

# metos

## RANGE

### FUTURA RP2, RP4, RP6

MG-product codes

3494319, 3494358, 3494397, 3521114, 3521115, 3521121, 3521153, 3521178, 3521386, 3521393, 3521467,  
3572214, 3572221, 3755004, 3755005

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## Installation and Operation Manual

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# Table of Contents

<b>1.</b>	<b>General</b> .....	<b>3</b>
1.1.	Symbols used in the manual.....	3
1.2.	Symbols used on the appliance.....	3
1.3.	Checking the relationship of the appliance and the manual.....	3
<b>2.</b>	<b>Safety</b> .....	<b>4</b>
2.1.	Safe use of the appliance.....	4
2.2.	2.2 Disposal of the appliance.....	4
<b>3.</b>	<b>Functional description</b> .....	<b>5</b>
3.1.	Intended use of the appliance.....	5
3.1.1.	Prohibited use.....	5
3.2.	Operating principle and construction.....	5
<b>4.</b>	<b>Operation instructions</b> .....	<b>6</b>
4.1.	Before use.....	6
4.1.1.	Selecting cookware.....	6
4.2.	Operation procedures.....	6
4.2.1.	Using the range.....	6
4.3.	After use.....	7
4.3.1.	Cleaning.....	7
4.3.2.	Other service measures.....	8
<b>5.</b>	<b>Installation</b> .....	<b>9</b>
5.1.	General.....	9
5.2.	Transporting and unpacking the range.....	9
5.3.	Positioning the range.....	9
5.4.	Electrical connections.....	9
5.5.	Test-run.....	10
<b>6.</b>	<b>Troubleshooting</b> .....	<b>11</b>
<b>7.</b>	<b>Technical specifications</b> .....	<b>12</b>

## 1. General

Carefully read the instructions in this manual as they contain important information regarding proper, efficient and safe installation, use and maintenance of the appliance.

Keep this manual in a safe place for eventual use by other operators of the appliance.

The installation of this appliance must be carried out in accordance with the manufacturer's instructions and following local regulations. The connection of the appliance to the electric and water supply must be carried out by qualified persons only.

Persons using this appliance should be specifically trained in its operation.

Switch off the appliance in case of failure or malfunction. The periodical function checks requested in the manual must be carried out according to the instructions. Have the appliance serviced by a technically qualified person authorized by the manufacturer and using original spare parts.

Not complying with the above may put the safety of the appliance in danger.

### 1.1. Symbols used in the manual



This symbol informs about a situation where a safety risk might be at hand. Given instructions are mandatory in order to prevent injury.



This symbol informs about the right way to perform in order to prevent bad results, appliance damage or hazardous situations.



This symbol informs about recommendations and hints that help to get the best performance out of the appliance.

### 1.2. Symbols used on the appliance



This symbol on a part informs about electrical terminals behind the part. The removal of the part must be carried out by qualified persons only.

### 1.3. Checking the relationship of the appliance and the manual

The rating plate of the appliance indicates the serial number of the appliance. If the manuals are missing, it is possible to order new ones from the manufacturer or the local representative. When ordering new manuals it is essential to quote the serial number shown on the rating plate.

## 2. Safety

### 2.1. Safe use of the appliance



Because the range is a heated appliance that has hot surfaces during normal use, the following warnings and instructions must be followed in order to avoid burns.

During long-time operation even the frame surrounding the cooking plates gets hot.

The capability of the cooking plates to store and even out the heat also keeps them hot for a long time after switching them off.

For safe handling of cookware on the cooking top, always use heat protective gloves.

Do not leave the range on for long periods totally without supervision.

### 2.2. 2.2 Disposal of the appliance

The destroying of the appliance when its economical lifetime has been reached may be harmful to the environment if not properly handled. Utilization of materials that are reusable is best done by professional personnel specialized in recycling

## 3. Functional description

### 3.1. Intended use of the appliance

The Futura range is intended for preparing different kinds of foodstuffs using cookware.

#### 3.1.1. Prohibited use



Use of the appliance for other purposes than stated above is prohibited.

Preparing food directly on the cooking plate without cookware is prohibited.

Covering the gaps between the range cooking plates and the upper frame with folio is prohibited.



The manufacturer of the appliance takes no responsibility for situations that might occur if the warnings and instructions in this manual are neglected.

### 3.2. Operating principle and construction

Depending on the model, the range is equipped with two, four or six cooking plates.

Each cooking plate is equipped with a 7-position power regulator which allows power regulation in several steps. A green pilot light for every cooking plate indicates that the plate is on.

In order to ease daily cleaning the cooking plates are hinged and can be swung up in an upright position. In addition, the range is equipped with a removable spillage tray.

## 4. Operation instructions

### 4.1. Before use



The cooking plates of the range are protected with a thin layer of oil for the duration of storage and transportation. When heating up the range for the first time the oil may create some smoke and unpleasant smell. This is quite normal and disappears quickly when using the range.

#### 4.1.1. Selecting cookware

Always use flat-based cookware in order to achieve good heat transfer and to increase the service life of the cooking plate. Placing a cold and wet pan on a red-hot cooking plate should be avoided as the thermal tensions created considerably decrease the service life of the plate.

You get the best benefit from the range as well as from the cookware by observing the following:

- Use good quality flat-based cookware.
- Wait for pans to cool before putting them in cold water.
- Always ensure pans have clean, dry bases before use.
- Ensure pan handles are positioned safely and away from heat sources.
- Always use pan lids except when frying.
- Remember good quality pans retain heat well, so generally only low or medium heat is necessary.

### 4.2. Operation procedures

#### 4.2.1. Using the range



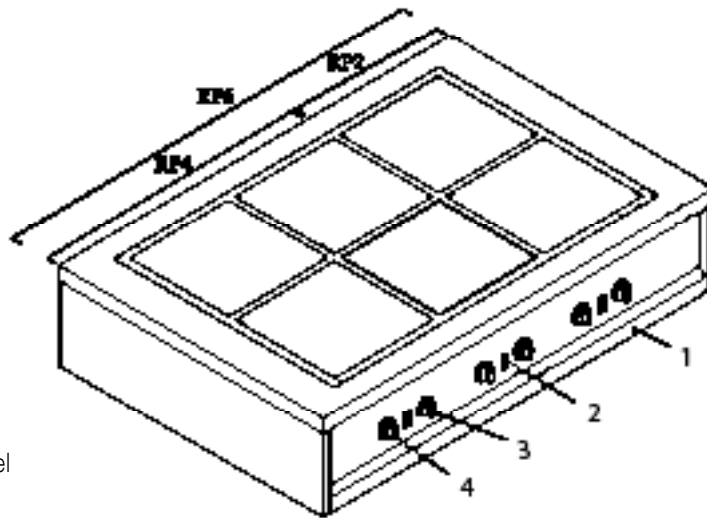
Switch the appliance off if it is damaged or is malfunctioning. Contact authorised service personnel using original spare parts for service of the appliance.



Ranges intended for use aboard ships are equipped with a potrack. Using a range aboard a ship without the potrack is prohibited.

During the installation, a mains switch may have been fitted near the range, often on a wall nearby. Check that the mains switch is in the ON position.

The range is controlled with power regulators and pilot lights.



Operating panel

1. Spillage tray
2. Pilot light cooking plate
3. Power regulator front panel
4. Power regulator, rear panel



Each cooking plate is equipped with a 7-position power regulator which allows powerregulation in several steps. A green pilot light for every cooking plate indicates that the plate is on.

Cooking is started by turning the power regulator to position 6. When boiling starts, the power is decreased as needed. Usually it is possible to use a small or medium power setting.

Do not leave the cooking plate on without any load, because it then overheats, which considerably decreases the service life of the plate. By turning the cooking plate off when not needed, energy is saved and a cooler working environment is achieved.



If there are longer interruptions in the electricity distribution, all power regulators of the range should be set to the 0 position. This should be done in order to prevent unexpected start-up of the range when the electricity distribution is restored.

## 4.3. After use

### 4.3.1. Cleaning



Use of a water hose or pressure cleaning jet is strictly forbidden.



It is not allowed to wipe the undersides of cooking plates swung up to a cleaning position with a wet sponge, cloth etc., because water flowing down the plate is absorbed into the insulating material thus causing earth leakage.



When cleaning the cooking plates, observe that they are hot a long time after they have been switched off. When the cooking plates are swung up for cleaning, it is advisable to support the plate in the upper position with one hand thus preventing the possibility that they unexpectedly return to their working position.



Be careful when removing the spillage tray, as it may contain spillages that are still hot. Cleaning is very easy, if possible spillovers are removed immediately with a damp cloth. Sugar and mixes containing much sugar must be removed immediately, because later removing is laborious.

In all cleaning, prefer chemical cleaning methods rather than mechanical rubbing. Use a slightly alkaline detergent (pH 8-10) diluted in water according to instructions when cleaning the surfaces of the range.



Always dry the cooking plates after cleaning by heating them up.

Clean cooking plates give an efficient heat transfer to the cookware. Cooking is then fast and the service life of the cooking plates is extended.

The spillage tray is pulled out and cleaned. Outer surfaces are wiped off with a damp cloth and then wiped dry.

#### **4.3.2. Other service measures**



The appliance does not include any user serviceable parts inside. Service must be left to authorised service personnel.



## 5. Installation

### 5.1. General

The installation of this appliance must be carried out in accordance with the manufacturer's instructions and following local regulations. This installation manual must be used together with the installation drawing of the appliance.



The connection of the appliance to the electrical and water supply must be carried out by qualified persons only.

### 5.2. Transporting and unpacking the range

The best way to move the range is to keep it in its package as long as possible while it also protects the range from outer damage. If it is necessary to unpack the range, possible lifting must be done from the bottom frame using suitable spacers of wood. In order to avoid damages it is not allowed to use the cooking top as a workbench during installation.

### 5.3. Positioning the range



Because the temperature of a cooking plate accidentally forgotten on without a pan may reach even 550°C, it is mandatory to follow local fire safety regulations when installing the range.

The range is positioned in the installation place and adjusted in a horizontal position from the adjustable legs.



When the range is on the correct location and in a horizontal position, it must be bolted to the floor, the land models by the flanges in the rear adjusting legs and the marine models from all four leg flanges.

### 5.4. Electrical connections

Besides the live electrical parts, also look out for possible moving mechanisms inside the appliance, if there is a need for testing during installation and the guards or cover plates are detached.



In order to make eventual future service easier and increase safety, a mains switch must be installed near the appliance. This switch must disconnect the appliance completely from the electrical supply network.

## 5.5. Test-run

Acquaint yourself with the user manual of this appliance before testing it. The appliances under the cooking top are provided with their own manuals.

After connecting the cable check the function of the range.

Check that

- every cooking plate heats up and the corresponding pilot light turns on when the plate is switched on with the power regulator
- no wires inside the appliance get jammed before refitting the outer panels.

Refit the outer panels.

## 6. Troubleshooting

If the appliance does not function, check the following

- Has the appliance been used according to the instructions?
- Are all possibly removable parts refitted?
- Is the mains switch on the appliance or nearby - often on the wall - in the ON position?
- Are the circuit breakers (fuses) of the appliance in the electricity distribution board in working order?  
Ask an authorised person to check the circuit breakers.

If even this does not help, figure out in advance how to briefly describe the breakdown and contact an authorised service person.

## **7. Technical specifications**

**Wiring diagram 81848-83C**

**Wiring diagram 81849C83**

**Main and control circuit T03431 A3**

**Main and control circuit T03519 A3**

**Main and control circuit S00092 A4**

**Installation drawing T02237 A3**

**Installation drawing T02238 A3**

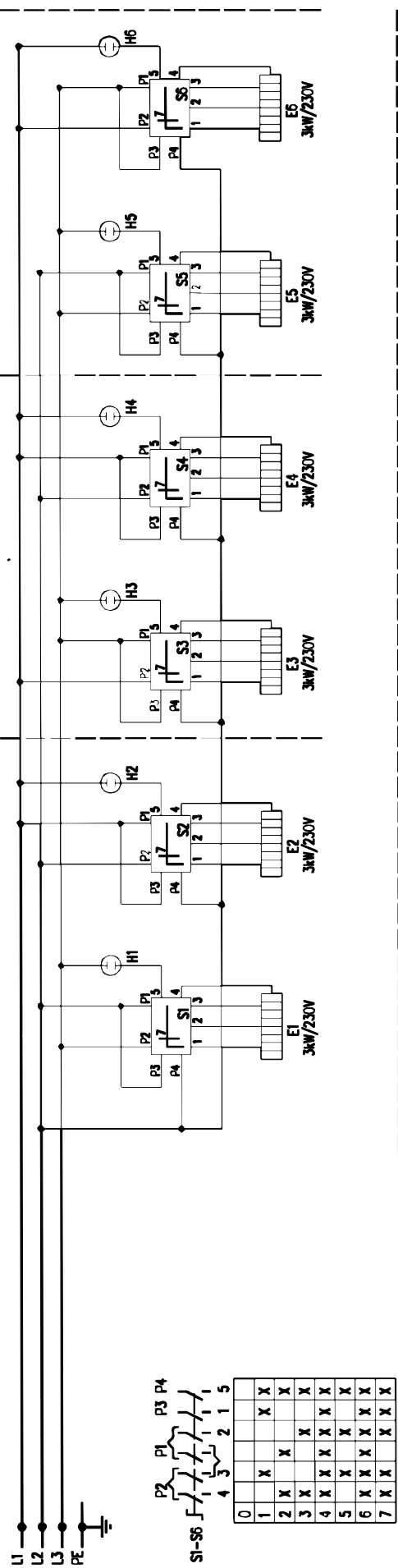
**Installation drawing T02239 A3**

**Installation drawing T02240 A3**

**Installation drawing T02241 A3**

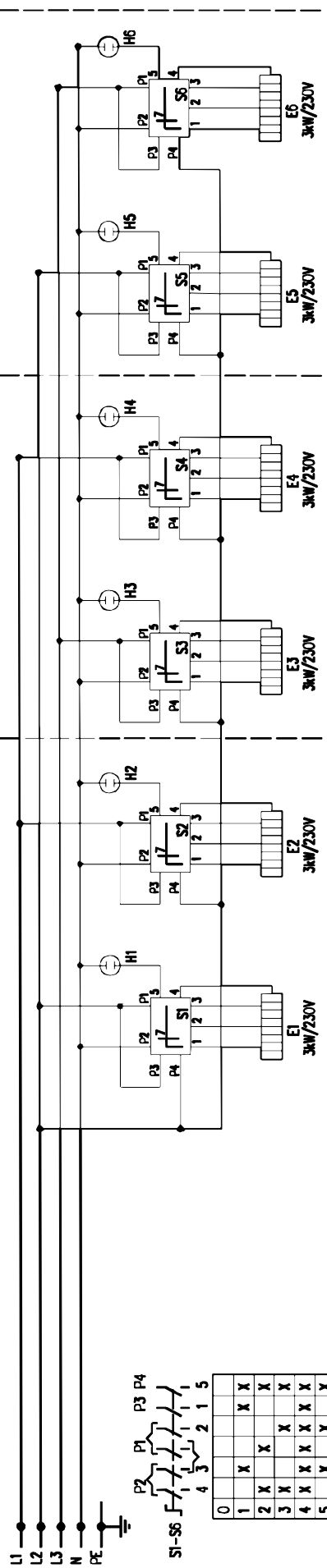
**Installation drawing T02242 A3**

3/PE AC220-230V 50-60Hz



	0	1	2	3	4	5	6	7
1		X						
2			X					
3				X				
4					X			
5						X		
6							X	
7								X

3(2)/N/PE AC380-415V 50-60Hz

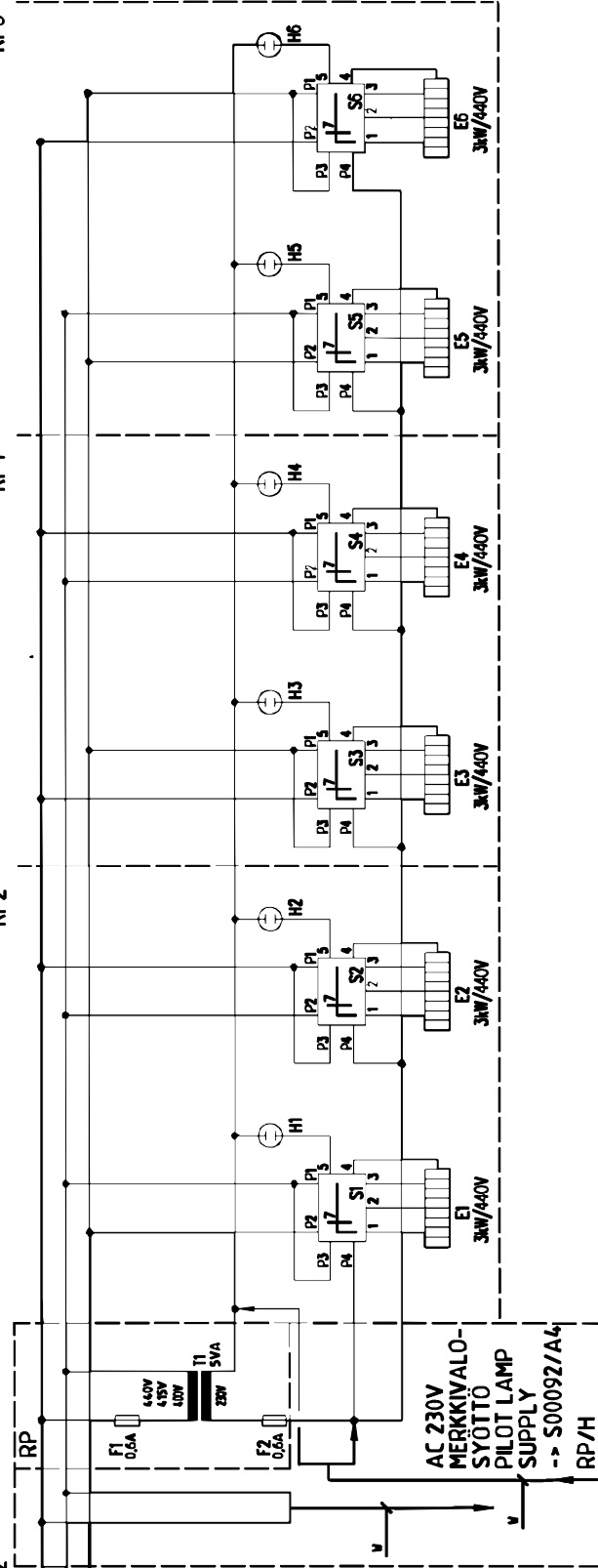
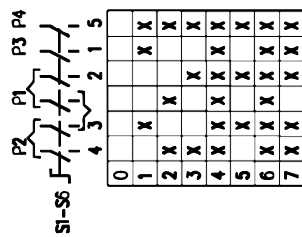


	0	1	2	3	4	5	6	7
1		X						
2			X					
3				X				
4					X			
5						X		
6							X	
7								X

VERKKO / ELECTRIC SUPPLY	RP2		RP4		RP6	
	P/A/W	I/A	P/A/W	I/A	P/A/W	I/A
3/PE AC220V 50-60Hz	5,5	22	11,0	34	16,5	43
3/PE AC230V 50Hz	6,0	23	12,0	35	18,0	45
2/N/PE AC380V 50Hz	5,5	13				
2/N/PE AC400V 50Hz	6,0	13				
2/N/PE AC415V 60Hz	6,5	14				
3/N/PE AC380V 50Hz			11,0	25	16,5	25
3/N/PE AC400V 50Hz			12,0	26	18,0	26
3/N/PE AC415V 50Hz			13,1	27	19,6	27

Pöytäkirja.	S. 13.03.-91 EE
	P. 18.03.-91 EE
Tucite: Futuro RP-iliesi ; spjis ; range	M. 29.09.-99 PAAK
	T.
Kytentäkaavio	81848-83C
Kopplingschema	3(2)/N/PE AC380-415/220-240V 50Hz
Wiring diagrams	3/PE AC220-230 50-60Hz
Korvaus: 81848-83B	Korvaus:

3/PE AC415-440V 50-60Hz



VERKKO / ELECTRIC SUPPLY	RP2		RP4		RP6	
	P/A/W	I/A	P/A/W	I/A	P/A/W	I/A
3/PE AC380V 50Hz	4,5	11	9,0	16	13,4	21
3/PE AC400V 50Hz	5,0	11	9,9	17	14,9	22
3/PE AC415V 50Hz	5,4	11	10,7	17	16,0	23
3/PE AC440V 60Hz	6,0	12	12,0	18	18,0	24

**Kytentäkaavio**  
**Kopplingschema**  
**Wiring diagrams**

3 /PE AC380-440V 50-60Hz

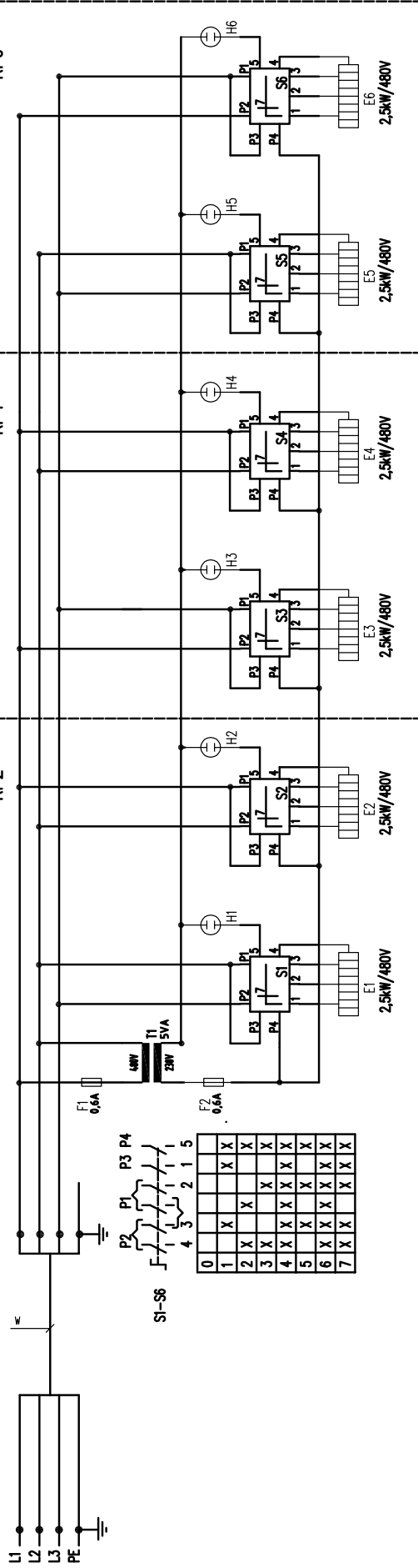
81849C83

Konoz: Konvalite

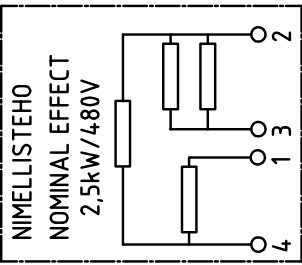
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P. 18.03.-91 EE  
M. 17.12.-98 JCE  
T.

Pilppilr.  
Tuote: Futura RP-iesi ; spis ; range

3/PE AC480V,50-60Hz



0									
1	X	X	X	X	X	X	X	X	X
2	X	X	X	X	X	X	X	X	X
3	X	X	X	X	X	X	X	X	X
4	X	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X	X
7	X	X	X	X	X	X	X	X	X



480V = 5,2A ; 2500W

LIITÄNTÄTIEDOT/CONNECTION INFORMATION

VERKKO / ELECTRIC SUPPLY	RP2	RP4	RP6
3/PE AC480V 50Hz	P/kW	P/kW	P/kW
	5,0	10,0	15,0
	I/A	I/A	I/A
	9,0	13,5	18,0

Pää- ja ohjauvirtapiiriin kytkentäkaavio  
Main- and control circuit diagram  
3/PE AC480V,50-60Hz

**RAINGER**  
**RP2, RP4, RP6**

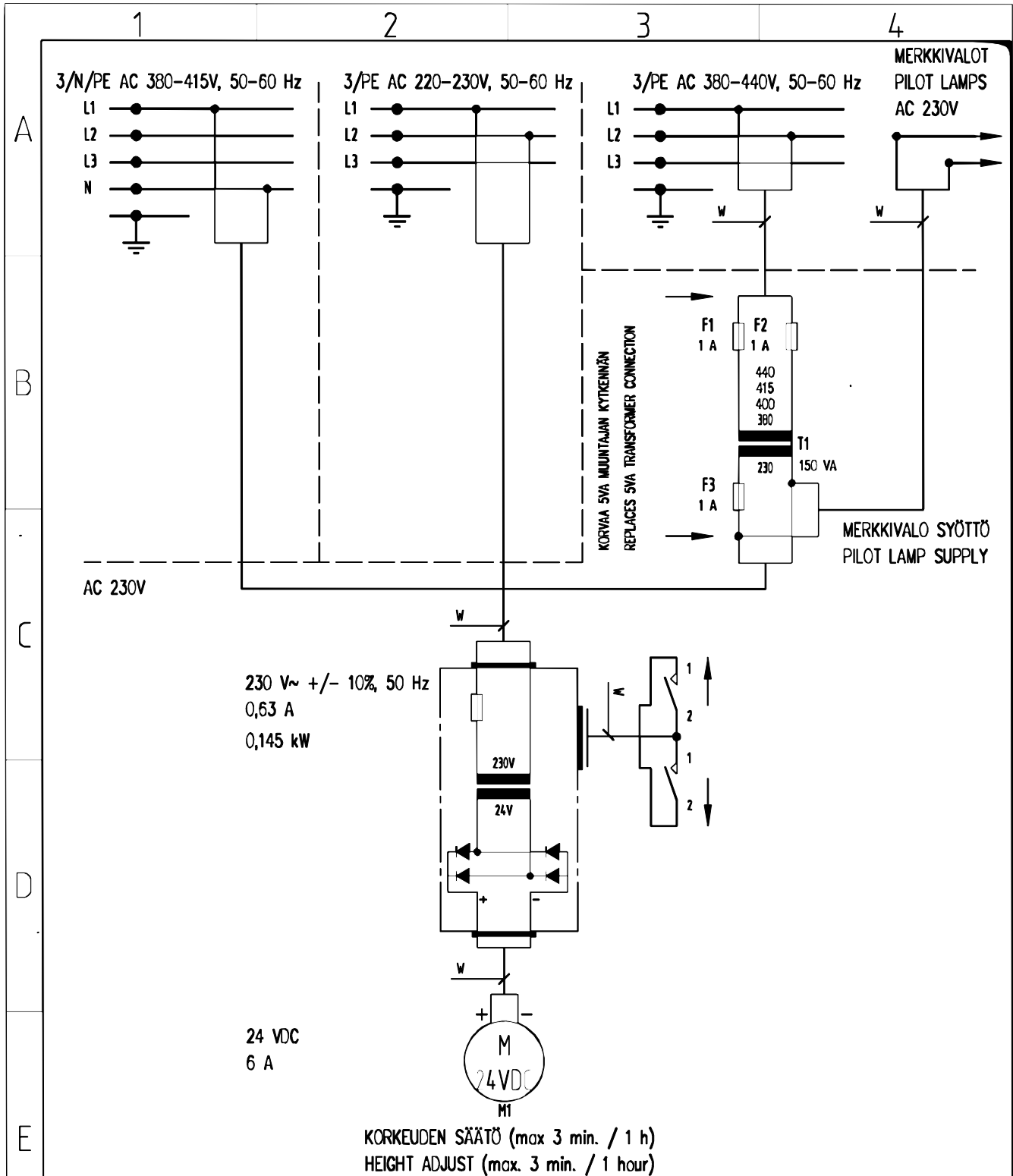
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Terä: OKKO  
Mitt: APPR

**HACKMAN**

Typ:nro: T03431A3  
Tiedosto: T03431A3  
Päiv: 1/1  
Dwg:nr: T03431A3  
REV

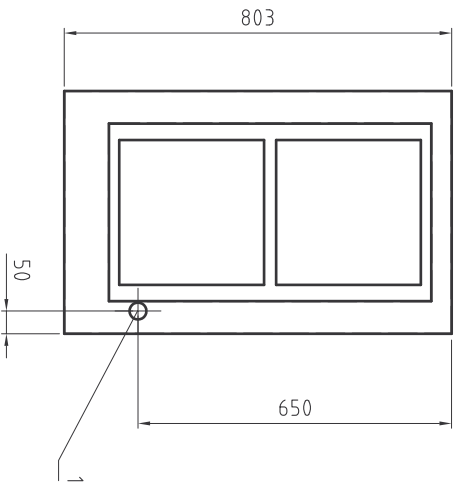
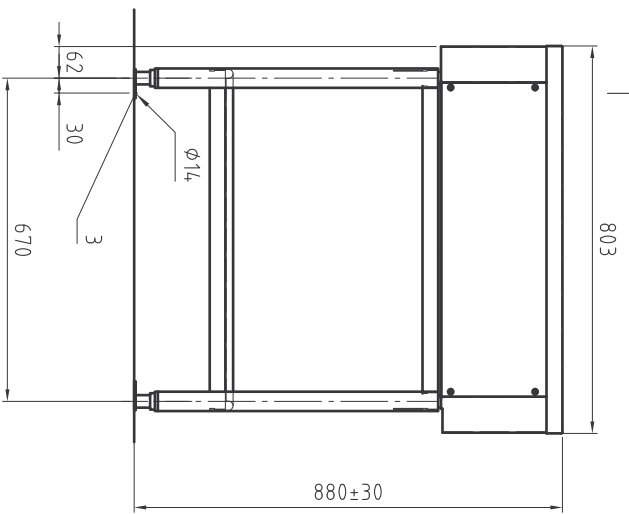
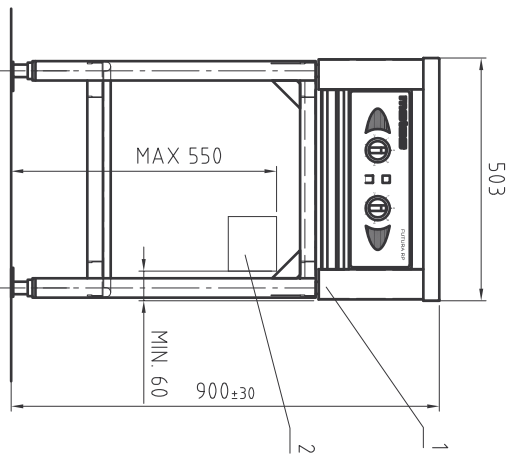






F	<i>Tuote</i> ARDOX / FULI / JALUSTA <i>Malli</i> S2, S4, S6 / RC, RP / H <i>Moduli</i>		<i>Suhde</i> 1:1 <i>Lehti</i> 1/1
	<i>Optio</i>		<i>Suunn.</i> 01.09.2000    PAAK <i>Liittyy</i>
	<i>Koodi</i>		<b>S00092A4</b> <i>Korvattu</i> <input type="checkbox"/> <i>Tulostettu</i> 28.11.00 09:52

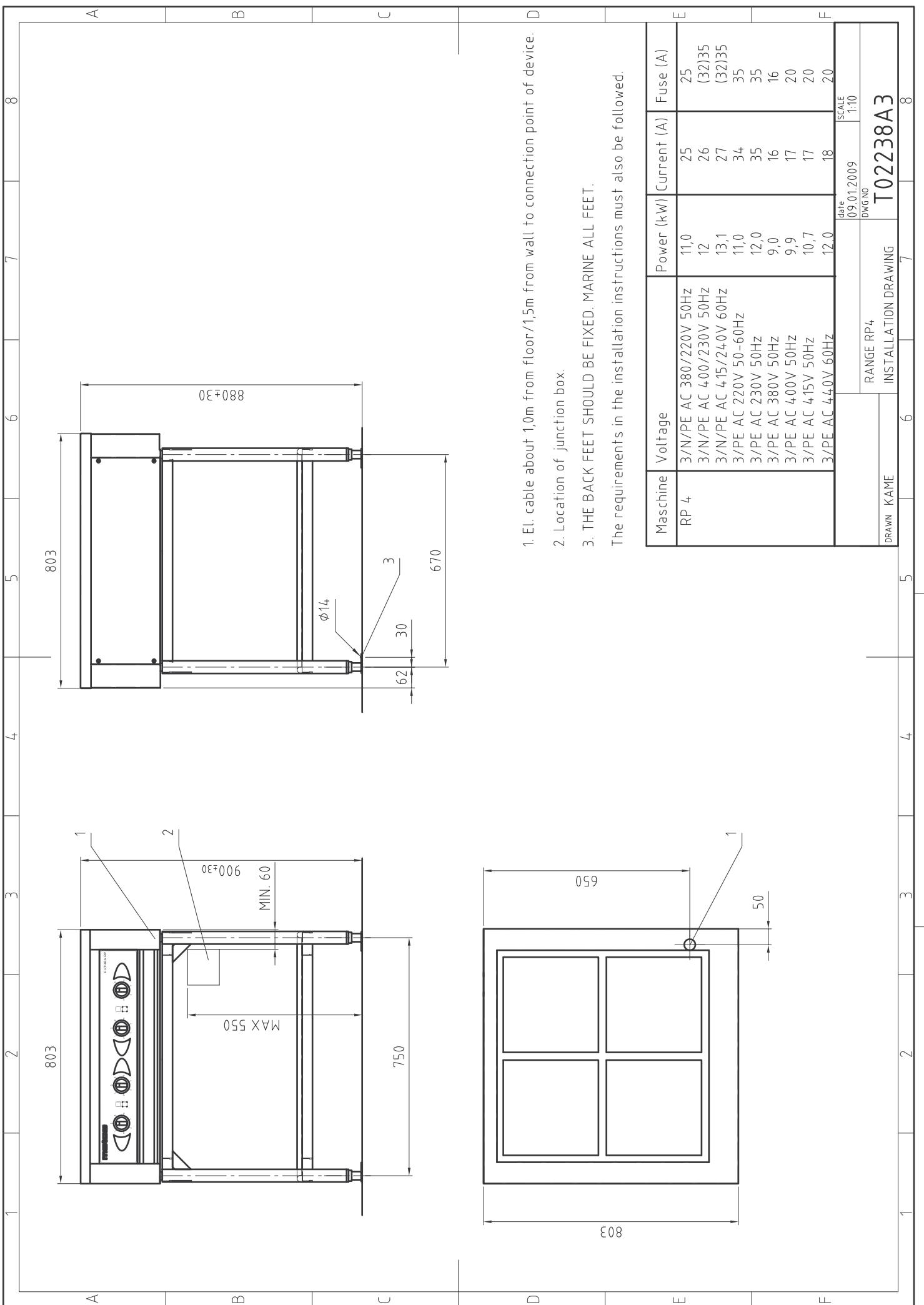
PÄÄ- JA OHJAUSPIIRIKAAVIO  
 MAIN- AND CONTROL DIAGRAM  
 3/N/PE AC380-415 V; 3/PE AC220-440V, 50-60 Hz



1. El. cable about 1,0m from floor/1,5m from wall to connection point of device.
  2. Location of junction box.
  3. THE BACK FEET SHOULD BE FIXED. MARINE ALL FEET.
- The requirements in the installation instructions must also be followed.

Maschine	Voltage	Power (kW)	Current (A)	Fuse (A)
RP 4	3/N/PE AC 380/220V 50Hz	5,5	13	16
	3/N/PE AC 400/230V 50Hz	6,0	14	16
	3/N/PE AC 415/240V 50Hz	6,5	14	16
	3/PE AC 220V 50-60Hz	5,5	22	25
	3/PE AC 230V 50Hz	6,0	23	25
	3/PE AC 380V 50Hz	4,5	11	16
	3/PE AC 400V 50Hz	5,0	11	16
	3/PE AC 415V 50Hz	5,4	11	16
	3/PE AC 440V 60Hz	6,0	12	16

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DWGNO	T02237A3		
DRAWN	KAME		
RANGE RP2		INSTALLATION DRAWING	

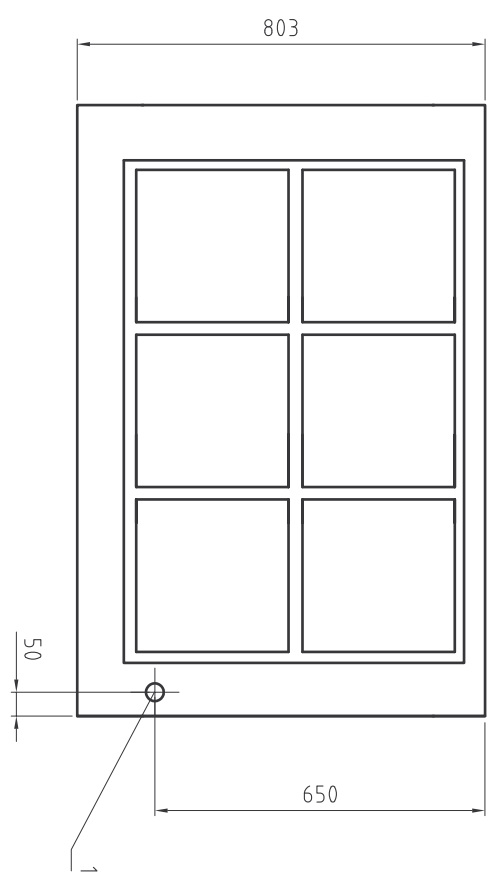
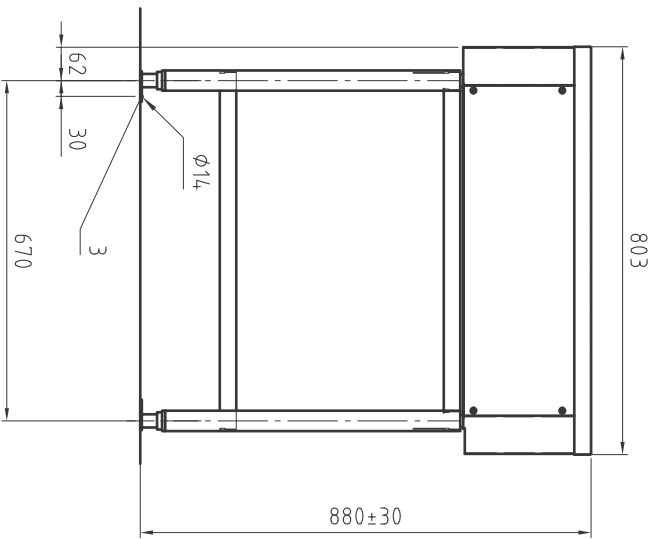
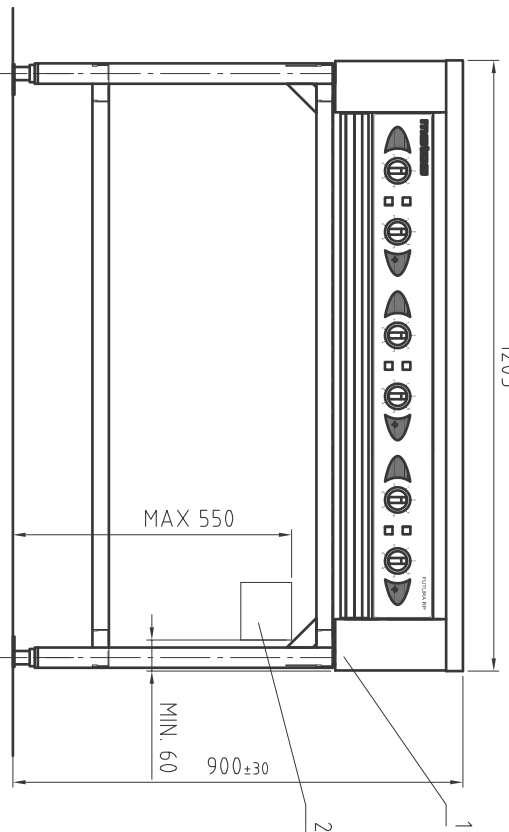


1. El. cable about 1,0m from floor/1,5m from wall to connection point of device.
  2. Location of junction box.
  3. THE BACK FEET SHOULD BE FIXED. MARINE ALL FEET.
- The requirements in the installation instructions must also be followed.

Maschine	Voltage	Power (kW)	Current (A)	Fuse (A)
RP 4	3/N/PE AC 380/220V 50Hz	11,0	25	25
	3/N/PE AC 400/230V 50Hz	12	26	(32)35
	3/N/PE AC 415/240V 60Hz	13,1	27	(32)35
	3/PE AC 220V 50-60Hz	11,0	34	35
	3/PE AC 230V 50Hz	12,0	35	35
	3/PE AC 380V 50Hz	9,0	16	16
	3/PE AC 400V 50Hz	9,9	17	20
	3/PE AC 415V 50Hz	10,7	17	20
	3/PE AC 440V 60Hz	12,0	18	20

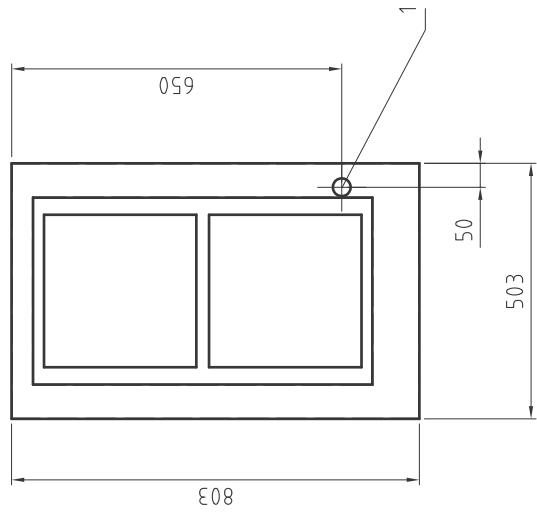
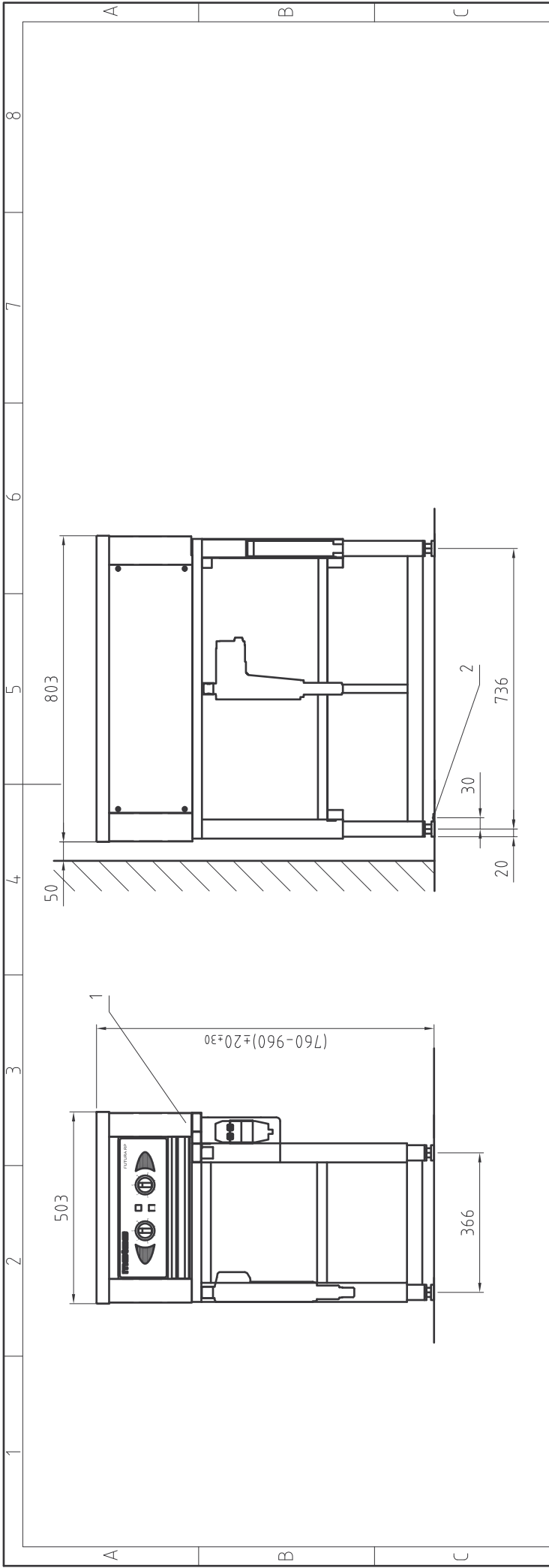
date	09.01.2009	SCALE	1:10
DWG NO			
RANGE RP4	INSTALLATION DRAWING		
DRAWN KAME	T02238A3		



1. EI. cable about 1,0m from floor/1,5m from wall to connection point of device.
  2. Location of junction box.
  3. THE BACK FEET SHOULD BE FIXED. MARINE ALL FEET.
- The requirements in the installation instructions must also be followed.

Maschine	Voltage	Power (kW)	Current (A)	Fuse (A)
RP 4	3/N/PE AC 380/220V 50Hz	16,5	25	25
	3/N/PE AC 400/230V 50Hz	18,0	26	(32)35
	3/N/PE AC 415/240V 60Hz	19,6	27	(32)35
	3/PE AC 220V 50-60Hz	16,5	43	50
	3/PE AC 230V 50Hz	18,0	45	50
	3/PE AC 380V 50Hz	13,4	21	25
	3/PE AC 400V 50Hz	14,9	22	25
	3/PE AC 415V 50Hz	16,0	23	25
	3/PE AC 440V 60Hz	18,0	24	25

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		DWGNO <b>T02239A3</b>	

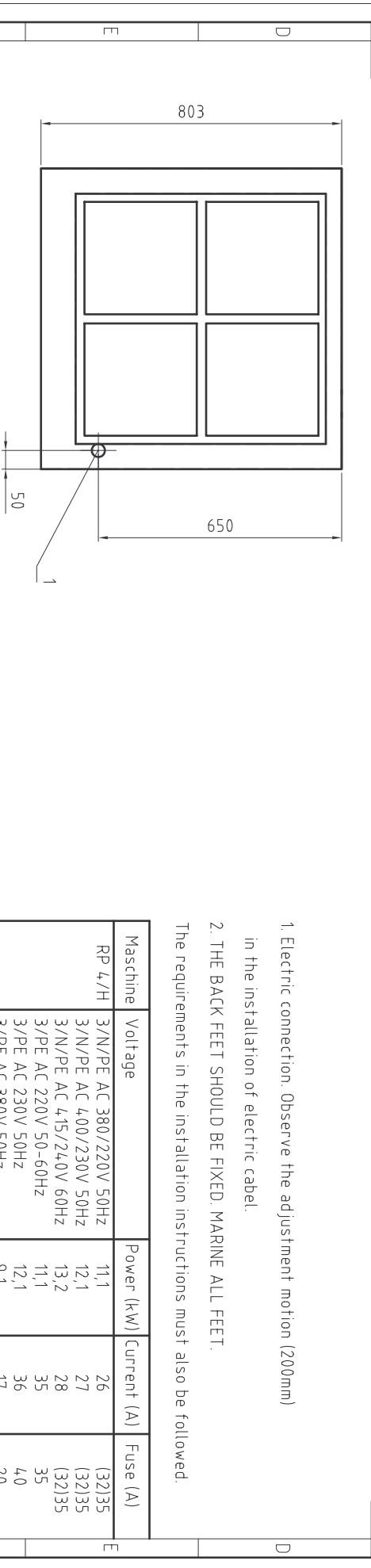
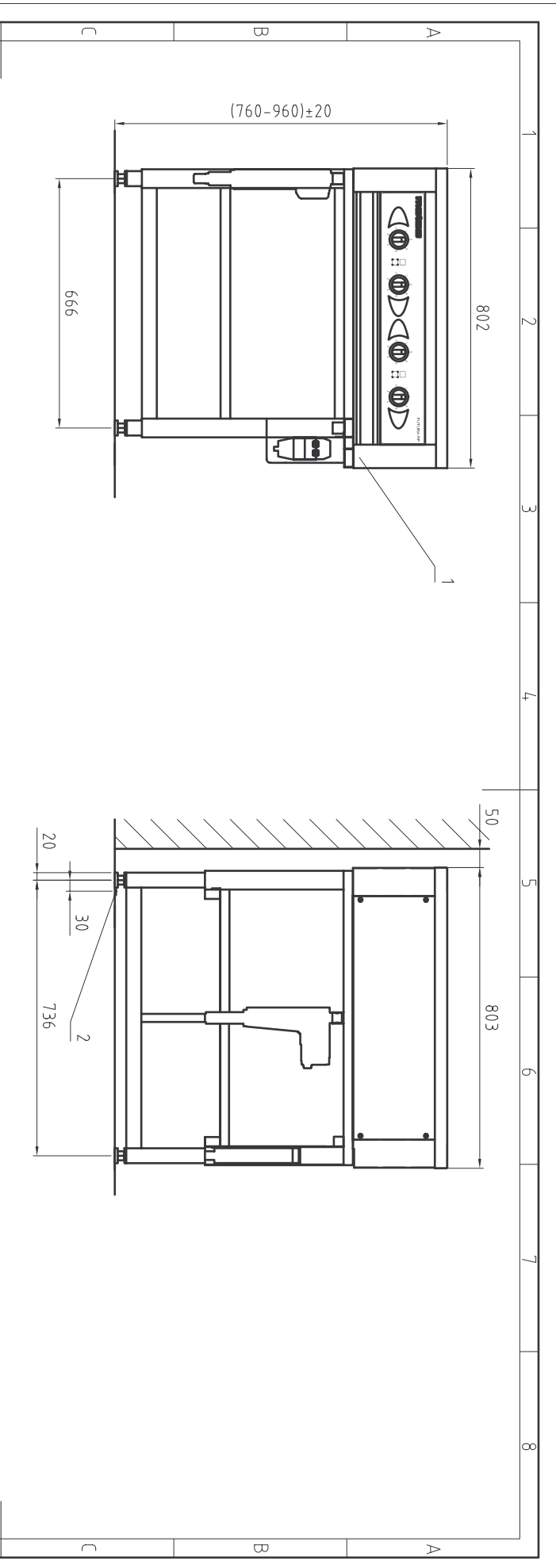


1. Electric connection. Observe the adjustment motion (200mm) in the installation of electric cabel.
  2. THE BACK FEET SHOULD BE FIXED. MARINE ALL FEET.
- The requirements in the installation instructions must also be followed.

Maschine	Voltage	Power (kW)	Current (A)	Fuse (A)
RP 2/H	2/N/PE AC 380/220V 50Hz	5,6	14	16
	2/N/PE AC 400/230V 50Hz	6,1	14	16
	2/N/PE AC 415/240V 60Hz	6,6	15	16
	3/PE AC 220V 50-60Hz	5,6	23	25
	3/PE AC 230V 50Hz	6,1	24	25
	3/PE AC 380V 50Hz	4,6	11	(13)16
	3/PE AC 400V 50Hz	5,1	12	(13)16
	3/PE AC 415V 50Hz	5,5	12	(13)16
	3/PE AC 440V 60Hz	6,1	13	(13)16

Range with height adjust	date	SCALE
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INSTALLATION DRAWING	DWG.NO	
DRAWN KAME	T02240A3	

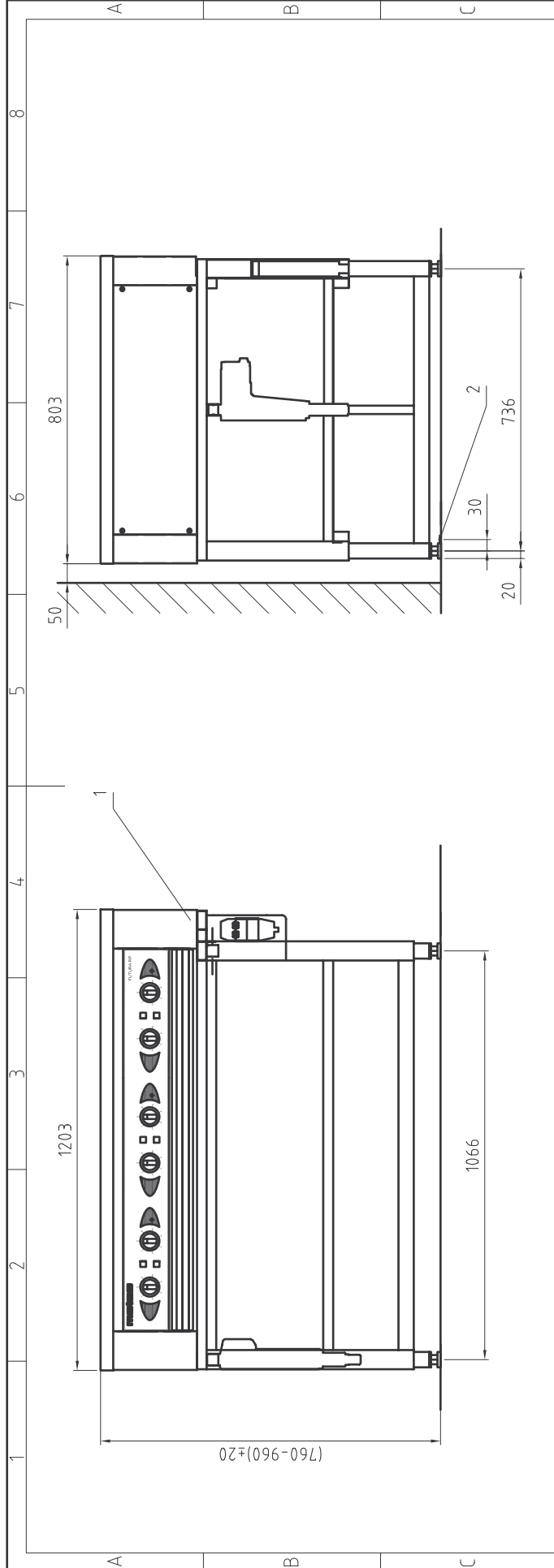


1. Electric connection. Observe the adjustment motion (200mm) in the installation of electric cable.
2. THE BACK FEET SHOULD BE FIXED. MARINE ALL FEET. The requirements in the installation instructions must also be followed.

Machine	Voltage	Power (kW)	Current (A)	Fuse (A)
RP 4/H	3/N/PE AC 380/220V 50Hz	11,1	26	(32)35
	3/N/PE AC 400/230V 50Hz	12,1	27	(32)35
	3/N/PE AC 415/240V 60Hz	13,2	28	(32)35
	3/PE AC 220V 50-60Hz	11,1	35	35
	3/PE AC 230V 50Hz	12,1	36	40
	3/PE AC 380V 50Hz	9,1	17	20
	3/PE AC 400V 50Hz	10,0	18	20
	3/PE AC 415V 50Hz	10,8	18	20
	3/PE AC 440V 60Hz	12,1	19	20

DRAWN KAME	Range with height adjust	date	SCALE
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INSTALLATION DRAWING		DWG NO	
		<b>T02241A3</b>	





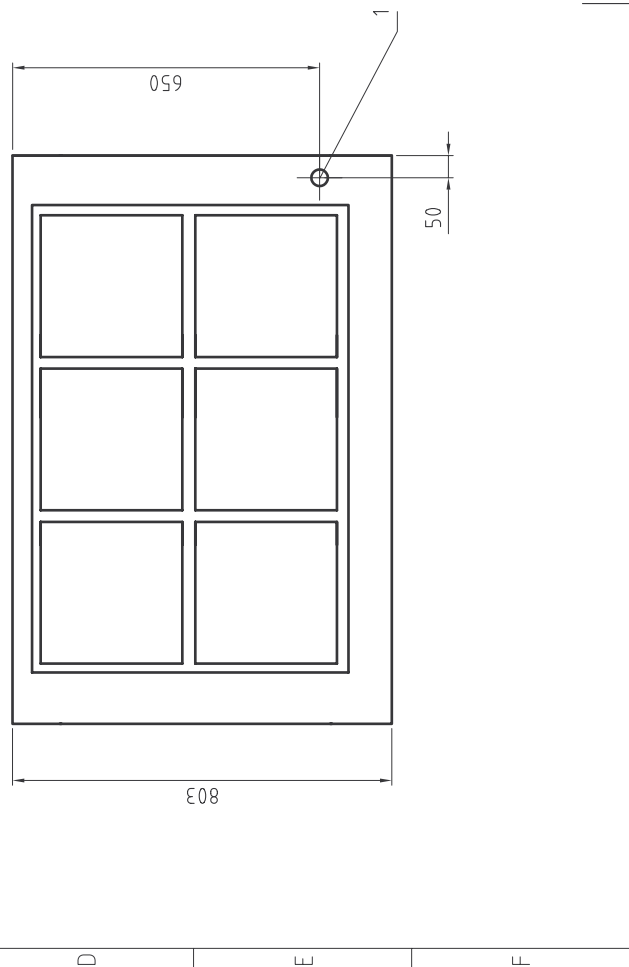
1. Electric connection. Observe the adjustment motion (200mm) in the installation of electric cabel.

2. THE BACK FEET SHOULD BE FIXED. MARINE ALL FEET.

The requirements in the installation instructions must also be followed.

Maschine	Voltage	Power (kW)	Current (A)	Fuse (A)
RP 6/H	3/N/PE AC 380/220V 50Hz	16,6	26	(32)35
	3/N/PE AC 400/230V 50Hz	18,1	27	(32)35
	3/N/PE AC 415/240V 60Hz	19,7	28	(32)35
	3/PE AC 220V 50-60Hz	16,6	44	50
	3/PE AC 230V 50Hz	18,1	46	50
	3/PE AC 380V 50Hz	13,5	22	25
	3/PE AC 400V 50Hz	15,0	23	25
	3/PE AC 415V 50Hz	16,1	24	25
	3/PE AC 440V 60Hz	18,1	25	25

date	12.01.2009	SCALE	1:10
DWG NO	T02242A3		
DRAWN	KAME	INSTALLATION DRAWING	



Valmistajan nimi / Tillverkarens namn / Manufacturer's name

METOS AS

Osoite / Adress / Address

VALUKOJA 16  
11415 TALLINN  
ESTONIA

Vakuuttaa, että seuraava tuote / Försäkrar att följande produkt / Declare that the following product

Nimi, tyyppi tai malli / Namn, typ eller modell / Name, type or model

Liesi / Spis / Range RP -sarja / serien / series

Mallit / Modeller / Models :

RP2, RP4, RP6, RP4/Chef 220, RP4/Chef 240, RP4/200, RP6/Chef 220, RP6/Chef 240, RP6/Chef 200

on seuraavien direktiivien asiaankuuluvien säännösten mukainen / överensstämmer med tillämpliga bestämmelser i följande direktiv / is in conformity with the relevant provisions of the following directives

MD 2006/42/EC, LVD 2006/95/EC, EMC 2004/108/EC, RoHS 2002/95/EC, WEEE2002/96/EC

ja lisäksi vakuuttaa, että seuraavia yhdenmukaistettuja standardeja (tai niiden osia/kohtia) on sovellettu / och försäkrar dessutom att följande harmoniserade standarder (eller delar/paragrafer) har använts / and furthermore declares that the following harmonised standards (or parts/clauses) have been used

EN ISO 12100-1, EN ISO 12100-2

ja lisäksi vakuuttaa, että seuraavia muita standardeja (tai niiden osia/kohtia) on sovellettu / och försäkrar dessutom att följande andra standarder (eller delar/paragrafer) har använts / and furthermore we declare that the following other standards (or parts/clauses) have been used

EN 60204-1, EN 60335-1, EN 60335-2-36, EN 60335-2-42

Alla mainittu henkilö on valtuutettu kokoamaan teknisen tiedoston / Nedan nämnda person är bemyndigad att sammanställa den tekniska dokumentfilen / The person mentioned below is authorized to compile the technical file

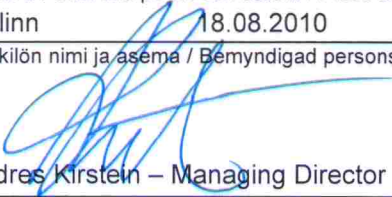
Valeri Bogoslovstev

Metos AS, Valukoja 16, 11415 Tallinn, Estonia

Antopaikka ja päivä / Utfärdad på ort och datum / Place and date of issue

Tallinn 18.08.2010

Valtuutetun henkilön nimi ja asema / Bemyndigad persons namn och befattning / Name and title of authorized person

  
Andres Kirstein – Managing Director  
Jaan Muru – Production Manager





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