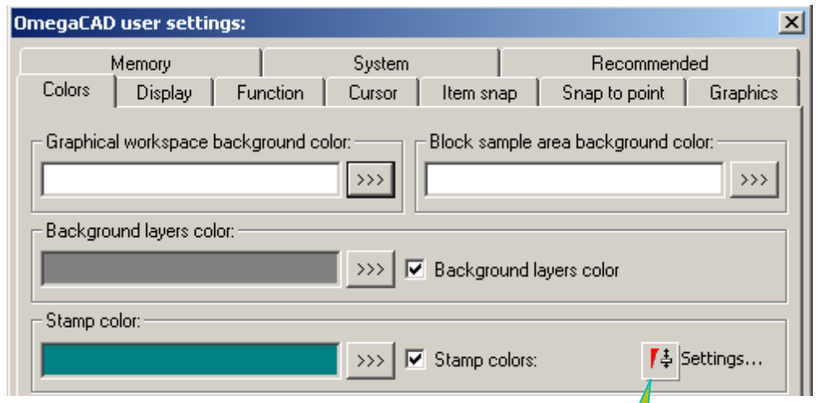
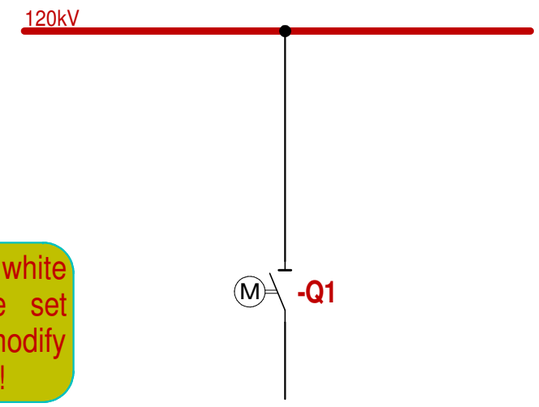
Contents:	
1 .sheet	General remarks
2 .sheet	Circuit function remarks 1. on 2. page
	Circuit function remarks 2. on 2. page
3 .sheet	Circuit function remarks 1. on 3. page
4 .sheet	+PLACE01 /-KS1 /-F1
	+PLACE02 /-H1 /-T1.L1 /-T1.L2
5 .sheet	+PLACE02 /-T1.L3
6 .sheet	=E82+PLACE03 /-H2 /-K1
7 .sheet	Cable:=E01: /1. /2. /3. /4.
8 .sheet	Cable:=E82: /101. /102.

Made by with 'Make context' function. This funkction gathers all 'Context text' from the circuit logical plan, what the designer make, and from the apparatus and cable list page, what the system automatically placed



If likes to work on a white basis better then here set works colours. He may modify many other settings here!

Single line drawing of field if any.



Fitting places:		
=E01	+PLACE01	First fitting place
=E01	+PLACE02	Second fitting place
=E82	+PLACE03	Third fitting place

This table made by with 'Make place table' function. This funkction gathers all fitting place from the circuit logical plan, what the designer set.

Bus wires:	
120kV	120kV Bus-bar
EQUIT 01	Equipotencial 01
EQUIT 02	Equipotencial 02

This table made by with 'Bus wire names table' function. This funkction gathers all bus wire from the circuit logical plan, what the designer set.

The your plan format you make in the 'Edit stamp' modul. You must be make own format all plan type for the cover and the next pages.

This plan data is set by 'Maintain project...' modul. In this modul you may bee set the first and second line the project name and the field name.

This plan data is set by 'Set plan stamp data' funkction.

This plan data is set by 'Set plan stamp data' funkction.

General remarks

CHANGES									
						Head of department:	Dr. Boss		
						Leader designer:	Leslie Hegyaljai		
						Designer:	Omega-Soft Kft.		
						Controller:	Example Comtroller		
						Editor:	OmegaCAD ELEKTRO		
						Date:	2009.03.03.		
						Scale:	M=1:1		
A	2009.03.03.	Charles Szopko	OmegaManager	OmegaController	Demonstration plan change version	Sheet size:	A3 420x297mm		
Sign	Date	Designer	Manager	Controller	Change contents	Printing date:	2015.2.18.	9h 16' 25".	

The interpretation of concept in OmegaCAD ELEKTRO system

Theme: Circuit diagram (Plan type) "D" plan (Plan nature)
Demonstarion plan (Plan name)

=E01
The interpretation of concepts
in OmegaCAD ELEKTRO system

Example Plan Ltd.
H -1164 Budapest
Takács str. 4.
E-mail:info@omegasoft.hu

Example-Plan Ltd.

All sheet: 9 | Sheetnumber: 1. | Plan number/Change: PLAN-NUMBER-1 A

Plan code: PLAN-CODE

+PLACE01

Fitting place indentifier, belong to default place

Bus wire (equitpotencial) indentifier

Bus wire or equitpotencial for ringrains

Inside drawing connection with page number/circut number

EQUIT 01

-X3 :7

2/3

EQUIT 01

EQUIT 01

EQUIT 01

The page number where the apparatus placed in the circuit aparatus list drawing.

-F1 :1 :2 [4]

-KS1 :5 :6 [4]

-KS1 :14 :15 [4]

-KS1 :11 :10 [4]

-KS1 :20 :19 [4]

Apparatus part symbol with its indentifier (sign and number) and connetction points

Limit line between two fitting place

-X1 :1 1

1 -X1 :1

:2 102 1

Apparatus with direct cable connection

This cable belong to =E82 field! (This is apparent from the other cable mark text color!) The =E82 cable list start at 101!

-H1 :1 :2 [4]

-H2 :X2 :X1 [6]

Custom Potential

101 1

+PLACE02

-X1 :2 1 2

=E82 +PLACE03

102 2

cable mark with cable number and core number

Fitting place indentifier wich belong to other field and place

Conection leaving the drawing with the connection plan number, page number/circiut number and connectoin object indentifier with his connection points. This connection is not exist in this project!

PLAN-NUMBER:3 125/4 -X2:45

MINT-S-J01-R00 =J01+S1-X2:1 5/5

2/7

-KS1 :1 :2 [4]

EQUIT 02

EQUIT 02

EQUIT 02

Simple terminal with its sign and number

EQUIT 02

-X3 :8

-X3 :8

-X3 :9

Conection leaving the drawing with the connection plan number, page number/circiut number and connectoin object indentifier with his connection points. This connection exist in this project, and the conecton data is fill and refresh automatically by system!

Circuit function remarks for the context table to the cover page

Circuit function remarks 1. on 2. page

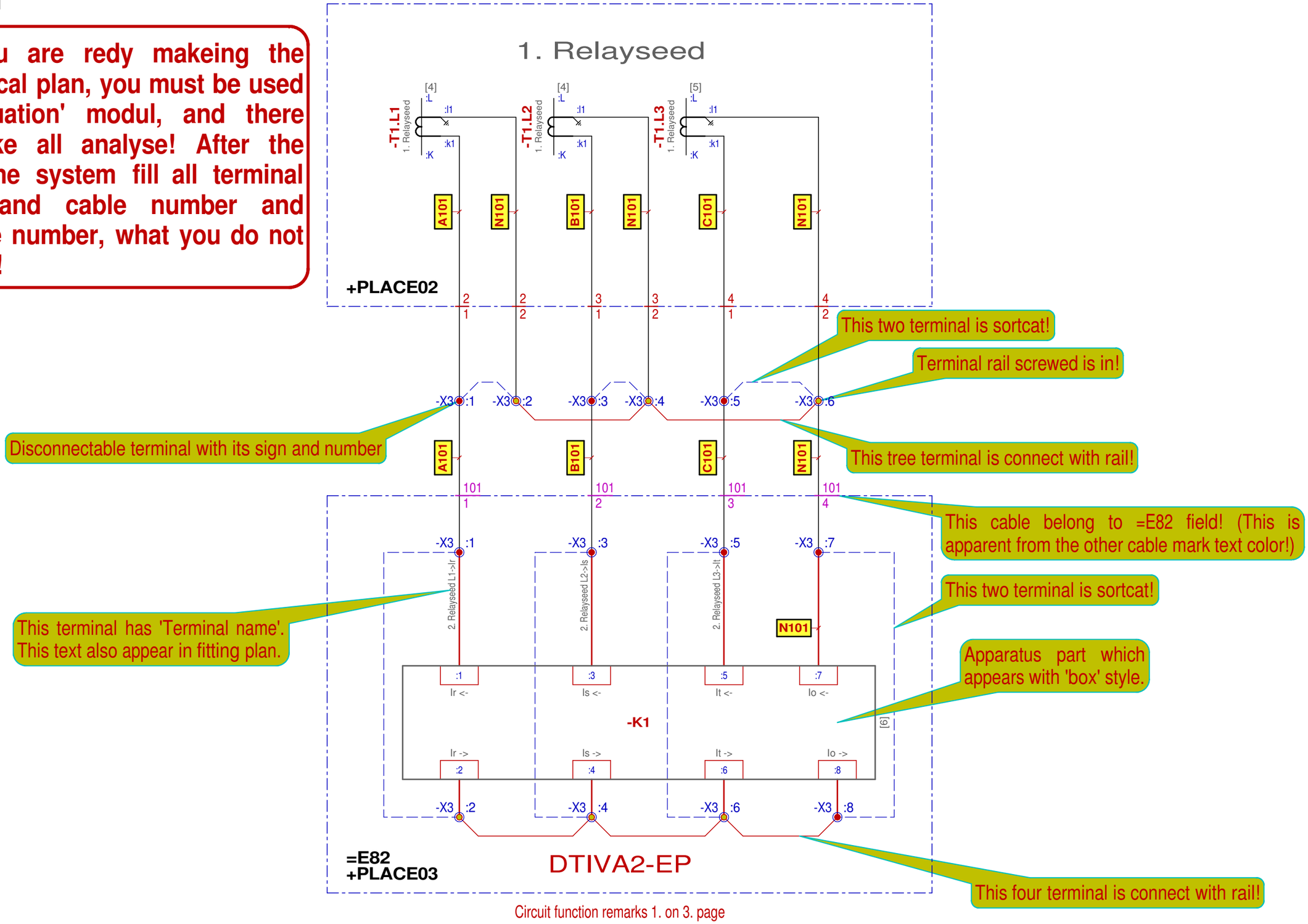
Circuit function remarks 2. on 2. page

Default fitting place and field indentifier

The interpretation of concepts in OmegaCAD ELEKTRO system The interpretation of concepts in OmegaCAD ELEKTRO system		Change: A Date: 2009.03.03.	Example-Plan Ltd.	=E01 +PLACE01	Plan number: PLAN-NUMBER-1 Plan code: PLAN-CODE	Sheet: 2/9	

+PLACE01

When you are redy makeing the circiut logical plan, you must be used the 'Evaluation' modul, and there must make all analyse! After the analyse the system fill all terminal number, and cable number and cable core number, what you do not set direcly!



Circuit function remarks 1. on 3. page

The interpretation of concepts in OmegaCAD ELEKTRO system The interpretation of concepts in OmegaCAD ELEKTRO system	Change: A Date: 2009.03.03.	Example-Plan Ltd.	=E01 +PLACE01	Plan number: PLAN-NUMBER-1 Plan code: PLAN-CODE	Sheet: 3/9

Ftg. place	Apparatus name	Attributes	Nominal datas	Plansign	Pcs.	Placement of apparatus part [Sheet/Circuit diagram position]
+PLACE01	auxiliary relay	RUs-18 4z+4ny Un érintk./In tipusszám	= 220 V~ = 4z+4ny = 714558	-KS1	1	1 2 3 4 5 6 8 9 10 11 12 13 14 15 17 18 19 20 2/2 — 2/4 — 2/7 — 2/5 — 2/8
	cutout	BS C 2/1 In assist.co. Irz/Un	= 2 A = - = 230 V AC	-F1	1	1 1.95 1.96 1.98 2.95 2.96 2.98 2/2 — —
+PLACE02	bagpipe	EV-502 Un . .	= 220 V AC = - = -		1	1 2 2/4
	sound signal	Existing, unchanged!	-H1			
	current transf.	ARM-20a (L) Up Ip Isz	= 20 kV = 500 A = 5/5 A	-T1.L1 -T1.L2	3	k1 K I1 L k2 K I2 L 3/3 — 3/4 —

Aparatus type and dates

Appendid aparatus parts!

Fitting place indentifier

Aparatus indentifier

This part is used!

Where the parts of apparatus found in the circuit logical plan. Page number / circuit number

This part is available!

Before you generaling the apparatus list plans must be used the 'Evaluation' modul, and there must make all analyse! The generated apparatus list plan will error free, if the 'Evaluation' analyse also is error free !

+PLACE01 /-KS1 /-F1 +PLACE02 /-H1 /-T1.L1 /-T1.L2

The interpretation of concepts in OmegaCAD ELEKTRO system The interpretation of concepts in OmegaCAD ELEKTRO system	Change: A Date: 2009.03.03.	Example-Plan Ltd.	=E01	Plan number: PLAN-NUMBER-1 Plan code: PLAN-CODE	Sheet: 4/9

Ftg. place	Apparatus name	Attributes	Nominal datas	Plansign	Pcs.	Placement of apparatus part [Sheet/Circuit diagram position]		
+PLACE02				-T1.L3		3/5	—	

+PLACE02 /-T1.L3

The interpretation of concepts in OmegaCAD ELEKTRO system The interpretation of concepts in OmegaCAD ELEKTRO system	Change: A Date: 2009.03.03.	Example-Plan Ltd. Example-Plan Ltd.	=E01	Plan number: PLAN-NUMBER-1 Plan code: PLAN-CODE	Sheet: 5/9

Ftg. place	Apparatus name	Attributes	Nominal datas	Plansign	Pcs.	Placement of apparatus part [Sheet/Circuit diagram position]
+PLACE03	signallight	EF3 060261 Un Power Color	 = 220 V-240V = 130 W = Red		1	X2 / X1 X1 X2 2/5
	red light signal		Used, reinstall needed	-H2		
	overcurrent pr.	DTIVA2-EP AV Unfv In Un	 = . = 5A = .	-K1	1	1 2 3 4 5 6 7 8 Ir↓ Ir↑ Is↓ Is↑ It↓ It↑ Io↓ Io↑ 1 2 3 4 5 6 7 8 — — — — 3/4 3/4 3/4 3/4 3/5 3/5 3/6 3/6

=E82+PLACE03 /-H2 /-K1

The interpretation of concepts in OmegaCAD ELEKTRO system The interpretation of concepts in OmegaCAD ELEKTRO system	Change: A Date: 2009.03.03.	Example-Plan Ltd. Example-Plan Ltd.	=E82	Plan number: PLAN-NUMBER-1 Plan code: PLAN-CODE	Sheet: 6/9

Num-ber	Cable number	From To	Sign	Placement of cable cores [Sheet/Circuit diagram position]	Comment Type / Structure
1	E01VE001	+PLACE01 +PLACE02	A	2 2 4 4	SZRMtKVM-J 7 x 1.5
2	E01VE002	+PLACE01 +PLACE02	B	3 3 4 4	SZRMtKVM-J 4 x 2.5
3	E01VE003	+PLACE01 +PLACE02	D	3 3 4 5	SZRMtKVM-J 4 x 2.5
4	E01VE004	+PLACE01 +PLACE02	F	3 3 5 6	SZRMtKVM-J 4 x 2.5

This core is available!

Where the core of cable found in the circuit logical plan. Page number / circuit number

This core is used!

Cable code for cable, general of the project

Cable number, same as on the circuit number

Separator, or break sign of the cable. This sign run from 'A' to 'Z', and is singular sign between two fitting places. (Paralel cables separatos sign)

Before you generaling the cable list plans must be used the 'Evaluation' modul, and there must make all analyse! The generated cable list plan will error free, if the 'Evaluation' analyse also is error free !

Cable:=E01: /1. /2. /3. /4.

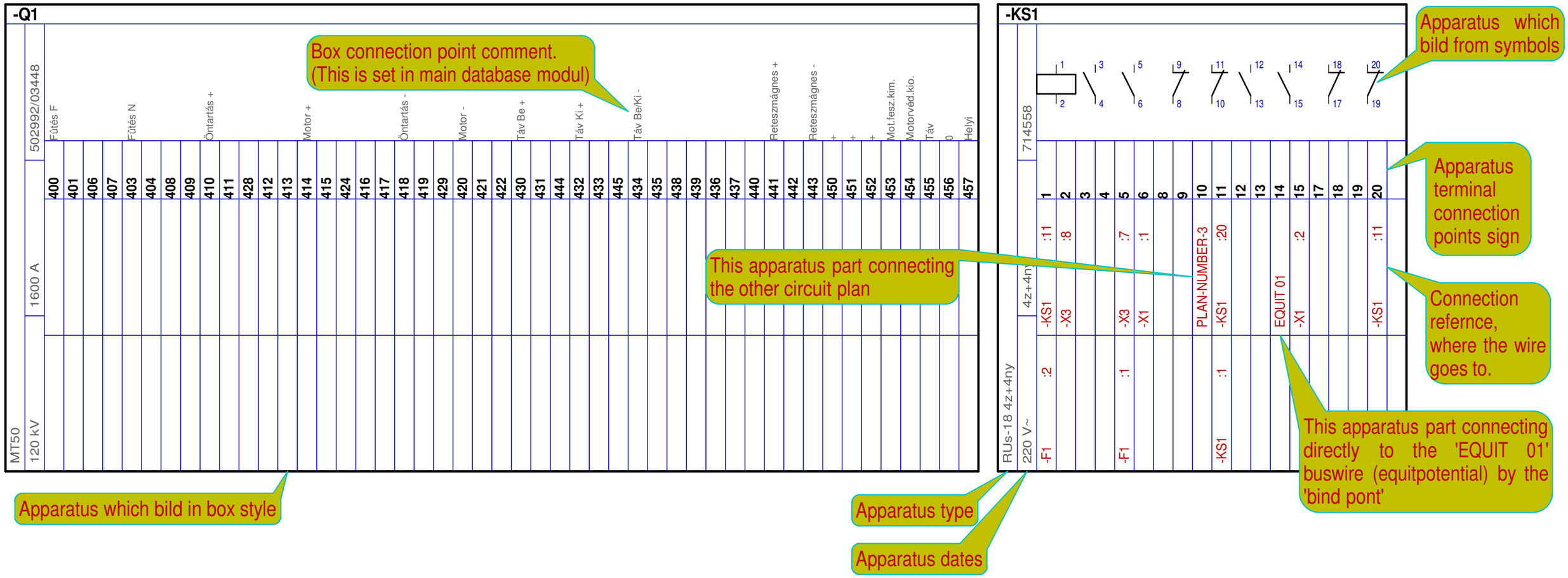
The interpretation of concepts in OmegaCAD ELEKTRO system The interpretation of concepts in OmegaCAD ELEKTRO system	Change: A Date: 2009.03.03.	Example-Plan Ltd.	=E01	Plan number: PLAN-NUMBER-1 Plan code: PLAN-CODE	Sheet: 7 / 9

Num-ber	Cable number	From To	Sign	Placement of cable cores [Sheet/Circuit diagram position] 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48	Comment Type / Structure
101	E01VE101	=E01+PLACE01 +PLACE03	A	3 3 3 3 / 4 4 5 6	SZRMtKVM-J 7 x 1.5
102	E01VE102	=E01+PLACE01 +PLACE03	B	2 2 / 5 5	SZRMtKVM-J 7 x 1.5

Cable:=E82: /101. /102.

Num-ber	Cable number	From To	Sign	Placement of cable cores [Sheet/Circuit diagram position]	Comment Type / Structure
Cables with field link: =J01					
101	E007V101	+S1 =E01+PLACE01	A	2 8	Field connect SZRMtKVM-J 7 x 1.5

Cable:=J01: /101.



Fit terminal type			
Block	Number	Type + codenumber	
X1 block	1 - 7	WDK 2.5	102150
X3 block	1 - 6	. . . . .	
	7 - 14	WDK 2.5	102150

Made by with 'Place terminal tabée' function. This funkction gathers all terminal, what is used in this fitting place.

Contents:	
1 .sheet	-Q1 /-KS1
2 .sheet	-X1:1 - 7. /-F1
3 .sheet	-X3:1 - 14.
4 .sheet	Cables: / 1. / 2. / 3. / 4. / 101. / 102. / 105.
5 .sheet	Bus wires: /EQUIT 01
6 .sheet	Wires inside fitting place:
7 .sheet	Chaining of binding points:

Made by with 'Make context' function. This funkction gathers all 'Context text' from the fitting, what the system automatically placed.

Wiring plans of apparatus

Before you generaling the fitting plans must be used the 'Evaluation' modul, and there must make all analyse! The generated fitting plan will error free, if the 'Evaluation' analyse also is error free !

-Q1 /-KS1

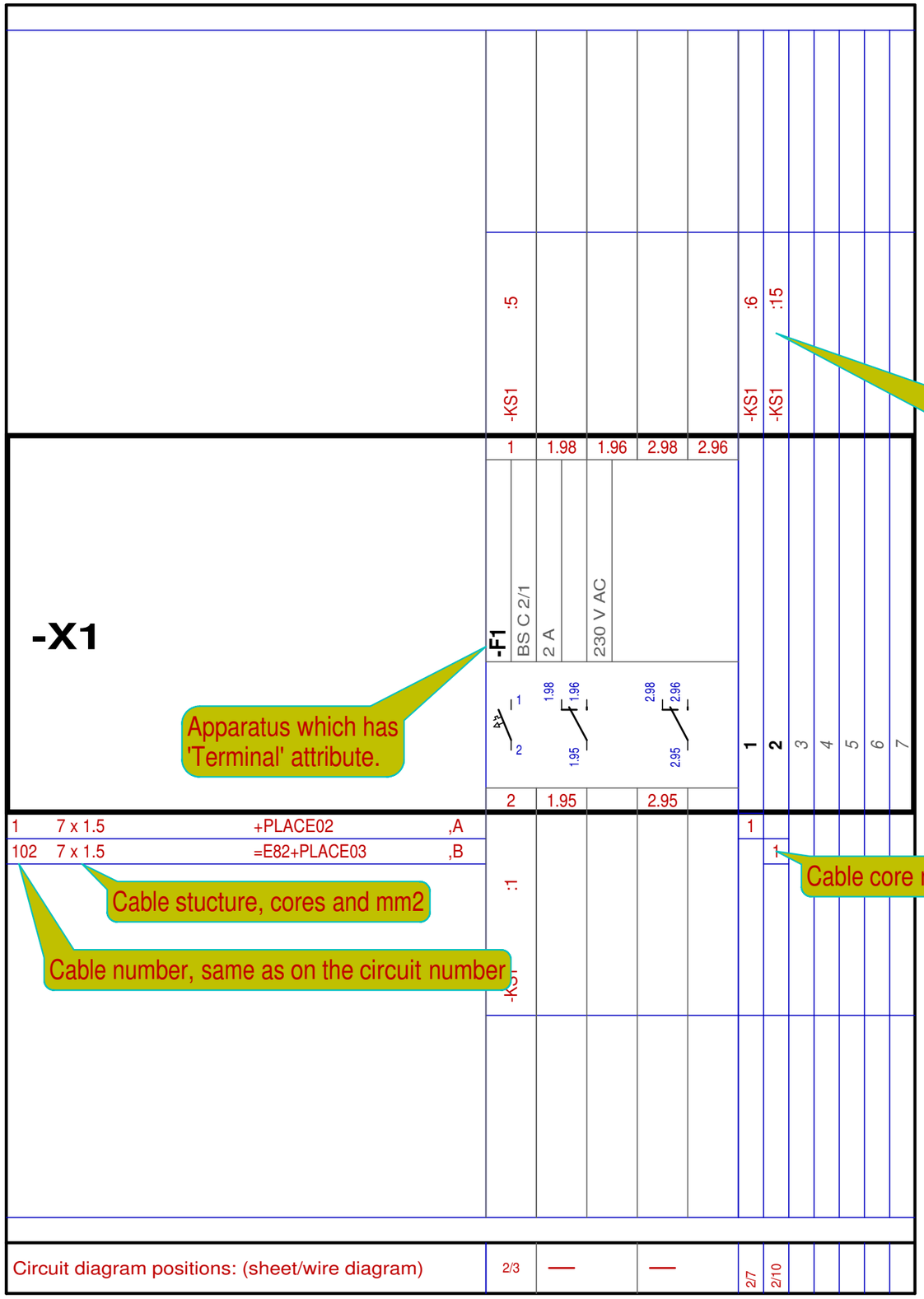
CHANGES									
							Head of department:	Dr. Boss	
							Leader designer:	Leslie Hegyaljai	
							Designer:	Omega-Soft Kft.	
							Controller:	Example Comtroller	
							Editor:	OmegaCAD ELEKTRO	
							Date:	2009.03.03.	
							Scale:	M=1:1	
							Sheet size:	A3 420x297mm	
Sign	Date	Designer	Manager	Controller	Change contents		Printing date:	2015.2.18.	9h 16' 27".

The interpretation of concepts in OmegaCAD ELEKTRO system

Theme: Fitting plan (Plan type) "D" plan (Plan nature)
Demonstarion plan (Plan name)
=E01 +PLACE01 First fitting place
The interpretation of concepts in OmegaCAD ELEKTRO system

Example-Plan Ltd.
H -1164 Budapest
Takács str. 4.
E-mail:info@omegasoft.hu

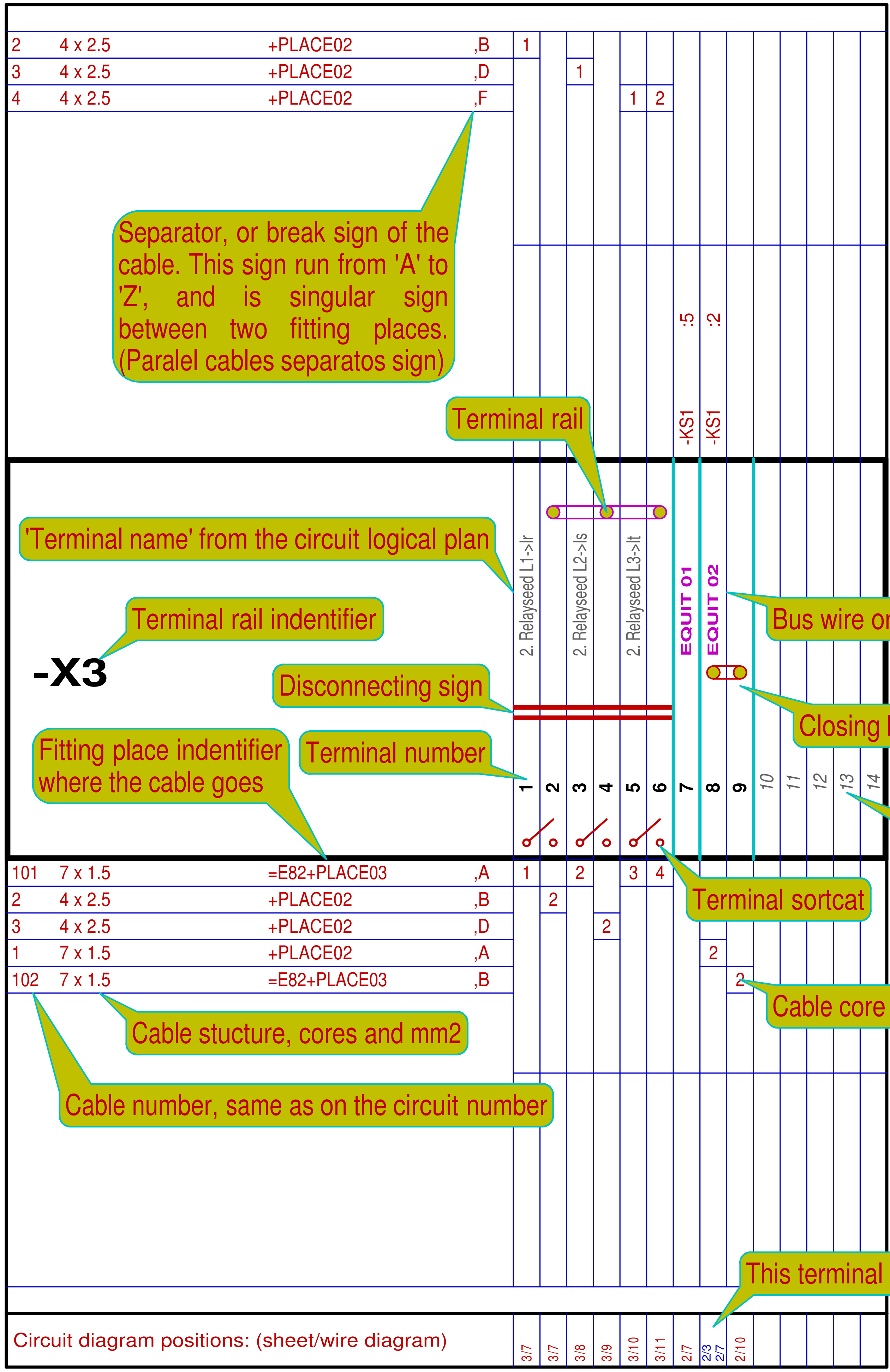
All sheet: 7 Sheetnumber: 1.
Plan number/Change: PLAN-FIT-01
Plan code: PLAN-CODE



Wiring plans of terminals

-X1:1 - 7. /-F1

The interpretation of concepts in OmegaCAD ELEKTRO system The interpretation of concepts in OmegaCAD ELEKTRO system	Change: Scale: M=1:1 Date: 2009.03.03.	Example-Plan Ltd. Example-Plan Ltd.	=E01 +PLACE01	Plan number: PLAN-FIT-01 Plan code: PLAN-CODE	Sheet: 2 / 7



Wiring plans of terminals

-X3:1 - 14.

The interpretation of concepts
in OmegaCAD ELEKTRO system
The interpretation of concepts
in OmegaCAD ELEKTRO system

Change:
Scale: M=1:1
Date: 2009.03.03.

Example-Plan Ltd.

=E01
+PLACE01

Plan number: PLAN-FIT-01
Plan code: PLAN-CODE

Sheet: 3 / 7

Cable number:	E01VE001
Cable number:	1.
Bind fitting place	+PLACE01
End fitting place	+PLACE02
Brake:	A
Type:	SZRMtKVM-J
Wire number:	7
Construction:	7 x 1.5
Note:	New cable

Wire number:	Bind point (Plan sign :Connection)		Wire number:	Bind point (Plan sign :Connection)
1.	-X1 :1		5.	-
2.	-X3 :8		6.	-
3.	-		7.	-
4.	-			

Cable number:	E01VE002
Cable number:	2.
Bind fitting place	+PLACE01
End fitting place	+PLACE02
Brake:	B
Type:	SZRMtKVM-J
Wire number:	4
Construction:	4 x 2.5
Note:	New cable

Wire number:	Bind point (Plan sign :Connection)		Wire number:	Bind point (Plan sign :Connection)
1.	-X3 :1		3.	-
2.	-X3 :2		4.	-

Cable number:	E01VE003
Cable number:	3.
Bind fitting place	+PLACE01
End fitting place	+PLACE02
Brake:	D
Type:	SZRMtKVM-J
Wire number:	4
Construction:	4 x 2.5
Note:	New cable

Wire number:	Bind point (Plan sign :Connection)		Wire number:	Bind point (Plan sign :Connection)
1.	-X3 :3		3.	-
2.	-X3 :4		4.	-

Cable number:	E01VE004
Cable number:	4.
Bind fitting place	+PLACE01
End fitting place	+PLACE02
Brake:	F
Type:	SZRMtKVM-J
Wire number:	4
Construction:	4 x 2.5
Note:	New cable

Wire number:	Bind point (Plan sign :Connection)		Wire number:	Bind point (Plan sign :Connection)
1.	-X3 :5		3.	-
2.	-X3 :6		4.	-

Cable number:	E01VE101
Cable number:	101.
Bind fitting place	+PLACE01
End fitting place	=E82+PLACE03
Brake:	A
Type:	SZRMtKVM-J
Wire number:	7
Construction:	7 x 1.5
Note:	New cable

Wire number:	Bind point (Plan sign :Connection)		Wire number:	Bind point (Plan sign :Connection)
1.	-X3 :1		5.	-
2.	-X3 :3		6.	-
3.	-X3 :5		7.	-
4.	-X3 :6			

Cable number:	E01VE102
Cable number:	102.
Bind fitting place	+PLACE01
End fitting place	=E82+PLACE03
Brake:	B
Type:	SZRMtKVM-J
Wire number:	7
Construction:	7 x 1.5
Note:	New cable

Wire number:	Bind point (Plan sign :Connection)		Wire number:	Bind point (Plan sign :Connection)
1.	-X1 :2		5.	-
2.	-X3 :9		6.	-
3.	-		7.	-
4.	-			

Cable number:	E82VE005
Cable number:	105.
Bind fitting place	=E82+PLACE-04
End fitting place	=E82+PLACE-01
Brake:	A
Type:	SZRMtKVM-J
Wire number:	7
Construction:	7 x 1.5
Note:	New cable

Wire number:	Bind point (Plan sign :Connection)		Wire number:	Bind point (Plan sign :Connection)
1.	-		5.	-
2.	-		6.	-
3.	-X12 :56		7.	-
4.	-			

Cable code for cable, general of the project

Cable number, same as on the circuit number

Separator, or break sign of the cable. This sign run from 'A' to 'Z', and is singular sign between two fitting places. (Paralel cables separatos sign)

Cable core number

The cable core is connected to the terminal rail from below. (from the cable side to the terminal rail)

The cable core is connected to the terminal rail from above. (from the apparatus side to the terminal rail)

Wiring plans of cables

Cables: / 1. / 2. / 3. / 4. / 101. / 102. / 105.

The interpretation of concepts in OmegaCAD ELEKTRO system
The interpretation of concepts in OmegaCAD ELEKTRO system

Change:
Scale: M=1:1
Date: 2009.03.03.

Example-Plan Ltd.

=E01
+PLACE01

Plan number: PLAN-FIT-01
Plan code: PLAN-CODE

Sheet: 4 / 7

Bus wire: EQUIT 01
Equipotencial 01
(Plan sign :Connection)
-KS1 :14

Wiring plans of 'Bus wires' if necessary!

The interpretation of concepts in OmegaCAD ELEKTRO system The interpretation of concepts in OmegaCAD ELEKTRO system	Change: Scale: M=1:1 Date: 2009.03.03.	Example-Plan Ltd. Example-Plan Ltd.	=E01 +PLACE01	Plan number: PLAN-FIT-01 Plan code: PLAN-CODE	Sheet: 5/7

Wires inside fitting place:

1.	-KS1	:1	— -KS1	:11
2.	-KS1	:1	— -F1	:2
3.	-KS1	:2	— -X3	:8
4.	-KS1	:5	— -X3	:7
5.	-KS1	:5	— -F1	:1
6.	-KS1	:6	— -X1	:1
7.	-KS1	:10	— PLAN-NUMBER-3	
8.	-KS1	:11	— -KS1	:20
9.	-KS1	:14	— EQUIT 01	
10.	-KS1	:15	— -X1	:2

Wiring plans of 'Wires inside fitting place' if necessary!

Chaining of binding points:

Potential:	EQUIT 01		
-F1	:1	-KS1	:5

Wiring plans of 'Changing of binding points'
if necessary!

Dokumentation registry

Field: =J01, 1. 20 kV turnout, Budapest transmission line

Fitting place	Place name	Plan number	Plan code	Date	Plan type	Plan nature	V.	V.date	Change	Number	Scale	Drawing sheet
Circuit plans												
		MINT-S-J01-R00	MINT-S-J01-R00	2009.02.10.	Circuit diagram	Fruition plan	A	2009.02.24.	The extension of a change	8 sheet	M=1:1	A3 420x297mm
Dispozition and fitting plan sheets												
+R1	Secondary cupboard	MINT-S-J01-E01	MINT-S-J01-E01	2009.02.24.	Dispozition plan	Fruition plan				1 sheet	M=1:10	A3 420x297mm
+R1	Secondary cupboard	MINT-S-J01-S01	MINT-S-J01-S02	2009.02.24.	Fitting plan	Fruition plan				7 sheet	M=1:1	A3 420x297mm
+S1	External cupboard	MINT-S-J01-E02	MINT-S-J01-E02	2009.02.24.	Diszpozition plan	Fruition plan				1 sheet	M=1:5	A3 420x297mm
+S1	External cupboard	MINT-S-J01-S02	MINT-S-J01-S02	2009.02.15.	Fitting plan	Fruition plan				3 sheet	M=1:1	A3 420x297mm
+T1	20 kV current transformers	MINT-S-J01-E03	MINT-S-J01-E03	2009.02.24.	Diszpozition plan	Fruition plan				1 sheet	M=1:2	A3 420x297mm
+T1	20 kV current transformers	MINT-S-J01-S03	MINT-S-J01-S03	2009.02.24.	Fitting plan	Fruition plan				3 sheet	M=1:1	A3 420x297mm
General plans												
		MINT-S-J00-K00	MINT-S-J01-K00	2009.02.24.	Cable-laying plan	Fruition plan				1/4	M=1:20	A3 420x297mm
										2/4	M=1:20	A3 420x297mm
										3/4	M=1:10	A3 420x297mm
										4/4	M=1:10	A3 420x297mm
Cable list plans												
		MINT-S-J01-K00	MINT-S-J01-K00	2009.02.15.	Cable list plan	Fruition plan				6 sheet	M=1:1	A3 420x297mm
Materials list plans												
		MINT-S-J01-A00	MINT-S-J01-A00	2009.02.24.	Materlials list plan	Fruition plan				2 sheet	M=1:1	A3 420x297mm

Contents:

CHANGES

Sign	Date	Designer	Manager	Controller	Change contents

Head of department:	Dr. Boss	
Leader designer:	Leslie Hegyaljai	
Designer:	Omega-Soft Kft.	
Controller:	Example Comtroller	
Editor:	OmegaCAD ELEKTRO	
Date:	2009.02.24.	
Scale:	M=1:1	
Sheet size:	A3 420x297mm	
Printing date:	2015.2.18.	9h 16' 28".

The interpretation of concepts in OmegaCAD ELEKTRO system

Theme: Summary plan register

Fruition plan
Sample to the first step

=J01
1. 20 kV turnout
Budapest transmission line

All sheet: **2**

Sheetnumber: **1.**

Plan number/Change: MINT-S-J01-D00

Plan code: MINT-S-J01-D00

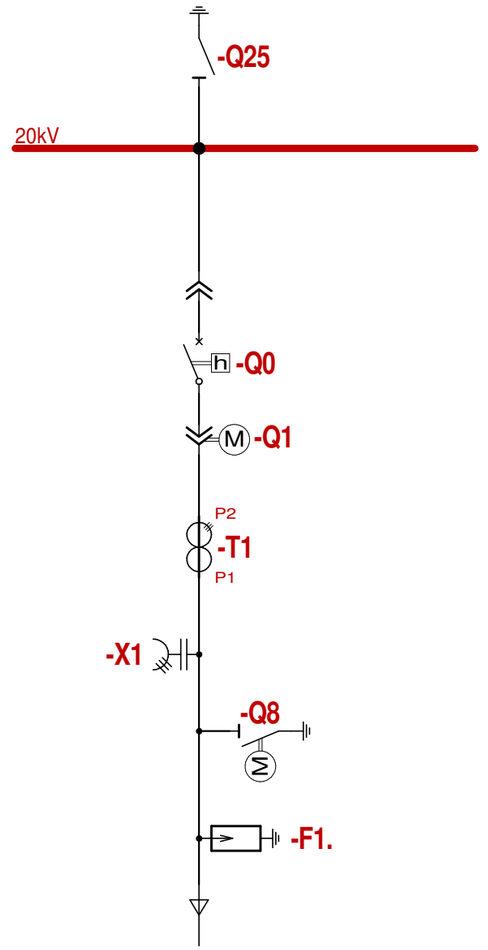
Example-Plan Ltd.
H -1164 Budapest
Takács str. 4.
E-mail:info@omegasoft.hu

Field: =J82, 20 kV devices buswires,

Fitting place	Place name	Plan number	Plan code	Date	Plan type	Plan nature	V.	V.date	Change	Number	Scale	Drawing sheet
Circuit plans												
		MINT-S-J82-R00	MINT-S-J82-J01	2009.02.10.	Circuit plan	Fruition plan				3 sheet	M=1:1	A3 420x297mm
Dispozition and fitting plan sheets												
+S11	20 kV devices buswires	MINT-S-J82-R01	MINT-S-J82-R01	2009.02.24.	Fitting plan	Fruition plan				3 sheet	M=1:1	A3 420x297mm

iDENTIFIERS OF FIELD AND FITTING PLACES

	Sign
Primary field:	=J01
Devices buswires:	=J82+S11
Buswires terminal:	-X1
Breaker	-Q0
Breaker car (switch)	-Q1
Ground switch	-Q8
Current transformer	-T1
Current transformer 3 phase	T1.L1,T2.L2,T3.L3
Current transformer fitting place	+T1
Secondary cupboard	+R1
External cupboard	+S1



=J01

Contents:

CHANGES

Sign	Date	Designer	Manager	Controller	Change contents
A	2009.02.24.	Leslie Hegyaljai			The extension of a change

Head of department:	Dr. Boss	
Leader designer:	Leslie Hegyaljai	
Designer:	Omega-Soft Kft.	
Controller:	Example Comtroller	
Editor:	OmegaCAD ELEKTRO	
Date:	2009.02.10.	
Scale:	M=1:1	
Sheet size:	A3 420x297mm	
Printing date:	2015.2.18.	9h 16' 28".

The interpretation of concepts in OmegaCAD ELEKTRO system

Theme: Circuit diagram

Fruition plan
Sample to the first step

=J01
1. 20 kV turnout
Budapest transmission line

All sheet: 9

Sheetnumber: 1.

Plan number/Change: MINT-S-J01-R00 A

Plan code: MINT-S-J01-R00

Example-Plan Ltd.
H -1164 Budapest
Takács str. 4.
E-mail:info@omegasoft.hu
Example-Plan Ltd.

Bus wires:	
C-O1	Main protection operator
C-O2+	Back-up protection operator
C-I+	Interlocking voltage
C-SO+	Switching operation voltage
C-S+	Signal voltage
C-BJP+	Breaker jamming protection start
C-	Common negative
BV++	Breaker operation voltage
J01/MO+	Main operator
J01/BO+	Back-up operator
J01/I+	Interlocking
J01/Q1+	Switching engine
J01/S+	Signals
J01/BJP+	Breaker jamming protection start
J01/EO+	Engine operating
J01/-	Negative
20kV	

Fitting places:		
=J01	+R1	Secondary cupboard
=J01	+S1	External cupboard
=J01	+T1	20 kV current transformers
=J82	*+S11*	*20 kV devices buswires*
=J01	*+J01*	

Wires:	
Cu 1.5mm2	
Cu 2.5mm2	
Cu 4mm2	
Cu 6mm2	
Cu 10mm2	
Cu 16mm2	
Cu 25mm2	
Cu 35mm2	
Cu 50mm2	
Cu 70mm2	
Cu 95mm2	
Cu 120mm2	

The interpretation of concepts in OmegaCAD ELEKTRO system
1. 20 kV turnout
Budapest transmission line

Change: A

Date: 2009.02.10.

Example-Plan Ltd.

=J01

Plan number: MINT-S-J01-R00

Plan code: MINT-S-J01-R00

Sheet: 2 / 9

=J82
+S11

Main protection operator MNT-S-J82-R00 2/2 =J82+S11-X1:1
Back-up operator MNT-S-J82-R00 2/3 =J82+S11-X1:2
Interlocking voltage MNT-S-J82-R00 2/4 =J82+S11-X1:3
Switching operation voltage MNT-S-J82-R00 2/5 =J82+S11-X1:8
Signal voltage MNT-S-J82-R00 2/6 =J82+S11-X1:5
Breaker jamming protection start MNT-S-J82-R00 2/6 =J82+S11-X1:6
Breaker operation voltage MNT-S-J82-R00 2/7 =J82+S11-X1:7
Common negative MNT-S-J82-R00 2/8 =J82+S11-X1:4

+R1

-F1 -F2 -F3 -F4 -F5 -F6 [6]

J01/MO+ Main protection operator -X1 :1
J01/BO+ Back-up operator -X1 :2
J01/I+ Interlocking voltage -X1 :3
J01/Q1+ Switching operation voltage -X1 :4
J01/S+ Signal voltage -X1 :5
J01/BJP+ Breaker jamming protection start -X1 :6
J01/EO+ Breaker operation voltage -X1 :7
J01/- Common negative -X1 :8

DC bus wires

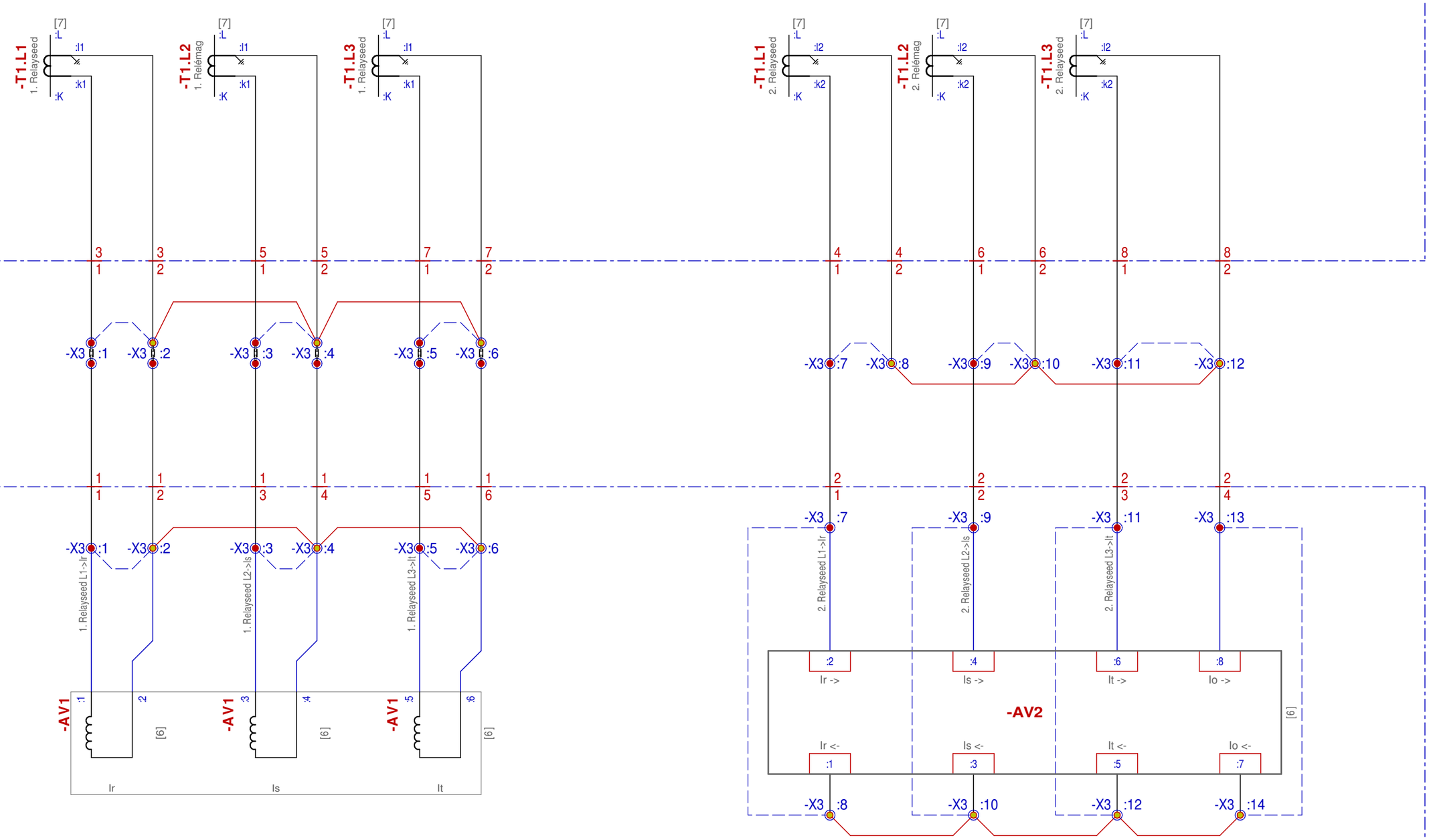
The interpretation of concepts in OmegaCAD ELEKTRO system 1. 20 kV turnout Budapest transmission line	Change: A Date: 2009.02.10.	Example-Plan Ltd.	=J01 +R1

Plan number: MINT-S-J01-R00
Plan code: MINT-S-J01-R00
Sheet: 3/9

+T1

1. Relayseed

2. Relayseed



DTI2-EP

DTIVA2-EP

Current transformer circuits

1	2	3	4	5	6	7	8

The interpretation of concepts in OmegaCAD ELEKTRO system 1. 20 kV turnout Budapest transmission line	Change: A Date: 2009.02.10.	**Example-Plan Ltd.**	**=J01** **+S1**	Plan number: MINT-S-J01-R00 Plan code: MINT-S-J01-R00	Sheet: **4** / 9

+S1

-X2 :1

101
1

Custom Potential

PLAN-NUMBER-1
2/8
=E01+PLACE01-KS1:19

=E01
+PLACE01

1	2	3	4	5	6	7	8

The interpretation of concepts in OmegaCAD ELEKTRO system
1. 20 kV turnout
Budapest transmission line

Change: A

Date: 2009.02.10.

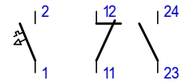
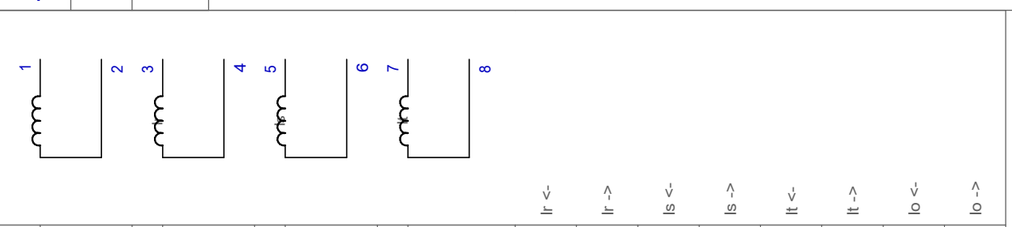
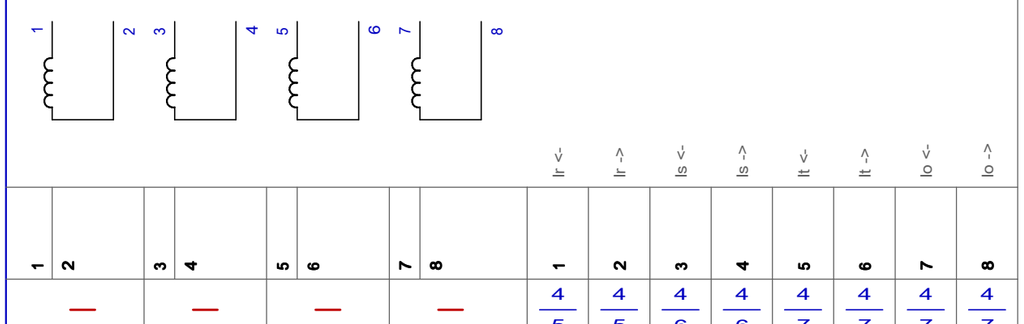
Example-Plan Ltd.

=J01
+S1

Plan number: MINT-S-J01-R00

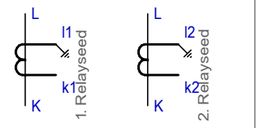
Plan code: MINT-S-J01-R00

Sheet: 5 / 9

Ftg. place	Apparatus name	Attributes	Nominal datas	Plansign	Pcs.	Placement of apparatus part [Sheet/Circuit diagram position]
+R1	cutout	5SX5106-7 In assist.co. Irz/Un	= 6 A = 1ny+1z = 220 V DC		6	
	Main protection operator			-F1		3/2 — —
	Back-up operator			-F2		3/3 — —
	Interlocking voltage			-F3		3/4 — —
	Switching operation voltage			-F4		3/5 — —
	Signal voltage			-F5		3/6 — —
	Breaker operation voltage			-F6		3/7 — —
	overcurrent pr.	DTI-EP AV Unfv In Un	 = . = 5A = .		1	
	overcurrent pr.	DTIVA2-EP AV Unfv In Un	 = . = 5A = .		1	

+R1 /-F1 /-F2 /-F3 /-F4 /-F5 /-F6 /-AV1 /-AV2

The interpretation of concepts in OmegaCAD ELEKTRO system 1. 20 kV turnout Budapest transmission line	Change: A Date: 2009.02.10.	Example-Plan Ltd.	=J01	Plan number: MINT-S-J01-R00 Plan code: MINT-S-J01-R00	Sheet: 6/9

Ftg. place	Apparatus name	Attributes	Nominal datas	Plansign	Pcs.	Placement of apparatus part [Sheet/Circuit diagram position]
+T1	current transf.	ARM-20a (L) Up Ip Isz	 = 20 kV = 500 A = 5/5 A		3	
	Current Transformer L1			-T1.L1		k1 K I1 L: 4/2 — k2 K I2 L: 4/5
	Current Transformer L2			-T1.L2		k1 K I1 L: 4/2 — k2 K I2 L: 4/6
	Current Transformer L3			-T1.L3		k1 K I1 L: 4/3 — k2 K I2 L: 4/7

+T1 /-T1.L1 /-T1.L2 /-T1.L3

The interpretation of concepts in OmegaCAD ELEKTRO system 1. 20 kV turnout Budapest transmission line	Change: A Date: 2009.02.10.	Example-Plan Ltd. Example-Plan Ltd.	=J01	Plan number: MINT-S-J01-R00 Plan code: MINT-S-J01-R00	Sheet: 7/9

Num-ber	Cable number	From To	Sign	Placement of cable cores [Sheet/Circuit diagram position] 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48	Comment Type / Structure
1	J001W001	+R1 +S1	A	4 4 4 4 4 4 2 2 3 3 3 4	SZRMtKVM-J 7 x 2.5
2	J001W002	+R1 +S1	B	4 4 4 4 5 6 7 7	SZRMtKVM-J 7 x 2.5
3	J001E003	+S1 -T1.L1	A	4 4 2 2	Current Tran. 1. relaysseed L1 SZRMtKVM-J 4 x 2.5
4	J001E004	+S1 -T1.L1	B	4 4 5 6	Current Tran. 2. relaysseed L1 SZRMtKVM-J 4 x 2.5
5	J000E005	+S1 -T1.L2	C	4 4 3 3	Current Tran. 1. relaysseed L2 SZRMtKVM-J 4 x 2.5
6	J001E006	+S1 -T1.L2	D	4 4 6 6	Current Tran. 2. relaysseed L2 SZRMtKVM-J 4 x 2.5
7	J001E007	+S1 -T1.L3	E	4 4 3 4	Current Tran. 1. relaysseed L3 SZRMtKVM-J 4 x 2.5
8	J001E008	+S1 -T1.L3	F	4 4 7 7	Current Tran. 2. relaysseed L3 SZRMtKVM-J 4 x 2.5
101	E007V101	+S1 =E01+PLACE01	A	5 5	Field connect SZRMtKVM-J 7 x 1.5

Cable:=J01: /1. /2. /3. /4. /5. /6. /7. /8. /101.

The interpretation of concepts in OmegaCAD ELEKTRO system
1. 20 kV turnout
Budapest transmission line

Change: A

Date: 2009.02.10.

Example-Plan Ltd.

Example-Plan Ltd.

=J01

Plan number: MINT-S-J01-R00

Plan code: MINT-S-J01-R00

Sheet: 8 / 9

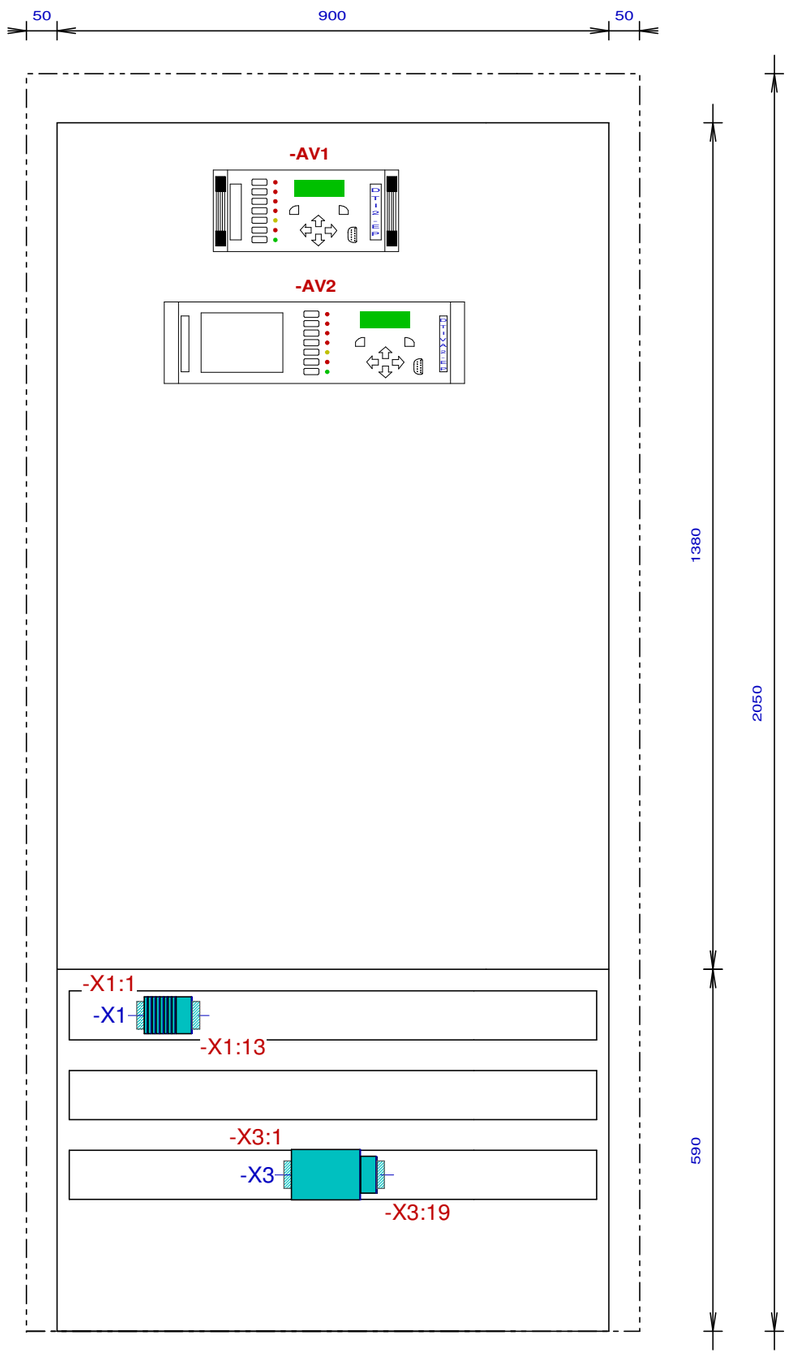
Num-ber	Cable number	From To	Sign	Placement of cable cores [Sheet/Circuit diagram position] 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48	Comment Type / Structure
Cables with field link: =J82					
1	J01EV001	+S11 =J01+R1	A	3 3 3 3 3 3 3 3 2 3 4 5 6 6 7 8	NYCY 14x1,5/16

Cable:=J82: /1.

The interpretation of concepts in OmegaCAD ELEKTRO system 1. 20 kV turnout Budapest transmission line	Change: A Date: 2009.02.10.	Example-Plan Ltd. Example-Plan Ltd.	=J82	Plan number: MINT-S-J01-R00 Plan code: MINT-S-J01-R00	Sheet: 9 9

+R1

without a front wiever door



Type of fitting place:		KSZ		
Plansign	Type of apparatus	Nominal datas		
-AV1	DTI-EP AV	.	5A	.
-AV2	DTIVA2-EP AV	.	5A	.
-F1	5SX5106-7	6 A	1ny+1z	220 V DC
-F2	5SX5106-7	6 A	1ny+1z	220 V DC
-F3	5SX5106-7	6 A	1ny+1z	220 V DC
-F4	5SX5106-7	6 A	1ny+1z	220 V DC
-F5	5SX5106-7	6 A	1ny+1z	220 V DC
-F6	5SX5106-7	6 A	1ny+1z	220 V DC

Type of terminals				
Block	Serial number		Type + Code	
X1 léc	1	- 13	WDU 2.5	102000
X2 léc	1	- 11	WDU 2.5	102000
X3 léc	1	- 14	SAKT 2/LT/35	010602
	15	- 19	WDU 2.5	102000

CHANGES

Sign	Date	Designer	Manager	Controller	Change contents

Head of department:	Dr. Boss	
Leader designer:	Leslie Hegyaljai	
Designer:	Omega-Soft Kft.	
Controller:	Example Comtroller	
Editor:	OmegaCAD ELEKTRO	
Date:	2009.02.24.	
Scale:	M=1:10	
Sheet size:	A3 420x297mm	
Printing date:	2015.2.18.	9h 16' 29".

The interpretation of concepts in OmegaCAD ELEKTRO system

Theme: Dispozition plan

Fruition plan
Sample to the first step
Secondary cupboard

=J01 +R1

1. 20 kV turnout
Budapest transmission line

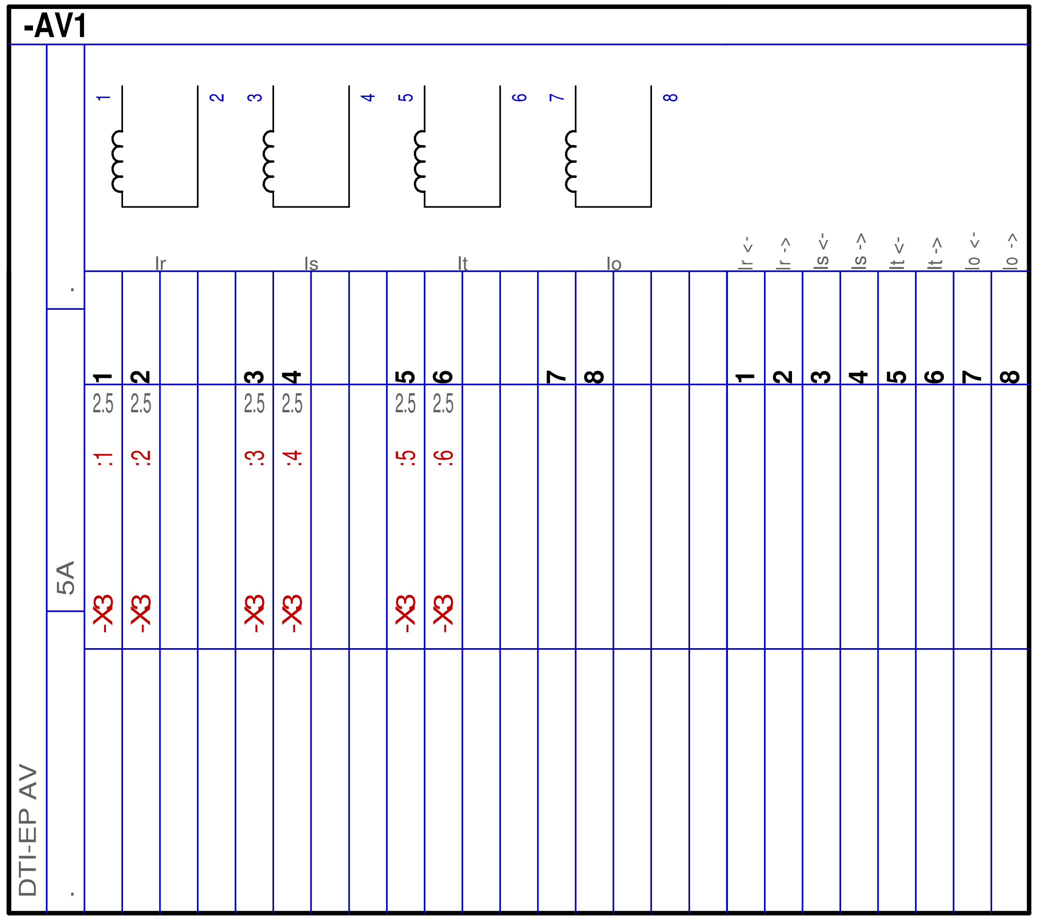
Example-Plan Ltd.
H -1164 Budapest
Takács str. 4.
E-mail:info@omegasoft.hu
Example-Plan Ltd.

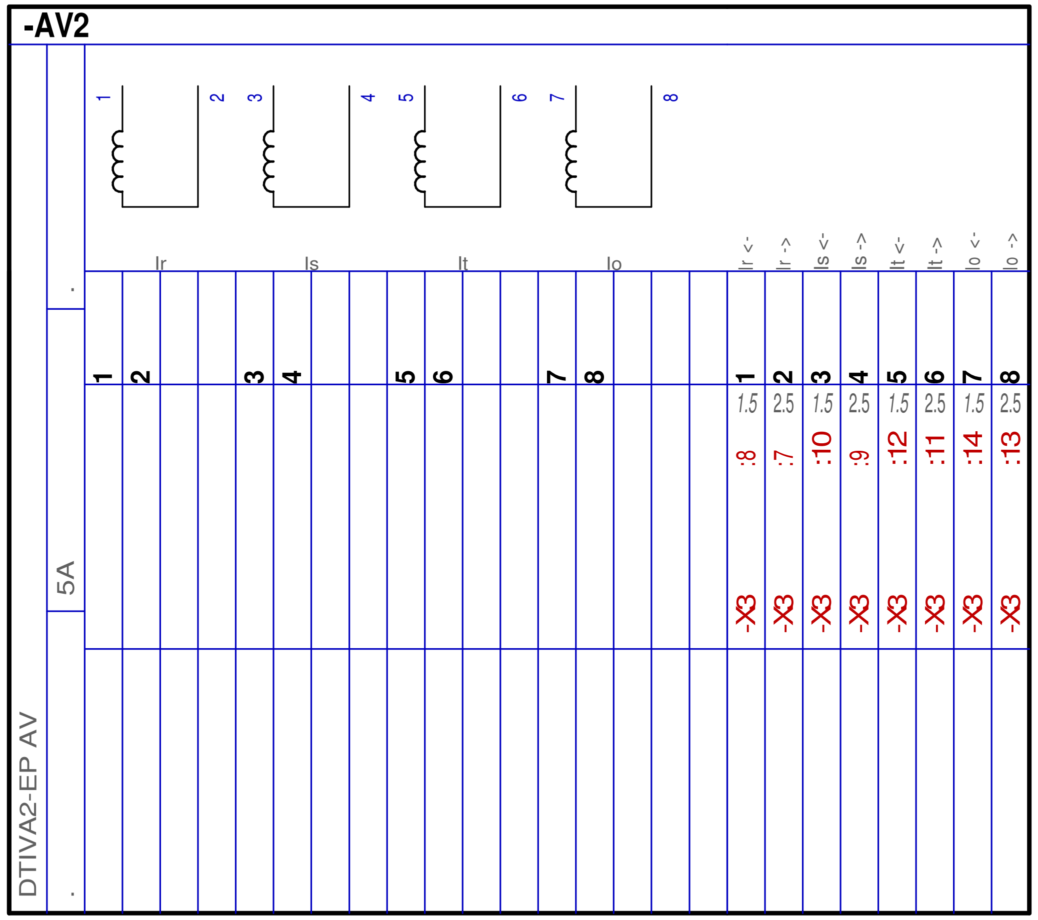
All sheet: **1**

Sheetnumber: **1.**

Plan number/Change: MINT-S-J01-E01

Plan code: MINT-S-J01-E01





Fit terminal type			
Block	Number	Type + codenumber	
X1 block	1 - 13	WDU 2.5	102000
X3 block	1 - 14	SAKT 2/LT/35	010602
	15 - 19	WDU 2.5	102000

-AV1 /-AV2

Contents:

CHANGES

Sign	Date	Designer	Manager	Controller	Change contents

Head of department:	Dr. Boss	
Leader designer:	Leslie Hegyaljai	
Designer:	Omega-Soft Kft.	
Controller:	Example Comtroller	
Editor:	OmegaCAD ELEKTRO	
Date:	2009.02.24.	
Scale:	M=1:1	
Sheet size:	A3 420x297mm	
Printing date:	2015.2.18.	9h 16' 29''.

The interpretation of concepts in OmegaCAD ELEKTRO system

Theme: Fitting plan

Fruition plan
Sample to the first step
Secondary cupboard

=J01 +R1
1. 20 kV turnout
Budapest transmission line

All sheet: 7

Sheetnumber: 1.

Plan number/Change: MINT-S-J01-S01

Plan code: MINT-S-J01-S02

Example-Plan Ltd.
H -1164 Budapest
Takács str. 4.
E-mail:info@omegasoft.hu
Example-Plan Ltd.

-F1

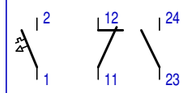
Main protection operator

220 V DC

1ny+1z

5SX5106-7

6 A



	1	2	11	12	23	24
1 14x1,5/16 =J82+S11 ,A	1.5	1				
	:1					
	-X1					

-F2

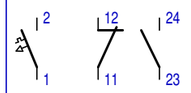
Back-up operator

220 V DC

1ny+1z

5SX5106-7

6 A



	1	2	11	12	23	24
1 14x1,5/16 =J82+S11 ,A	1.5	2				
	:2					
	-X1					

-F3

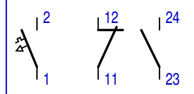
Interlocking voltage

220 V DC

1ny+1z

5SX5106-7

6 A



	1	2	11	12	23	24
1 14x1,5/16 =J82+S11 ,A	1.5	3				
	:3					
	-X1					

-F4

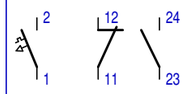
Switching operation voltage

220 V DC

1ny+1z

5SX5106-7

6 A



	1	2	11	12	23	24
1 14x1,5/16 =J82+S11 ,A	1.5	4				
	:4					
	-X1					

-F1 /-F2 /-F3 /-F4

The interpretation of concepts in OmegaCAD ELEKTRO system
1. 20 kV turnout
Budapest transmission line

Change:
Scale: M=1:1
Date: 2009.02.24.

Example-Plan Ltd.

=J01
+R1

Plan number: MINT-S-J01-S01
Plan code: MINT-S-J01-S02

Sheet: 2 / 7

-F5

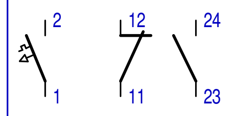
Signal voltage

220 V DC

1ny+1z

5SX5106-7

6 A



1	2	11	12	23	24

1	14x1,5/16	=J82+S11	,A	1.5	5	

-X1 :5

-F6

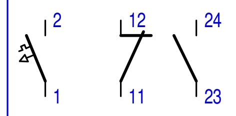
Breaker operation voltage

220 V DC

1ny+1z

5SX5106-7

6 A



1	2	11	12	23	24

1	14x1,5/16	=J82+S11	,A	1.5	7	

-X1 :7

-F5 /-F6

The interpretation of concepts
in OmegaCAD ELEKTRO system
1. 20 kV turnout
Budapest transmission line

Change:	
Scale:	M=1:1
Date:	2009.02.24.

Example-Plan Ltd.

=J01
+R1

Plan number: MINT-S-J01-S01
Plan code: MINT-S-J01-S02

Sheet: **3** / 7

	1	2	3	4	5	6	7	8	9	10	11	12	13
	1.5 :1 -F1	1.5 :1 -F2	1.5 :1 -F3	1.5 :1 -F4	1.5 :1 -F5		1.5 :1 -F6						
	J01/MO+	J01/BO+	J01/I+	J01/Q1+	J01/S+	J01/BJP+	J01/EO+	J01/-					
1						6		8					
Circuit diagram positions: (sheet/wire diagram)	3/4	3/6	3/8	3/9	3/11	3/12	3/14	3/16					

Fit terminal type

Block	Number	Type + codenumber
X1 block	1 - 13	WDU 2.5 102000

-X1

1 14x1,5/16 =J82+S11 ,A

-X1:1 - 13.

The interpretation of concepts in OmegaCAD ELEKTRO system
1. 20 kV turnout
Budapest transmission line

Change:
Scale: M=1:1
Date: 2009.02.24.

Example-Plan Ltd.

=J01
+R1

Plan number: MINT-S-J01-S01
Plan code: MINT-S-J01-S02

Sheet: 4 / 7

Fit terminal type			
Block	Number	Type + codenumber	
X3 block	1 - 14	SAKT 2/LT/35	010602
	15 - 19	WDU 2.5	102000

-X3

2.5	2.5	2.5	2.5	2.5	2.5	2.5	1.5	2.5	1.5	2.5	1.5	2.5	1.5							
:1	:2	:3	:4	:5	:6	:2	:1	:4	:3	:6	:5	:8	:7							
-AV1	-AV1	-AV1	-AV1	-AV1	-AV1	-AV2	-AV2	-AV2	-AV2	-AV2	-AV2	-AV2	-AV2							
1. Relayseed L1->r		1. Relayseed L2->s		1. Relayseed L3->t		2. Relayseed L1->r		2. Relayseed L2->s		2. Relayseed L3->t										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		

1	7 x 2.5	+S1	,A	1	2	3	4	5	6											
2	7 x 2.5	+S1	,B							1		2		3		4				

Circuit diagram positions: (sheet/wire diagram)																		
4/3	4/4	4/5	4/5	4/6	4/7	4/10	4/10	4/12	4/12	4/13	4/13	4/14	4/14					

-X3:1 - 19.

The interpretation of concepts in OmegaCAD ELEKTRO system 1. 20 kV turnout Budapest transmission line	Change:	Example-Plan Ltd.	=J01 +R1	Plan number: MINT-S-J01-S01	Sheet: 5/7
	Scale: M=1:1			Plan code: MINT-S-J01-S02	
	Date: 2009.02.24.				

Cable number:	J001W001
Cable number:	1.
Bind fitting place	+R1
End fitting place	+S1
Brake:	A
Type:	SZRMtKVM-J
Wire number:	7
Construction:	7 x 2.5
Note:	New cable

Wire number: (Plan sign	Bind point :Connection)		Wire number: (Plan sign	Bind point :Connection)	
1.	-X3	:1	**5.**	-X3	:5
2.	-X3	:2	**6.**	-X3	:6
3.	-X3	:3	**7.**		-
4.	-X3	:4			

Cable number:	J001W002
Cable number:	2.
Bind fitting place	+R1
End fitting place	+S1
Brake:	B
Type:	SZRMtKVM-J
Wire number:	7
Construction:	7 x 2.5
Note:	New cable

Wire number: (Plan sign	Bind point :Connection)		Wire number: (Plan sign	Bind point :Connection)	
1.	-X3	:7	**5.**		-
2.	-X3	:9	**6.**		-
3.	-X3	:11	**7.**		-
4.	-X3	:13			

Cable number:	J01EV001
Cable number:	1.
Bind fitting place	+R1
End fitting place	=J82+S11
Brake:	A
Type:	NYCY
Wire number:	14.
Construction:	14x1,5/16
Note:	New cable

Wire number: (Plan sign	Bind point :Connection)		Wire number: (Plan sign	Bind point :Connection)	
1.	-F1	:2	**8.**	-X1	:8
2.	-F2	:2	**9.**		-
3.	-F3	:2	**10.**		-
4.	-F4	:2	**11.**		-
5.	-F5	:2	**12.**		-
6.	-X1	:6	**13.**		-
7.	-F6	:2	**14.**		-

Cables: / 1. / 2. / 1.

The interpretation of concepts in OmegaCAD ELEKTRO system
1. 20 kV turnout
Budapest transmission line

Change:
Scale: M=1:1
Date: 2009.02.24.

Example-Plan Ltd.

=J01
+R1

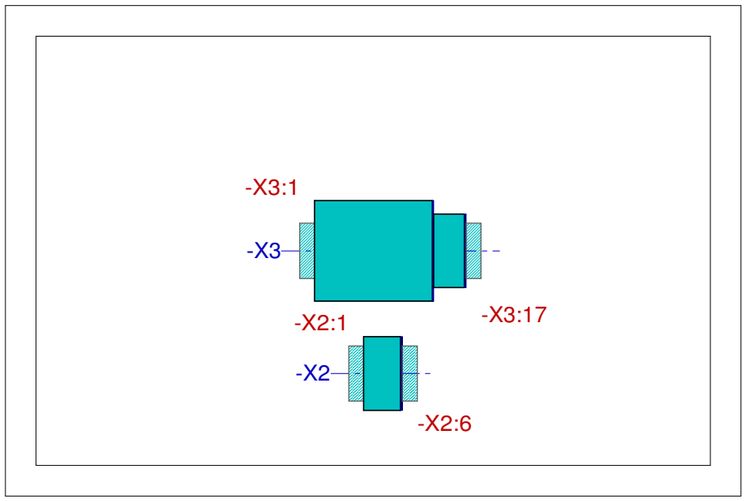
Plan number: MINT-S-J01-S01
Plan code: MINT-S-J01-S02

Sheet: 6 / 7

Wires inside fitting place:

1.	-AV1	:1	—	-X3	:1	2.5
2.	-AV1	:2	—	-X3	:2	2.5
3.	-AV1	:3	—	-X3	:3	2.5
4.	-AV1	:4	—	-X3	:4	2.5
5.	-AV1	:5	—	-X3	:5	2.5
6.	-AV1	:6	—	-X3	:6	2.5
7.	-AV2	:1	—	-X3	:8	1.5
8.	-AV2	:2	—	-X3	:7	2.5
9.	-AV2	:3	—	-X3	:10	1.5
10.	-AV2	:4	—	-X3	:9	2.5
11.	-AV2	:5	—	-X3	:12	1.5
12.	-AV2	:6	—	-X3	:11	2.5
13.	-AV2	:7	—	-X3	:14	1.5
14.	-AV2	:8	—	-X3	:13	2.5
15.	-F1	:1	—	-X1	:1	1.5
16.	-F2	:1	—	-X1	:2	1.5
17.	-F3	:1	—	-X1	:3	1.5
18.	-F4	:1	—	-X1	:4	1.5
19.	-F5	:1	—	-X1	:5	1.5
20.	-F6	:1	—	-X1	:7	1.5

+S1



Fitting place type:		GK-W642		
Plansign	Apparat type	Nominal data		
-F1	5SX5106-7	6 A	1ny+1z	220 V DC
-F2	5SX5106-7	6 A	1ny+1z	220 V DC
-F3	5SX5106-7	6 A	1ny+1z	220 V DC
-F4	5SX5106-7	6 A	1ny+1z	220 V DC
-F5	5SX5106-7	6 A	1ny+1z	220 V DC
-F6	5SX5106-7	6 A	1ny+1z	220 V DC

Fit terminal type			
Block	Number	Type + codenumber	
X1 block	1 - 13	WDU 2.5	102000
X3 block	1 - 12	SAKT 2/LT/35	010602
	13 - 17	WDU 2.5	102000

CHANGES

Sign	Date	Designer	Manager	Controller	Change contents

Head of department:	Dr. Boss	
Leader designer:	Leslie Hegyaljai	
Designer:	Omega-Soft Kft.	
Controller:	Example Comtroller	
Editor:	OmegaCAD ELEKTRO	
Date:	2009.02.24.	
Scale:	M=1:5	
Sheet size:	A3 420x297mm	
Printing date:	2015.2.18.	9h 16' 29".

The interpretation of concepts in OmegaCAD ELEKTRO system

Theme: Diszpozition plan

Fruition plan
Sample to the first step
External cupboard

=J01 +S1
1. 20 kV turnout
Budapest transmission line

All sheet: **1**

Sheetnumber: **1.**

Plan number/Change: MINT-S-J01-E02

Plan code: MINT-S-J01-E02

Example-Plan Ltd.
H -1164 Budapest
Takács str. 4.
E-mail:info@omegasoft.hu
Example-Plan Ltd.

Fit terminal type			
Block	Number	Type + codenumber	
X3 block	1 - 12	SAKT 2/LT/35	010602
	13 - 17	WDU 2.5	102000

Contents:

CHANGES

Sign	Date	Designer	Manager	Controller	Change contents

Head of department:	Dr. Boss	
Leader designer:	Leslie Hegyaljai	
Designer:	Omega-Soft Kft.	
Controller:	Example Comtroller	
Editor:	OmegaCAD ELEKTRO	
Date:	2009.02.15.	
Scale:	M=1:1	
Sheet size:	A3 420x297mm	
Printing date:	2015.2.18.	9h 16' 29".

The interpretation of concepts in OmegaCAD ELEKTRO system

Theme: Fitting plan

Fruition plan
Sample to the first step
External cupboard

=J01 +S1
1. 20 kV turnout
Budapest transmission line

Example-Plan Ltd.
H -1164 Budapest
Takács str. 4.
E-mail:info@omegasoft.hu

All sheet: **3**

Sheetnumber: **1.**

Plan number/Change: MINT-S-J01-S02

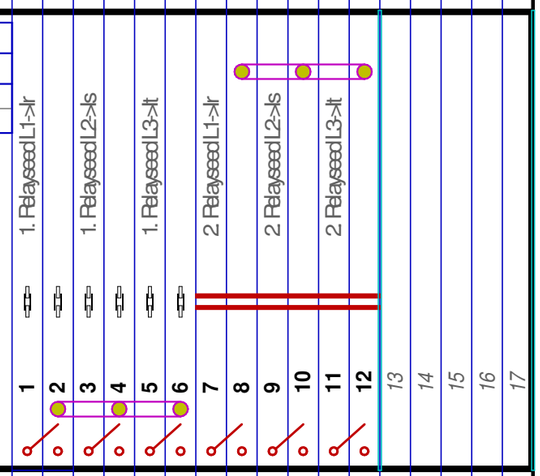
Plan code: MINT-S-J01-S02

				1	2	3	4	5	6										
1	7 x 2.5	+R1	,A							1									
4	4 x 2.5	-T1.L1	,B								1								
6	4 x 2.5	-T1.L2	,D									1							
8	4 x 2.5	-T1.L3	,F											1	2				

Fit terminal type

Block	Number	Type + codenumber	
X3 block	1 - 12	SAKT 2/LT/35	010602
	13 - 17	WDU 2.5	102000

-X3



				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
3	4 x 2.5	-T1.L1	,A	1	2															
5	4 x 2.5	-T1.L2	,C			1	2													
7	4 x 2.5	-T1.L3	,E					1	2											
2	7 x 2.5	+R1	,B							1		2		3	4					
4	4 x 2.5	-T1.L1	,B								2									
6	4 x 2.5	-T1.L2	,D										2							

Circuit diagram positions: (sheet/wire diagram)	4/3	4/4	4/5	4/5	4/6	4/7	4/10	4/11	4/12	4/12	4/13	4/14					

-X3:1 - 17.

The interpretation of concepts in OmegaCAD ELEKTRO system
1. 20 kV turnout
Budapest transmission line

Change:
Scale: M=1:1
Date: 2009.02.15.

Example-Plan Ltd.

=J01
+S1

Plan number: MINT-S-J01-S02
Plan code: MINT-S-J01-S02

Sheet: 2 / 3

Cable number:	J001W001
Cable number:	1.
Bind fitting place	+S1
End fitting place	+R1
Brake:	A
Type:	SZRMtKVM-J
Wire number:	7
Construction:	7 x 2.5
Note:	New cable

Wire number:	Bind point (Plan sign :Connection)		Wire number:	Bind point (Plan sign :Connection)	
1.	-X3	:1	5.	-X3	:5
2.	-X3	:2	6.	-X3	:6
3.	-X3	:3	7.		-
4.	-X3	:4			

Cable number:	J001W002
Cable number:	2.
Bind fitting place	+S1
End fitting place	+R1
Brake:	B
Type:	SZRMtKVM-J
Wire number:	7
Construction:	7 x 2.5
Note:	New cable

Wire number:	Bind point (Plan sign :Connection)		Wire number:	Bind point (Plan sign :Connection)	
1.	-X3	:7	5.		-
2.	-X3	:9	6.		-
3.	-X3	:11	7.		-
4.	-X3	:12			

Cable number:	J001E003
Cable number:	3.
Bind fitting place	+S1
End fitting place	-T1.L1
Brake:	A
Type:	SZRMtKVM-J
Wire number:	4
Construction:	4 x 2.5
Note:	New cable
Current Tran. 1. relaysseed L1	

Wire number:	Bind point (Plan sign :Connection)		Wire number:	Bind point (Plan sign :Connection)	
1.	-X3	:1	3.		-
2.	-X3	:2	4.		-

Cable number:	J001E004
Cable number:	4.
Bind fitting place	+S1
End fitting place	-T1.L1
Brake:	B
Type:	SZRMtKVM-J
Wire number:	4
Construction:	4 x 2.5
Note:	New cable
Current Tran. 2. relaysseed L1	

Wire number:	Bind point (Plan sign :Connection)		Wire number:	Bind point (Plan sign :Connection)	
1.	-X3	:7	3.		-
2.	-X3	:8	4.		-

Cable number:	J000E005
Cable number:	5.
Bind fitting place	+S1
End fitting place	-T1.L2
Brake:	C
Type:	SZRMtKVM-J
Wire number:	4
Construction:	4 x 2.5
Note:	New cable
Current Tran. 1. relaysseed L2	

Wire number:	Bind point (Plan sign :Connection)		Wire number:	Bind point (Plan sign :Connection)	
1.	-X3	:3	3.		-
2.	-X3	:4	4.		-

Cable number:	J001E006
Cable number:	6.
Bind fitting place	+S1
End fitting place	-T1.L2
Brake:	D
Type:	SZRMtKVM-J
Wire number:	4
Construction:	4 x 2.5
Note:	New cable
Current Tran. 2. relaysseed L2	

Wire number:	Bind point (Plan sign :Connection)		Wire number:	Bind point (Plan sign :Connection)	
1.	-X3	:9	3.		-
2.	-X3	:10	4.		-

Cable number:	J001E007
Cable number:	7.
Bind fitting place	+S1
End fitting place	-T1.L3
Brake:	E
Type:	SZRMtKVM-J
Wire number:	4
Construction:	4 x 2.5
Note:	New cable
Current Tran. 1. relaysseed L3	

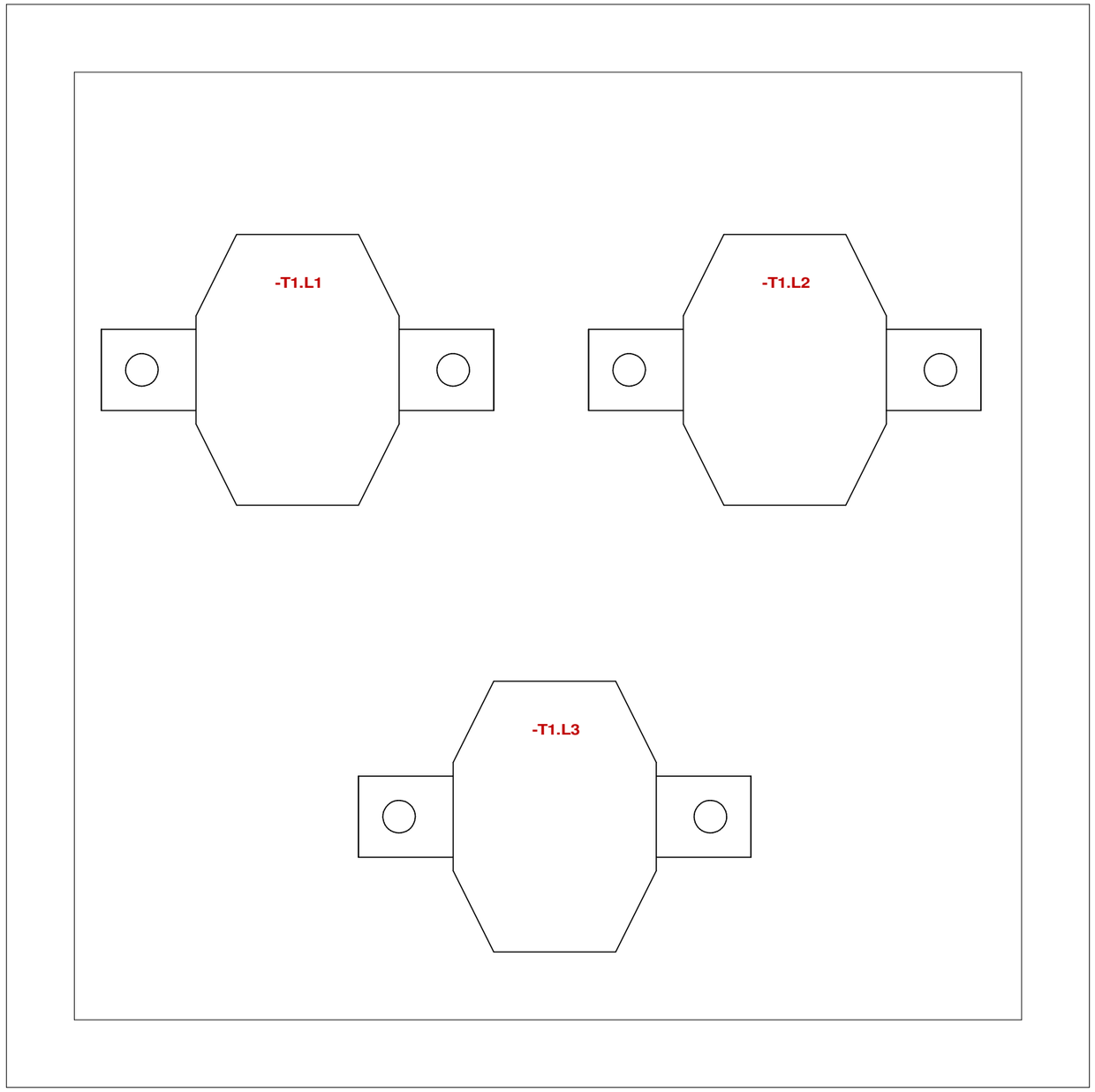
Wire number:	Bind point (Plan sign :Connection)		Wire number:	Bind point (Plan sign :Connection)	
1.	-X3	:5	3.		-
2.	-X3	:6	4.		-

Cable number:	J001E008
Cable number:	8.
Bind fitting place	+S1
End fitting place	-T1.L3
Brake:	F
Type:	SZRMtKVM-J
Wire number:	4
Construction:	4 x 2.5
Note:	New cable
Current Tran. 2. relaysseed L3	

Wire number:	Bind point (Plan sign :Connection)		Wire number:	Bind point (Plan sign :Connection)	
1.	-X3	:11	3.		-
2.	-X3	:12	4.		-

Cables: / 1. / 2. / 3. / 4. / 5. / 6. / 7. / 8.

+T1



Fitting place type:		GK-W441		
Plansign	Apparat type	Nominal data		
-T1.L1	ARM-20a (L)	20 kV	500 A	5/5 A
-T1.L2	ARM-20a (L)	20 kV	500 A	5/5 A
-T1.L3	ARM-20a (L)	20 kV	500 A	5/5 A

CHANGES

Sign	Date	Designer	Manager	Controller	Change contents

Head of department:	Dr. Boss	
Leader designer:	Leslie Hegyaljai	
Designer:	Omega-Soft Kft.	
Controller:	Example Comtroller	
Editor:	OmegaCAD ELEKTRO	
Date:	2009.02.24.	
Scale:	M=1:2	
Sheet size:	A3 420x297mm	
Printing date:	2015.2.18.	9h 16' 29".

The interpretation of concepts in OmegaCAD ELEKTRO system

Theme: Diszpozition plan

Fruition plan
Sample to the first step
20 kV current transformers

=J01 +T1
1. 20 kV turnout
Budapest transmission line

All sheet: **1**

Sheetnumber: **1.**

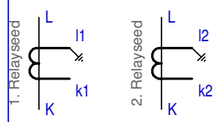
Plan number/Change: MINT-S-J01-E03

Plan code: MINT-S-J01-E03

Example-Plan Ltd.
H -1164 Budapest
Takács str. 4.
E-mail:info@omegasoft.hu
Example-Plan Ltd.

-T1.L1

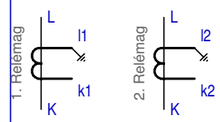
Current Transformer L1 — 5/5 A — 500 A — ARM-20a (L) — 20 kV



				k1	K	I1	L	k2	K	I2	L
3	4 x 2.5	+S1	,A	1		2					
4	4 x 2.5	+S1	,B					1		2	

-T1.L2

Current Transformer L2 — 5/5 A — 500 A — ARM-20a (L) — 20 kV



				k1	K	I1	L	k2	K	I2	L
5	4 x 2.5	+S1	,C	1		2					
6	4 x 2.5	+S1	,D					1		2	

Contents:

-T1.L1 /-T1.L2

CHANGES										
							Head of department:	Dr. Boss		
							Leader designer:	Leslie Hegyaljai		
							Designer:	Omega-Soft Kft.		
							Controller:	Example Comtroller		
							Editor:	OmegaCAD ELEKTRO		
							Date:	2009.02.24.		
							Scale:	M=1:1		
							Sheet size:	A3 420x297mm		
Sign	Date	Designer	Manager	Controller	Change contents		Printing date:	2015.2.18.	9h 16' 29".	

The interpretation of concepts in OmegaCAD ELEKTRO system

Theme: Fitting plan

Fruition plan
Sample to the first step
20 kV current transformers

=J01 +T1
1. 20 kV turnout
Budapest transmission line

Example-Plan Ltd.
H -1164 Budapest
Takács str. 4.
E-mail:info@omegasoft.hu
Example-Plan Ltd.

All sheet: **3**

Sheetnumber: **1.**

Plan number/Change: MINT-S-J01-S03

Plan code: MINT-S-J01-S03

-T1.L3

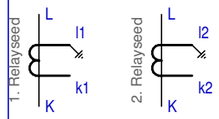
Current Transformer L3

ARM-20a (L)

20 kV

5/5 A

500 A



				k1	K	I1	L	k2	K	I2	L
7	4 x 2.5	+S1	,E	1		2					
8	4 x 2.5	+S1	,F					1		2	

-T1.L3

The interpretation of concepts in OmegaCAD ELEKTRO system 1. 20 kV turnout Budapest transmission line	Change: Scale: M=1:1 Date: 2009.02.24.	**Example-Plan Ltd.** Example-Plan Ltd.	**=J01** **+T1**	Plan number: MINT-S-J01-S03 Plan code: MINT-S-J01-S03	Sheet: **2** / 3

Cable number:	J001E003
Cable number:	3.
Bind fitting place	-T1.L1
End fitting place	+S1
Brake:	A
Type:	SZRMtKVM-J
Wire number:	4
Construction:	4 x 2.5
Note:	New cable
Current Tran. 1. relaysseed L1	

Wire number: (Plan sign	Bind point :Connection)	Wire number: (Plan sign	Bind point :Connection)
1. -T1.L1	:k1	**3.**	-
2. -T1.L1	:l1	**4.**	-

Cable number:	J001E006
Cable number:	6.
Bind fitting place	-T1.L2
End fitting place	+S1
Brake:	D
Type:	SZRMtKVM-J
Wire number:	4
Construction:	4 x 2.5
Note:	New cable
Current Tran. 2. relaysseed L2	

Wire number: (Plan sign	Bind point :Connection)	Wire number: (Plan sign	Bind point :Connection)
1. -T1.L2	:k2	**3.**	-
2. -T1.L2	:l2	**4.**	-

Cable number:	J001E004
Cable number:	4.
Bind fitting place	-T1.L1
End fitting place	+S1
Brake:	B
Type:	SZRMtKVM-J
Wire number:	4
Construction:	4 x 2.5
Note:	New cable
Current Tran. 2. relaysseed L1	

Wire number: (Plan sign	Bind point :Connection)	Wire number: (Plan sign	Bind point :Connection)
1. -T1.L1	:k2	**3.**	-
2. -T1.L1	:l2	**4.**	-

Cable number:	J001E007
Cable number:	7.
Bind fitting place	-T1.L3
End fitting place	+S1
Brake:	E
Type:	SZRMtKVM-J
Wire number:	4
Construction:	4 x 2.5
Note:	New cable
Current Tran. 1. relaysseed L3	

Wire number: (Plan sign	Bind point :Connection)	Wire number: (Plan sign	Bind point :Connection)
1. -T1.L3	:k1	**3.**	-
2. -T1.L3	:l1	**4.**	-

Cable number:	J000E005
Cable number:	5.
Bind fitting place	-T1.L2
End fitting place	+S1
Brake:	C
Type:	SZRMtKVM-J
Wire number:	4
Construction:	4 x 2.5
Note:	New cable
Current Tran. 1. relaysseed L2	

Wire number: (Plan sign	Bind point :Connection)	Wire number: (Plan sign	Bind point :Connection)
1. -T1.L2	:k1	**3.**	-
2. -T1.L2	:l1	**4.**	-

Cable number:	J001E008
Cable number:	8.
Bind fitting place	-T1.L3
End fitting place	+S1
Brake:	F
Type:	SZRMtKVM-J
Wire number:	4
Construction:	4 x 2.5
Note:	New cable
Current Tran. 2. relaysseed L3	

Wire number: (Plan sign	Bind point :Connection)	Wire number: (Plan sign	Bind point :Connection)
1. -T1.L3	:k2	**3.**	-
2. -T1.L3	:l2	**4.**	-

Cables: / 3. / 4. / 5. / 6. / 7. / 8.

The interpretation of concepts in OmegaCAD ELEKTRO system
1. 20 kV turnout
Budapest transmission line

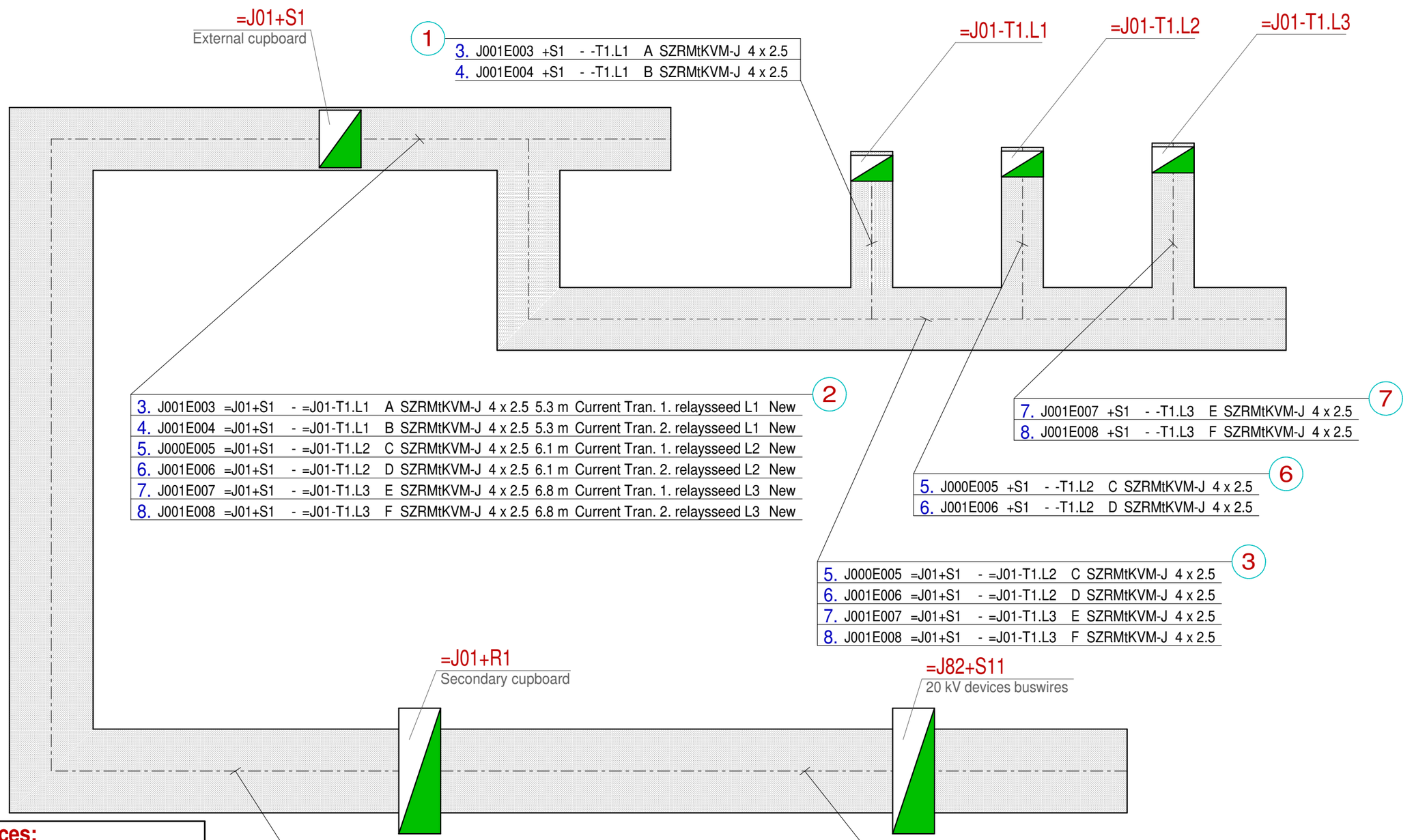
Change:
Scale: M=1:1
Date: 2009.02.24.

Example-Plan Ltd.

=J01
+T1

Plan number: MINT-S-J01-S03
Plan code: MINT-S-J01-S03

Sheet: 3 / 3



1
3. J001E003 +S1 - -T1.L1 A SZRMtKVM-J 4 x 2.5
4. J001E004 +S1 - -T1.L1 B SZRMtKVM-J 4 x 2.5

2
3. J001E003 =J01+S1 - =J01-T1.L1 A SZRMtKVM-J 4 x 2.5 5.3 m Current Tran. 1. relaysseed L1 New
4. J001E004 =J01+S1 - =J01-T1.L1 B SZRMtKVM-J 4 x 2.5 5.3 m Current Tran. 2. relaysseed L1 New
5. J000E005 =J01+S1 - =J01-T1.L2 C SZRMtKVM-J 4 x 2.5 6.1 m Current Tran. 1. relaysseed L2 New
6. J001E006 =J01+S1 - =J01-T1.L2 D SZRMtKVM-J 4 x 2.5 6.1 m Current Tran. 2. relaysseed L2 New
7. J001E007 =J01+S1 - =J01-T1.L3 E SZRMtKVM-J 4 x 2.5 6.8 m Current Tran. 1. relaysseed L3 New
8. J001E008 =J01+S1 - =J01-T1.L3 F SZRMtKVM-J 4 x 2.5 6.8 m Current Tran. 2. relaysseed L3 New

7
7. J001E007 +S1 - -T1.L3 E SZRMtKVM-J 4 x 2.5
8. J001E008 +S1 - -T1.L3 F SZRMtKVM-J 4 x 2.5

6
5. J000E005 +S1 - -T1.L2 C SZRMtKVM-J 4 x 2.5
6. J001E006 +S1 - -T1.L2 D SZRMtKVM-J 4 x 2.5

3
5. J000E005 =J01+S1 - =J01-T1.L2 C SZRMtKVM-J 4 x 2.5
6. J001E006 =J01+S1 - =J01-T1.L2 D SZRMtKVM-J 4 x 2.5
7. J001E007 =J01+S1 - =J01-T1.L3 E SZRMtKVM-J 4 x 2.5
8. J001E008 =J01+S1 - =J01-T1.L3 F SZRMtKVM-J 4 x 2.5

5
1. J001W001 =J01+R1 - =J01+S1 A SZRMtKVM-J 7 x 2.5 7.4 m New
2. J001W002 =J01+R1 - =J01+S1 B SZRMtKVM-J 7 x 2.5 7.4 m New

4
1. J01EV001 =J01+R1 - =J82+S11 A NYCY 14x1,5/16 3.6 m New

Fitting places:

=J01	+R1	Secondary cupboard	1.sheet	KSZ	0x600x0 [mm]
=J01	+S1	External cupboard	1.sheet	GK-W642	0x275x0 [mm]
=J01	-T1.L1		1.sheet	AKM-0	0x124x0 [mm]
=J01	-T1.L2		1.sheet	AKM-0	0x124x0 [mm]
=J01	-T1.L3		1.sheet	AKM-0	0x124x0 [mm]
=J82	+S11	20 kV devices buswires	1.sheet	KSZ	0x600x0 [mm]

CHANGES

Sign	Date	Designer	Manager	Controller	Change contents

Head of department:	Dr. Boss	
Leader designer:	Leslie Hegyaljai	
Designer:	Omega-Soft Kft.	
Controller:	Example Comtroller	
Editor:	OmegaCAD ELEKTRO	
Date:	2009.02.24.	
Scale:	M=1:20	
Sheet size:	A3 420x297mm	
Printing date:	2015.2.18.	9h 16' 30".

The interpretation of concepts in OmegaCAD ELEKTRO system

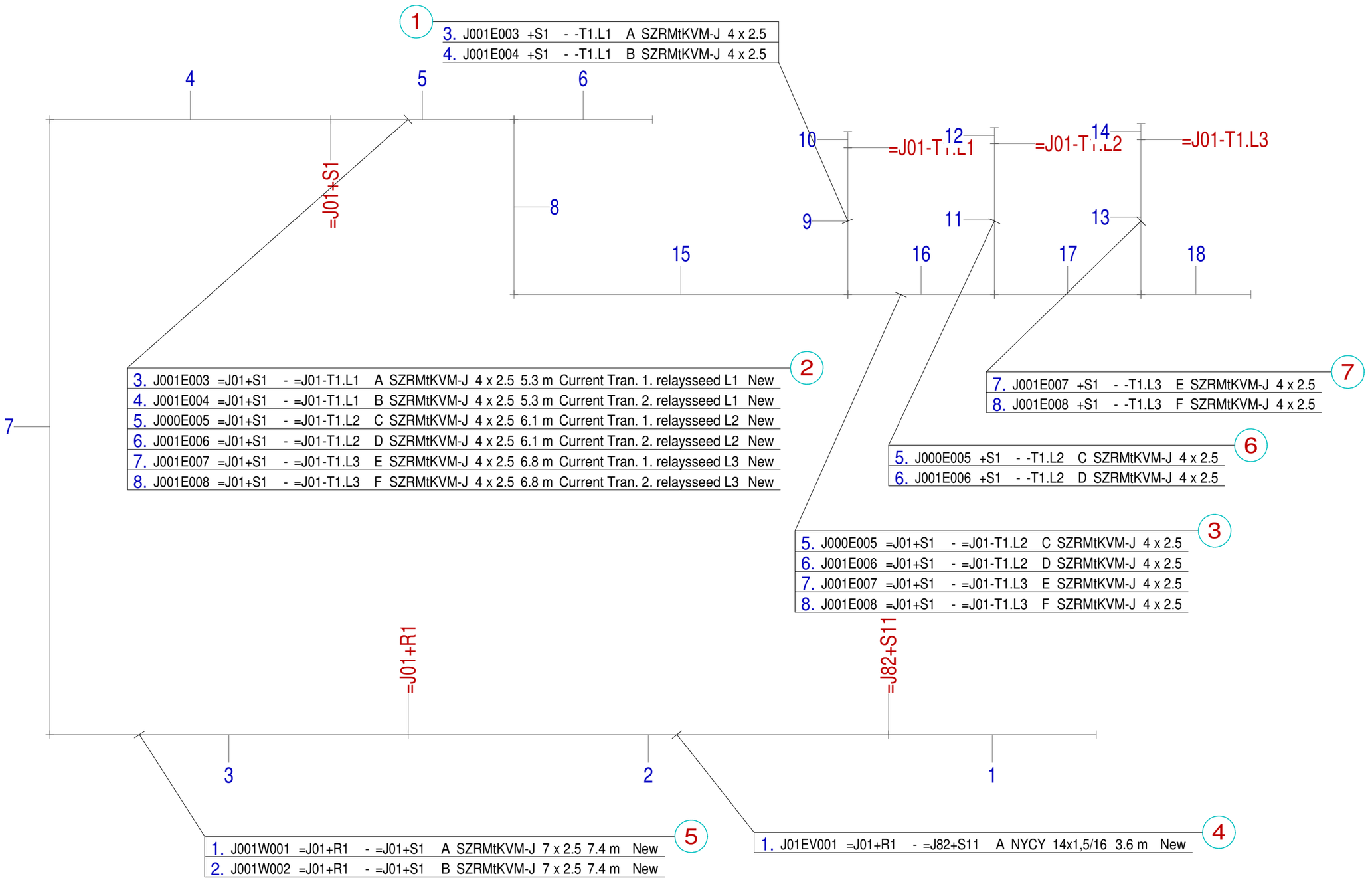
Theme: Cable-laying plan

Fruition plan
Sample to the first step

=J01
1. 20 kV turnout
Budapest transmission line

Example-Plan Ltd.
H -1164 Budapest
Takács str. 4.
E-mail:info@omegasoft.hu
Example-Plan Ltd.

All sheet: 4
Sheetnumber: 1.
Plan number/Change: MINT-S-J00-K00
Plan code: MINT-S-J01-K00



The interpretation of concepts in OmegaCAD ELEKTRO system 1. 20 kV turnout Budapest transmission line	Change: Scale: M=1:20 Date: 2009.02.24.	Example-Plan Ltd.	=J01	Plan number: MINT-S-J00-K00 Plan code: MINT-S-J01-K00	Sheet: 2 / 4

1

3.	J001E003	+S1	-	-T1.L1	A	SZRMtKVM-J	4 x 2.5				
4.	J001E004	+S1	-	-T1.L1	B	SZRMtKVM-J	4 x 2.5				

2

3.	J001E003	=J01+S1	-	=J01-T1.L1	A	SZRMtKVM-J	4 x 2.5	5.3 m	Current Tran. 1. relaysseed L1	New	
4.	J001E004	=J01+S1	-	=J01-T1.L1	B	SZRMtKVM-J	4 x 2.5	5.3 m	Current Tran. 2. relaysseed L1	New	
5.	J000E005	=J01+S1	-	=J01-T1.L2	C	SZRMtKVM-J	4 x 2.5	6.1 m	Current Tran. 1. relaysseed L2	New	
6.	J001E006	=J01+S1	-	=J01-T1.L2	D	SZRMtKVM-J	4 x 2.5	6.1 m	Current Tran. 2. relaysseed L2	New	
7.	J001E007	=J01+S1	-	=J01-T1.L3	E	SZRMtKVM-J	4 x 2.5	6.8 m	Current Tran. 1. relaysseed L3	New	
8.	J001E008	=J01+S1	-	=J01-T1.L3	F	SZRMtKVM-J	4 x 2.5	6.8 m	Current Tran. 2. relaysseed L3	New	

3

5.	J000E005	=J01+S1	-	=J01-T1.L2	C	SZRMtKVM-J	4 x 2.5	
6.	J001E006	=J01+S1	-	=J01-T1.L2	D	SZRMtKVM-J	4 x 2.5	
7.	J001E007	=J01+S1	-	=J01-T1.L3	E	SZRMtKVM-J	4 x 2.5	
8.	J001E008	=J01+S1	-	=J01-T1.L3	F	SZRMtKVM-J	4 x 2.5	

4

1.	J01EV001	=J01+R1	-	=J82+S11	A	NYCY	14x1,5/16	3.6 m	New		

5

1.	J001W001	=J01+R1	-	=J01+S1	A	SZRMtKVM-J	7 x 2.5	7.4 m	New		
2.	J001W002	=J01+R1	-	=J01+S1	B	SZRMtKVM-J	7 x 2.5	7.4 m	New		

6

5.	J000E005	+S1	-	-T1.L2	C	SZRMtKVM-J	4 x 2.5	
6.	J001E006	+S1	-	-T1.L2	D	SZRMtKVM-J	4 x 2.5	

7

7.	J001E007	+S1	-	-T1.L3	E	SZRMtKVM-J	4 x 2.5	
8.	J001E008	+S1	-	-T1.L3	F	SZRMtKVM-J	4 x 2.5	

The interpretation of concepts
in OmegaCAD ELEKTRO system
1. 20 kV turnout
Budapest transmission line

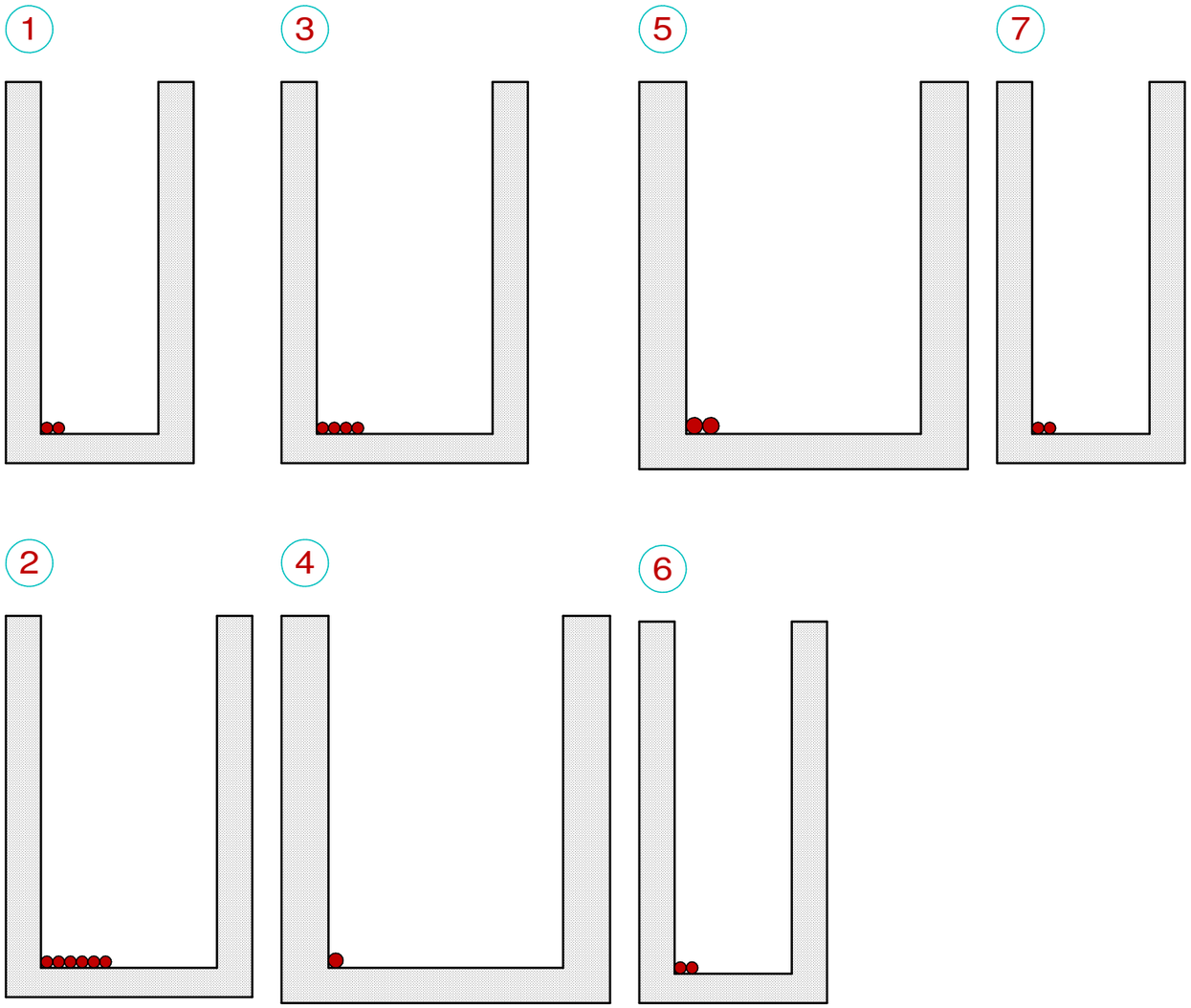
Change:
Scale: M=1:10
Date: 2009.02.24.

Example-Plan Ltd.
Example-Plan Ltd.

=J01

Plan number: MINT-S-J00-K00
Plan code: MINT-S-J01-K00

Sheet: 3 / 4



The interpretation of concepts
in OmegaCAD ELEKTRO system
1. 20 kV turnout
Budapest transmission line

Change:
Scale: M=1:10
Date: 2009.02.24.

Example-Plan Ltd.

=J01

Plan number: MINT-S-J00-K00
Plan code: MINT-S-J01-K00

Sheet: 4 / 4

Cable registry by fitting places

=J01 +R1 Secondary cupboard	1	J001W001	A	SZRMtKVM-J	7 x 2.5	7.4m		=J01 +S1	External cupboard
	2	J001W002	B	SZRMtKVM-J	7 x 2.5	7.4m			
	1	J01EV001	A	NYCY	14x1,5/16	3.6m		=J82 +S11	20 kV devices buswires
=J01 +S1 External cupboard	1	J001W001	A	SZRMtKVM-J	7 x 2.5	7.4m		=J01 +R1	Secondary cupboard
	2	J001W002	B	SZRMtKVM-J	7 x 2.5	7.4m			
	3	J001E003	A	SZRMtKVM-J	4 x 2.5	5.3m	Current Tran. 1. relaysseed L1	=J01 -T1.L1	Current Transformer L1
	4	J001E004	B	SZRMtKVM-J	4 x 2.5	5.3m	Current Tran. 2. relaysseed L1		
	5	J000E005	C	SZRMtKVM-J	4 x 2.5	6.1m	Current Tran. 1. relaysseed L2	=J01 -T1.L2	Current Transformer L2
	6	J001E006	D	SZRMtKVM-J	4 x 2.5	6.1m	Current Tran. 2. relaysseed L2		
	7	J001E007	E	SZRMtKVM-J	4 x 2.5	6.8m	Current Tran. 1. relaysseed L3	=J01 -T1.L3	Current Transformer L3
	8	J001E008	F	SZRMtKVM-J	4 x 2.5	6.8m	Current Tran. 2. relaysseed L3		
	101	E007V101	A	SZRMtKVM-J	7 x 1.5	0.0 m	Field connect	=E01 +PLACE01	Example
=J82 +S11 20 kV devices buswires	1	J01EV001	A	NYCY	14x1,5/16	3.6m		=J01 +R1	Secundary cupboard
=J01 -T1.L1 Current Transformer L1	3	J001E003	A	SZRMtKVM-J	4 x 2.5	5.3m	Current Tran. 1. relaysseed L1	=J01 +S1	External cupboard
	4	J001E004	B	SZRMtKVM-J	4 x 2.5	5.3m	Current Tran. 2. relaysseed L1		
=J01 -T1.L2 Current Transformer L2	5	J000E005	C	SZRMtKVM-J	4 x 2.5	6.1m	Current Tran. 1. relaysseed L2	=J01 +S1	External cupboard
	6	J001E006	D	SZRMtKVM-J	4 x 2.5	6.1m	Current Tran. 2. relaysseed L2		
=J01 -T1.L3 Current Transformer L3	7	J001E007	E	SZRMtKVM-J	4 x 2.5	6.8m	Current Tran. 1. relaysseed L3	=J01 +S1	External cupboard
	8	J001E008	F	SZRMtKVM-J	4 x 2.5	6.8m	Current Tran. 2. relaysseed L3		
=E01 +PLACE01 Example	101	E007V101	A	SZRMtKVM-J	7 x 1.5	0.0 m	Field connect	=J01 +S1	External cupboard

Contents:

CHANGES

Sign	Date	Designer	Manager	Controller	Change contents

Head of department:	Dr. Boss	
Leader designer:	Leslie Hegyaljai	
Designer:	Omega-Soft Kft.	
Controller:	Example Comtroller	
Editor:	OmegaCAD ELEKTRO	
Date:	2009.02.15.	
Scale:	M=1:1	
Sheet size:	A3 420x297mm	
Printing date:	2015.2.18.	9h 16' 30".

The interpretation of concepts in OmegaCAD ELEKTRO system

Theme: Cable list plan

Fruition plan
Sample to the first step

=J01
1. 20 kV turnout
Budapest transmission line

Example-Plan Ltd.
H -1164 Budapest
Takács str. 4.
E-mail:info@omegasoft.hu

All sheet: 3

Sheetnumber: 1.

Plan number/Change: MINT-S-J01-K00

Plan code: MINT-S-J01-K00

Cable summary

(Cable lengths must be checked before cutting!)

	Field	Number	Identifier	From	To	Break	Type	Structure	Length [m]	Name
1.	=J01	1.	J001W001	+R1	+S1	A	SZRMtKVM-J	7 x 2.5	7.4m	
2.	=J01	2.	J001W002	+R1	+S1	B	SZRMtKVM-J	7 x 2.5	7.4m	
3.	=J01	3.	J001E003	+S1	-T1.L1	A	SZRMtKVM-J	4 x 2.5	5.3m	Current Tran. 1. relaysseed L1
4.	=J01	4.	J001E004	+S1	-T1.L1	B	SZRMtKVM-J	4 x 2.5	5.3m	Current Tran. 2. relaysseed L1
5.	=J01	5.	J000E005	+S1	-T1.L2	C	SZRMtKVM-J	4 x 2.5	6.1m	Current Tran. 1. relaysseed L2
6.	=J01	6.	J001E006	+S1	-T1.L2	D	SZRMtKVM-J	4 x 2.5	6.1m	Current Tran. 2. relaysseed L2
7.	=J01	7.	J001E007	+S1	-T1.L3	E	SZRMtKVM-J	4 x 2.5	6.8m	Current Tran. 1. relaysseed L3
8.	=J01	8.	J001E008	+S1	-T1.L3	F	SZRMtKVM-J	4 x 2.5	6.8m	Current Tran. 2. relaysseed L3

Cable between fields:

	Number	Identifier	From	To	Break	Type	Structure	Length [m]	Name
9.	101.	E007V101	=J01+S1	=E01+PLACE01	A	SZRMtKVM-J	7 x 1.5	0.0 m	Field connect
10.	1.	J01EV001	=J82+S11	=J01+R1	A	NYCY	14x1,5/16	3.6m	

'Needed cable amount'

Type	Structure	Length [m]
SZRMtKVM-J	4 x 2.5	36.4 [m]
SZRMtKVM-J	7 x 2.5	14.7 [m]
NYCY	14x1,5/16	3.6 [m]

'Number of cable ends'

Type	Structure	Quantity
SZRMtKVM-J	4 x 2.5	12 piece
SZRMtKVM-J	7 x 1.5	2 piece
SZRMtKVM-J	7 x 2.5	4 piece
NYCY	14x1,5/16	2 piece

Write material list/calculation

Project: Example I. 120/20/10 kV-os, Transformer Substation

Collectedt to

Field: =J01, 1. 20 kV turnout, Budapest transmission line

Apparats

X: 3837.	current transf.:ARM-20a (L) Up =20 kV Ip =500 A Isz =5/5 A	Quantity= 3 db
X: 4022.	cutout :5SX5106-7 In =6 A s. érint. =1ny+1z Irz/Un =220 V DC	Quantity= 6 db
X: 5439.	overcurrent pr.:DTI-EP AV Unív =. In =5A Un =.	Quantity= 1 pieces
X: 5440.	overcurrent pr.:DTIVA2-EP AV Unív =. In =5A Un =.	Quantity= 1 pieces

Terminal

102000	Terminal: WDU [TS 35] Type: WDU 2.5 Rail: TS 35 Un: 800V In: 24A Max.: 2.5mm2 Wire: 0.13 .... 4mm2 Color: Beige, Material: Wemid Ordering number: 102000	Quantity= 23 peaces
010602	Terminal: SAKT [TS 35] Type: SAKT 2/LT/35 Rail: TS 35 Un: 400V In: 27A Max.: 6mm2 Color: Okker, Material: KrG Ordering number: 010602	Quantity= 26 peaces
033830	Terminal parts: QL lamella line Type: QL 10 Ordering number: 033830	Quantity= 4 peace
030730	Terminal parts: QVS closing Type: QVS 2 Size - Ordering number: 030730	Quantity= 13 peaces
036366	Terminal parts: Small reply card Type: TSch 2 Size: - Ordering number: 036366	Quantity= 2 peaces
035366	Terminal parts: End reply card Type: TSch 2 Color: Dark beige, Material: Wemid Size: 1mm Ordering number: 035366	Quantity= 2 peaces
105010	Terminal parts: End reply card Type: WTW 2.5-10 Color: Beige, Material: Wemid Size: 1.5mm Ordering number: 105010	Quantity= 12 peace
037710	Sorkapocs tartozék: Csavar Típus: BS Anyag: CuNi Méret: M 3.0x20 Rendelési szám: 037710	Quantity= 13 darab
033470	Sorkapocs tartozék: Csavar Típus: BS 25 Szín: Szín nélkül, Anyag: CuZn 39 Méret: - Rendelési szám: 033470	Quantity= 26 darab
031800	Sorkapocs tartozék: Hüvely Típus: VH 19 Anyag: CuZn 39 Méret: - Rendelési szám: 031800	Quantity= 26 darab
020773	Sorkapocs tartozék: Szigetelő hüvely Típus: DS 12.5 Méret: - Rendelési szám: 020773	Quantity= 13 darab
105900	Sorkapocs tartozék: Végbak Típus: WEW 35/1 Méret: 12.2x63x56 Rendelési szám: 105900	Quantity= 8 darab
174735	Sorkapocs tartozék: Tartósín Típus: TS 35 Anyag: Nemesacél Méret: 35x7.5 Rendelési szám: 174735	Quantity= 49 cm

CHANGES

Sign	Date	Designer	Manager	Controller	Change contents

Head of department:	Dr. Boss	
Leader designer:	Leslie Hegyaljai	
Designer:	Omega-Soft Kft.	
Controller:	Example Comtroller	
Editor:	OmegaCAD ELEKTRO	
Date:	2009.02.24.	
Scale:	M=1:1	
Sheet size:	A3 420x297mm	
Printing date:	2015.2.18.	9h 16' 30".

The interpretation of concepts in OmegaCAD ELEKTRO system

Theme: Materlials list plan

Fruition plan
Sample to the first step

=J01
1. 20 kV turnout
Budapest transmission line

All sheet: 2

Sheetnumber: 1.

Plan number/Change: MINT-S-J01-A00

Plan code: MINT-S-J01-A00

Example-Plan Ltd.
H -1164 Budapest
Takács str. 4.
E-mail:info@omegasoft.hu
Example-Plan Ltd.

Field: =J82, 20 kV devices buswires,

Terminal

102000	Terminal: WDU [TS 35] Type: WDU 2.5 Rail: TS 35 Un: 800V In: 24A Max.: 2.5mm2 Wire: 0.13 .... 4mm2 Color: Beige, Material: Wemid Ordering number: 102000	Quantity= 13 peaces

Used cable amount

43-643-03146-0	Cable: SZRMtKVM-J / 4 x 2.5	Quantity= 36 m
43-643-03149-0	Cable: SZRMtKVM-J / 7 x 2.5	Quantity= 14 m
X: 68.	Cable: NYCY / 14x1,5/16	Quantity= 3 m

Other items belonging to used cables

7-43-63-14-015	cable core tying-2.5 2-5 core case	Quantity= 12 Db
7-43-63-14-016	cable core tying-2.5 7-10 core case	Quantity= 4 db
64-15-21-11	end training 2-5 core case	Quantity= 12 db
64-15-21-12	end training 7-10 core case	Quantity= 4 db

The interpretation of concepts
in OmegaCAD ELEKTRO system
1. 20 kV turnout
Budapest transmission line

Change:

Date: 2009.02.24.

Example-Plan Ltd.

=J01

Plan number: MINT-S-J01-A00

Plan code: MINT-S-J01-A00

Sheet: 2 / 2

Fitting places:		
=J82	+S11	20 kV devices buswires
=J01	*+R1*	*Secundary cupboard*

Bus wires:	
C-O1	Main protection operator
C-O2	Back-up protection operator
C-I+	Interlocking voltage
C-	Common negative
C-S+	Signal voltage
C-BJP+	Breaker jamming protection start
BV++	Breaker operation voltage
J01/AM+	Alap mûködtetõ
J01/TM+	Tartalék mûködtetõ
J01/R+	Reteszelések
J01/Q1+	Szakaszoló motorhajtás
J01/J+	Jelzések
J01/MBM+	MBM
J01/KL+	Motormûködtetések
J01/-	Negatív
C-SO+	Szakaszoló hajtás tápfesz

Contents:	
2 .sheet	DC bus wires
3 .sheet	Cable:=J82: /1.

CHANGES								
						Head of department:	Dr. Boss	
						Leader designer:	Leslie Hegyaljai	
						Designer:	Omega-Soft Kft.	
						Controller:	Example Comtroller	
						Editor:	OmegaCAD ELEKTRO	
						Date:	2009.02.10.	
						Scale:	M=1:1	
						Sheet size:	A3 420x297mm	
Sign	Date	Designer	Manager	Controller	Change contents	Printing date:	2015.2.18.	9h 16' 30".

The interpretation of concepts in OmegaCAD ELEKTRO system

Theme: Circuit plan

Fruition plan
Sample to the first step

=J82
20 kV devices buswires

Example-Plan Ltd.
H -1164 Budapest
Takács str. 4.
E-mail:info@omegasoft.hu
Example-Plan Ltd.

All sheet: 3

Sheetnumber: 1.

Plan number/Change: MINT-S-J82-R00

Plan code: MINT-S-J82-J01

+S11

C-O1	Main protection operator	-X1 :1
C-O2	Back-up protection operator	-X1 :2
C-I+	Interlocking voltage	-X1 :3
C-SO+	Switching operation voltage	-X1 :8
C-S+	Signal voltage	-X1 :5
C-BJP+	Breaker jamming protection start	-X1 :6
BV++	Breaker operation voltage	-X1 :7
C-	Common negative	-X1 :4

=J01
+R1

1/1	1/2	1/3	1/4	1/5	1/6	1/7	1/8
Main protection operator	Back-up operator	Interlocking voltage	Switching operation voltage	Signal voltage	Breaker jamming protection start	Breaker operation voltage	Common negative
MINT-S-J01-R00	MINT-S-J01-R00	MINT-S-J01-R00	MINT-S-J01-R00	MINT-S-J01-R00	MINT-S-J01-R00	MINT-S-J01-R00	MINT-S-J01-R00
3/2	3/3	3/4	3/5	3/6	3/6	3/7	3/8
=J01+R1-F1:2	=J01+R1-F2:2	=J01+R1-F3:2	=J01+R1-F4:2	=J01+R1-F5:2	=J01+R1-X1:6	=J01+R1-F6:2	=J01+R1-X1:8

DC bus wires

The interpretation of concepts in OmegaCAD ELEKTRO system 20 kV devices buswires			Change: Date: 2009.02.10.	Example-Plan Ltd. Example-Plan Ltd.	=J82 +S11	Plan number: MINT-S-J82-R00 Plan code: MINT-S-J82-J01	Sheet: 2/3

Num-ber	Cable number	From / To	Sign	Placement of cable cores [Sheet/Circuit diagram position] 1	2	3	4	5	6	7	8	Comment Type / Structure
1	J01EV001	+S11	A	2	2	2	2	2	2	2	2	
		=J01+R1		2	3	4	5	6	6	7	8	NYCY 14x1,5/16

Cable:=J82: /1.

The interpretation of concepts in OmegaCAD ELEKTRO system
20 kV devices buswires

Change:

Date: 2009.02.10.

Example-Plan Ltd.

Example-Plan Ltd.

=J82

Plan number: MINT-S-J82-R00

Plan code: MINT-S-J82-J01

Sheet: 3 / 3

Fit terminal type			
Block	Number	Type + codenumber	
X1 block	1 - 13	WDU 2.5	102000

Contents:	
2 .sheet	-X1:1 - 13.
3 .sheet	Cables: / 1.

CHANGES									
							Head of department:	Dr. Boss	
							Leader designer:	Leslie Hegyaljai	
							Designer:	Omega-Soft Kft.	
							Controller:	Example Comtroller	
							Editor:	OmegaCAD ELEKTRO	
							Date:	2009.02.24.	
							Scale:	M=1:1	
							Sheet size:	A3 420x297mm	
	Sign	Date	Designer	Manager	Controller	Change contents	Printing date:	2015.2.18.	9h 16' 30".

The interpretation of concepts in OmegaCAD ELEKTRO system

Theme: Fitting plan

=J82 +S11

20 kV devices buswires

Fruition plan
Sample to the first step
20 kV devices buswires

All sheet: **3**

Sheetnumber: **1.**

Plan number/Change: MINT-S-J82-R01

Plan code: MINT-S-J82-R01

Example-Plan Ltd.
H -1164 Budapest
Takács str. 4.
E-mail:info@omegasoft.hu
Example-Plan Ltd.

Fit terminal type		
Block	Number	Type + codenumber
X1 block	1 - 13	WDU 2.5 102000

-X1

		K-M1+	K-M2+	K-R+	K-	K-J+	K-MBM+	KL++	K-RL+				
		1	2	3	4	5	6	7	8	9	10	11	12	13
1	14x1,5/16 =J01+R1 ,A	1	2	3	8	5	6	7	4					
Circuit diagram positions: (sheet/wire diagram)		1/4	1/6	1/8	1/16	1/11	1/12	1/14	1/9					

-X1:1 - 13.

The interpretation of concepts in OmegaCAD ELEKTRO system 20 kV devices buswires	Change: Scale: M=1:1 Date: 2009.02.24.	Example-Plan Ltd. Example-Plan Ltd.	=J82 +S11	Plan number: MINT-S-J82-R01 Plan code: MINT-S-J82-R01	Sheet: 2/3

Cable number:	J01EV001
Cable number:	1.
Bind fitting place	+S11
End fitting place	=J01+R1
Brake:	A
Type:	NYCY
Wire number:	14.
Construction:	14x1,5/16
Note:	New cable

Wire number: (Plan sign :Connection)	Bind point	Wire number: (Plan sign :Connection)	Bind point
1. -X1	:1	**8.** -X1	:4
2. -X1	:2	**9.**	-
3. -X1	:3	**10.**	-
4. -X1	:8	**11.**	-
5. -X1	:5	**12.**	-
6. -X1	:6	**13.**	-
7. -X1	:7	**14.**	-

The interpretation of concepts
in OmegaCAD ELEKTRO system
20 kV devices buswires

Change:
Scale: M=1:1
Date: 2009.02.24.

Example-Plan Ltd.

=J82
+S11

Plan number: MINT-S-J82-R01
Plan code: MINT-S-J82-R01

Sheet: 3
3

CHANGES								
						Head of department:	Dr. Boss	
						Leader designer:	Leslie Hegyaljai	
						Designer:	Omega-Soft Kft.	
						Controller:	Example Comtroller	
						Editor:	OmegaCAD ELEKTRO	
						Date:	2009.09.04.	
						Scale:	M=1:1	
						Sheet size:	A3 420x297mm	
Sign	Date	Designer	Manager	Controller	Change contents	Printing date:	2015.2.18.	9h 16' 31".

The interpretation of concepts in OmegaCAD ELEKTRO system

Theme: Áramútterv — Minta terv

=M01
Engine operating

All sheet: 5

Sheetnumber: 1.

Plan code: MINTA

Plan number/Change:
MINTA S L 102

Example-Plan Ltd.
H -1164 Budapest
Takács str. 4.
E-mail:info@omegasoft.hu

=J82
+S11

L1 -X1 :1
L2 -X1 :2
L3 -X1 :3
N -X1 :4
Pe -X1 :5

1/1 1/2 1/3 1/4 1/5

L1 -X1 :1
L2 -X1 :3
L3 -X1 :4
N -X1 :5
Pe -X1 :7

-Pe1 :Pe [4]

-Q1 :1 :3 :5 [3] I> I> I> :2 :4 :6
BE
4-6,3A
250V
10kA

-Q2 :1 :3 :5 [3] :2 :4 :6
-Q3 :1 :3 :5 [3] :2 :4 :6

-X1 :9 2/1 :10 2/2 :11 2/3 :8 2/4
:R :S :T :PE

M [4]
VZ 213/6
400V/230V 50
0,6kW
-M1

+M

L1 -X1 :2
-S1 :1 :2 [3]

-S2 :3 :4 [3]
-Q2 :A1 :A2 [3]
DIL 4-22
230 V AC
250 A , AC1
IP 00
-Q2 :13 :14 [3]
-Q3 :21 :22 [3]

-S3 :3 :4 [4]
-Q3 :A1 :A2 [3]
DIL 4-22
230 V AC
250 A , AC1
IP 00
-Q3 :13 :14 [3]
-Q2 :21 :22 [3]

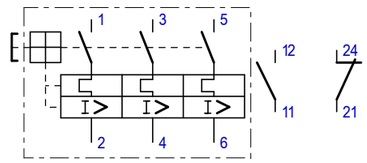
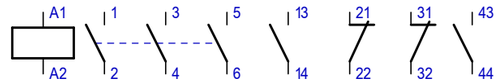
2/3 N
:5 :6

-Q2
:6 :22 2/6
:5 :21 2/7
:32 :31 -
:44 :43 -

-Q3
:6 :22 2/7
:5 :21 2/6
:32 :31 -
:44 :43 -

Motor supply

The interpretation of concepts in OmegaCAD ELEKTRO system Engine operating	Change: Date: 2009.09.04.	**Example-Plan Ltd.**
=M01 +S1	Plan number: MINTA S L 102 Plan code: MINTA	Sheet: 2/5

Ftg. place	Apparatus name	Attributes	Nominal datas	Plansign	Pcs.	Placement of apparatus part [Sheet/Circuit diagram position]
+S1	engine defender	BE In Un Irz	= 4-6,3A = 250V = 10kA	-Q1	1	 1 2 3 4 5 6 11 12 21 24 2/2 — —
	power contactor	DIL 4-22 Un In osculatory	= 230 V AC = 250 A , AC1 = IP 00	-Q2 -Q3	2	 A1 A2 1 2 3 4 5 6 13 14 21 22 31 32 43 44 2/6 2/2 2/6 2/7 — — 2/7 2/3 2/7 2/6 — —
	nyomógomb	C21AA03+230E01 osculatory In color	= 1ny = fekete = GANZ KK	-S1	1	 1 2 2/5
	nyomógomb	C21AA02+230E10 osculatory In color	= 1z = zöld = GANZ KK	-S2	2	 3 4 2/6

+S1 /-Q1 /-Q2 /-Q3 /-S1 /-S2

The interpretation of concepts in OmegaCAD ELEKTRO system Engine operating	Change:	Example-Plan Ltd.	=M01	Plan number: MINTA S L 102	Sheet: 3/5
	Date: 2009.09.04.			Plan code: MINTA	

Ftg. place	Apparatus name	Attributes	Nominal datas	Plansign	Pcs.	Placement of apparatus part [Sheet/Circuit diagram position]
+S1				-S3		2/7
	földelés	Védőföldelés Anyag Keresztm. Jelleg	 = Cu = 2.5 mm2 = Szig. flex.	-Pe1	1	Pe Pe 2/3
+M	ventillátor	VZ 213/6 Un Pn Légszáll.	 = 400V/230V 50 = 0,6kW = .	-M1	1	R S T PE M PE R S T 2/2

+S1 /-S3 /-Pe1 +M /-M1

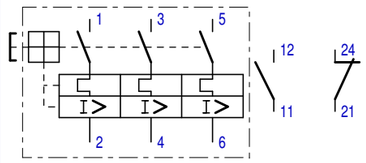
The interpretation of concepts in OmegaCAD ELEKTRO system Engine operating	Change: Date: 2009.09.04.	Example-Plan Ltd. Example-Plan Ltd.	=M01	Plan number: MINTA S L 102 Plan code: MINTA Sheet: 4/5

Num-ber	Cable number	From To	Sign	Placement of cable cores [Sheet/Circuit diagram position] 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48	Comment Type / Structure
1	M82E0001	=J82+S11 +S1	A	2 2 2 2 2 1 2 2 2 3	Erõátvitel SZRMtKVM-J 7 x 2.5
2	M82E0002	+S1 +M	A	2 2 2 2 1 2 2 2	Zsomp szívattyú megtáplálás SZRMtKVM-J 4 x 2.5

Cable:=M01: /1. /2.

The interpretation of concepts in OmegaCAD ELEKTRO system Engine operating	Change: Date: 2009.09.04.	**Example-Plan Ltd.** Example-Plan Ltd.	**=M01**	Plan number: MINTA S L 102 Plan code: MINTA Sheet: 5 / 5

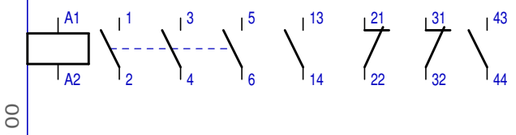
-Q1



BE | 4-6,3A | 250V | 10kA

	1	2	3	4	5	6			11	12	21	24
	1.5	1.5	1.5	1.5	1.5	1.5						
	:1	:1	:3	:3	:4	:5						
	-X1	-Q2	-X1	-Q2	-X1	-Q2						

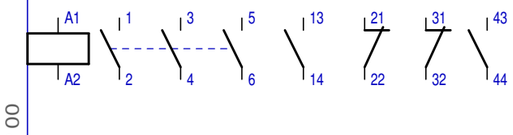
-Q2



DIL 4-22 | 230 V AC | 250 A , AC1 | IP 00

	A1	A2	1	2	3	4	5	6	13	14	21	22	31	32	43	44
	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5				
	:4	:13	:2	:2	:4	:4	:6	:6	:A2	:21	:14	:6				
	-S2	-Q2	-Q1	-Q3	-Q1	-Q3	-Q1	-Q3	-Q2	-Q3	-Q3	-X1				
			1.5		1.5		1.5									
			:5		:3		:1									
			-Q3		-Q3		-Q3									

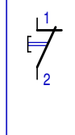
-Q3



DIL 4-22 | 230 V AC | 250 A , AC1 | IP 00

	A1	A2	1	2	3	4	5	6	13	14	21	22	31	32	43	44
	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5				
	:4	:13	:5	:2	:3	:4	:1	:6	:A2	:21	:14	:5				
	-S3	-Q3	-Q2	-Q2	-Q2	-Q2	-Q2	-Q2	-Q3	-Q2	-Q2	-X1				
				1.5		1.5		1.5								
				:9		:10		:11								
				-X1		-X1		-X1								

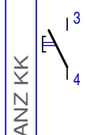
-S1



C21AA03+230E01 | 1ny | fekete | GANZ KK

	1	2
	1.5	1.5
	:2	:3
	-X1	-S2

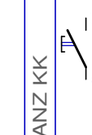
-S2



C21AA02+230E10 | 1z | zöld | GANZ KK

	3	4
	1.5	1.5
	:2	:A1
	-S1	-Q2
	1.5	
	:3	
	-S3	

-S3



C21AA02+230E10 | 1z | zöld | GANZ KK

	3	4
	1.5	1.5
	:3	:A1
	-S2	-Q3

-Pe1

Védőföldelés | Cu | 2.5 mm2 | Szig. flex.

	Pe
	1.5
	Pe

Contents:

-Q1 /-Q2 /-Q3 /-S1 /-S2 /-S3 /-Pe1

CHANGES

Sign	Date	Designer	Manager	Controller	Change contents

Head of department:	Dr. Boss	
Leader designer:	Leslie Hegyaljai	
Designer:	Omega-Soft Kft.	
Controller:	Example Comtroller	
Editor:	OmegaCAD ELEKTRO	
Date:	2009.09.04.	
Scale:	M=1:1	
Sheet size:	A3 420x297mm	
Printing date:	2015.2.18.	9h 16' 31".

The interpretation of concepts in OmegaCAD ELEKTRO system

Theme: ?

?
?

=M01 +S1
Engine operating

Szekunder szekrény

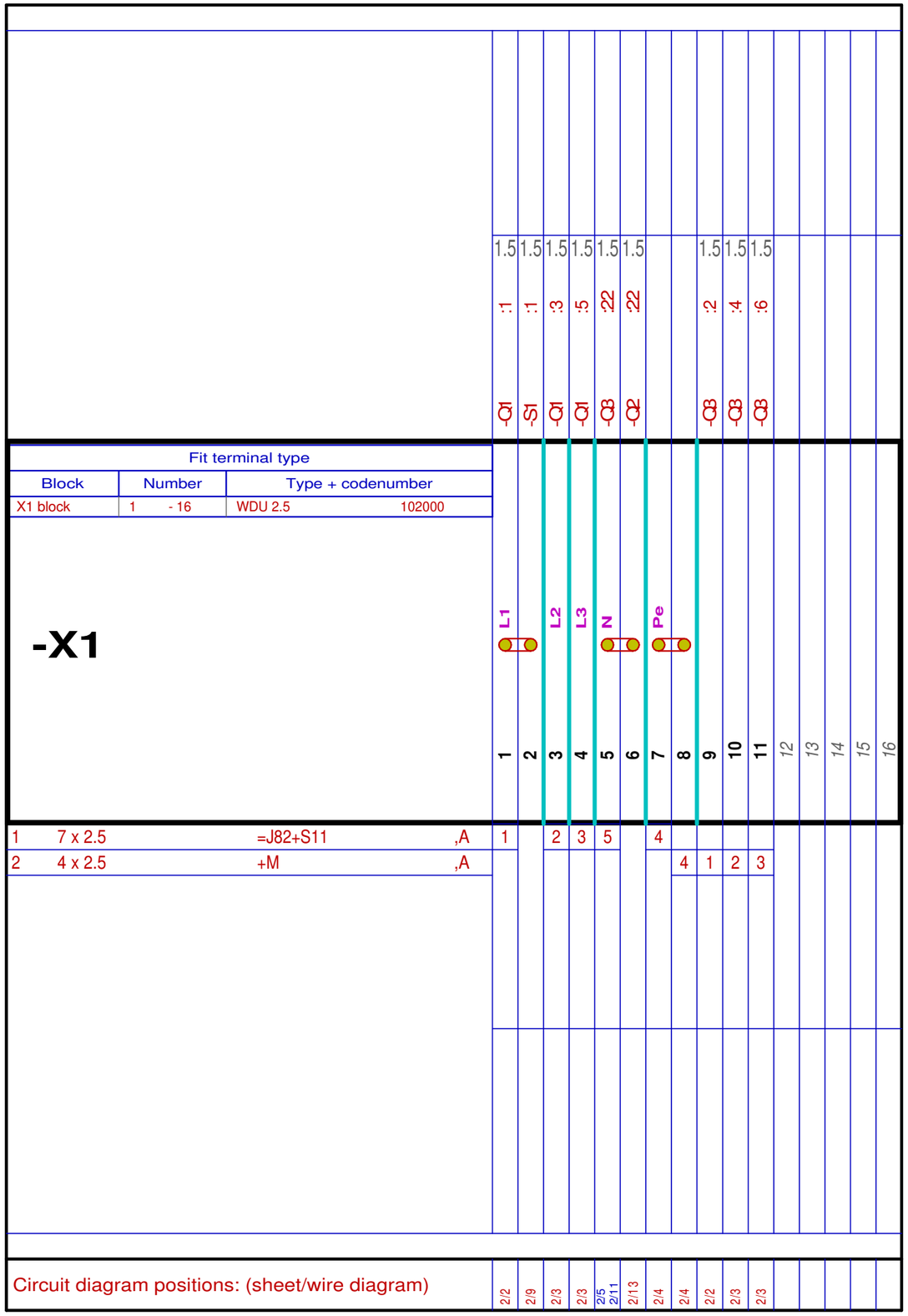
Example-Plan Ltd.
H -1164 Budapest
Takács str. 4.
E-mail:info@omegasoft.hu

All sheet: **6**

Sheetnumber: **1.**

Plan number/Change:
MINTA S S 351

Plan code: MINTA



Fit terminal type			
Block	Number	Type + codenumber	
X1 block	1 - 16	WDU 2.5	102000

-X1

1	7 x 2.5	=J82+S11	,A	1		2	3	5		4						
2	4 x 2.5	+M	,A								4	1	2	3		

Circuit diagram positions: (sheet/wire diagram)															
	2/2	2/9	2/3	2/3	2/5 2/11	2/13	2/4	2/4	2/2	2/3	2/3				

-X1:1 - 16.

The interpretation of concepts in OmegaCAD ELEKTRO system
Engine operating

Change:
Scale: M=1:1
Date: 2009.09.04.

Example-Plan Ltd.

=M01
+S1

Plan number: MINTA S S 351
Plan code: MINTA

Sheet: 2 / 6

Cable number:	M82E0001
Cable number:	1.
Bind fitting place	+S1
End fitting place	=J82+S11
Brake:	A
Type:	SZRMtKVM-J
Wire number:	7
Construction:	7 x 2.5
Note:	New cable
Erõátvitel	

Wire number: (Plan sign	Bind point :Connection)		Wire number: (Plan sign	Bind point :Connection)	
1.	-X1	:1	**5.**	-X1	:5
2.	-X1	:3	**6.**		-
3.	-X1	:4	**7.**		-
4.	-X1	:7			

Cable number:	M82E0002
Cable number:	2.
Bind fitting place	+S1
End fitting place	+M
Brake:	A
Type:	SZRMtKVM-J
Wire number:	4
Construction:	4 x 2.5
Note:	New cable
Zsomp szívattyú megtáplálás	

Wire number: (Plan sign	Bind point :Connection)		Wire number: (Plan sign	Bind point :Connection)	
1.	-X1	:9	**3.**	-X1	:11
2.	-X1	:10	**4.**	-X1	:8

Cables: / 1. / 2.

Bus wire:	Pe	
Földelés		
(Plan sign :Connection)		
-Pe1	:Pe	1.5

Bus wires: /Pe

The interpretation of concepts in OmegaCAD ELEKTRO system Engine operating	Change:	**Example-Plan Ltd.**	**=M01** **+S1**	Plan number: MINTA S S 351	Sheet: **4** 6
	Scale: M=1:1			Plan code: MINTA	
	Date: 2009.09.04.				

Wires inside fitting place:

1.	-Q1	:1	—	-X1	:1	1.5
2.	-Q1	:2	—	-Q2	:1	1.5
3.	-Q1	:3	—	-X1	:3	1.5
4.	-Q1	:4	—	-Q2	:3	1.5
5.	-Q1	:5	—	-X1	:4	1.5
6.	-Q1	:6	—	-Q2	:5	1.5
7.	-Q2	:A1	—	-S2	:4	1.5
8.	-Q2	:A2	—	-Q2	:13	1.5
9.	-Q2	:1	—	-Q3	:5	1.5
10.	-Q2	:2	—	-Q3	:2	1.5
11.	-Q2	:3	—	-Q3	:3	1.5
12.	-Q2	:4	—	-Q3	:4	1.5
13.	-Q2	:5	—	-Q3	:1	1.5
14.	-Q2	:6	—	-Q3	:6	1.5
15.	-Q2	:14	—	-Q3	:21	1.5
16.	-Q2	:21	—	-Q3	:14	1.5
17.	-Q2	:22	—	-X1	:6	1.5
18.	-Q3	:A1	—	-S3	:4	1.5
19.	-Q3	:A2	—	-Q3	:13	1.5
20.	-Q3	:2	—	-X1	:9	1.5
21.	-Q3	:4	—	-X1	:10	1.5
22.	-Q3	:6	—	-X1	:11	1.5
23.	-Q3	:22	—	-X1	:5	1.5
24.	-S1	:1	—	-X1	:2	1.5
25.	-S1	:2	—	-S2	:3	1.5
26.	-S2	:3	—	-S3	:3	1.5
27.	-Pe1	:Pe	—	Pe		1.5

Chaining of binding points:

Potential:	-Q1:2
-Q1	:2
-Q2	:1
-Q3	:5

Potential:	-Q1:4
-Q1	:4
-Q2	:3
-Q3	:3

Potential:	-Q1:6
-Q1	:6
-Q2	:5
-Q3	:1

Potential:	-Q2:2		
-Q2	:2		
-Q3	:2	-X1	:9

Potential:	-Q2:4		
-Q2	:4		
-Q3	:4	-X1	:10

Potential:	-Q2:6		
-Q2	:6		
-Q3	:6	-X1	:11

Potential:	-S1:2
-S1	:2
-S2	:3
-S3	:3