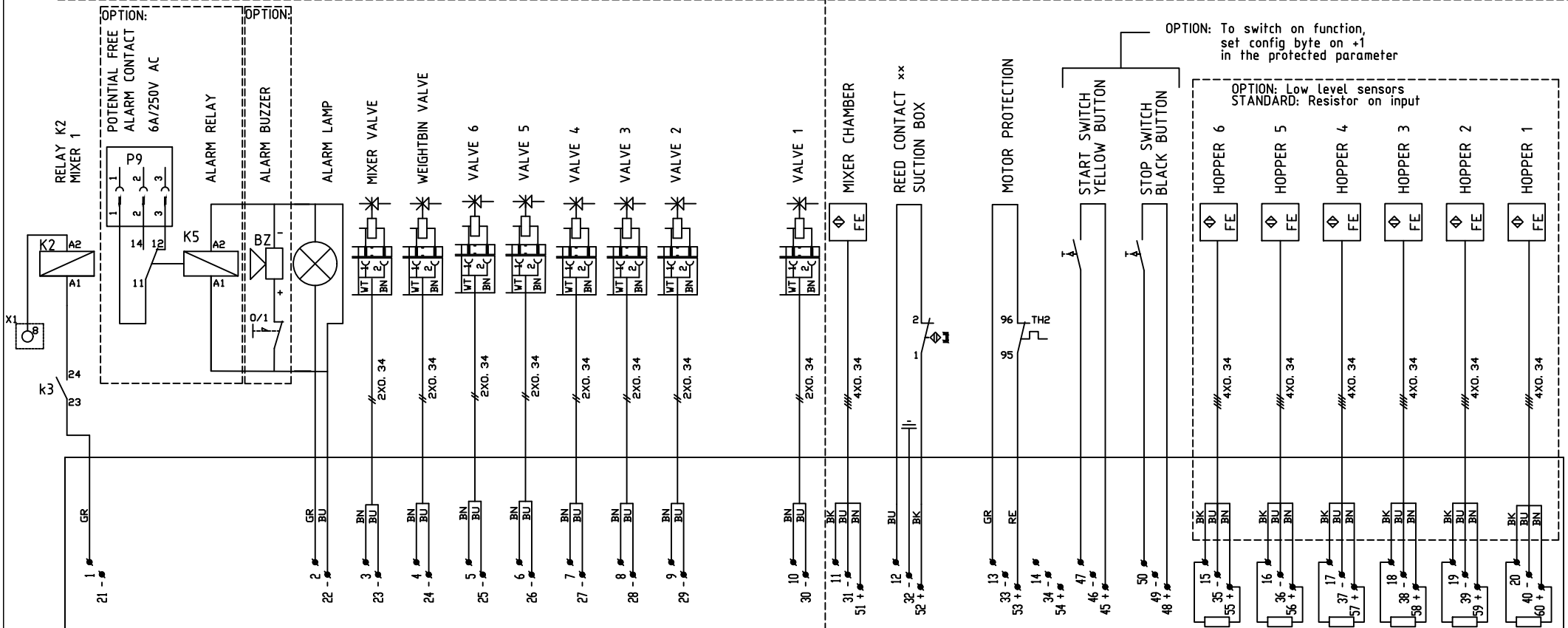
DRAWN BY: H. Wennemars
 DATE: 28-01-2015
 PROJECTNO. FGB 2-5
 PAGE: 1 OF: 13

DRAWING NUMBER:
 FGB 2-5 Kg H
 REVISION
 12-12-2023

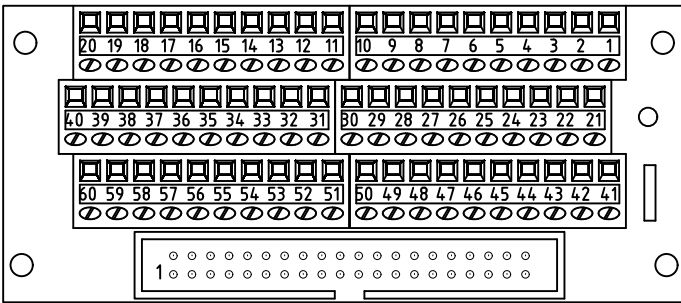
A4

24Vdc OUTPUT

24Vdc INPUT

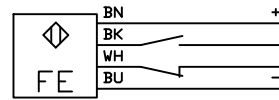


WIRING DIAGRAM INSERTED MODULE ON MAIN PCB



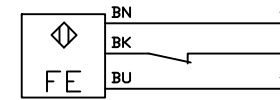
BK=BLACK
 BU=BLUE
 BN=BROWN
 WH=WHITE
 YE=YELLOW
 RE=RED
 GR=GRAY

Rechner KAS 80
 PNP 24VDC



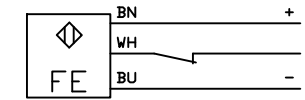
mixer or hopper sensor*

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.

Ferlin

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

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

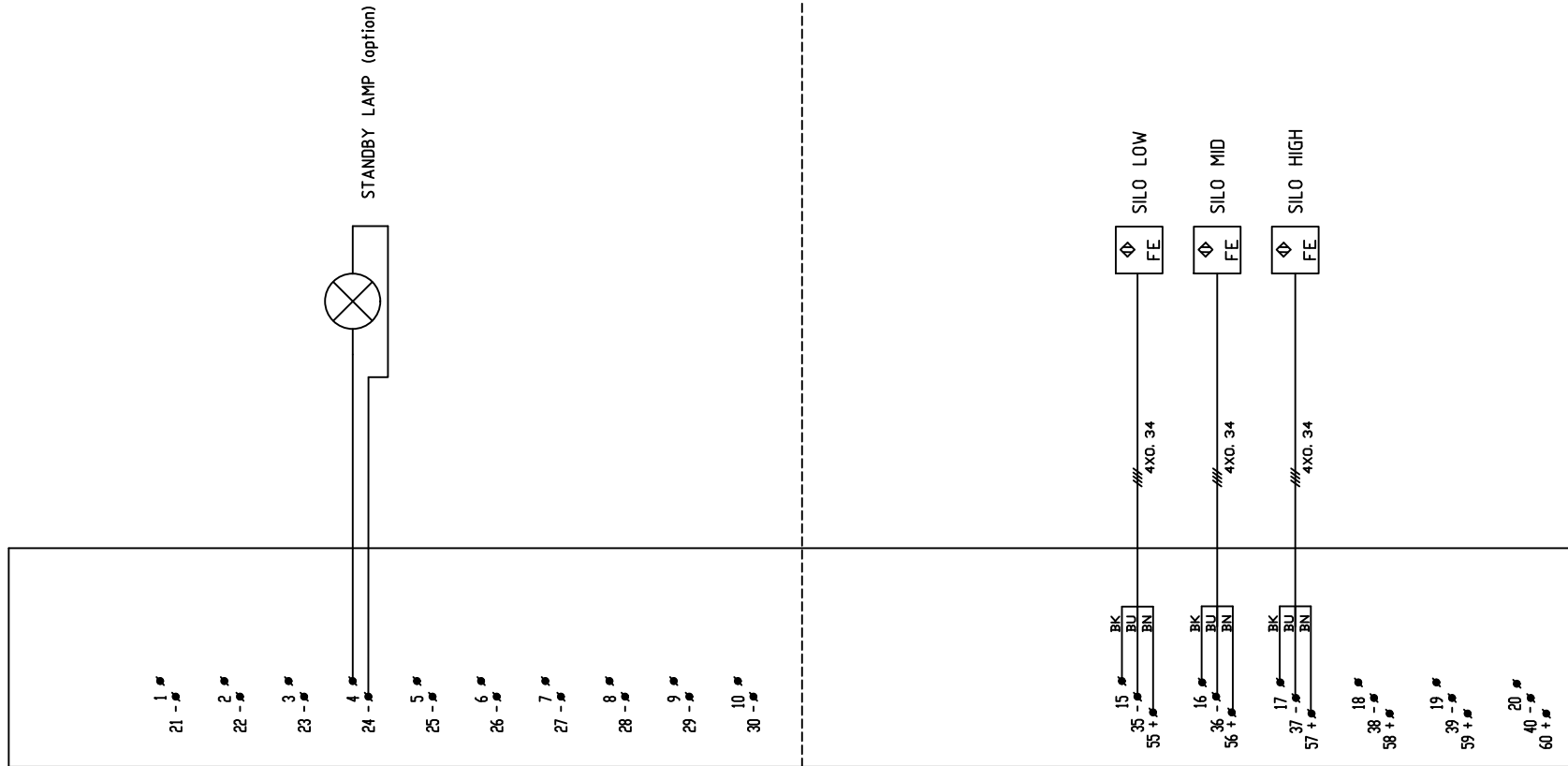
DRAWN BY: H. Wennemars
 DATE: 28-01-2015
 PROJECTNO. FGB 2-5
 PAGE: 2 OF: 13

DRAWING NUMBER:
 FGB 2-5 Kg H
 REVISION
 12-12-2023

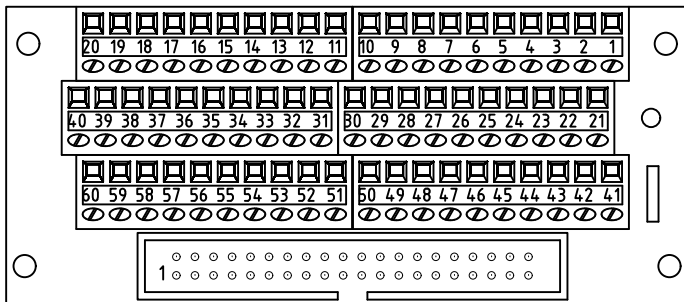
A4

OUTPUT

INPUT

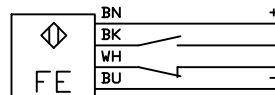


WIRING DIAGRAM EXPANSION BOARD



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.

Ferlin

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

PROJECT: FERLIN GRAVIMETRIC BLENDER
 SUBJECT: I/O EXPANSION

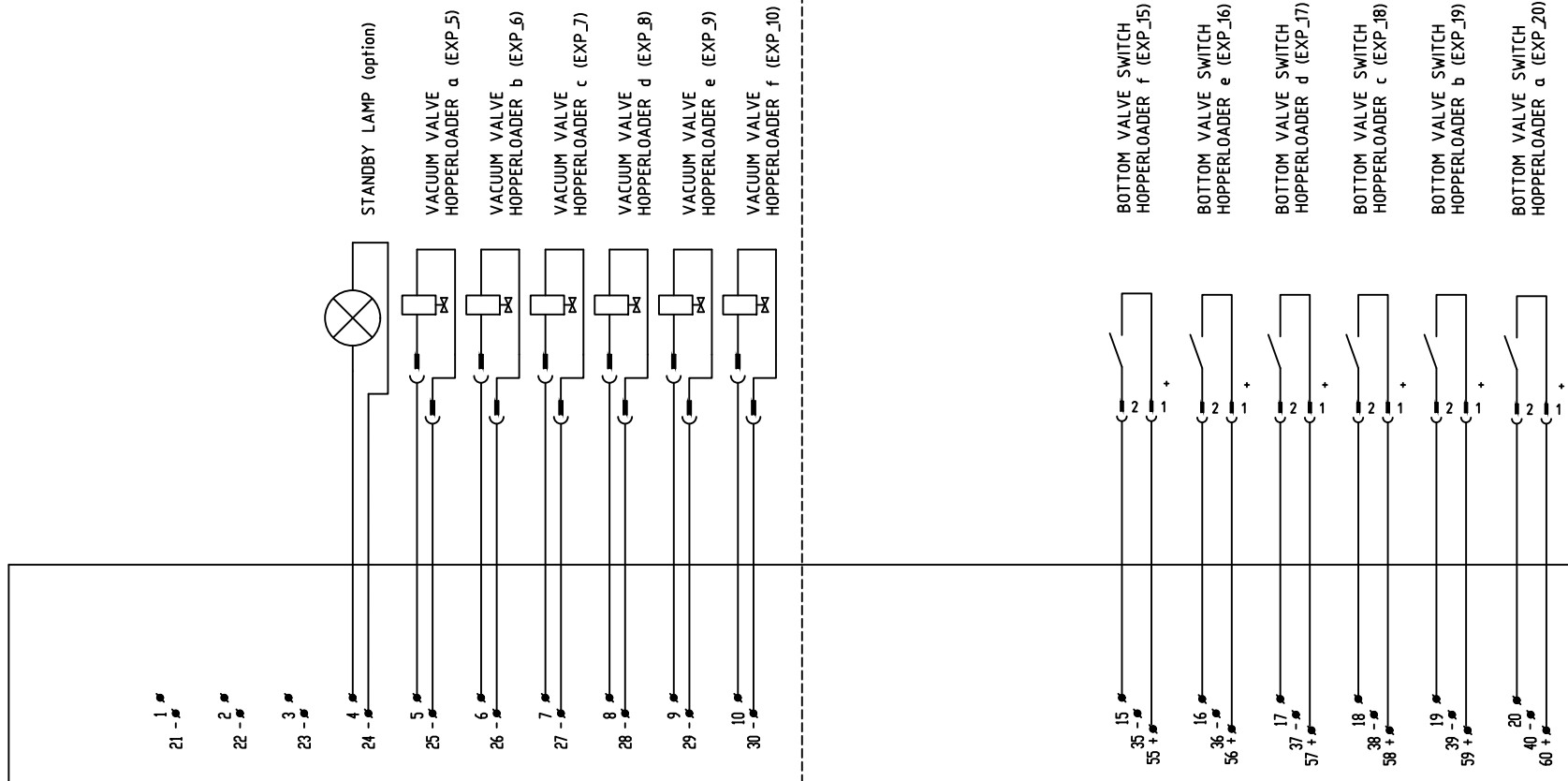
DRAWN BY: H. Wennemars
 DATE: 28-01-2015
 PROJECTNO. FGB 2-5
 PAGE: 3 OF: 13

DRAWING NUMBER: FGB 2-5 Kg H
 REVISION: 12-12-2023

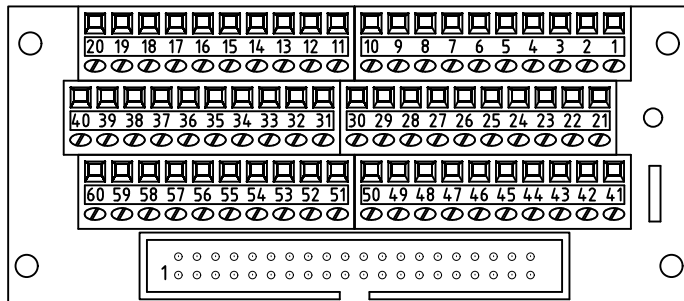
A4

OUTPUT

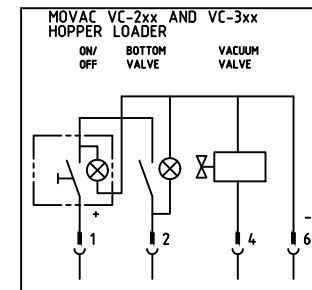
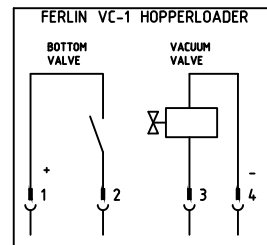
INPUT



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.

Ferlin

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

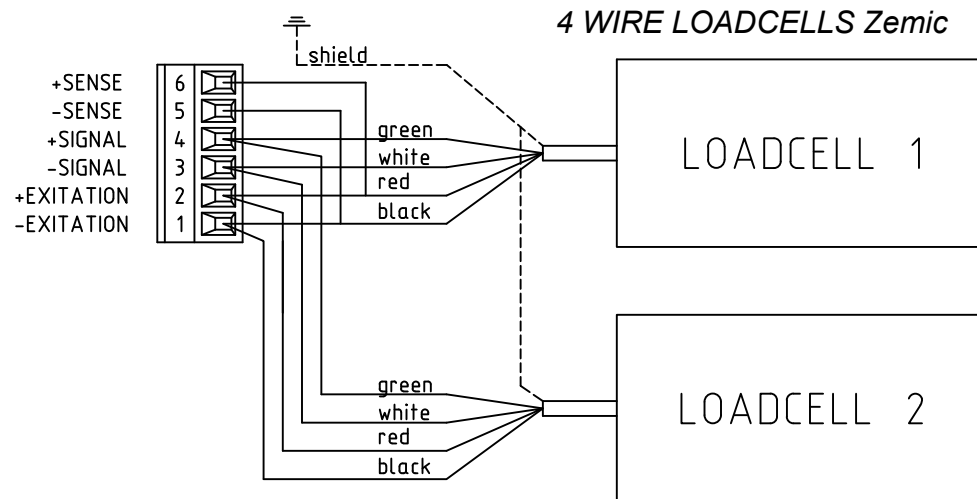
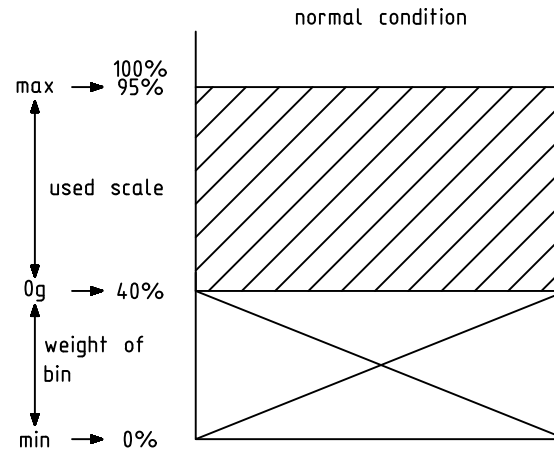
PROJECT: FERLIN GRAVIMETRIC BLENDER
 SUBJECT: I/O EXPANSION

DRAWN BY: H. Wennemars
 DATE: 28-01-2015
 PROJECTNO. FGB 2-5
 PAGE: 3a OF: 13

DRAWING NUMBER: FGB 2-5 Kg H
 REVISION: 12-12-2023

A4

LOADCELL SCALE



Ferlin

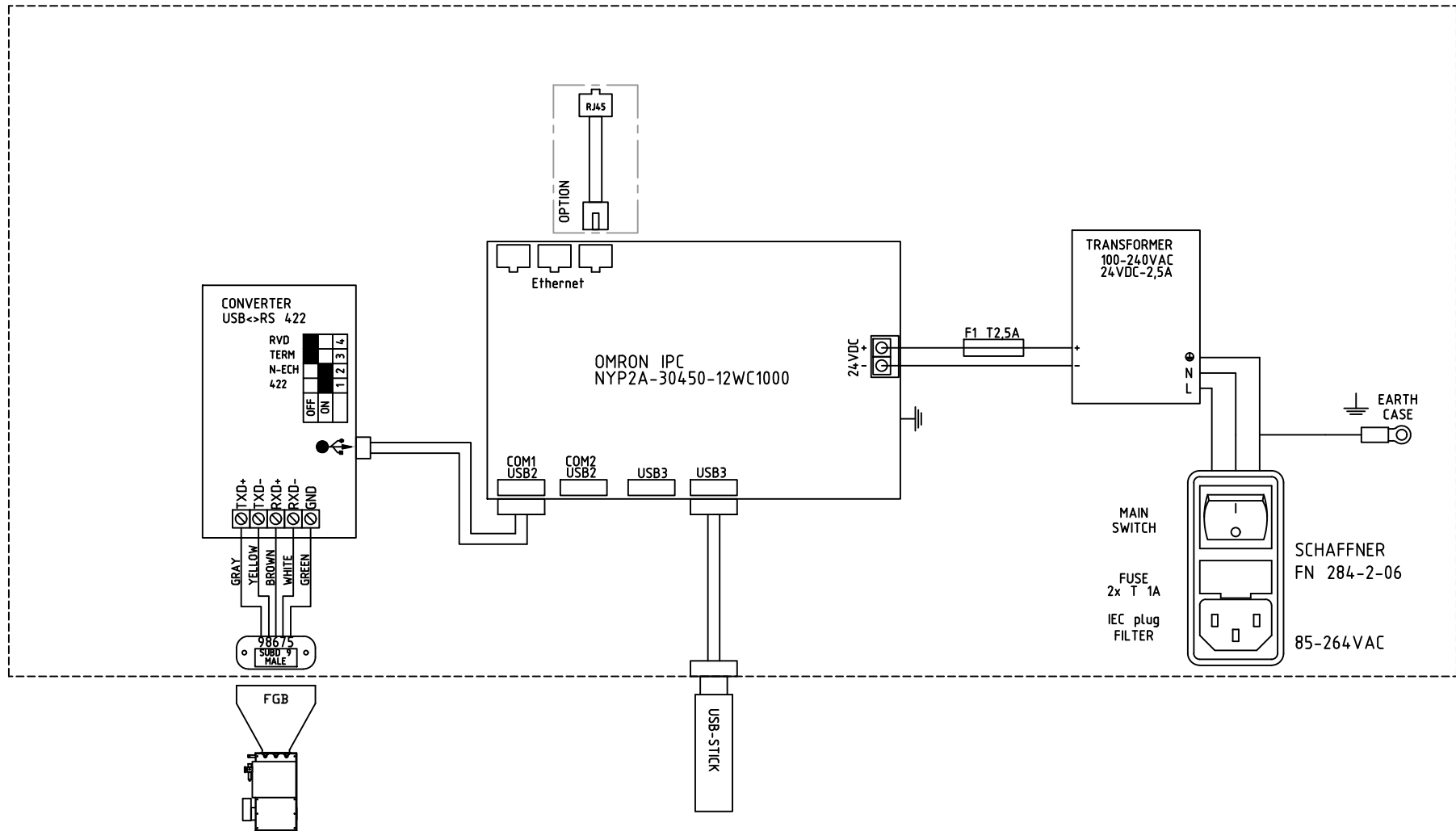
Galileistraat 29
7701 SK
Dedemsvaart
HOLLAND
tel. 0523-613439
fax 0523-616587

PROJECT: FERLIN GRAVIMETRIC BLENDER
SUBJECT: LOADCELL CONNECTION

DRAWN BY: H. Wennemars
DATE: 28-01-2015
PROJECTNO. FGB 2-5
PAGE: 4 OF: 13

DRAWING NUMBER: FGB 2-5 Kg H
REVISION: 12-12-2023

A4



Ferlin

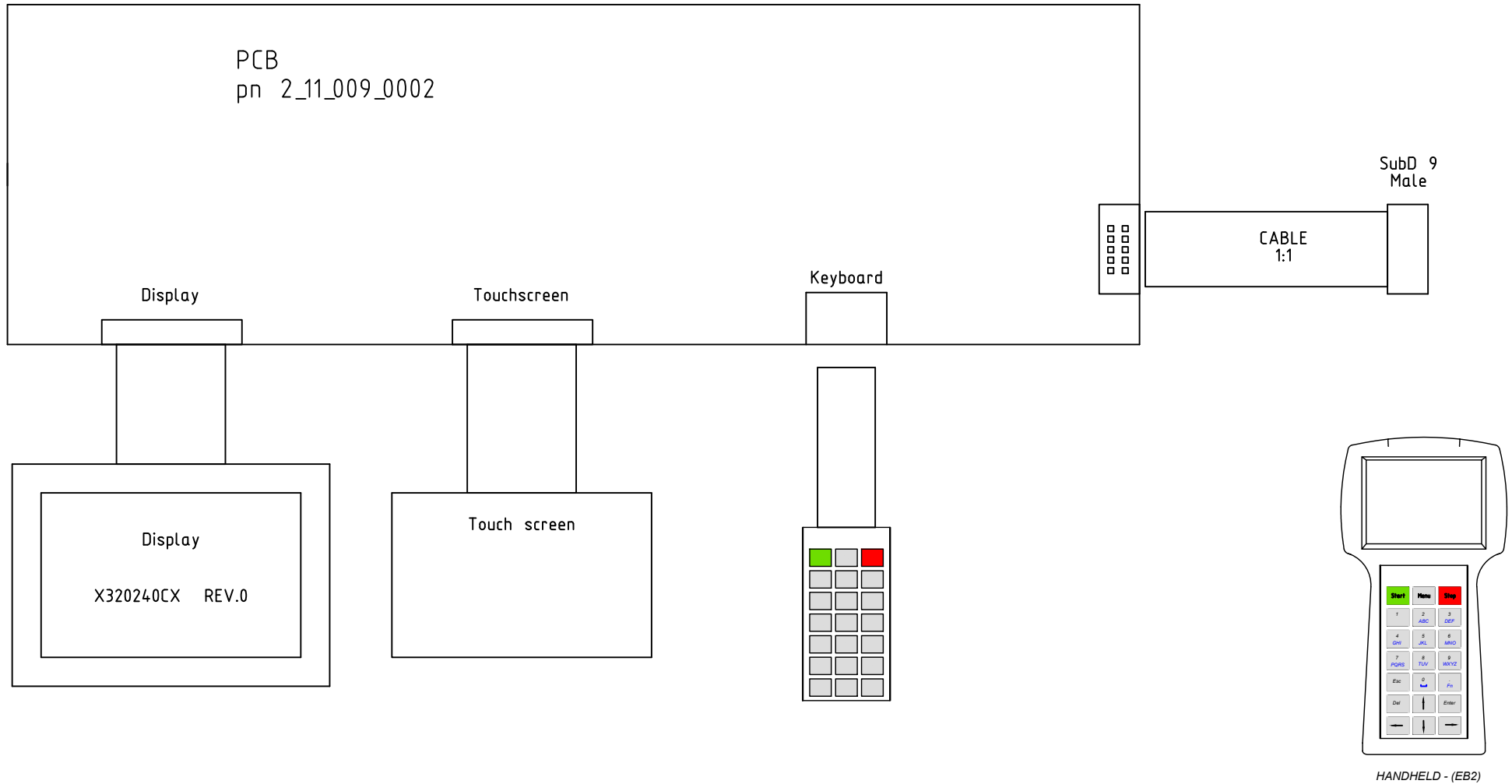
Galileistraat 29
7701 SK
Dedemsvaart
HOLLAND
tel. 0523-613439
fax 0523-616587

PROJECT: FERLIN GRAVIMETRIC BLENDER
SUBJECT: IPC USER INTERFACE

DRAWN BY: H. Wennemars
DATE: 28-01-2015
PROJECTNO. FGB 2-5
PAGE: 5 OF: 13

DRAWING NUMBER: FGB 2-5 Kg H
REVISION: 12-12-2023

A4



Ferlin

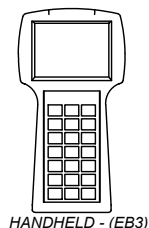
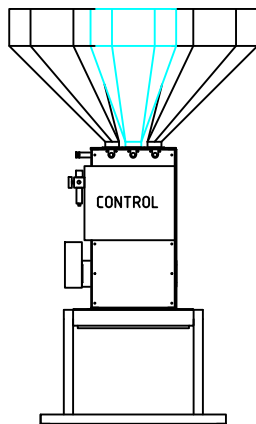
Galileistraat 29
7701 SK
Dedemsvaart
HOLLAND
tel. 0523-613439
fax 0523-616587

PROJECT: FERLIN GRAVIMETRIC BLENDER
SUBJECT: HANDHELD TERMINAL

DRAWN BY: H. Wennemars
DATE: 28-01-2015
PROJECTNO. FGB 2-5
PAGE: 6 OF: 13

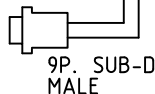
DRAWING NUMBER: FGB 2-5 Kg H
REVISION: 12-12-2023

A4

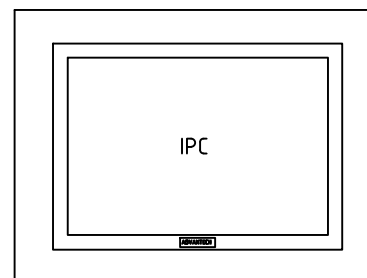


HANDHELD - (EB3)

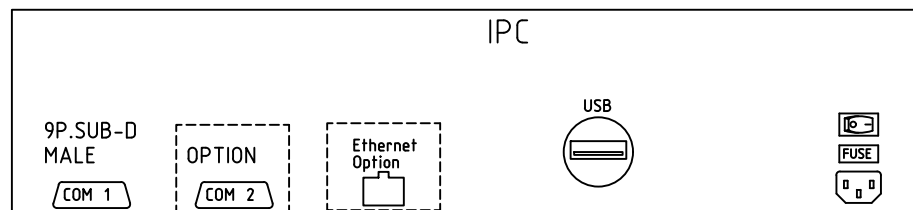
9P. SUB-D FEMALE



9P. SUB-D MALE



IPC



IPC

9P.SUB-D MALE
COM 1

OPTION
COM 2

Ethernet Option

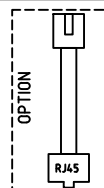
USB

FUSE

FUSE

FUSE

RS422



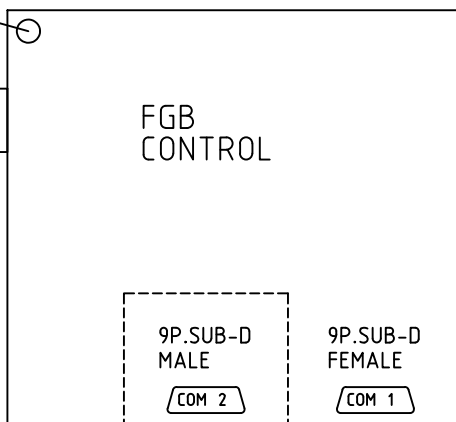
OPTION

RJ45

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

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

COMPRESSED AIR*
CONNECTION 1/4"

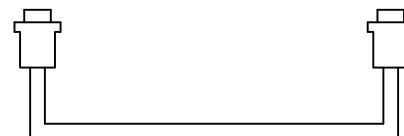


FGB CONTROL

9P.SUB-D MALE
COM 2

9P.SUB-D FEMALE
COM 1

PROFIBUS
option



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

Ferlin

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

PROJECT:
FERLIN GRAVIMETRIC BLENDER
SUBJECT:
IPC FGB CONNECTIONS

DRAWN BY: H. Wennemars

DATE: 28-01-2015

PROJECTNO. FGB 2-5

PAGE: 8 OF: 13

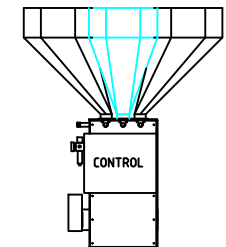
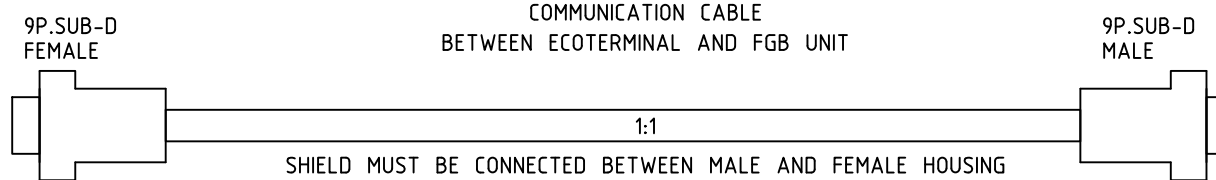
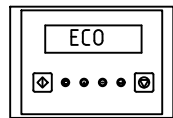
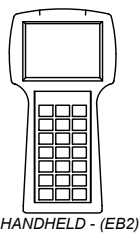
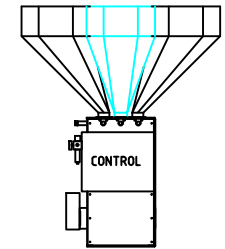
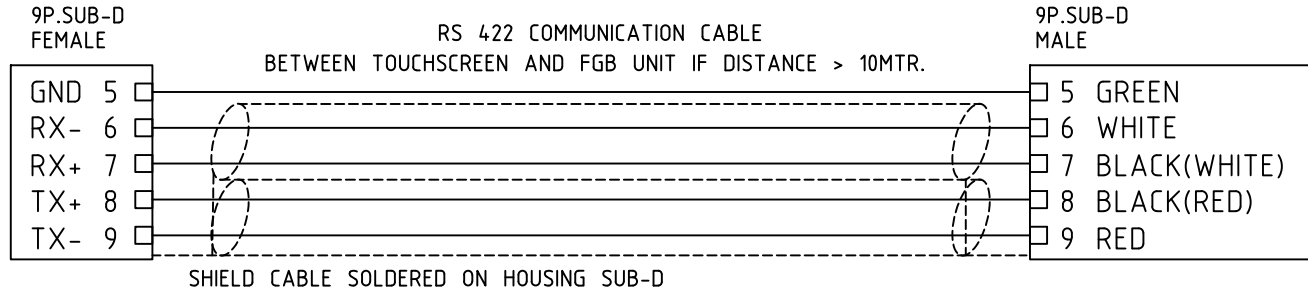
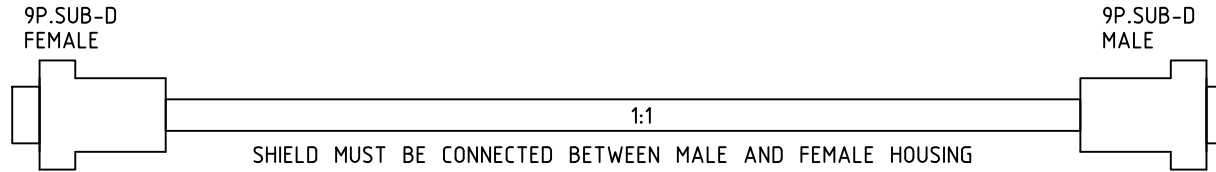
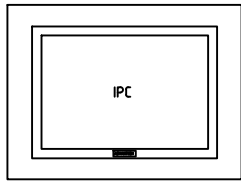
DRAWING NUMBER:

FGB 2-5 Kg H

REVISION

12-12-2023

A4



Ferlin

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

PROJECT:
FERLIN GRAVIMETRIC BLENDER

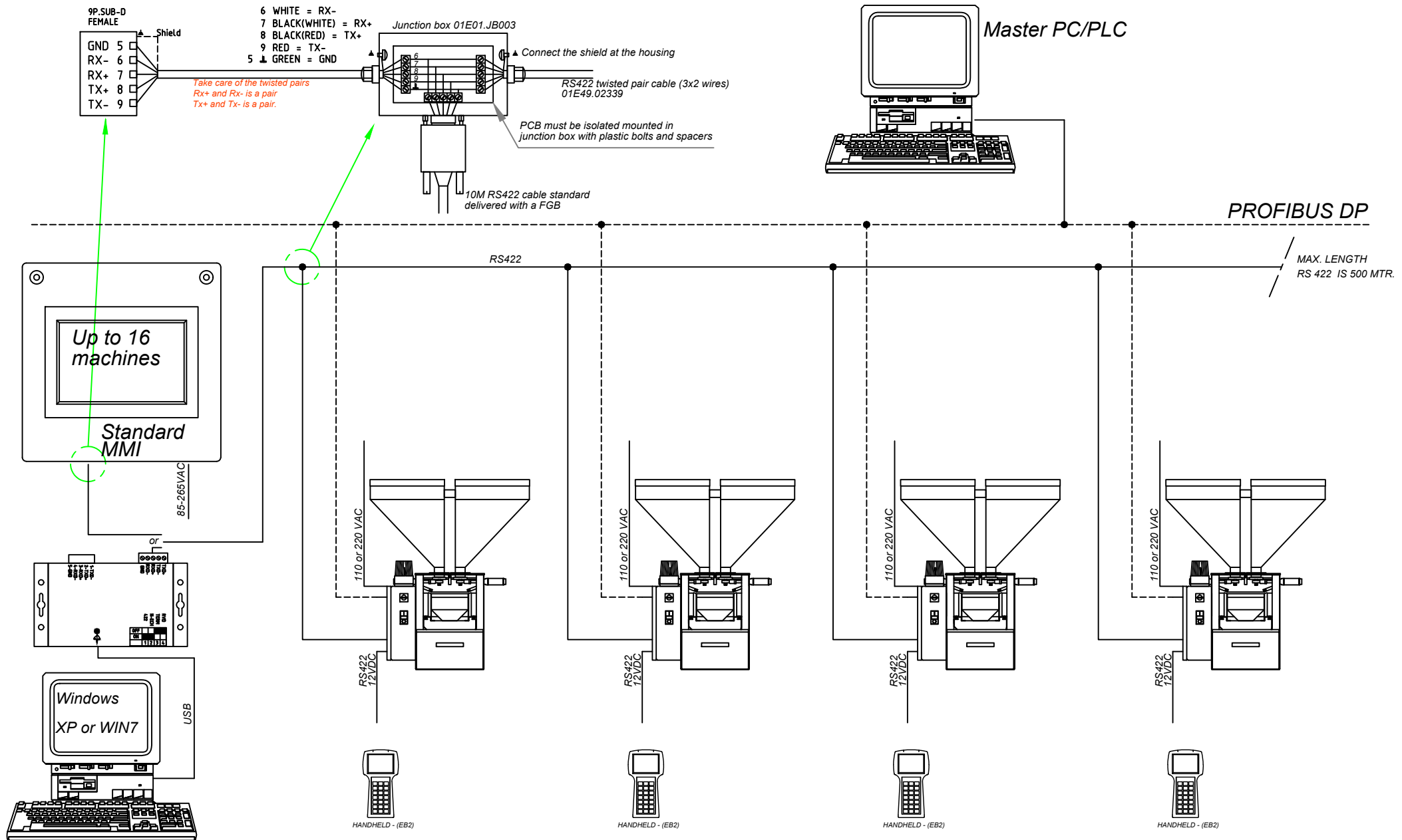
SUBJECT:
COMMUNICATION CABLE

DRAWN BY: H. Wennemars
DATE: 28-01-2015
PROJECTNO. FGB 2-5
PAGE: 9 OF: 13

DRAWING NUMBER:
FGB 2-5 Kg H

REVISION
12-12-2023

A4



Ferlin

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

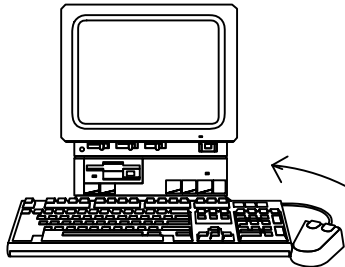
PROJECT: FERLIN GRAVIMETRIC BLENDER
SUBJECT: LINKING

DRAWN BY: H. Wennemars
DATE: 28-01-2015
PROJECTNO. FGB 2-5
PAGE: 10 OF: 13

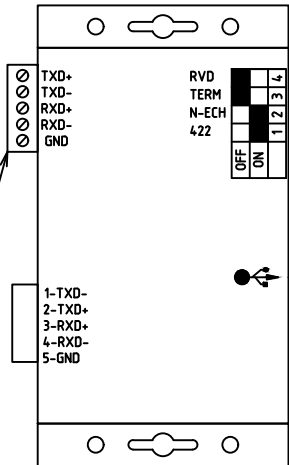
DRAWING NUMBER: FGB 2-5 Kg H
REVISION: 12-12-2023

A4

COMPUTER

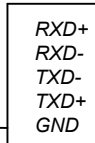


USB

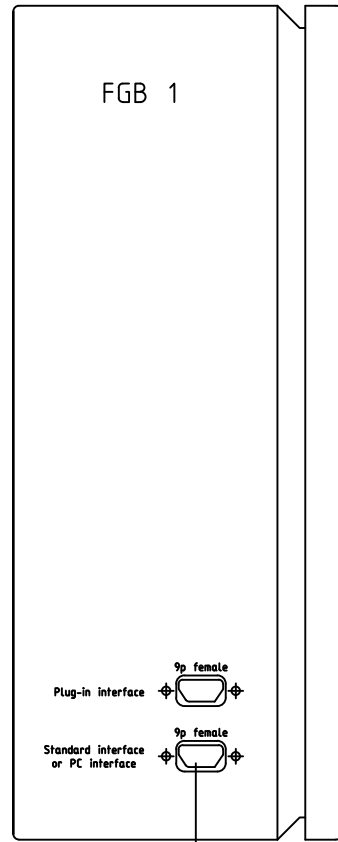


5p screw connector

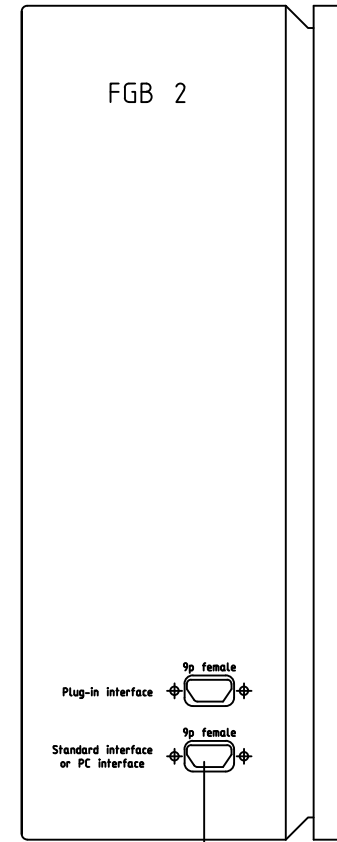
Take care of the twisted pairs
Rx+ and Rx- is a pair
Tx+ and Tx- is a pair.



FGB 1



FGB 2



Twisted pair cable 3x2X0.34
SHIELDED

CABLE 3x2X0.34
SHIELDED

SHIELD CABLE

JB-3 (junction box)

SHIELD CABLE

JB-3 (junction box)

SHIELD CABLE

WHITE
BLACK / W
BLACK / R
RED
GREEN

UP TO 16 UNITS

Ferlin

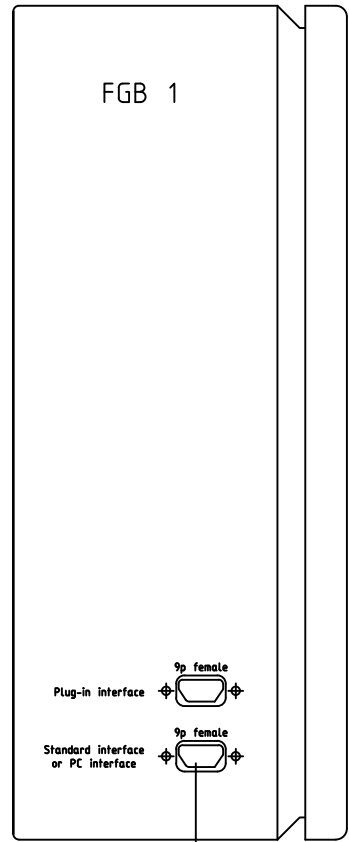
Galileistraat 29
7701 SK
Dedemsvaart
HOLLAND
tel. 0523-613439
fax 0523-616587

PROJECT: FERLIN GRAVIMETRIC BLENDER
SUBJECT: MULTI DROP IO 01 H USB<>RS422

DRAWN BY: H. Wennemars
DATE: 28-01-2015
PROJECTNO. FGB 2-5
PAGE: 11 OF: 13

DRAWING NUMBER: FGB 2-5 Kg H
REVISION: 12-12-2023

A4

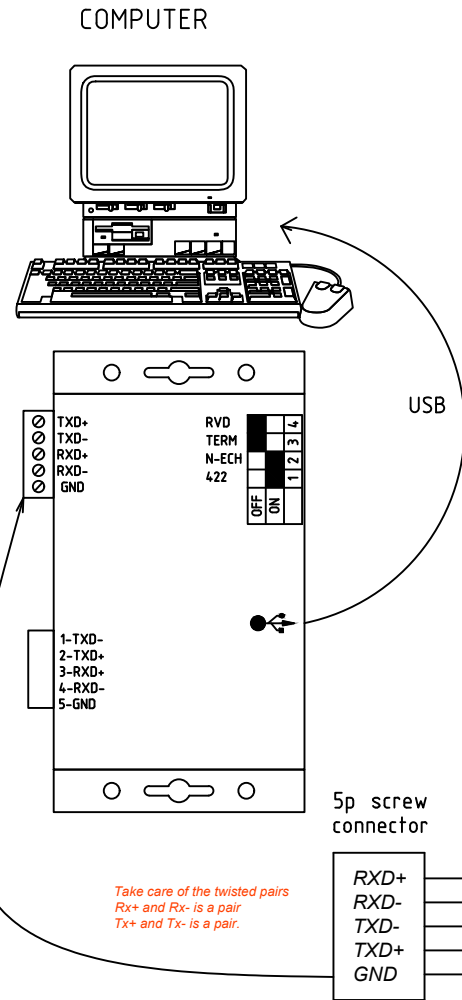


FGB 1

9p female
Plug-in interface

9p female
Standard interface or PC interface

9p SUBD
Male

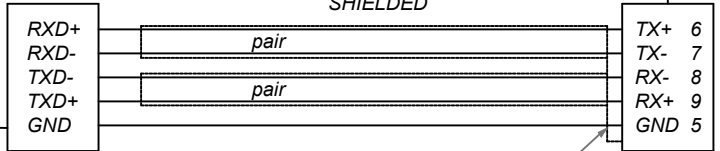


COMPUTER

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

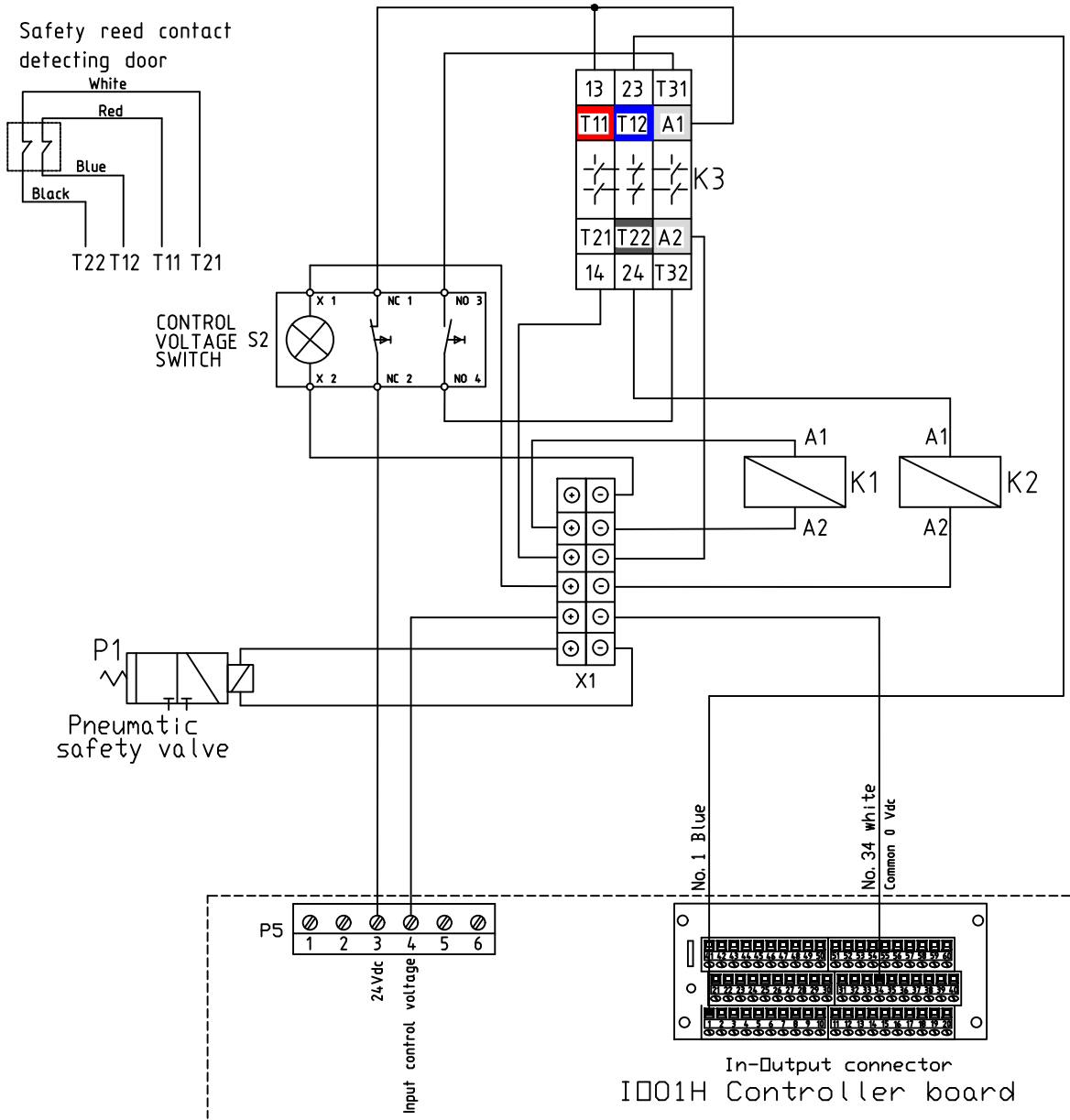
Galileistraat 29
7701 SK
Dedemsvaart
HOLLAND
tel. 0523-613439
fax 0523-616587

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

DRAWN BY:	H. Wennemars
DATE:	28-01-2015
PROJECTNO.	FGB 2-5
PAGE:	12 OF: 13

DRAWING NUMBER:	
FGB 2-5 Kg H	
REVISION	
12-12-2023	

A4



Ferlin

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

PROJECT:
FERLIN GRAVIMETRIC BLENDER

SUBJECT:
SAFETY SWITCH

DRAWN BY: H. Wennemars
DATE: 28-01-2015
PROJECTNO. FGB 2-5
PAGE: 13 OF: 13

DRAWING NUMBER:
FGB 2-5 Kg H
REVISION
12-12-2023

A4