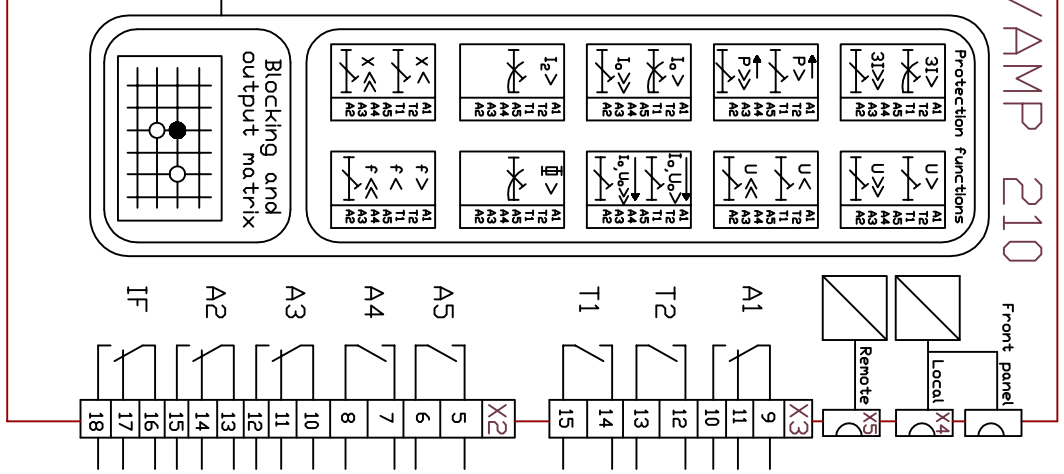
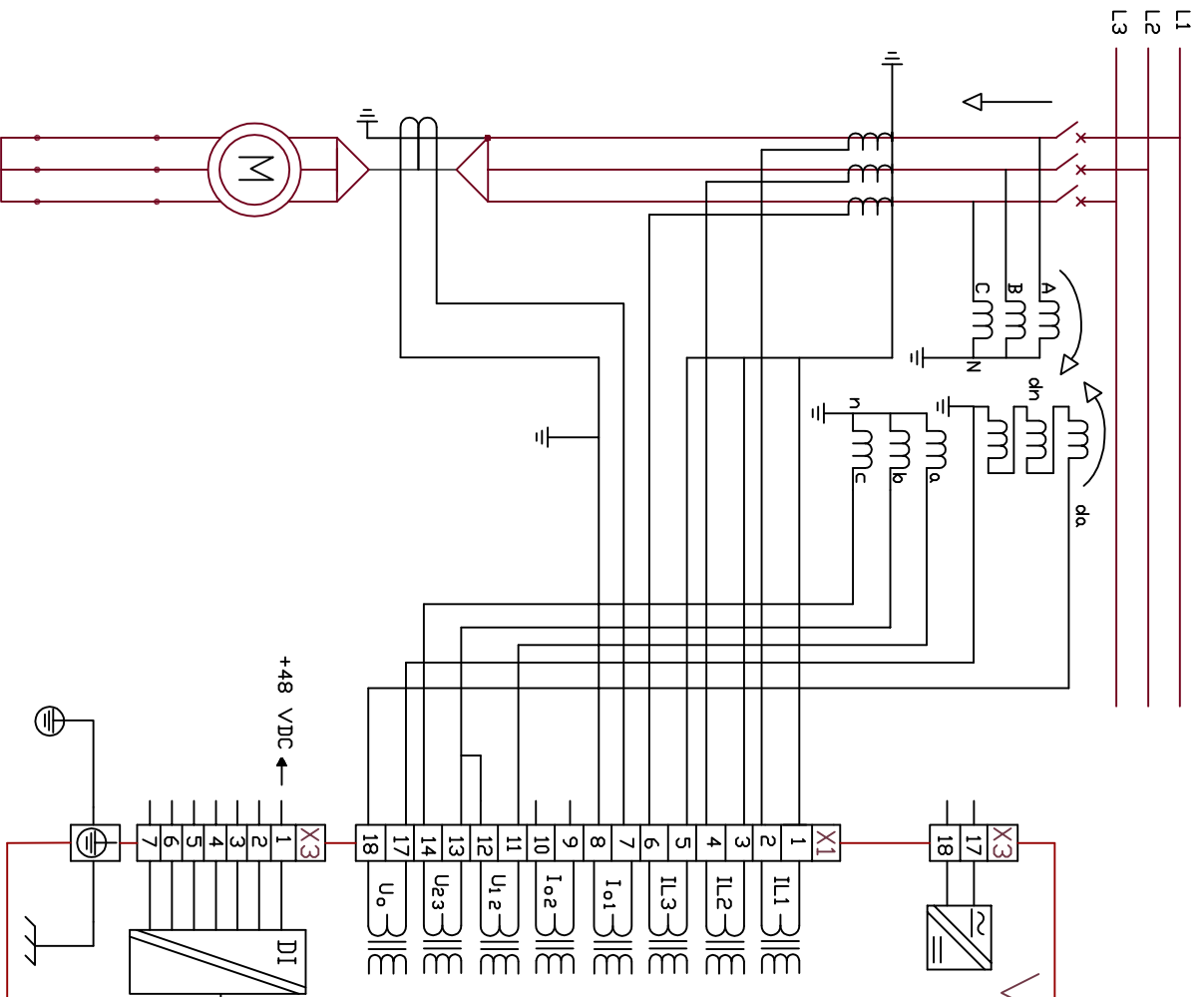
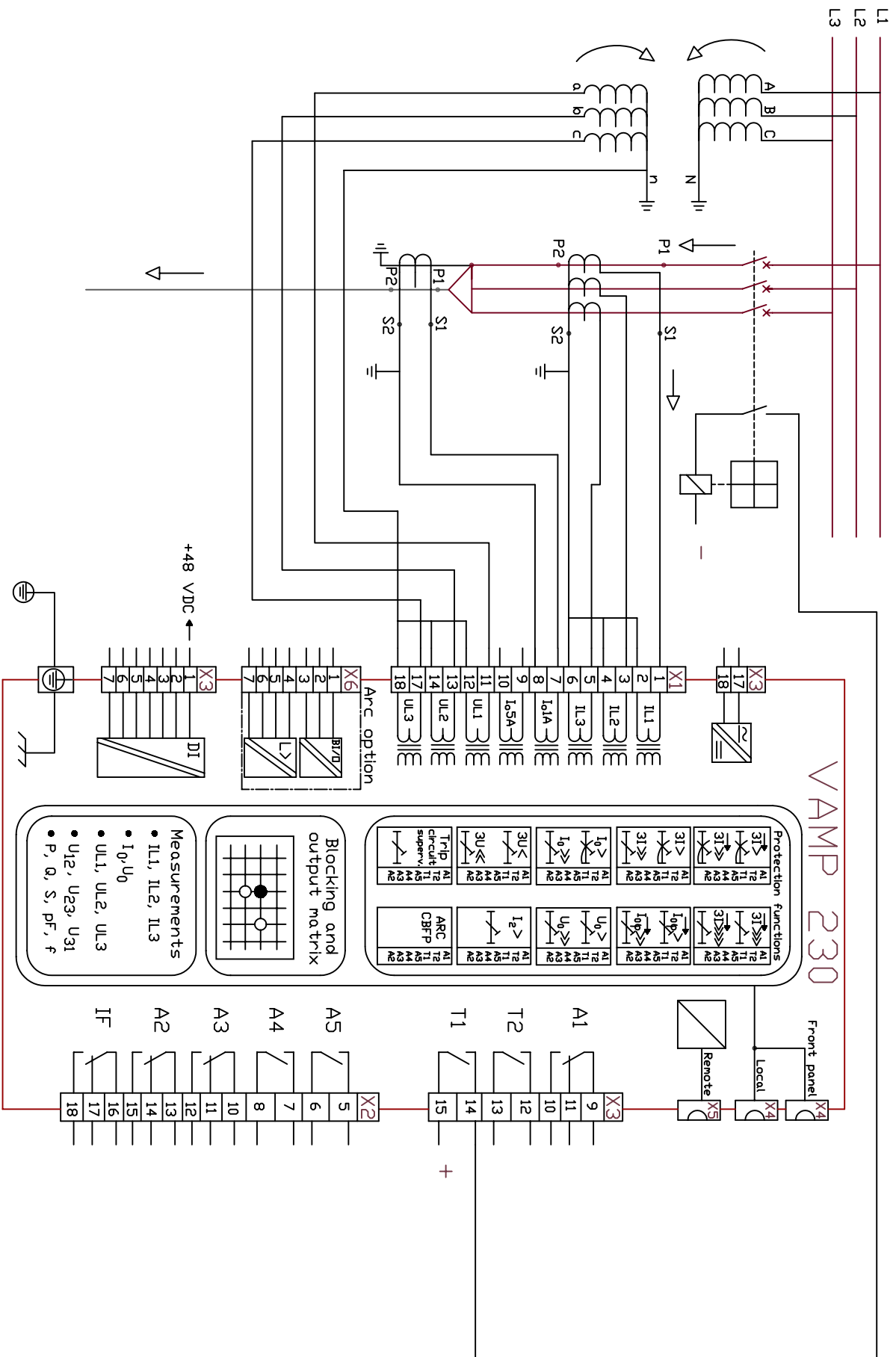


Itemref	Quantity	Title/Name, designation, material, dimension etc		Article No./Reference
Designed by R. Vaahterä	Checked by	Approved by - date	Title/Name	Date 2003.03.27
VAMP Ltd P.O.Box 5 (Runsorinte 7) FIN-65381 VAASA		Phone +358-6-212 1100 Fax +358-6-212 1105 email vampp@vamp.fi	Filename VAMP 210 - 5 A 7 A A A	Scale
FINLAND		Drawing number VD210.EN.003		Sheet 1/2



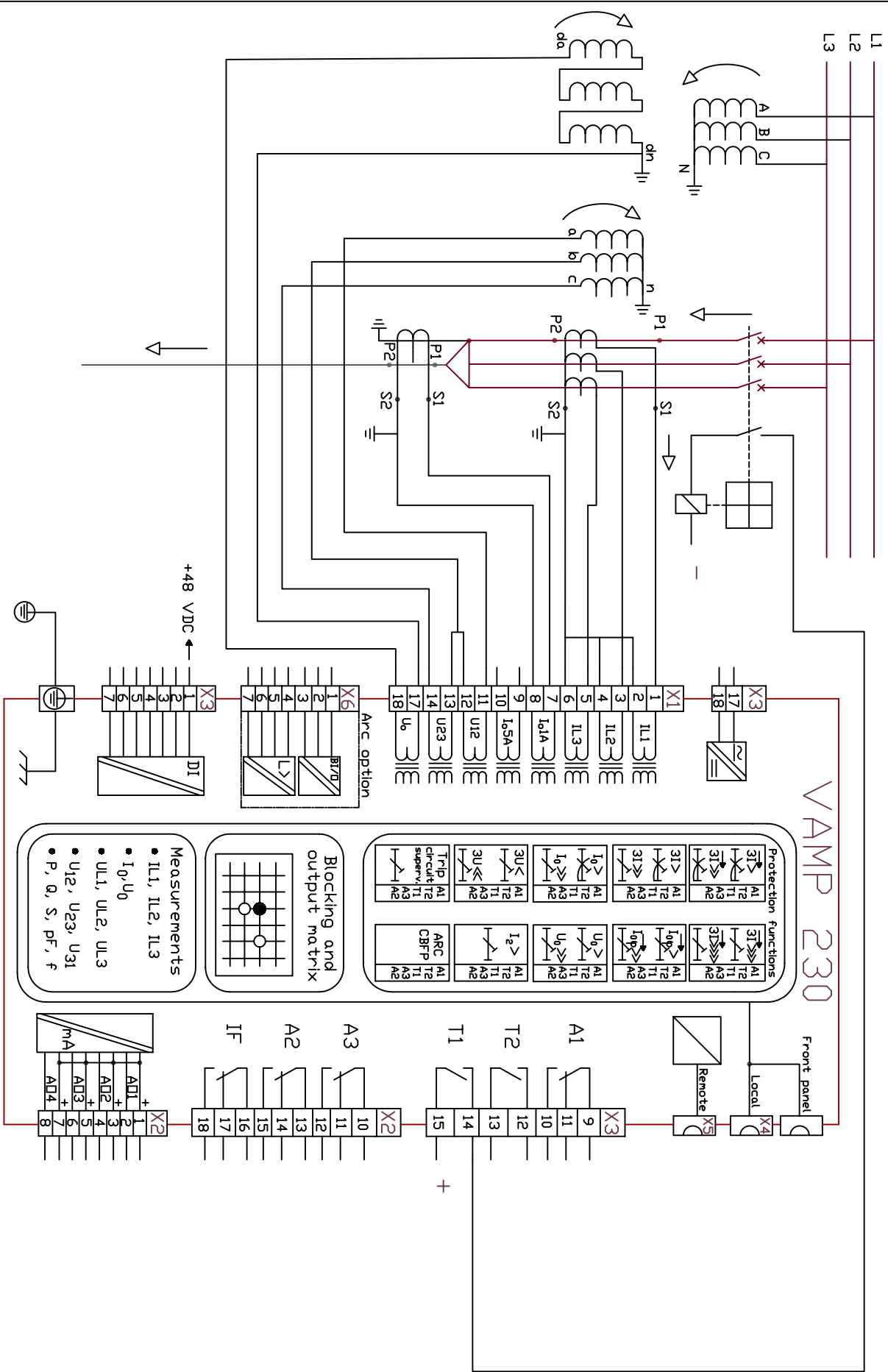
Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by R.Vaahterä	Checked by	Approved by – date	Title/Name Date 2008.06.23
VAMP Ltd P.O. Box 810 (Yrittäjänkatu 15) FIN-65101 VAASA FINLAND		Phone +358 20 753 3200 Fax +358 20 753 3205 email vamp@vamp.fi	File name VAMP 210 – 5 A 7 A A A – 4 Drawing number VD210.EN004 Edition A Sheet 1/1



VAMP 230

Mode: Phase (U₀ is calculated)

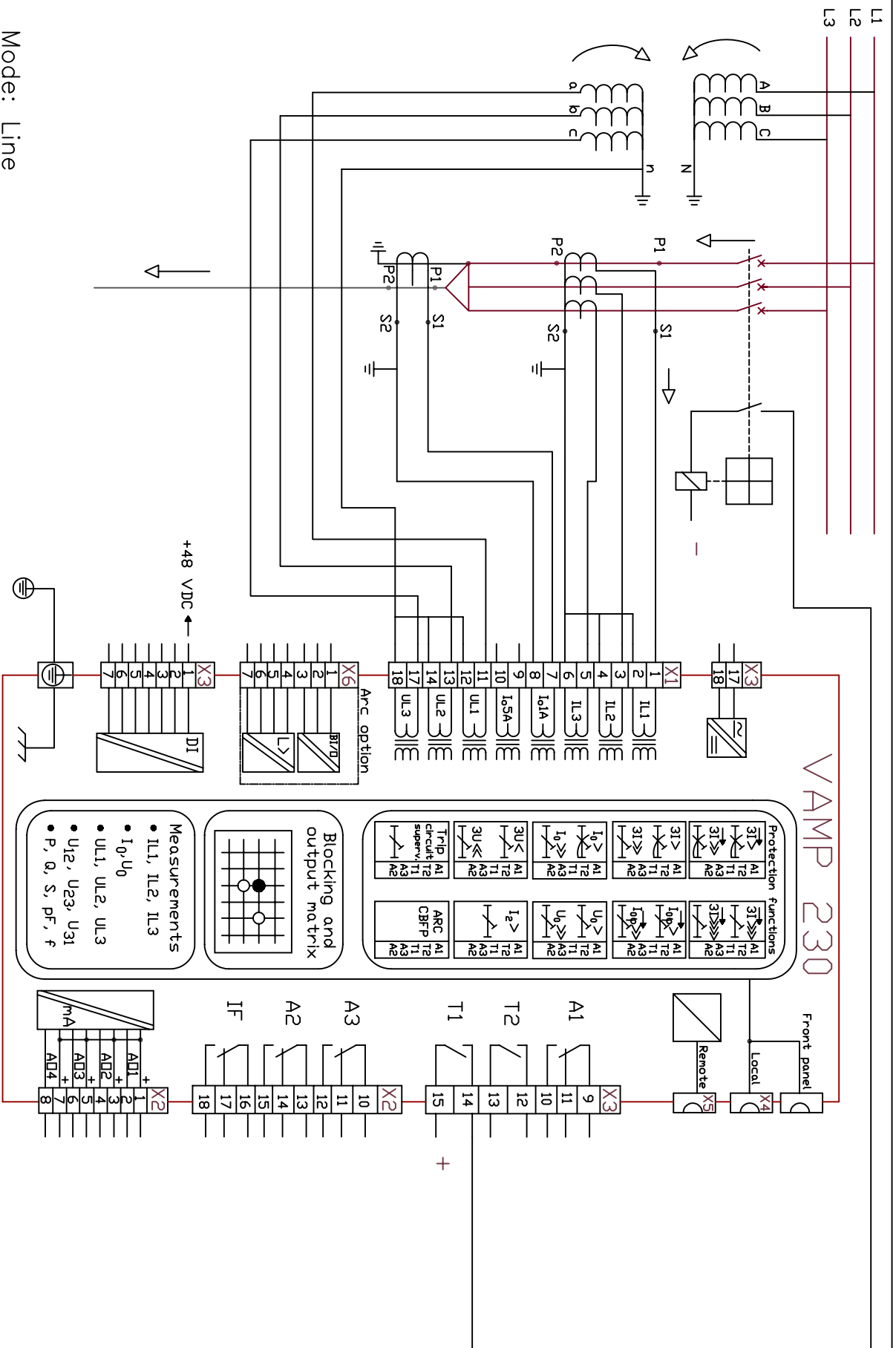
Itemref	Quantity	Title/Name, designation, material, dimension etc		Article No./Reference
Designed by R. Vaahterä	Checked by	Approved by - date	Title/Name	Date 2003.01.01
VAMP Ltd P.O.Box 5 (Runsorinte 7) FIN-65381 VAASA	Phone +358-6-212 1100 Fax +358-6-212 1105 email vampp@vamp.fi		Filename VAMP 230 - 3 C 7 C A A	Scale
FINLAND			Drawing number VD230.EN.002	Sheet 2/4



VAMP 230

Mode: Line + Uo

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by R.Vaahtera	Checked by	Approved by - date	Date 2003-01-01
VAMP Ltd P.O.Box 5 (Runsorintie 7) FIN-65381 VAASA FINLAND	Phone +358-6-212 1100 Fax +358-6-212 1105 email vamp@vamp.fi	Filename VAMP 230 - 3 C 7 C A B Drawing number VD230.EN.003	Scale
			Edition A
			Sheet 3/4

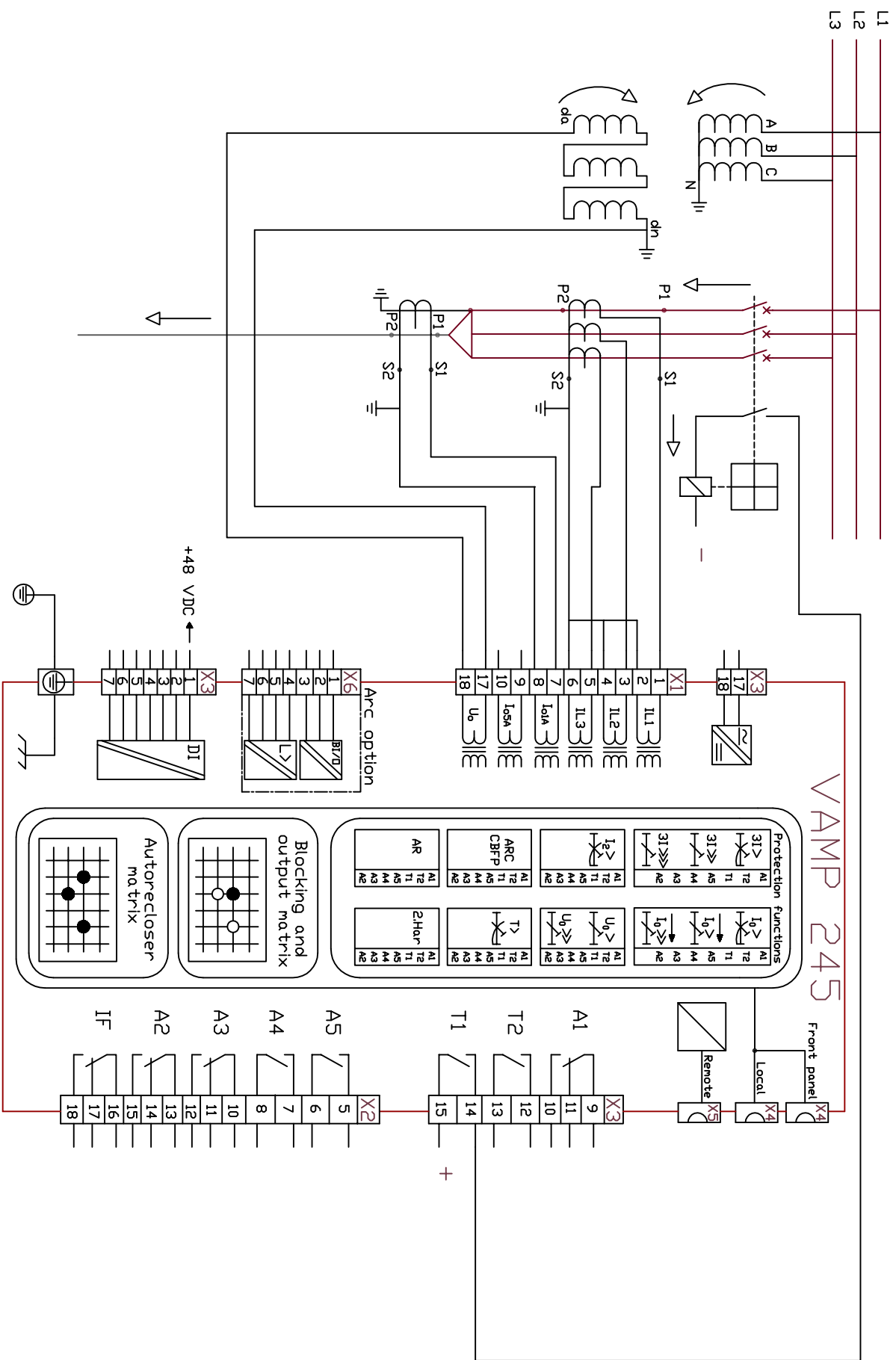


Mode: Line

Residual voltage is calculated using symmetrical components.

VAMP 230

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by R. Vaahterä	Checked by	Approved by - date	Date 2003-01-01
VAMP Ltd		File name VAMP 230 - 3 C 7 C A B	Scale
P.O.Box 5 (Runsorinte 7) FIN-65381 VAASA		Drawing number VD230.EN.004	Sheet 4/4
FINLAND		Phone +358-6-212 1100 Fax +358-6-212 1105 email vampp@vamp.fi	Edition C



VAMP 245

Protection functions

3I1	AI	T2	AI	T2	AI	T2	AI	T2
3I2	AI	T1	AI	T1	AI	T1	AI	T1
3I3	AI	A5	AI	A5	AI	A5	AI	A5
I0	AI	A4	AI	A4	AI	A4	AI	A4
U0	AI	A3	AI	A3	AI	A3	AI	A3
I0	AI	A2	AI	A2	AI	A2	AI	A2
U0	AI	A1	AI	A1	AI	A1	AI	A1
I0	AI	T1	AI	T1	AI	T1	AI	T1
U0	AI	A5	AI	A5	AI	A5	AI	A5
I0	AI	A4	AI	A4	AI	A4	AI	A4
U0	AI	A3	AI	A3	AI	A3	AI	A3
I0	AI	A2	AI	A2	AI	A2	AI	A2
U0	AI	A1	AI	A1	AI	A1	AI	A1

ARC CBRP

AI	T2	AI	T2	AI	T2	AI	T2
AI	T1	AI	T1	AI	T1	AI	T1
AI	A5	AI	A5	AI	A5	AI	A5
AI	A4	AI	A4	AI	A4	AI	A4
AI	A3	AI	A3	AI	A3	AI	A3
AI	A2	AI	A2	AI	A2	AI	A2

2Har

AI	T2	AI	T2	AI	T2	AI	T2
AI	T1	AI	T1	AI	T1	AI	T1
AI	A5	AI	A5	AI	A5	AI	A5
AI	A4	AI	A4	AI	A4	AI	A4
AI	A3	AI	A3	AI	A3	AI	A3
AI	A2	AI	A2	AI	A2	AI	A2

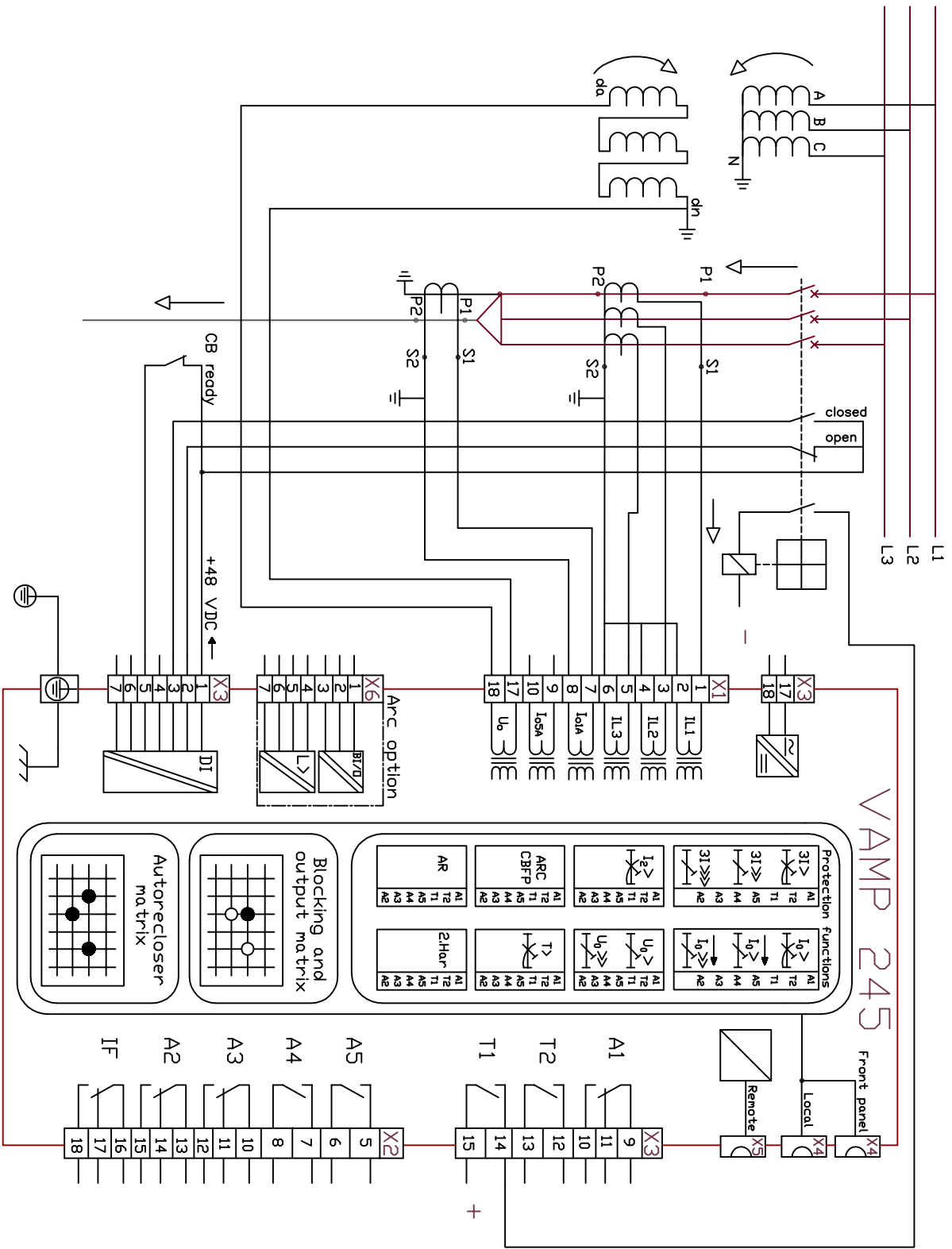
Blocking and output matrix

AI	T2	AI	T2	AI	T2	AI	T2
AI	T1	AI	T1	AI	T1	AI	T1
AI	A5	AI	A5	AI	A5	AI	A5
AI	A4	AI	A4	AI	A4	AI	A4
AI	A3	AI	A3	AI	A3	AI	A3
AI	A2	AI	A2	AI	A2	AI	A2
AI	A1	AI	A1	AI	A1	AI	A1
AI	IF	AI	IF	AI	IF	AI	IF

Autorecloser matrix

AI	T2	AI	T2	AI	T2	AI	T2
AI	T1	AI	T1	AI	T1	AI	T1
AI	A5	AI	A5	AI	A5	AI	A5
AI	A4	AI	A4	AI	A4	AI	A4
AI	A3	AI	A3	AI	A3	AI	A3
AI	A2	AI	A2	AI	A2	AI	A2
AI	A1	AI	A1	AI	A1	AI	A1
AI	IF	AI	IF	AI	IF	AI	IF

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by C/R	Checked by	Approved by - date	Date 2009.12.04
Vamp Ltd P.O.Box 810 (Yrittäjänkatu 15) FIN-65381 VAASA FINLAND		Phone +358 20 753 3200 Fax +358 20 753 3205 email vamp@vamp.fi	Scale
VAMP 245 - 3 C 7 C A A		File name VAMP 245 - 3 C 7 C A A	Edition B
Drawing number VD245.EN002-1		Sheet 1/2	



VAMP 245

Protection functions

3I1	AI	T2	AI	T2	TI	AI	T2	TI	AI	T2	TI	AI	T2	TI	AI	T2	TI
3I2	AI	T2	AI	T2	TI	AI	T2	TI	AI	T2	TI	AI	T2	TI	AI	T2	TI
3I3	AI	T2	AI	T2	TI	AI	T2	TI	AI	T2	TI	AI	T2	TI	AI	T2	TI
I0	AI	T2	AI	T2	TI	AI	T2	TI	AI	T2	TI	AI	T2	TI	AI	T2	TI
U0	AI	T2	AI	T2	TI	AI	T2	TI	AI	T2	TI	AI	T2	TI	AI	T2	TI
I2	AI	T2	AI	T2	TI	AI	T2	TI	AI	T2	TI	AI	T2	TI	AI	T2	TI

ARC CBRP

AI	T2	AI	T2	TI	AI	T2	TI	AI	T2	TI	AI	T2	TI	AI	T2	TI
AI	T2	AI	T2	TI	AI	T2	TI	AI	T2	TI	AI	T2	TI	AI	T2	TI

2Har

AI	T2	AI	T2	TI	AI	T2	TI	AI	T2	TI	AI	T2	TI	AI	T2	TI
AI	T2	AI	T2	TI	AI	T2	TI	AI	T2	TI	AI	T2	TI	AI	T2	TI

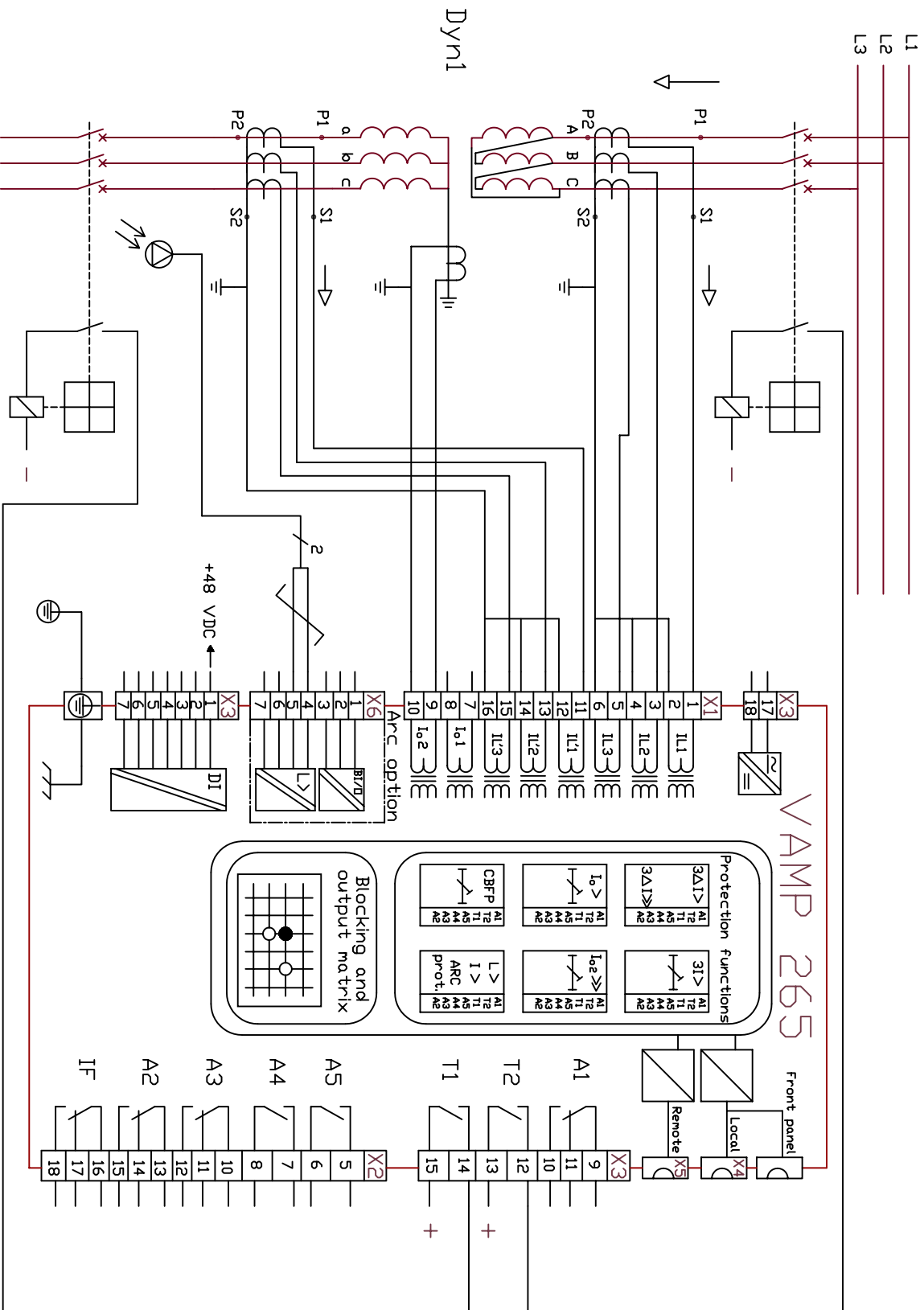
Blocking and output matrix

A1	A2	A3	A4	A5	IF
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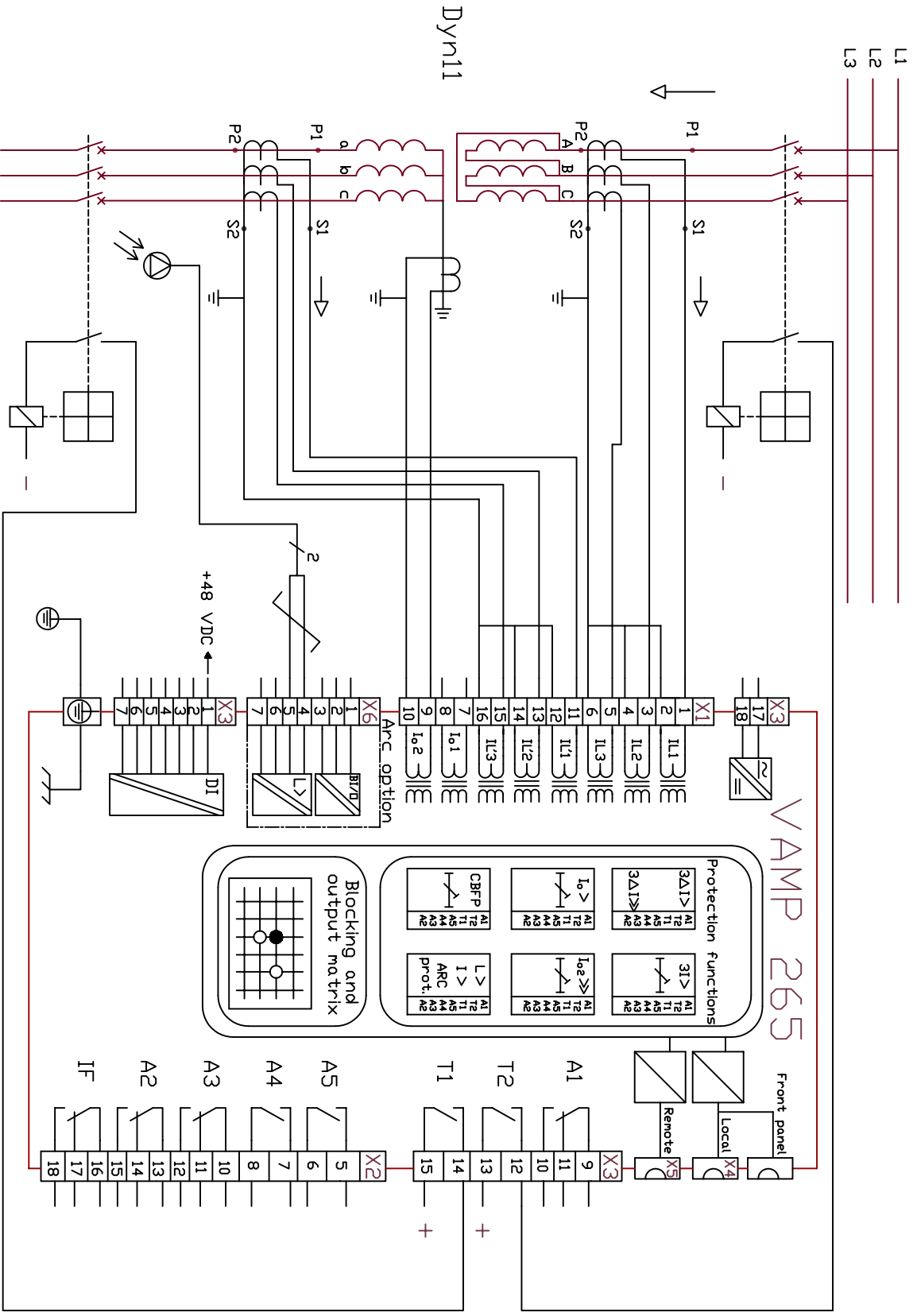
Autorecloser matrix

A1	A2	A3	A4	A5	IF
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

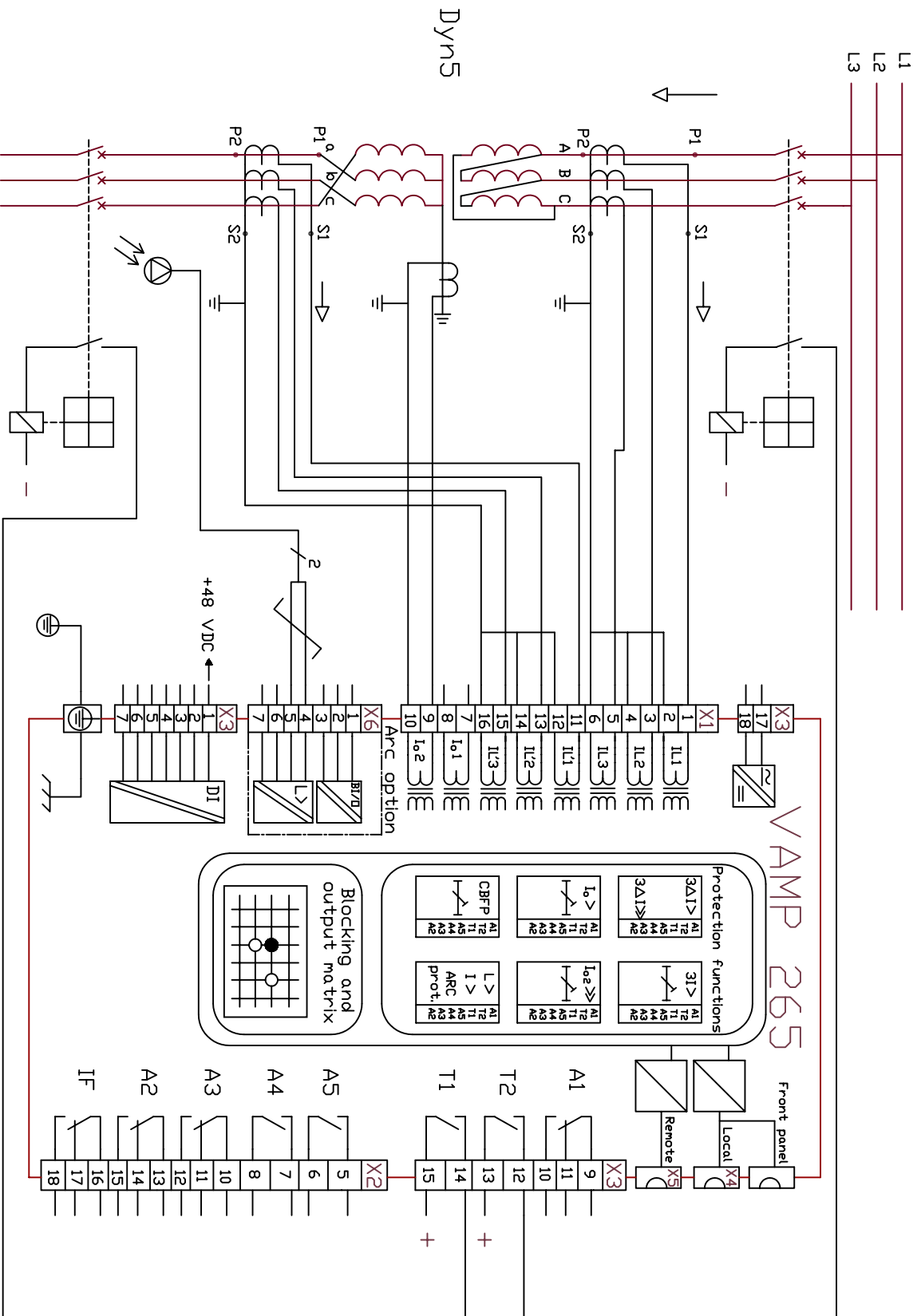
Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by C/R	Checked by	Approved by - date	Date 2009.12.04
VAMP Ltd. P.O.Box 810 (Yrittäjänkatu 15) FIN-65381 VAASA FINLAND		Phone +358 20 753 3200 Fax +358 20 753 3205 email vamp@vamp.fi	Filename VAMP 245 - 3 C 7 C A A _2 Drawing number VD245.EN002-2 Edition B Sheet 2/2



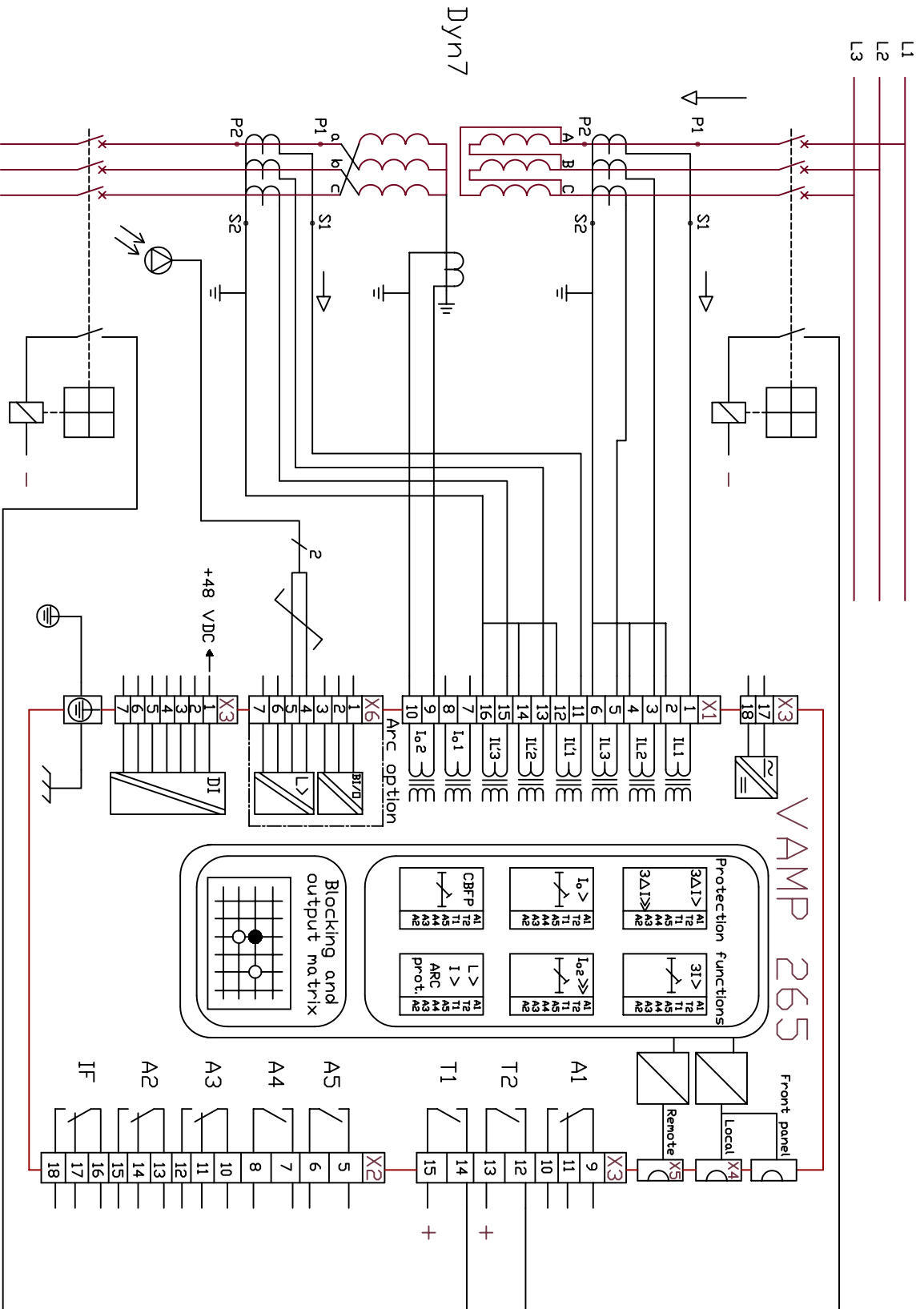
Itemref	Quantity	Title/Name, designation, material, dimension etc		Article No./Reference
Designed by R. Vaahtera	Checked by	Approved by - date	Title/Name Dyn1	Date 2001
VAMP Ltd. P.O.Box 5 (Runsorinte 7) FIN-65381 VAASA		Phone +358-6-212 1100 Fax +358-6-212 1105 email vampp@vamp.fi	Filename VAMP 265 - 5 A 7 C A A	Edition A
			Drawing number VD265.EN.001	Sheet 1/7



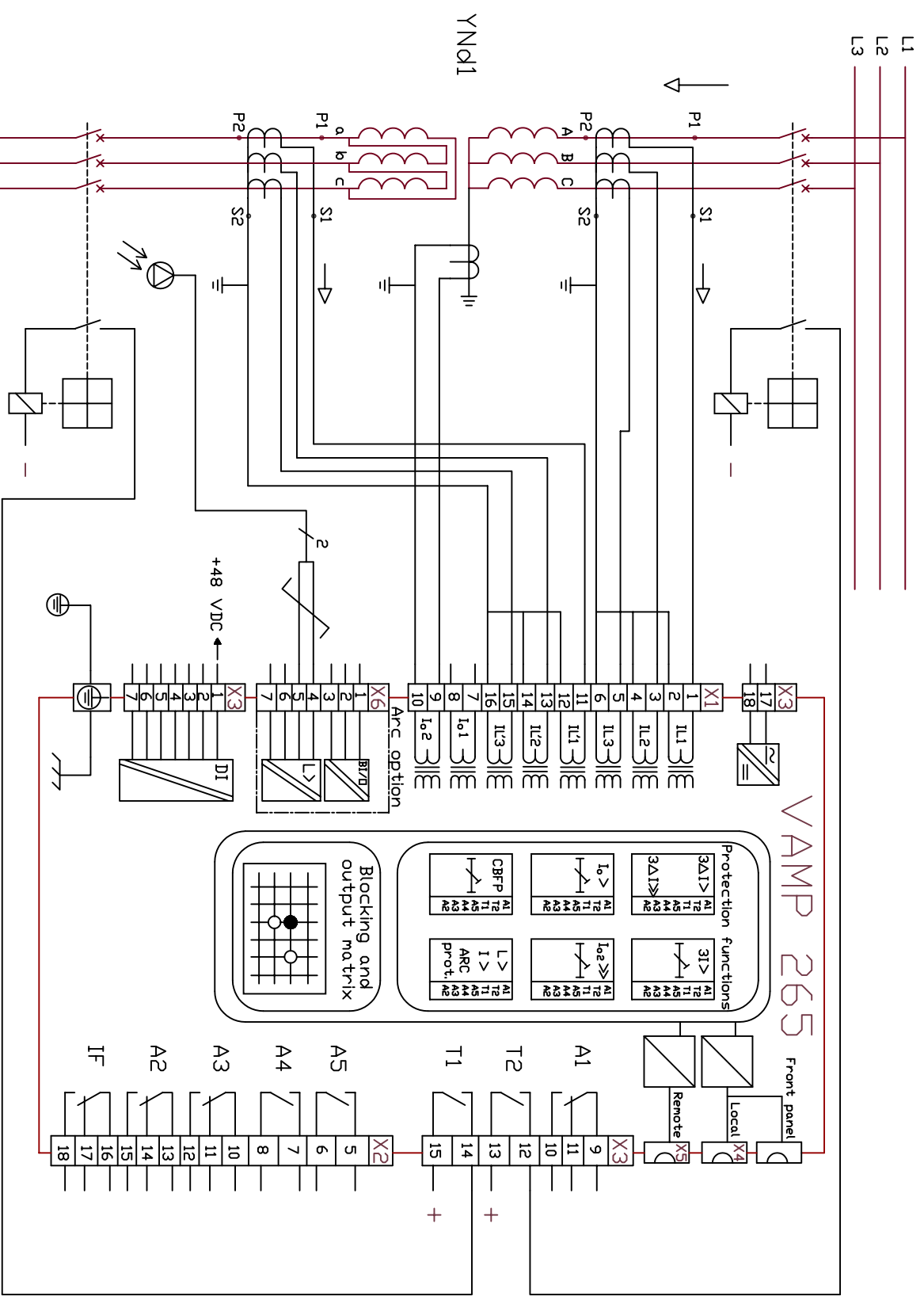
Itemref	Quantity	Title/Name, designation, material, dimension etc		Article No./Reference
Designed by R. Vaahtera	Checked by	Approved by - date	Title/Name Dyn11	Date 2003.01.01
VAMP Ltd P.O.Box 5 (Runsorinte 7) FIN-65381 VAASA		Phone +358-6-212 1100 Fax +358-6-212 1105 email velco@velco.fi	Filename VAMP 265 - 5 A 7 C A A	Edition A
FINLAND			Drawing number VD265.EN.002	Sheet 2/7



Itemref	Quantity	Title/Name, designation, material, dimension etc		Article No./Reference
Designed by R. Vaahnera	Checked by	Approved by - date	Title/Name Dyn5	Date 2003.01.01
VAMP Ltd P.O.Box 5 (Runsorinte 7) FIN-65381 VAASA		Phone +358-6-212 1100 Fax +358-6-212 1105 email vamp@vamp.fi	Filename VAMP 265 - 5 A 7 C A A	Edition A
FINLAND			Drawing number VD265.EN.003	Sheet 3/7



Itemref	Quantity	Title/Name, designation, material, dimension etc		Article No./Reference
Designed by R. Vaahtera	Checked by	Approved by - date	Title/Name Dyn7	Date 2003.01.01
VAMP Ltd P.O.Box 5 (Runsorinte 7) FIN-65381 VAASA		Phone +358-6-212 1100 Fax +358-6-212 1105 email vampp@vamp.fi	Filename VAMP 265 - 5 A 7 C A A	Edition A
			Drawing number VD265.EN.004	Sheet 4/7



Itemref	Quantity	Title/Name, designation, material, dimension etc		Article No./Reference
Designed by R. Vaahtera	Checked by	Approved by - date	Title/Name YNd1	Date 2003.01.01
VAMP Ltd P.O.Box 5 (Runsorinte 7) FIN-65381 VAASA		Phone +358-6-212 1100 Fax +358-6-212 1105 email vampp@vamp.fi	Filename VAMP 265 - 5 A 7 C A A	Edition A
			Drawing number VD265.EN.005	Sheet 5/7