Installation Instruction Manual for washers

RMS6*, RMG6*, REM*, RMG*

GIRBAU, SA
Crta de Manlleu, km. 1
08500 VIC (Barcelona) • SPAIN
National sales:
T.(+ 34) 902 300 359
comercial@girbau.es
International sales:
T.(+ 34) 938 862 219
sales@girbau.es
Service:
T.(+ 34) 902 300 357
sat@girbau.es
www.girbau.es

For **USA** and **CANADA**:
CONTINENTAL GIRBAU Inc.
2500 State Road 44
WI 54904 Oshkosh • USA
Tel. 1(920) 231-8222
info@continentalgirbau.com
www.continentalgirbau.com

EN

Installation

RMS*
RMG*
REM*

Cod. 598250
Rev. 07/0717

Model	From serial #
RMS610	2,021,494
RMS/RMG613	2,330,000
RMS/RMG617	2,340,000
RMS/RMG623	2,350,000
RMS/RMG628	2,410,192
REM025	1,371,423
REM/RMG033	2,360,000
REM/RMG040	2,370,000
REM/RMG055	2,380,000
REM/RMG070	2,420,237

CONTENTS

WARNING!

TRANSPORT, INSTALLATION, INSPECTION, MAINTENANCE, REPAIR OR MODIFICATION ROUTINES ON GIRBAU EQUIPMENT

1. The actions described in these instructions are strictly reserved for contractually **AUTHORISED TECHNICAL SERVICES** (**ATS**) and personnel who have successfully completed training by Girbau SA.
2. The company responsible for the Authorised Technical Service accepts full liability for the work done and any possible consequences that may derive from it.
3. Any actions carried out by personnel who are not authorised by the manufacturer will be considered to be improper and will result in the automatic voiding of the machine's warranty.
4. The manufacturer will not accept responsibility for any physical and/or material damage caused by actions performed on the machine undertaken by unauthorised personnel.
5. Do not store or install the machine in areas exposed to the ELEMENTS or where it may be splashed by water.
6. The room where the machine is located MUST comply with the environmental conditions (air venting, temperature, humidity, etc.) specified in the technical specifications table. NEVER INSTALL THE MACHINE IN ENVIRONMENTS where it will be splashed with water or where there is a very high level of humidity in the atmosphere.
7. All installations required for the proper operation of the machine MUST be carried out by a duly accredited Registered Installation Contractors, in compliance with the legal regulations applicable in the country of use.
8. Once the corresponding operation has been performed, the ATS staff must perform the final machine inspection.
9. Avoid carrying out any action on the machine without having first read and understood the machine's Installation and Operating Manuals, paying special attention to the Safety Instructions.
10. In any action that modifies the values of the machine's specifications plate, it should be borne in mind that:
    - It is the responsibility of the ATS to check that the external installation for the machine has been modified and adapted to the new requirements, particularly to those regarding ducting and electrical protection.
    - It is the responsibility of the ATS to update the specifications plate, in accordance with the new operation conditions, once the final machine inspection has been performed.
11. Carrying out transport, installation, inspection routines, adjustments, maintenance, repairs, cleaning or any work on the machines without applying safety measures or having the necessary technical know-how can lead to **ELECTRICAL SHOCK OR SERIOUS ACCIDENTS.**
12. When tools designed for specific transport, installation, maintenance and repair routines are available, their use is compulsory in order to avoid unnecessary risks.
13. Before carrying out any procedures on machines fitted with pneumatic or hydraulic circuits:
    - Make the machines COMPLETELY SAFE by following the instructions set out in the corresponding Manuals or by wedging them with wooden blocks where necessary.
    - Bear in mind that working on a component without having previously understood the role that it performs in the circuit as a whole involves a high risk of suffering a **SERIOUS ACCIDENT**.
14. **BEFORE CARRYING OUT ANY** inspection routine, adjustment, maintenance, repairs, cleaning or any work on the machine, DISCONNECT IT FROM ALL THE ENERGY SOURCES.
    - **COMPLETELY** disconnect the machine from the power supply and prevent the possibility of accidental reconnection by mechanically locking the automatic external switch and/or the switch breaker. Stopping the machine with the NORMAL STOP key or push-button is not enough.

- Disconnect the electrical connection of any circuit external to the machine; for example external dosing equipment, external vending units, folders or ironer feeders. These circuits are independent of the supply to the machine.
- Before beginning any procedure on machines equipped with an inverter or equipment with capacitative loads, wait for at least five minutes (10 minutes on equipment with a power rating greater than 25 kW) after the electrical disconnection, to eliminate risk of residual voltage.
- Close and mechanically lock the manual WATER, GAS, STEAM, THERMAL OIL, COMPRESSED AIR, etc. supply valves.
- Check that the water bath has **COMPLETELY** drained, that no part of the machine is at an excessively high temperature and that no parts are in movement through inertia.

15. **DANGER !** Some fault localisation procedures require checking at different points of the electric circuit with the machine connected to the power supply and other supply sources. When carrying out these procedures, respect the following instructions:
    - The appropriate checks must be carried out by ONLY ONE PERSON.
    - During these procedures, ONLY remove the protective covers from the electric circuit and/or the inverter. Never remove the covers protecting the moving parts of the machine.
16. **THE MANUFACTURER REFUSES ANY RESPONSIBILITY IF THESE SAFETY INSTRUCTIONS AND ALL INFORMATION IN THE CORRESPONDING HANDBOOKS ARE NOT FOLLOWED. KEEP THESE INSTRUCTIONS IN A SAFE PLACE.**

SYMBOLS USED IN MACHINE LABELLING

Electrical risk
Protective guard for elements carrying an electric current.

High temperature risk
Handle with caution.
Use adequate protection.

Mechanical risk
Protective guard for moving parts.

Risk of inhaling harmful or irritant vapours
Keep the doors/covers closed.
Use adequate protection.

Flame risk (only on some machines)
Protective guard for flame.

Risk of falling
Use proper access and safety methods.

Access prohibited

Refer to instruction manual/booklet

SYMBOLS USED IN THIS MANUAL

Symbol used to highlight a possible HAZARD, WARNING or NOTE.

This symbol is used to emphasise a particular explanation.

TRANSLATION OF ORIGINAL MANUAL

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1. TECHNICAL SPECIFICATIONS

1.1. Tools needed for installation

- Bolting nuts M12 ..... open end or ring wrench 3/4 in (19 mm)
- Bolting nuts M14 ..... open end or ring wrench 7/8 in (21 mm)
- Bolting nuts M16 ..... open end or ring wrench 5/16 in (24 mm)
- Clamps fixing ..... tubular wrench 7 mm
- Water inlet coupling ..... open end wrench 1 3/8 in (34 mm)
- Covers fixing ..... Torx T20 screwdriver
- Covers fixing ..... Torx T25 screwdriver
- Water inlet hoses ..... slip-joint pliers or pipe wrench diam. 1 1/2 in (35 mm)
- Electrical connection ..... Phillips screwdriver 2 mm. (#2)
- External dosing connection ..... slotted-head screwdriver 3 mm.
- Vending circuit connection ..... slotted-head screwdriver 3 mm & Philips 1 (#1)

1.2. Accessories in machine

Keep all machine instructions in a safe place.

ACCESSORIES	QUANTITY	
Bolting nuts and hoses	4	***(5)***
Hold-down washer	4	***(6)***
Drain hose	1	
Clamp 50-70	1	
Cold water inlet hose	1	***(1)***
Hot water inlet hose	1	***(1)***
Water inlet coupling	2	***(2)***
Water inlet gasket	2	***(2)***
Top cover lock key	1	
Coin meter box lock key	1	***(3, 4)***
Coin meter tokens	10	***(3, 4)***
Fuse 8 A	1	
Fuse 2.5 A	2	
Installation handbook	1	
Operation handbook	1	
Parts handbook	1	***(4)***
Documentation	- -	***(4)***

NOTES

(1) not available USA / Canada

(2) available USA / Canada only

(3) Coin control models only

(4) depending on target country

(5) for RMS/RMG628 and REM/RMG070 quantity 6

(6) for RMS/RMG628 and REM/RMG070 quantity 6 top washers + 2 bottom washers

1.3. EC Declaration of conformity

RMS610 Model

EC DECLARATION OF CONFORMITY

Manufacturer: GIRBAU S.A.

Address: Ctra. de Manlleu, km 1, 08500 Vic, Barcelona, SPAIN

Identification of the machine

Generic denomination:	Function:	Type:
Washer extractor Lavadora-centrifugadora Wasch- und Schleudermaschine Laveuse-essoreuse Lavatrice-centrifugatrice Rentadora-centrifugadora	Washing in a water bath and extracting textiles Lavar en baño de agua y centrifugar géneros textiles Das Waschen im Waschbad und das Ausschleudern von Textilien Laver en bain d'eau et essorer textiles Lavare in bagno d'acqua e centrifugare tessuti Rentar en bany d'aigua i centrifugar teixits	Front loading Carga frontal Frontladung Chargement frontal Carico frontale Càrrega frontal

Model: **RMS-610**

The manufacturer declares under its sole responsibility that the specified equipment has been manufactured in compliance with the following Directives:

El fabricante declara bajo su exclusiva responsabilidad que el producto especificado se ha fabricado conforme a las siguientes Directivas:

Der Hersteller bestätigt, dass das vorstehend bezeichnete Produkt gemäß den folgenden Richtlinien hergestellt wurde:

Le fabricant déclare, sous sa seule responsabilité, que le produit spécifié a été fabriquée conformément aux Directives suivantes:

Il fabbricante dichiara, sotto la sua esclusiva responsabilità, che il prodotto specificato é fabbricato secondo le seguenti Direttive:

El fabricant declara, sota la seva exclusiva responsabilitat, que el producte especificat s'ha fabricat conforme a les següents Directives:

2006/42/EC Machine Safety Directive
Main harmonized standards: EN ISO 10472-1:2008, EN ISO 10472-2:2008, EN 12100:2010, EN 13849-1:2015

2014/35/EU Low Voltage Directive
Main harmonized standards: EN 60335-1:2012, EN 60335-2-7:2010

2014/30/EU Electromagnetic Compatibility Directive
Main harmonized standards: EN 55014-1:2006, EN 61000-3-2:2014, EN 61000-3-3:2013, EN 55014-2:2015
N.B.: LGAI Technological Center S.A. Number: 0370. N.B. Declaration. Certificate: 0370-EMC-0040

2011/65/EU Hazardous Substances in Electrical and Electronic Equipment Directive
Main harmonized standards: EN 50581

2012/19/EU Waste Electrical and Electronic Equipment Directive (not a CE Marking Directive)

RMS613, RMG613 Model

EC DECLARATION OF CONFORMITY

Manufacturer: GIRBAU S.A.

Address: Ctra. de Manlleu, km 1, 08500 Vic, Barcelona, SPAIN

Identification of the machine

Generic denomination:	Function:	Type:
Washer extractor Lavadora-centrifugadora Wasch- und Schleudermaschine Laveuse-essoreuse Lavatrice-centrifugatrice Rentadora-centrifugadora	Washing in a water bath and extracting textiles Lavar en baño de agua y centrifugar géneros textiles Das Waschen im Waschbad und das Ausschleudern von Textilien Laver en bain d'eau et essorer textiles Lavare in bagno d'acqua e centrifugare tessuti Rentar en bany d'aigua i centrifugar teixits	Front loading Carga frontal Frontladung Chargement frontal Carico frontale Càrrega frontal

Model: **RMS-613, RMG-613**

The manufacturer declares under its sole responsibility that the specified equipment has been manufactured in compliance with the following Directives:

El fabricante declara bajo su exclusiva responsabilidad que el producto especificado se ha fabricado conforme a las siguientes Directivas:

Der Hersteller bestätigt, dass das vorstehend bezeichnete Produkt gemäß den folgenden Richtlinien hergestellt wurde:

Le fabricant déclare, sous sa seule responsabilité, que le produit spécifié a été fabriquée conformément aux Directives suivantes:

Il fabbricante dichiara, sotto la sua esclusiva responsabilità, che il prodotto specificato é fabbricato secondo le seguenti Direttive:

El fabricant declara, sota la seva exclusiva responsabilitat, que el producte especificat s'ha fabricat conforme a les següents Directives:

2006/42/EC Machine Safety Directive
Main harmonized standards: EN ISO 10472-1:2008, EN ISO 10472-2:2008, EN 12100:2010, EN 13849-1:2015

2014/35/EU Low Voltage Directive
Main harmonized standards: EN 60204-1:2006

2014/30/EU Electromagnetic Compatibility Directive
Main harmonized standards: EN 61000-6-2:2005, EN 61000-6-3:2007, EN 61000-3-2:2014, EN 61000-3-3:2013
N.B.: LGAI Technological Center S.A. Number: 0370. N.B. Declaration. Certificate:0370-EMC-0057

2011/65/EU Hazardous Substances in Electrical and Electronic Equipment Directive
Main harmonized standards: EN 50581

2012/19/EU Waste Electrical and Electronic Equipment Directive (not a CE Marking Directive)

RMS617, RMG617 Model

EC DECLARATION OF CONFORMITY

Manufacturer: GIRBAU S.A.

Address: Ctra. de Manlleu, km 1, 08500 Vic, Barcelona, SPAIN

Identification of the machine

Generic denomination:	Function:	Type:
Washer extractor Lavadora-centrifugadora Wasch- und Schleudermaschine Laveuse-essoreuse Lavatrice-centrifugatrice Rentadora-centrifugadora	Washing in a water bath and extracting textiles Lavar en baño de agua y centrifugar géneros textiles Das Waschen im Waschbad und das Ausschleudern von Textilien Laver en bain d'eau et essorer textiles Lavare in bagno d'acqua e centrifugare tessuti Rentar en bany d'aigua i centrifugar teixits	Front loading Carga frontal Frontladung Chargement frontal Carico frontale Càrrega frontal

Model: **RMS-617, RMG-617**

The manufacturer declares under its sole responsibility that the specified equipment has been manufactured in compliance with the following Directives:

El fabricante declara bajo su exclusiva responsabilidad que el producto especificado se ha fabricado conforme a las siguientes Directivas:

Der Hersteller bestätigt, dass das vorstehend bezeichnete Produkt gemäß den folgenden Richtlinien hergestellt wurde:

Le fabricant déclare, sous sa seule responsabilité, que le produit spécifié a été fabriquée conformément aux Directives suivantes:

Il fabbricante dichiara, sotto la sua esclusiva responsabilità, che il prodotto specificato é fabbricato secondo le seguenti Direttive:

El fabricant declara, sota la seva exclusiva responsabilitat, que el producte especificat s'ha fabricat conforme a les següents Directives:

2006/42/EC Machine Safety Directive
Main harmonized standards: EN ISO 10472-1:2008, EN ISO 10472-2:2008, EN 12100:2010, EN 13849-1:2015

2014/35/EU Low Voltage Directive
Main harmonized standards: EN 60204-1:2006

2014/30/EU Electromagnetic Compatibility Directive
Main harmonized standards: EN 61000-6-2:2005, EN 61000-6-3:2007, EN 61000-3-2:2014, EN 61000-3-3:2013
N.B.: LGAI Technological Center S.A. Number: 0370. N.B. Declaration. Certificate:0370-EMC-0057

2011/65/EU Hazardous Substances in Electrical and Electronic Equipment Directive
Main harmonized standards: EN 50581

2012/19/EU Waste Electrical and Electronic Equipment Directive (not a CE Marking Directive)

RMS623, RMG623 Model

EC DECLARATION OF CONFORMITY

Manufacturer: GIRBAU S.A.

Address: Ctra. de Manlleu, km 1, 08500 Vic, Barcelona, SPAIN

Identification of the machine

Generic denomination:	Function:	Type:
Washer extractor Lavadora-centrifugadora Wasch- und Schleudermaschine Laveuse-essoreuse Lavatrice-centrifugatrice Rentadora-centrifugadora	Washing in a water bath and extracting textiles Lavar en baño de agua y centrifugar géneros textiles Das Waschen im Waschbad und das Ausschleudern von Textilien Laver en bain d'eau et essorer textiles Lavare in bagno d'acqua e centrifugare tessuti Rentar en bany d'aigua i centrifugar teixits	Front loading Carga frontal Frontladung Chargement frontal Carico frontale Càrrega frontal

Model: **RMS-623, RMG-623**

The manufacturer declares under its sole responsibility that the specified equipment has been manufactured in compliance with the following Directives:

El fabricante declara bajo su exclusiva responsabilidad que el producto especificado se ha fabricado conforme a las siguientes Directivas:

Der Hersteller bestätigt, dass das vorstehend bezeichnete Produkt gemäß den folgenden Richtlinien hergestellt wurde:

Le fabricant déclare, sous sa seule responsabilité, que le produit spécifié a été fabriquée conformément aux Directives suivantes:

Il fabbricante dichiara, sotto la sua esclusiva responsabilità, che il prodotto specificato é fabbricato secondo le seguenti Direttive:

El fabricant declara, sota la seva exclusiva responsabilitat, que el producte especificat s'ha fabricat conforme a les següents Directives:

2006/42/EC Machine Safety Directive
Main harmonized standards: EN ISO 10472-1:2008, EN ISO 10472-2:2008, EN 12100:2010, EN 13849-1:2015

2014/35/EU Low Voltage Directive
Main harmonized standards: EN 60204-1:2006

2014/30/EU Electromagnetic Compatibility Directive
Main harmonized standards: EN 61000-6-2:2005, EN 61000-6-3:2007, EN 61000-3-2:2014, EN 61000-3-3:2013
N.B.: LGAI Technological Center S.A. Number: 0370. N.B. Declaration. Certificate:0370-EMC-0057

2011/65/EU Hazardous Substances in Electrical and Electronic Equipment Directive
Main harmonized standards: EN 50581

2012/19/EU Waste Electrical and Electronic Equipment Directive (not a CE Marking Directive)

RMS628, RMG628 Model

EC DECLARATION OF CONFORMITY

Manufacturer: GIRBAU S.A.

Address: Ctra. de Manlleu, km 1, 08500 Vic, Barcelona, SPAIN

Identification of the machine

Generic denomination:	Function:	Type:
Washer extractor Lavadora-centrifugadora Wasch- und Schleudermaschine Laveuse-essoreuse Lavatrice-centrifugatrice Rentadora-centrifugadora	Washing in a water bath and extracting textiles Lavar en baño de agua y centrifugar géneros textiles Das Waschen im Waschbad und das Ausschleudern von Textilien Laver en bain d'eau et essorer textiles Lavare in bagno d'acqua e centrifugare tessuti Rentar en bany d'aigua i centrifugar teixits	Front loading Carga frontal Frontladung Chargement frontal Carico frontale Càrrega frontal

Model: **RMS-628, RMG-628**

The manufacturer declares under its sole responsibility that the specified equipment has been manufactured in compliance with the following Directives:

El fabricante declara bajo su exclusiva responsabilidad que el producto especificado se ha fabricado conforme a las siguientes Directivas:

Der Hersteller bestätigt, dass das vorstehend bezeichnete Produkt gemäß den folgenden Richtlinien hergestellt wurde:

Le fabricant déclare, sous sa seule responsabilité, que le produit spécifié a été fabriquée conformément aux Directives suivantes:

Il fabbricante dichiara, sotto la sua esclusiva responsabilità, che il prodotto specificato é fabbricato secondo le seguenti Direttive:

El fabricant declara, sota la seva exclusiva responsabilitat, que el producte especificat s'ha fabricat conforme a les següents Directives:

2006/42/EC Machine Safety Directive
Main harmonized standards: EN ISO 10472-1:2008, EN ISO 10472-2:2008, EN 12100:2010, EN 13849-1:2015

2014/35/EU Low Voltage Directive
Main harmonized standards: EN 60204-1:2006

2014/30/EU Electromagnetic Compatibility Directive
Main harmonized standards: EN 61000-6-2:2005, EN 61000-6-3:2007, EN 61000-3-2:2014, EN 61000-3-3:2013
N.B.: LGAI Technological Center S.A. Number: 0370. N.B. Declaration. Certificate:0370-EMC-0071

2011/65/EU Hazardous Substances in Electrical and Electronic Equipment Directive
Main harmonized standards: EN 50581

2012/19/EU Waste Electrical and Electronic Equipment Directive (not a CE Marking Directive)

1.4. Installation specifications

Loads and kinetic energy

	UNITS	RMS610 REM025	RMS613 REM033	RMS617 REM040	RMS623 REM055	RMS628 REM070
DRUM VOLUME	dm3 (cu. ft.)	99.1 (3.5)	125.6 (4.44)	165.6 (5.85)	225.6 (8.0)	274 (9.7)
DRY LINEN CAPACITY	kg 1/10 (lb)	10.1 (22.3)	12.56 (27.7)	16.56 (36.5)	22.56 (49.7)	27.4 (60.4)
SPIN	r.p.m. max.	600	600	600	600	600
	max G factor	119.3	125	125	141	154
WASHING SPEED	r.p.m.	50	47	47	44	42
STATIC FORCE TRANSMITTED	kg (lb)	194 (428)	327 (721)	365 (805)	477 (1052)	548 (1208)
DYNAMIC FORCE TRANSMITTED	kg (lb)	267 (589)	392 (864)	516 (1138)	794 (1750)	1078 (2377)
FREQUENCY DYNAMIC FORCE	Hz	10	10	10	10	10
KINETIC ENERGY	N*m	6600	10600	13200	24300	32100

	UNITS		RMG613 RMG033	RMG617 RMG040	RMG623 RMG055	RMG628 RMG070
DRUM VOLUME	dm3 (cu. ft.)		125.6 (4.44)	165.6 (5.85)	225.6 (8.0)	274 (9.7)
DRY LINEN CAPACITY	kg 1/10 (lb)		12.56 (27.7)	16.56 (36.5)	22.56 (49.7)	27.4 (60.4)
SPIN	r.p.m. max.		760	760	715	684
	max G factor		200	200	200	200
WASHING SPEED	r.p.m.		47	47	44	42.5
STATIC FORCE TRANSMITTED	kg (lb)		327 (721)	365 (805)	477 (1052)	548 (1208)
DYNAMIC FORCE TRANSMITTED	kg (lb)		629 (1387)	829 (1828)	1128 (2487)	1400 (3086)
FREQUENCY DYNAMIC FORCE	Hz		12.7	12.7	11.9	11.4
KINETIC ENERGY	N*m		17000	21100	34500	41700

Dimensions & weights

		UNITS	RMS610 REM025	RMS/RMG613 REM/RMG033	RMS/RMG617 REM/RMG040	RMS/RMG623 REM/RMG055	RMS/RMG628 REM/RMG070
WITH PACKAGING	H	mm (in)	1250 (49.2)	1494 (58.8)	1494 (58.8)	1565 (61.6)	1627 (64.1)
	L	mm (in)	707 (27.8)	777 (30.6)	777 (30.6)	897 (35.3)	897 (35.3)
	P	mm (in)	830 (32.7)	962 (37.9)	1095 (43.1)	1170 (46.1)	1225 (48.2)
	WEIGHT	kg (lb)	155 (342)	263 (579)	283 (624)	366 (806)	434 (957)
WITHOUT PACKAGING	H	mm (in)	1080 (42.5)	1344 (52.9)	1344 (52.9)	1424 (56.1)	1466 (57.7)
	L	mm (in)	685 (27.0)	750 (29.5)	750 (29.5)	870 (34.3)	870 (34.3)
	P	mm (in)	760 (29.9)	930 (36.6)	1063 (41.8)	1139 (44.8)	1174 (46.2)
	M	mm (in)	390 (15.4)	509 (20.0)	509 (20.0)	500 (19.7)	544 (21.4)
	 CdG K	mm (in)	447 (17.6)	600 (23.6)	585 (230)	615 (24.2)	662 (26.0)
	CdG J	mm (in)	402 (15.8)	438 (17.2)	515 (20.3)	573 (22.6)	528 (20.8)
	WEIGHT	kg (lbs)	144 (317)	238 (524)	255 (562)	336 (740)	408 (899)

Other characteristics

	UNITS	RMS610 REM025	RMS/RMG613 REM/RMG033	RMS/RMG617 REM/RMG040	RMS/RMG623 REM/RMG055	RMS/RMG628 REM/RMG070
MAXIMUM THERMAL SHOCK	ºC (ºF)	90 (162)	90 (162)	90 (162)	90 (162)	90(162)
MAXIMUM SOUND LEVEL	dbA	< 70	< 70	< 70	< 70	< 70
PROTECTION INDEX	IP	21C	21C	21C	21C	24

Connections

		UNITS	RMS610 REM025	RMS/RMG613 REM/RMG033	RMS/RMG617 REM/RMG040	RMS/RMG623 REM/RMG055	RMS/RMG628 REM/RMG070
A	CONNECTION	B.S.P. thread (NH)	2 x 3/4	2 x 3/4	2 x 3/4	2 x 3/4	2 x 3/4
	H	mm (in)	938 (35.9)	1141 (44.9)	1141 (44.9)	1221 (48.1)	1250 (49.2)
	MIN/MAX PRESSURE	bar (P.S.I)	0.5-6 (7-87)	0.5-6 (7-87)	0.5-6 (7-87)	0.5-6 (7-87)	0.5-6 (7-87)
	RECOMM. PRESSURE	bar (P.S.I)	2-4 (30-60)	2-4 (30-60)	2-4 (30-60)	2-4 (30-60)	2-4 (30-60)
	FLOW (4 bar)	l/min (Usgal/min)	30 (8)	60 (16)	60 (16)	60 (16)	60 (16)
	MAXIMUM TEMPERATURE	ºC (ºF)	80 (176)	80 (176)	80 (176)	80 (176)	80 (176)
D	OUTLET HOSE	Ø mm (in)	50 (2)	80 (3)	80 (3)	80 (3)	80 (3)
	H	mm (in)	106 (4.2)	125 (4.9)	125 (4.9)	125 (4.9)	105 (4.1)
	N	mm (in)	203 (8.0)	154 (6.1)	154 (6.1)	154 (6.1)	145 (5.7)
	p	mm (in)	160 (6.3)	250 (10)	250 (10)	250 (10)	250 (10)
	DRAIN BOX DIMENSIONS (L,P,H)	mm in	200 x 200 x 150 8” x 8” x 6”	300 x 300 x 250 12” x 12” x 10”	300 x 300 x 250 12” x 12” x 10”	300 x 300 x 250 12” x 12” x 10”	300 x 300 x 250 12” x 12” x 10”
	DRAIN BOX PIPE	Ø mm (in)	100 (4)	100 (4)	100 (4)	100 (4)	100 (4)
E	INLET FASTENING	Ø mm (in)	22.5 (0.89)	37 (1 1/2)	37 (1 1/2)	37 (1 1/2)	37 (1 1/2)
	H	mm (in)	807 (31.8)	1005 (39.5)	1005 (39.5)	1165 (45.9)	1145 (45.1)
	N	mm (in)	188 (7.4)	303 (11.9)	303 (11.9)	360 (14.2)	362 (14.2)
Ed	INLET FASTENING	Ø mm (in)	16 (5/8)	16 (5/8)	16 (5/8)	16 (5/8)	16 (5/8)
	H	mm (in)	807 (31.8)	1005 (39.5)	1005 (39.5)	1120 (44.1)	1145 (45.1)
	N	mm (in)	248 (9.8)	242 (9.5)	242 (9.5)	367 (14.5)	306 (12.0)
	MAXIMUM VOLTAGE	V	240	240	240	240	240
	MAXIMUM CURRENT	A	0.05 (*2)	0.05 (*2)	0.05 (*2)	0.05 (*2)	0.05 (*2)
d	CONNECTION	mm (in)	10 (3/8)	10 (3/8)	10 (3/8)	10 (3/8)	10 (3/8)
	H	mm (in)	796 (31.3)	1019 (40.1)	1019 (40.1)	1100 (43.3)	1140 (44.88)
	N	mm (in)	260 (10.2)	270 (10.6)	270 (10.6)	340 (13.4)	340 (13.4)
V	CONNECTION	B.S.P. (in)	- - - - -	1/2	1/2	1/2	1/2
	H	mm (in)	- - - - -	625 (24.6)	625 (24.6)	626 (24.6)	641 (25.2)
	N	mm (in)	- - - - -	320 (12.6)	320 (12.6)	384 (15.1)	388 (15.3)
	PRESSURE	bar (P.S.I)	- - - - -	2/6 (29/87)	2/6 (29/87)	2/6 (29/87)	2/6 (29/87)
	FLOW	kg/h (lbs/h.)	- - - - -	40 (88)	60 (132)	80 (176)	80 (176)
Vc	INLET FASTENING	Ø mm (in)	16 (5/8)	16 (5/8)	16 (5/8)	16 (5/8)	16 (5/8)
	H	mm (in)	807 (31.8)	1005 (39.5)	1005 (39.5)	1120 (44.1)	1145 (45.1)
	N	mm (in)	248 (9.8)	242 (9.5)	242 (9.5)	367 (14.5)	258 (10.2)

Environment and positioning conditions

MAXIMUM TEMPERATURE		ºC (ºF)	+41 (+104)
MINIMUM TEMPERATURE		ºC (ºF)	+5 (+40)
LIGHTING		Lux	300
VENTING OPENING		cm^2 (sq.ft.)	300 (0.4)
MAXIMUM RELATIVE HUMIDITY		%	90
S	WORKING AREA	mm (in)	1000 (39.4)
T	REAR MAINTENANCE AREA	mm (in)	500 (19.7)

Legend

CONNECTIONS	
A	Water supply
D	Drain
E	Electrical connection inlet
Ed	Electrical connection inlet external dosing
d	Product inlets external dosing
V	Steam inlet connection
Vc	Vending connection inlet (not applicable to USA/CANADA models)
* 2	Origin of the external dosing signal to the washer 1A maximum current

DIMENSIONS (Figures 1.1, 1.2, 1.3, 1.4 and 1.5)	
H	Height from the machine base
N	Distance from the centre of symmetry of the unit
P	Depth
M	Height to door bottom
	Gravity centre (GC)

Images

RMS610 / REM025

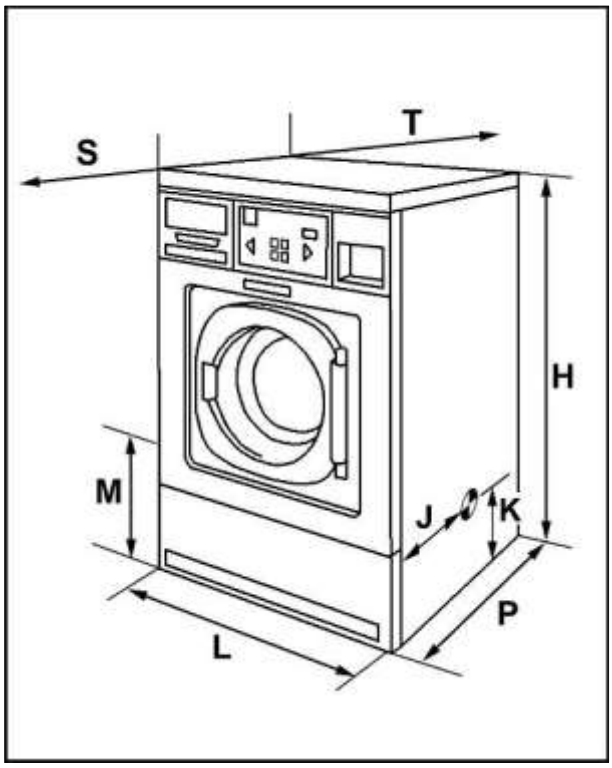


Fig. 1.1

RMS/RMG613/17/23/28 /REM/RMG033/040/055/070

Fig. 1.2

RMS610 / REM025

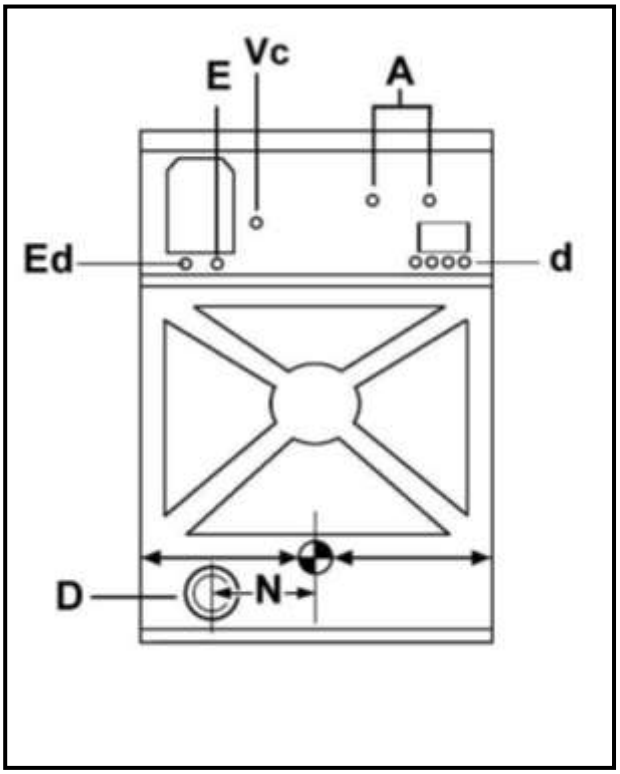


Fig. 1.3

RMS/RMG613/17/23 / REM/RMG033/040/055

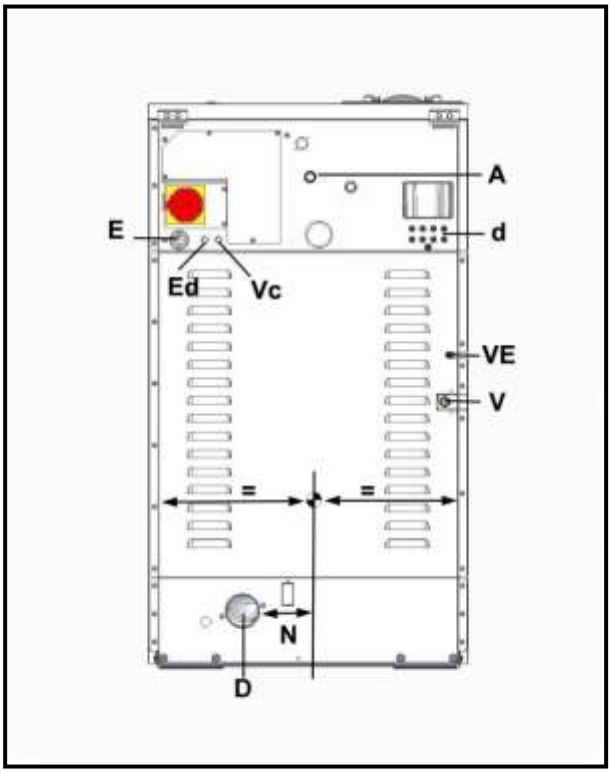


Fig. 1.4

RMS/RMG628 / REM/RMG070

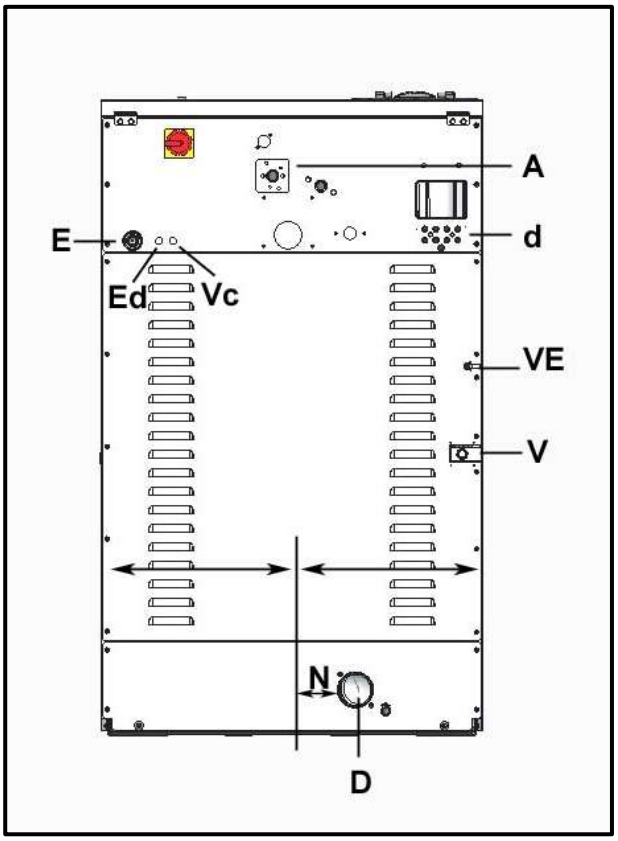


Fig. 1.5

1.5. Electrical connection tables explanation.

Explanation and symbols of tables on sections 1.6, 1.7 and 1.8

(*1) HEATING		
H	Without heating	
V	Steam heating	
E	Electric heating	
	red.	reduced power
	norm.	normal power

(*2) EXPLANATION OF WIRE VALUES	
A x B + N + ⏚	Wire details in mm2
(A x B + GND)	(USA/CANADA: wire details in AWG)
A x B + N +	Wire number
A x B + N + ⏚	Neutral wire
A x B + N + ⏚	Ground
(A x B + GND)	(USA/CANADA: ground wire)

USE COPPER CONDUCTORS ONLY
The machine shall be connected only to a supply circuit to which no lighting units or general-purpose receptacles are connected

Check table explanation in section **1.5**.

In brackets: USA / CANADA specific values

1.6. RMS610, REM025 Models Electrical connection requirements

VOLTAGE	HEATING (*1)		TOTAL POWER	TOTAL CONSUMP.	SWITCH CURRENT	CONDUCTOR (*2)
			kW	A	A	mm² (AWG)
120V 1ph + N	H		0.35	2.9	8	1.5 x 2 + ⏚
			(0.35)	(2.9)	15A mains outlet socket	(supplied by the manufacturer)
200V 1ph + N 2ph	H		0.35	1.8	5	1.5 x 2 + ⏚
	E	red.	3.3	16.6	20	2.5 x 2 + ⏚
		norm.	4.8	24.2	32	6 x 2 + ⏚
208V 1ph + N 2ph	H		0.35	1.7	5	1.5 x 2 + ⏚
			(0.35)	(1.7)	(5)	(14 x 2 + GND)
	E	red.	3.6	17.2	25	2.5 x 2 + ⏚
			(3.3)	(15.9)	(20)	(12 x 2 + GND)
		norm.	5.2	25.0	32	6 x 2 + ⏚
220V 1ph + N 2ph	H		0.35	1.6	5	1.5 x 2 + ⏚
	E		4.0	18.0	25	2.5 x 2 + ⏚
			5.8	26.3	32	6 x 2 + ⏚
230V 1ph + N 2ph	H		0.35	1.5	5	1.5 x 2 + ⏚
	E	red.	2.3	10.0	13	1.5 x 2 + ⏚
			4.3	18.7	25	2.5 x 2 + ⏚
		norm.	6.3	27.4	32	6 x 2 ⏚
240V 1ph + N 2ph	H		0.35	1.5	5	1.5 x 2 + ⏚
			(0.35)	(1.5)	(5)	(14 x 2 + GND)
	E	red.	2.3	9.6	13	1.5 x 2 + ⏚
			4.3	17.9	25	2.5 x 2 + ⏚
			(4.3)	(17.9)	(25)	(12 x 2 + GND)
		norm.	6.3	26.3	32	6 x 2 ⏚
200V 3ph	E		4.8	14.6	20	2.5 x 3 + ⏚
208V 3ph	E		5.2	15.1	20	2.5 x 3 + ⏚
			(4.8)	(14.0)	(20)	(12 x 3 + GND)
220V 3ph	E		5.8	15.8	20	2.5 x 3 + ⏚
230V 3ph	E		6.3	16.4	20	2.5 x 3 + ⏚
240V 3ph	E		6.3	15.7	20	2.5 x 3 + ⏚
			(6.3)	(15.7)	(20)	(12 x 3 + GND)
380V 3ph + N	E		5.8	9.7	13	2.5 x 3 + N + ⏚
400V 3ph + N	E		6.3	10.0	13	2.5 x 3 + N + ⏚
415V 3ph + N	E		6.3	9.6	13	2.5 x 3 + N + ⏚

1.7. Electrical connection requirements

RMS613 / REM033 models (software version DN69 or higher)
RMG613 / RMG033 models

VOLTAGE	HEATING (*1)		TOTAL POWER (max)	TOTAL CONSUMP. (max)	SWITCH CURRENT	CONDUCTOR (*2)
			kW	A	A	mm² (AWG)
200V 1ph + N 2ph	H / V		0.67/0.85	4.3	6	1.5 x 2 + ⏚
	E	red.	5.0	25.0	32	6 x 2 + ⏚
		norm.	6.5	32.6	40	10 x 2 + ⏚
208V 1ph + N 2ph	H / V		0.67/0.85	4.1	6	1.5 x 2 + ⏚
			(0.85)	(4.1)	(10)	(14 x 2 + GND)
	E	red.	5.4	25.9	32	6 x 2 + ⏚
		norm.	7.0	33.7	40	10 x 2 + ⏚
			(6.5)	(31.1)	(50)	(6 x 2 + GND)
220V 1ph + N 2ph	H / V		0.67/0.85	3.9	6	1.5 x 2 + ⏚
	E	red.	6.0	27.1	40	6 x 2 + ⏚
		norm.	7.8	35.4	50	10 x 2 + ⏚
230V 1ph + N 2ph	H / V		0.67/0.85	3.7	6	1.5 x 2 + ⏚
	E	red.	6.5	28.1	40	6 x 2 + ⏚
		norm.	8.5	36.8	50	10 x 2 + ⏚
240V 1ph + N 2ph	H / V		0.67/0.85	3.5	6	1.5 x 2 + ⏚
			(0.85)	(3.5)	(10)	(14 x 2 + GND)
	E	red.	6.5	27.0	40	6 x 2 + ⏚
		norm.	8.5	35.3	50	10 x 2 + ⏚
			(8.5)	(35.3)	(50)	(6 x 2 + GND)
200V 3ph	E	red.	7.3	22.0	32	6 x 3 + ⏚
		norm.	9.5	28.5	40	6 x 3 + ⏚
208V 3ph	E	red.	7.8	22.7	32	6 x 3 + ⏚
		norm.	10.3	29.5	40	6 x 3 + ⏚
			(9.5)	(27.3)	(40)	(8 x 3 + GND)
220V 3ph	E	red.	8.7	23.7	32	6 x 3 + ⏚
		norm.	11.4	30.9	40	6 x 3 + ⏚
230V 3ph	E	red.	9.5	24.6	32	6 x 3 + ⏚
		norm.	12.5	32.2	40	6 x 3 + ⏚
240V 3ph	E	red.	9.5	23.6	32	6 x 3 + ⏚
		norm.	12.5	30.8	40	6 x 3 + ⏚
			(12.5)	(30.8)	(40)	(8 x 3 + GND)
380V 3ph + N	E	red.	8.7	14.6	20	4 x 3 + N + ⏚
		norm.	11.4	18.7	25	4 x 3 + N + ⏚
400V 3ph + N	E	red.	9.5	15.1	20	4 x 3 + N + ⏚
		norm.	12.6	19.5	25	4 x 3 + N + ⏚
415V 3ph + N	E	red.	9.4	14.4	20	4 x 3 + N + ⏚
		norm.	12.4	18.6	25	4 x 3 + N + ⏚

RMS617 / REM040 models (software version DN69 or higher)
RMG617 / RMG040 models

VOLTAGE	HEATING (*1)		TOTAL POWER (max)	TOTAL CONSUMP. (max)	SWITCH CURRENT	CONDUCTOR (*2)
			kW	A	A	mm² (AWG)
200V 1ph + N 2ph	H / V		0.8	4.0	6	2.5 x 2 + ⏚
	E	red.	5.1	25.7	32	6 x 2 + ⏚
		norm.	8.2	40.8	50	10 x 2 + ⏚
208V 1ph + N 2ph	H / V		0.8	3.8	6	2.5 x 2 + ⏚
			(0.8)	(3.8)	(10)	(14 x 2 + GND)
	E	red.	5.5	26.5	32	6 x 2 + ⏚
		norm.	8.8	42.2	50	10 x 2 + ⏚
			(8.1)	(39.0)	(60)	(6 x 2 + GND)
220V 1ph + N 2ph	H / V		0.8	3.6	6	2.5 x 2 + ⏚
	E	red.	6.1	27.7	40	6 x 2 + ⏚
		norm.	9.7	44.3	63	10 x 2 + ⏚
230V 1ph + N 2ph	H / V		0.8	3.5	6	2.5 x 2 + ⏚
	E	red.	6.6	28.7	40	6 x 2 + ⏚
		norm.	10.6	46.1	63	10 x 2 + ⏚
240V 1ph + N 2ph	H / V		0.8	3.3	6	2.5 x 2 + ⏚
			(0.8)	(3.3)	(10)	(14 x 2 + GND)
	E	red.	6.6	27.5	40	6 x 2 + ⏚
		norm.	10.6	44.2	63	10 x 2 + ⏚
			(10.6)	(44.2)	(60)	(6 x 2 + GND)
200V 3ph	E	red.	7.4	22.6	32	6 x 3 + ⏚
		norm.	11.9	35.7	50	10 x 3 + ⏚
208V 3ph	E	red.	8.0	23.3	32	6 x 3 + ⏚
		norm.	12.9	36.9	50	10 x 3 + ⏚
			(11.9)	(34.2)	(50)	(6 x 3 + GND)
220V 3ph	E	red.	8.8	24.3	32	6 x 3 + ⏚
		norm.	14.3	38.7	50	10 x 3 + ⏚
230V 3ph	E	red.	9.6	25.2	32	6 x 3 + ⏚
		norm.	15.6	40.3	50	10 x 3 + ⏚
240V 3ph	E	red.	9.6	24.2	32	6 x 3 + ⏚
		norm.	15.6	38.6	50	10 x 3 + ⏚
			(15.6)	(38.6)	(50)	(6 x 3 + GND)
380V 3ph + N	E	red.	8.8	15.2	20	4 x 3 + N + ⏚
		norm.	14.2	23.5	32	6 x 3 + N + ⏚
400V 3ph + N	E	red.	9.7	15.7	20	4 x 3 + N + ⏚
		norm.	15.7	24.4	32	6 x 3 + N + ⏚
415V 3ph + N	E	red.	9.6	15.0	20	4 x 3 + N + ⏚
		norm.	15.6	23.3	32	6 x 3 + N + ⏚

RMS623 / REM055 models (software version DN69 or higher)
RMG623 / RMG055 models

VOLTAGE	HEATING (*1)		TOTAL POWER (max)	TOTAL CONSUMP. (max)	SWITCH CURRENT	CONDUCTOR (*2)
			kW	A	A	mm² (AWG)
200V 1ph + N 2ph	H / V		0.93/1.05	5.3	10	2.5 x 2 + ⏚
208V 1ph + N 2ph	H / V		0.93/1.05	5.0	10	2.5 x 2 + ⏚
			(1.05)	(5.0)	(10)	(14 x 2 + GND)
220V 1ph + N 2ph	H / V		0.93/1.05	4.8	10	2.5 x 2 + ⏚
230V 1ph + N 2ph	H / V		0.93/1.05	4.6	10	2.5 x 2 + ⏚
240V 1ph + N 2ph	H / V		0.93/1.05	4.4	10	2.5 x 2 + ⏚
			(1.05)	(4.4)	(10)	(14 x 2 + GND)
200V 3ph	E	red.	9.9	30.4	40	6 x 3 + ⏚
		norm.	15.6	46.8	63	16 x 3 + ⏚
208V 3ph	E	red.	10.7	31.3	40	6 x 3 + ⏚
		norm.	16.8	48.4	63	16 x 3 + ⏚
			(15.5)	(44.7)	(63)	(6 x 3 + GND)
220V 3ph	E	red.	11.8	32.7	40	6 x 3 + ⏚
		norm.	18.7	50.7	63	16 x 3 + ⏚
230V 3ph	E	red.	12.9	33.8	40	6 x 3 + ⏚
		norm.	20.4	52.6	63	16 x 3 + ⏚
240V 3ph	E	red.	12.9	32.4	40	6 x 3 + ⏚
		norm.	20.4	50.5	63	16 x 3 + ⏚
			(20.4)	(50.5)	(63)	(6 x 3 + GND)
380V 3ph + N	E	red.	11.8	20.5	25	4 x 3 + N + ⏚
		norm.	18.6	30.8	40	6 x 3 + N + ⏚
400V 3ph + N	E	red.	12.9	21.2	25	4 x 3 + N + ⏚
		norm.	20.5	32.1	40	6 x 3 + N + ⏚
415V 3ph + N	E	red.	12.8	20.2	25	4 x 3 + N + ⏚
		norm.	20.3	30.6	40	6 x 3 + N + ⏚

RMS628 / REM070 3Ph Models
RMG628 / RMG070 3Ph Models

VOLTAGE	HEATING (*1)		TOTAL POWER	TOTAL CONSUMP.	SWITCH CURRENT	CONDUCTOR (*2)
			kW	A	A	mm2 (AWG)
200V 3ph	H / V		1.3	3.8	6	2.5 x 3 +
	E	red.	10.1	29	40	10 x 3 +
		norm.	15.9	45.9	63	25 x 3 +
208V 3ph	H / V		1.3	3.6	6	2.5 x 3 +
			(1.3)	(3.6)	(15)	(12 x 3 + GND)
	E	red.	10.8	30	40	10 x 3 +
		norm.	17.1	47.5	63	25 x 3 +
			(15.6)	(43.4)	(50)	(4 x 3 + GND)
220V 3ph	H / V		1.3	3.4	6	2.5 x 3 +
	E	red.	12	31.4	40	10 x 3 +
		norm.	19.1	50	63	25 x 3 +
230V 3ph	H / V		1.3	3.3	6	2.5 x 3 +
	E	red.	13	32.7	40	10 x 3 +
		norm.	20.7	52.1	63	25 x 3 +
240V 3ph	H / V		1.3	3.1	6	2.5 x 3 +
			(1.3)	(3.1)	(15)	(12 x 3 + GND)
	E	red.	13.1	31.4	40	10 x 3 +
		norm.	20.5	49.4	63	25 x 3 +
			(20.5)	(49.4)	(60)	(4 x 3 + GND)
380V 3ph	H / V		1.3	2	6	2.5 x 3 +
	E	red.	11.9	18.1	25	4 x 3 +
		norm.	19	28.8	40	10 x 3 +
400V 3ph	H / V		1.3	1.9	6	2.5 x 3 +
	E	red.	13.1	18.9	25	4 x 3 +
		norm.	20.9	30.2	40	10 x 3 +
415V 3ph	H / V		1.3	1.8	6	2.5 x 3 +
	E	red.	13	18.1	25	4 x 3 +
		norm.	20.5	28.5	40	10 x 3 +
440V 3ph	H / V		1.3	1.7	6	2.5 x 3 +
			(1.3)	(1.7)	(10)	(12 x 3 + GND)
480V 3ph	H / V		1.3	1.6	6	2.5 x 3 +
			(1.3)	(1.6)	(10)	(12 x 3 + GND)

Connection to power supply Iequ=16A Rsce=180 in accordance with UNE EN 61000-3-12:2012

RMS628 / REM070 1Ph Models
RMG628 / RMG070 1Ph Models

VOLTAGE	HEATING (*1)	TOTAL POWER	TOTAL CONSUMP.	SWITCH CURRENT	CONDUCTOR (*2)
		kW	A	A	mm2 (AWG)
200V 1ph + N 2ph	H / V	1.6	8.0	16	2.5 x 2 + ⏚
208V 1ph + N 2ph	H / V	1.6	7.7	16	2.5 x 2 + ⏚
		(1.6)	(7.7)	(15)	(12 x 2 + GND)
220V 1ph + N 2ph	H / V	1.6	7.3	16	2.5 x 2 + ⏚
230V 1ph + N 2ph	H / V	1.6	7.0	16	2.5 x 2 + ⏚
240V 1ph + N 2ph	H / V	1.6	6.7	16	2.5 x 2 + ⏚
		(1.6)	(6.7)	(15)	(12 x 2 + GND)

2. RECEIPT, TRANSPORT AND LOCATION

2.1. Receipt

The following should be checked on accepting delivery of the washer:

- Check that the product has not suffered any damage in transit. (Any damage caused in this way will not be attributable to the manufacturer, and the appropriate claim should be made against the party responsible for transporting the product.)
- Check that the delivered machine fulfils the requirements requested in the order: **MODEL, VOLTAGE, FREQUENCY AND TYPE OF HEATING.**

THE MACHINE'S PACKAGING MUST BE DISPOSED OF IN ACCORDANCE WITH THE ENVIRONMENTAL REGULATIONS IN FORCE IN THE COUNTRY OR AREA IN WHICH THE MACHINE IS TO BE USED.

2.2. Transport of crated machines

IT IS BOUND THAT ALL MANOEUVRES ARE CARRIED OUT BY STAFF SPECIALISED IN TRANSPORT. ALWAYS USE TRANSPORT METHODS WHICH ARE SUITABLE FOR THE WEIGHT AND VOLUME OF THE WASHER. CHECK THE VALUES ON THE PACKAGING AND THE INSTALLATION SPECS (section 1.4) OF THIS MANUAL.

- Before moving the washer, check the instructions of the packaging pictograms.
- Unit must be transported in the upright position.
- Protect the machine from rain and dampness.
- Avoid blows and shocks.
- It is preferable to transport the washer with its packaging using a forklift and by lifting it from its base. Never move the machine by pushing on the sides of the packaging.
- Position the washer with crating as near as possible to the final location.

2.3. Washer location. Conditions

THE CONSTRUCTION OF THE LOCATION AND THE BOLTING DOWN OF THE WASHER TO THE BASE MUST BE CARRIED OUT BY A SPECIALIZED COMPANY.

THE AUTHORISED TECHNICAL SERVICE MUST APPROVE THIS OPERATION.

INSTALLATION ON UPPER FLOORS

Never install these machines models RMG6/RMG on suspended floors or above ground level.
Never install these machines models RMS6/REM on suspended floors or above ground level without obtaining approval from the appropriate qualified technician (structural engineer for building safety and noise transmission).
SEE FLOOR STATIC & DYNAMIC STRENGTH REQUIREMENTS ON INSTALLATION SPECIFICATIONS (section 1.4).
In these installations, the manufacturer declines all responsibility for possible damages caused by vibrations in the building structures.

Respect the ENVIRONMENTAL CONDITIONS indicated on the INSTALLATION SPECS (section **1.4**). Also, respect the work and maintenance areas; these are necessary for the safe use and appropriate maintenance of the washing machine.
Do not install the washer in improper vented areas. The products used can produce steam and gas products emissions, which in high concentrations can be very dangerous to health.

CAUTION!
RMS/RMG6 & REM/RMG MODELS ARE HARD-MOUNTED WASHERS. THEY MUST BE BOLTED DOWN.
A CORRECTLY EXECUTED FLOOR BOLTING IS VITAL TO THE PROPER OPERATION OF THE MACHINE AND TO AVOID SERIOUS DAMAGE TO ITS STRUCTURE.
TAKE GREAT CARE IN BOTH THE EXECUTION AND ALSO THE CHOICE AND QUALITY OF THE MATERIALS USED.

THE WASHER MUST BE POSITIONED ON A HORIZONTAL AND COMPLETELY FLAT CONCRETE SURFACE CAPABLE OF SUPPORTING THE WEIGHT OF THE WASHER AND ITS TRANSMITTED LOADS. CONSULT THE INSTALLATION SPECIFICATIONS (section **1.4**).
To assist loading and unloading operations, IT IS RECOMMENDED TO CONSTRUCT THIS BASE HIGHER THAN THE FLOOR OF THE BUILDING BUT ALWAYS WITH THE SAME CHARACTERISTICS AS THE REST OF THE FLOORING STRUCTURE.

NEVER USE ELEMENTS FOR MANOEUVRING AND LIFTING THE WASHING MACHINE BY ITS CENTRAL REAR PART. This area does not have a rigid base and the washing machine's bottom rear cover can be damaged.

NEVER INSTALL THE WASHER OVER AREAS BUILT WITH COMBUSTIBLE MATERIAL.
IF WASHERS ARE INSTALLED ON METALLIC SURFACES, AN ELECTRICAL CONDUCTOR INDEPENDENT TO THE WASHER GROUND MUST GROUND THESE SURFACES.

Specific warning for appliances installed in the USA /CANADA.
To reduce the risk of fire, this appliance must be fastened or otherwise secured to an uncovered concrete floor.
Alternatively the appliance should stand on a metal plate, at least the same size as the appliance and minimum thickness of 1/16 inch.

2.4. Bolting down

RMS610, RMS/RMG613, 617, 623
REM025, REM/RMG033, 040, 055 models

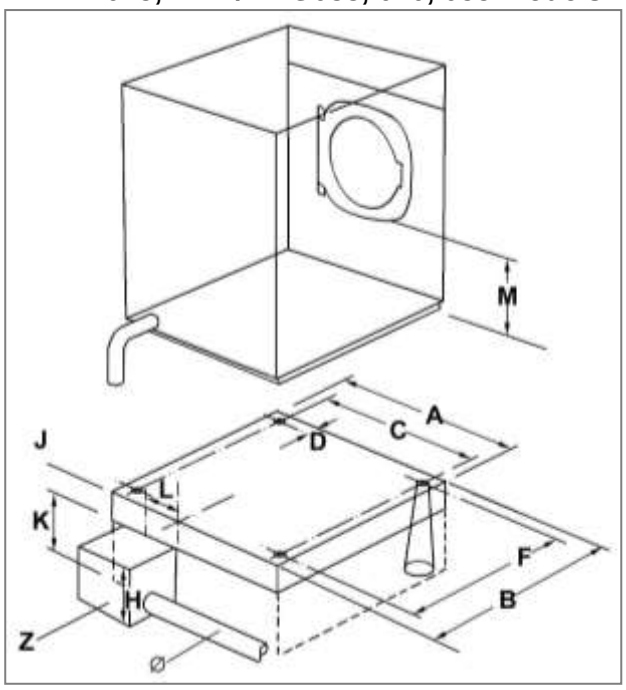


Fig.2.1

RMS/RMG628, REM/RMG070 models

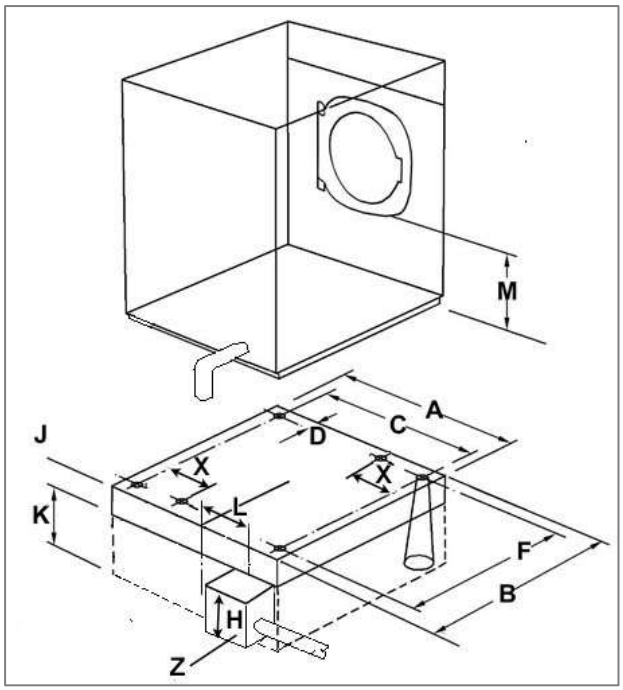


Fig.2.2

Should the extra cardboard packing used as a spacer between the washing machine and the packaging have the holes (**C**) or (**C** and **D**) indicated in Fig. 2.3, this can be used as a template for the layout of the washing machine's anchoring points on the floor.

- Place the extra sheet of cardboard on the floor as shown in Fig. 2.3. It is important to place the cut-out for the dispenser as it is located on the washing machine.
- The washing machine can be aligned using the plans (**A**) or (**B**) in Fig. 2.3 as appropriate. Plan (**A**) distributes the anchorage points with reference to the hinges, or in the case of the **RMS/RMG628** and **REM/RMG070** models, to the handle. Whereas Plan (**B**) does so with reference to the front of the washing machine.
- Mark the anchoring points on the floor using holes (**C**) as indicated in Fig. 2.3. In the case of the **RMS/RMG628** and **REM/RMG070** models, mark the points using the holes (**C**) and (**D**) as indicated in Fig. 2.3.
- Remove the extra sheet of cardboard.

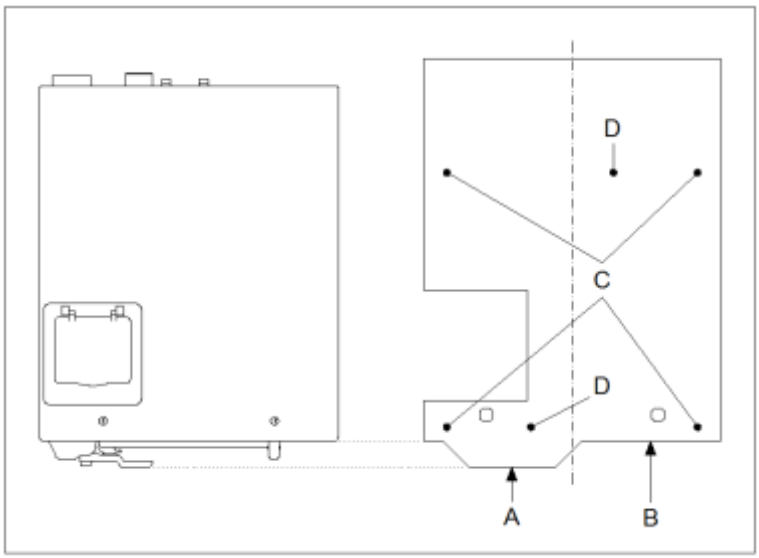


Fig. 2.3

2.5. Table of bolting down values

BOLTING DOWN DIMENSIONS		RMS610 REM025	RMS/RMG613 REM/RMG033	RMS/RMG617 REM/RMG040	RMS/RMG623 REM/RMG055	RMS/RMG628 REM/RMG070
A	mm (in)	715 (28.1)	810 (31.9)	810 (31.9)	928 (36.5)	928 (36.5)
A (*1)	mm (in)	815 (32.0)	902 (35.5)	902 (35.5)	981 (38.6)	981 (38.6)
B	mm (in)	841 (33.1)	930 (36.6)	1063 (41.9)	1139 (44.8)	1174 (46.2)
C	mm (in)	514 (20.2)	602 (23.7)	602 (23.7)	681 (26.8)	730 (28.7)
D	mm (in)	114 (4.5)	138 (5.4)	138 (5.4)	125 (4.9)	38 (1.5)
F	mm (in)	558 (22.0)	557 (21.9)	690 (27.2)	730 (28.7)	741.5 (29.2)
J	mm (in)	100 (4)	100 (4)	100 (4)	100 (4)	200 (8)
K	mm (in)	150 (6)	150 (6)	150 (6)	300 (12)	300 (12)
L		--	--	--	--	145 (5.7)
M	mm (in)	390 (15.4)	509 (20)	509 (20)	500 (19.7)	544 (21.4)
X		--	--	--	--	245 (9.6)
Drain ducting	∅ mm (in)	100 (4)	100 (4)	100 (4)	100 (4)	100 (4)
Drain box	Z mm in	200 x 200 x 150 (H) 8” x 8” x 6” (H)	300 x 300 x 250 (H) 12” x 12” x 10” (H)			

Note *1 Value **A**: bases for metal or chemical bolting down systems.
For installations with more than one washer, refer to additional dimensions in section 2.6.3. & figure 2.7.

2.6. Washer bolting down systems

IMPORTANT WARNING FOR MODELS WITH A SPIN SPEED HIGHER THAN 150G.
For the washer to be able to operate properly, the correct method for fastening the machine to the floor must be adopted.
INCORRECT FASTENING MAY LEAD TO MAJOR FAULTS OR A SERIOUS ACCIDENT.
Before constructing the base for positioning and bolting down, make sure you have read and understood the static and dynamic load values set out in the installation specifications (section 1.4).

The most widely-used fastening systems for washers are:
- With bolts (supplied with the washer). This fastening system is indicated for machines with a load capacity greater than 13 kg (30lb) and high speed models (higher than 150G).
  Consult the construction instructions for positioning and bolting down in section 2.6.1.
- Using anchors or metal fasteners (not supplied with the washer). Not suitable for machines with a load capacity greater than 13 kg (30lb) or high speed models (higher than 150G).
  Consult the construction instructions for positioning and bolting down in section 2.6.2.
- Using chemical anchors (not supplied with the washer).
  This anchoring system must be installed by a company specialising in the use of this technology.

CHECK THE TIGHTNESS OF THE FASTENERS ONCE THE INITIAL WASH PROGRAMS HAVE COMPLETED.
FOR THE FIRST MONTH OF OPERATION, VERIFICATION OF THE TIGHTENING MUST BE DONE WEEKLY.

ATTENTION!
WASHING MACHINES MODELS RMS/RMG628 AND REM/RMG070 MUST BE ANCHORED TO THE FLOOR USING 6 ANCHORING POINTS. IT IS ESSENTIAL TO FIT THE TWO WASHERS SUPPLIED UNDER THE BASE OF THE WASHING MACHINE IN ITS TWO CENTRAL ANCHORING AREAS, FRONT AND REAR.
THE ANCHORAGE TO THE FLOOR IS ESSENTIAL TO ENSURE THE PROPER OPERATION OF THE MACHINE AND TO AVOID SERIOUS DAMAGE TO ITS STRUCTURE.

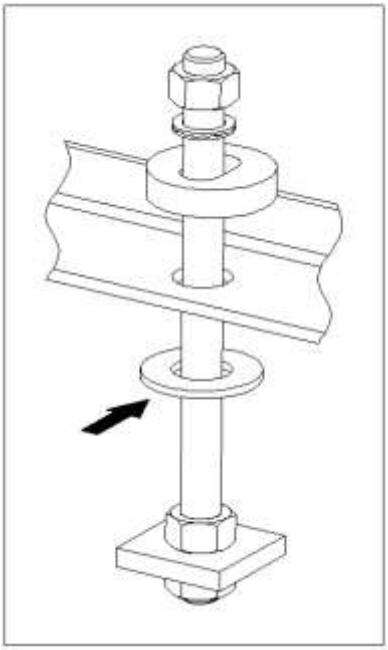


Fig. 2.4

2.6.1. Bolting down using bolts

Build a concrete base according to the drawing in Figures 2.1 and 2.2 (section 2.4). The dimensions values are specified on the table in section 2.5 according to the machine model.

The minimum resistance of the concrete must be equivalent to 25 N/mm2 (4000 psi).

To assist loading and unloading operations, it is recommended to build an elevated base (value **J**) in respect to the building floor **BUT ALWAYS WITH THE SAME CHARACTERISTICS AS THE REST OF THE FLOORING STRUCTURE**. Check the height of the lower zone of the washer door at value **M** on the attached table.

At the points marked in Figures 2.1 and 2.2, make some cavities to insert the bolts. These cavities must be peripherally tapered and the interior sides must be roughened so as to facilitate the later adherence of the filling concrete.
Approximate diameter of the anchor cavity: 150 mm (6 in).

Position the washer over the concrete base and centre the fastening holes on the machine base over the anchoring cavities. Insert the bolts supplied with the washer into the fastening holes on the washer base. Check the specifications for the bolts and washers in the attached table.

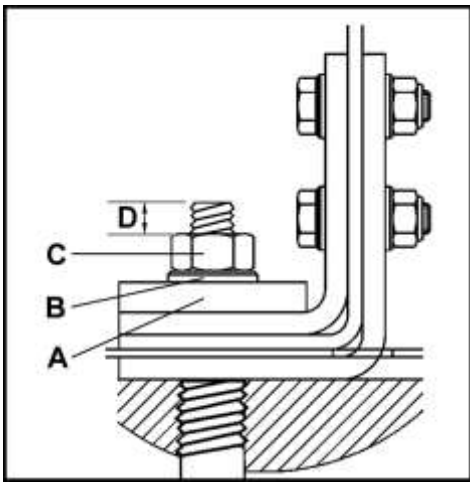


Fig. 2.5

Fit the securing washer (Fig. 2.5/**A**), the safety washer (Fig. 2.5/**B**) and the nut (Fig. 2.5/**C**) onto each bolt and tighten the nut until there is approximately **1/2 in** (10mm) of free thread protruding above the nut (Fig. 2.5, value **D**).

THE FLAT WASHERS ARE ESSENTIAL IN MAKING A SECURE BOLTING DOWN OF THE WASHING MACHINE (Fig. 2.5/**A** and **B**).

Fill each cavity on the flooring with bolting down concrete and agitate it until the cavities under the base are completely filled. The bolts must be vertical and centred in the base holes.
Wait the setting and curing time of the concrete (from two to three weeks) and tighten down the fastening nuts on the washer. Some additives can considerably reduce this time: consult the concrete supplier.

			RMS610 REM025	RMS613/617 REM033/040	RMS623 REM055	RMG613/617/623 RMG033/040/055	RMS/RMG628 REM/RMG070
Bolts	length	mm	170	180	370	250	300
		(in)	(6.7)	(7.1)	(14.6)	(9.8)	(11.8)
	diameter	mm	12	14	14	16	20
		(in)	(0.47)	(0.55)	(0.55)	(0.63)	(0.78)
Securing washer	inner diameter	mm	13 x 19	17 x 32	17 x 32	17 x 32	21 x 28.5
		(in)	(0.4x1.7)	(0.7x1.3)	(0.7x1.3)	(0.7x1.3)	(0.82x1.12)
	external diameter	mm	50	64	64	64	64
		(in)	(2.0)	(2.5)	(2.5)	(2.5)	(2.5)

2.6.2. Fastening using metal anchors

Only RMS610 (REM025) and RMS613 (REM033) washer models with a maximum spin speed of less than 150G.

THIS FASTENING SYSTEM ALLOWS FOR THE IMMEDIATE USE OF THE WASHER BUT IT CAN ONLY BE APPLIED IF THE RESISTANCE OF THE FLOORING MATERIAL IS EQUAL TO OR GREATER THAN 25 N/mm2 (4000 psi) AND ITS THICKNESS IS GREATER THAN 50 mm (2 in) IN VALUE K ON FIGURE 2.6.

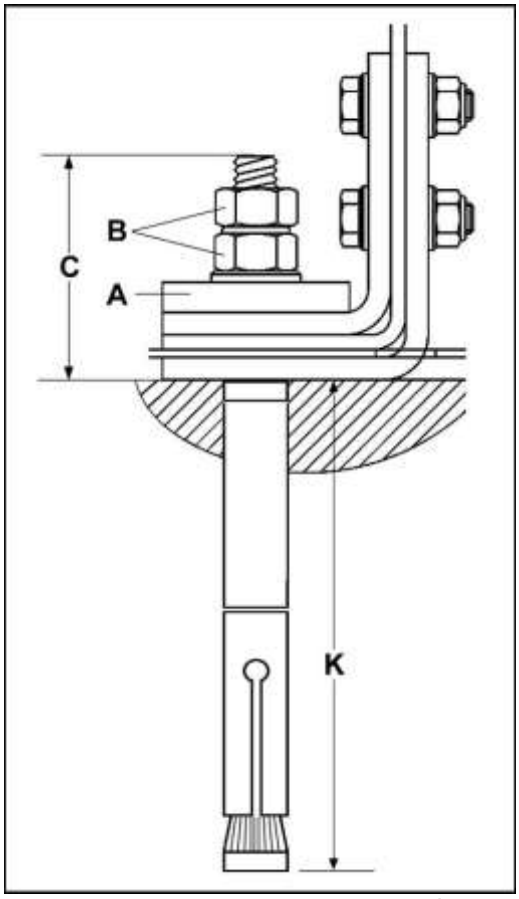


Fig. 2.6

Characteristics of the washer placement
Build a concrete base according to the drawing in Figures 2.1 and 2.2 (section 2.4). The dimensions values are specified on the table in section 2.5 according to the machine model.
The minimum resistance of the concrete must be equivalent to 25 N/mm2 (3600 psi).
To assist loading and unloading operations, it is recommended to build an elevated base (value **J**, table section 2.4) in respect to the building floor **BUT ALWAYS WITH THE SAME CHARACTERISTICS AS THE REST OF THE FLOORING STRUCTURE**. Check the height of the lower zone of the washer door at value **M** (table section 2.4).
Mark the bolting points on the washer by following the indications in Figure 2.1 and 2.2 (optionally, the washer can be used as a template).

Characteristics of the metal anchors (Fig. 2.6):
- Use metal expansion bolts with a high mechanical resistance. The use of expansion bolts fastens down the washer with the nuts and locknuts (**B**).
- Diameter of the bolts:
  RMS610 (REM025): 0.5 in (12 mm) (M12 or equivalent)
  RMS613 (REM033): 0.6 in (14 mm) (M14 or equivalent)
- Minimum length (**K**) of the expansion body: 3.9 in (100 mm)
- The top end (**C**) of the expansion bolt must rest 2.4 in (60 mm) above the flooring.

Setting the metal anchors
Drill the holes for the metal anchors and clean the dust and concrete from the inside.
Place the washer over the anchor holes. Insert the metal anchors in their respective holes.
The fastening of the machine must be done by using the bolting down flat washers supplied with the machine (Fig. 2.6/**A**). THESE FLAT WASHERS ARE ESSENTIAL TO THE SECURE FASTENING OF THE WASHER.
Set the flat washers and tighten the nuts and locknuts (Fig. 2.6/**B**).
The torque value of the nuts is the only indication of the proper installation and fastening of the metal anchors; therefore it is essential to check whether the nuts are tightened with a dynamometric wrench, following the instructions provided by the anchor manufacturer.

2.6.3. Installing more than one washer

If the installation calls for more than one washer, align them with each other. The diameter of the fastening holes makes this operation easier.
The minimum distance between adjacent machines and the user and maintenance areas (values **I**, **S** and **T** of Figure 2.7) are specified on the table below.
Check the dimensions of the drain box and the drain pipe on the table below.

Positioning conditions (Fig. 2.7)

	DIMENSIONS		RMS610 REM025	RMS613 RMG613 REM033 RMG033	RMS617 RMG617 REM040 RMG040	RMS623/628 RMG623/628 REM055/070 RMG055/070
I	DISTANCE BETWEEN BOLTING POINTS (RECOMMENDED) (Commercial and Industrial laundries)	mm (in)	271-421 (10.7 - 16.6)	248 - 398 (9.8 - 15.7)	248 - 398 (9.8 - 15.7)	287 - 437 (11.3 - 17.2)
	DISTANCE BETWEEN BOLTING POINTS (MINIMUM) (Coin-op laundries)	mm (in)	181 (7.1)	158 (6.2)	158 (6.2)	197 (7.8)
S	WORKING AREA	mm (in)	1000 (39.4)	1000 (39.4)	1000 (39.4)	1000 39.4)
T	REAR MAINTENANCE AREA	mm(in)	500 (19.7)	509 (20)	509 (20)	500 (19.7)
∅	DRAIN PIPE (∅x1; ∅x2; ∅x3)	mm (in)	100; 150; 180 (4; 6; 7)	100; 150; 180 (4; 6; 7)	100; 150; 180 (4; 6; 7)	100; 150; 180 (4; 6; 7)

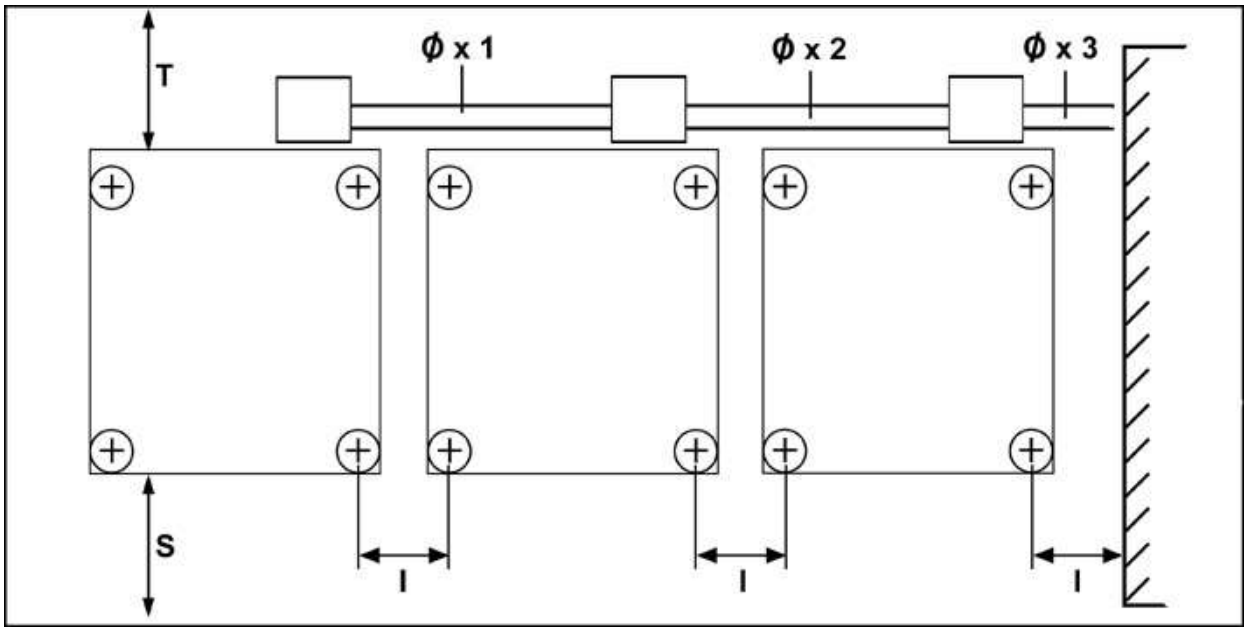


Fig. 2.7

3. INSTALLATION

ALL CONNECTIONS FOR ELECTRICAL POWER AND PLUMBING MUST COMPLY WITH THE STATUTORY SAFETY STANDARDS APPLICABLE TO EACH COUNTRY, AND BE MADE BY AUTHORISED INSTALLATION CONTRACTORS ONLY.
ALL THE WASHER CONNECTIONS MUST BE CARRIED OUT BY THE AUTHORIZED TECHNICAL SERVICE.

3.1. Drain

OBSERVATIONS REGARDING THE DRAIN PIPE

Always fit the drain pipe supplied by the manufacturer.
As a safety measure, the drain elbow pipe must not be modified.

Choose one of the following options depending on the possibilities for installation and the regulations in force in the country where the installation is being carried out.

Drain to the drain box
Build a drain box (Fig. 3.1) following the specifications indicated in the INSTALLATION SPECS, section **1.4.**
Connect the drain elbow to the drain outlet and secure hose with the corresponding clamp (Fig. 3.2)

Do not sink the free end of the drain elbow in the drain box:
- To prevent dirty water siphoning to the washing machine.
- To facilitate the water drain.
- To detect water leaks through the drain.
- To prevent dirty water from coming into contact with the washer.

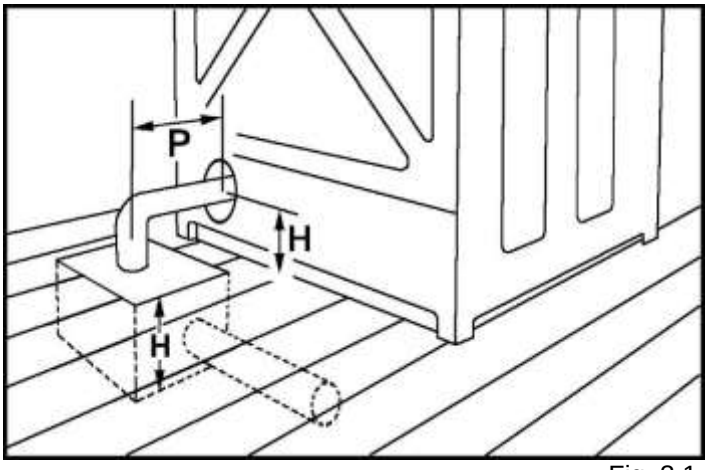


Fig. 3.1

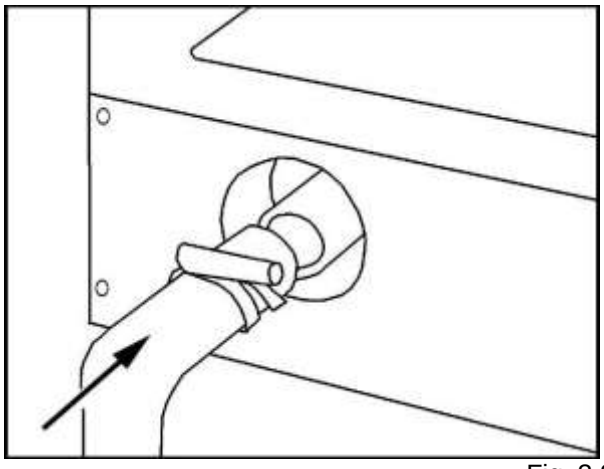


Fig. 3.2

Direct connection of the washer drain to the manifold (Fig. 3.3)
Facilities preferring this option to the open box option (recommended option) must respect the following precautions:
Provide next to the connection point of each machine to the manifold, with a manifold ventilation outlet **A** reaching the outside, set at a height of 40 in (1000 mm) and of a diameter of 2 in (50 mm).
Diameter of **B** manifold: refer to table on section 2.6.3 and Figure 2.7.
The emptying of the drain trap to the sewer system is done through an open drain box (Fig. 3.3/**B** and **C**) which prevents variations in pressure and backflow to the drain. **The end of the drain trap must not be sunk in the drain box.**

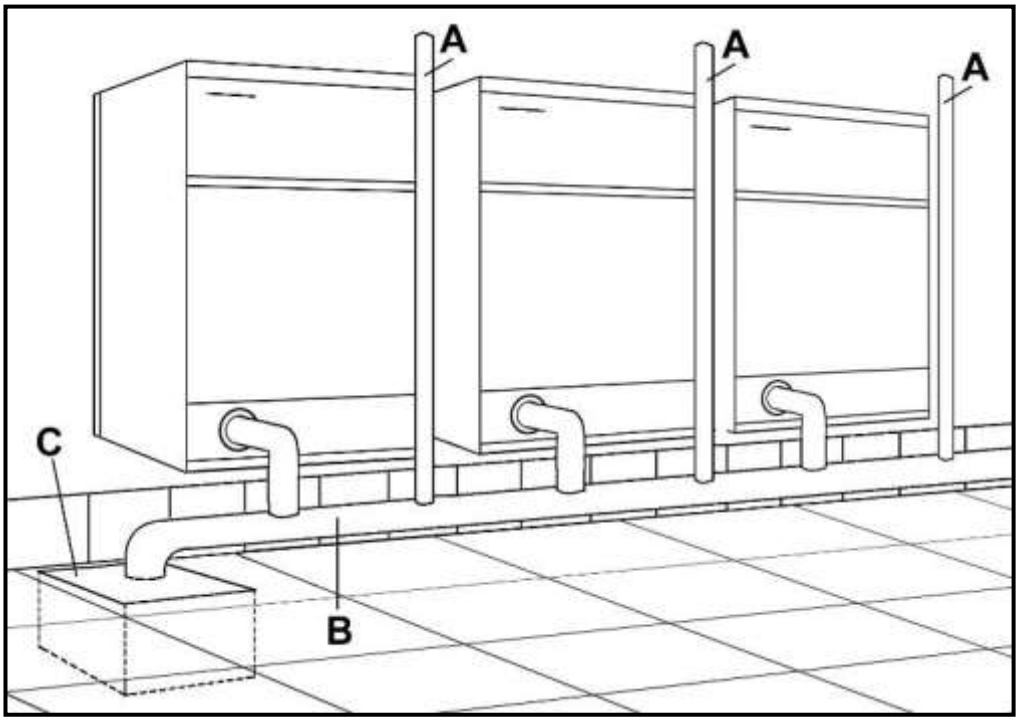


Fig. 3.3

3.2. Water supply

IMPORTANT!
The local or national regulations concerning the water supply system in the country where the washing machine is installed must be followed.

Hoses and pipes should be flushed through before being connected to the machine.
Install at each water supply and in an accessible location, a mechanically interlocked water valve.
In those premises using water containing impurities, it is recommended to install a filter at the main water supply inlet.
Refer to technical specifications on the installation specs, section 1.4.

Assembling the filters and their connection (Fig. 3.4)

Insert filter **C** and washer **B** inside each of the water inlet couplings **D**.
Assemble the couplings to the solenoid valves **A**.
Place the **E** seals on the water inlet hoses **F**.
Put the water inlet hoses on the solenoid valve couplings.
Open the manual valves and check for leaks in the installation.

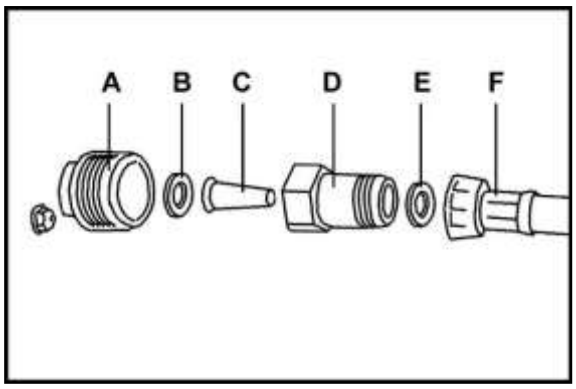


Fig. 3.4

Arrangement of the hoses
The inlets are identified by the label posted at each inlet (Fig. 3.5).
The washer mixes hot and cold water according to the temperature programmed. The use of hot/cold water allows the machine to gain time and effectiveness in its washing programs.

Inlet 1 1 — The cold water must **ALWAYS** be connected. The hose is marked with a blue line.

Inlet 2 2 — Connect hot water. The hose is marked with a red line.

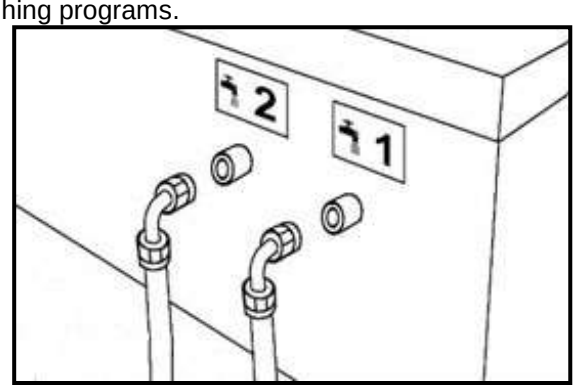


Fig. 3.5

DO NOT CONNECT THE HOT WATER TO INLET 1. THIS INLET DOES NOT HAVE A TEMPERATURE CONTROL SYSTEM.
DO NOT CONNECT THE HOT WATER TO INLET 3 IF IT IS NOT CONFIGURED AS A DUAL HOT WATER INLET FLOW.
INCOMPLIANCE OF THIS PRECAUTION CAN CAUSE FABRIC DAMAGE.

For a correct operation of the washing machine, the hot and cold water inlets must receive an uninterrupted supply at all times.
If there is no hot water supply, connect cold water or cold softened water to inlet 2.
INTELI control washing machines, ADAPT THE WASHER CONFIGURATION to operate with cold water.

Assembling the connection couplings for AUSTRALIA

IMPORTANT

20mm dual check valve supplied with machine must be installed on the cold water inlet to the machine. This valve is designed to prevent cross connection (back siphonage) and complies with AS/NZS Standard 2845.1 (Watermark).

- Fit the non-return valve A to the cold water water inlet connection of the machine considering the flow direction marked on the valve.
- Fit the coupling B downstream the valve.
- Fit the water inlet hoses downstream the valve.

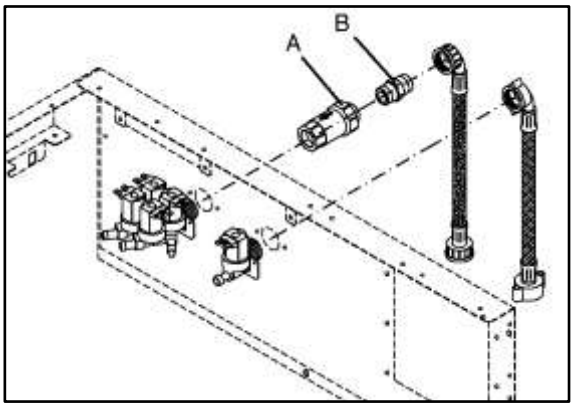


Fig.3.6

3.3. Electrical connection. Permanently connected appliances

Permanently connected appliances are those that do not incorporate power cord from works. The electrical wiring of these machines is the responsibility of the installer and must comply with the indications of sections 3.3.1, 2 and 3.
1Ph 120V units supplied by the manufacturer with power cord, for USA/CANADA installations, are excluded from this group.

3.3.1. Previous requirements

CHECK THAT THE POWER AND FREQUENCY OF THE ELECTRICAL SUPPLY CORRESPONDS TO THOSE OF THE WASHER. Check the nameplate posted on the back panel of the machine.

ALL CONNECTIONS FOR ELECTRICAL SUPPLY MUST BE CARRIED OUT BY AUTHORISED INSTALLATION CONTRACTORS AND MUST COMPLY WITH THE STATUTORY SAFETY STANDARDS APPLICABLE TO EACH COUNTRY.

ALL THE MATERIALS USED IN THE ELECTRICAL INSTALLATION MUST COMPLY WITH THE STATUTORY SAFETY STANDARDS APPLICABLE TO EACH COUNTRY.

ALWAYS CONNECT THE GROUND EXTERNAL PROTECTION CIRCUIT. THIS UNIT MUST BE CONNECTED TO THE GROUND INSTALLATION WITH A CONDUCTOR CONNECTED TO THE EQUIPMENT GROUNDING TERMINAL.

RMS AND REM SERIES GIRBAU WASHING MACHINES ARE DESIGNED TO OPERATE IN SINGLE-PHASE AND THREE-PHASE LINES. MODELS OF VOLTAGE BETWEEN 380 AND 415 V REQUIRE IN ADDITION A CONNECTION TO THE NEUTRAL WIRE.
IN INSTALLATIONS WITH SEVERAL SINGLE-PHASE MACHINES CONNECTED BETWEEN PHASE AND NEUTRAL IN THREE-PHASE LINES, IT IS RECOMMENDED TO DISTRIBUTE THE CONNECTION BY USING THE THREE PHASES TO BALANCE THE CONSUMPTION OF ALL THE PHASES IN THE LINE.

Specific warning for appliances installed IN THE USA /CANADA.

GROUNDING INSTRUCTIONS

This appliance must be connected to a grounded metal, permanent wiring system, or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment grounding terminal or lead on the appliance.

3.3.2. Installation characteristics

Before connecting the washer refer to INSTALLATION SPECIFICATIONS, section 1.4 and specific characteristics on the ELECTRICAL CONNECTION table, section 1.6.
Conductor:

- The data referring to conductors are based on those of multi-wire hose with copper conductor.
- The length of the conductor from the safety switch to the washer must not be longer than 10 m.
- For a correct fixation of the stuffing box to the washer inlet, the conductor must be of normalised hose and following the specifications on table section 1.6.
- The conductor must be secured against any pulling, crushing or rubbing.
- Additional specifications for the conductor: must comply with the statutory regulations of the country in which it is to be installed.

Circuit breaker. Install an earth-leakage protected circuit breaker.
Characteristics:

- installed in an easily accessible place.
- number of poles and intensity: consult ELECTRICAL CONNECTION table (section 1.6)
- A type.
- protected against pulse currents, harmonics, the presence of continuous components, etc. (consult manufacturer specifications)

Safety switch. Install an Automatic on/off Switch, outside the washer, with individual protection for each machine.
Characteristics:

- number of poles and intensity: consult ELECTRICAL CONNECTION table (section 1.6)
- C type with top opening at 3 mm (0.12 in)
- must isolate electrical source phases and the N cable
- mechanically lockable
- installed in an easily accessible place.

CAUTION!
On machines with ETL mark, the SAFETY SWITCH must be UL489 approved.

3.3.3. Machine electrical connection

FOR A CORRECT CONNECTION, FOLLOW THE INDICATIONS OF THE SECTIONS BELOW

RMS610, REM025 Models

- Disconnect and mechanically lock the external automatic switch.
- Open the machine's terminal box.
- Fix the electrical supply hose to the stuffing box at the washer entry.
- Connect the wires to the connection board.
- The connection sequence of the cables to the entry board varies according to the number of phases and the voltage of the washer. On the label posted next to the entry board are indicated the different connection options. Refer to Fig. 3.7.

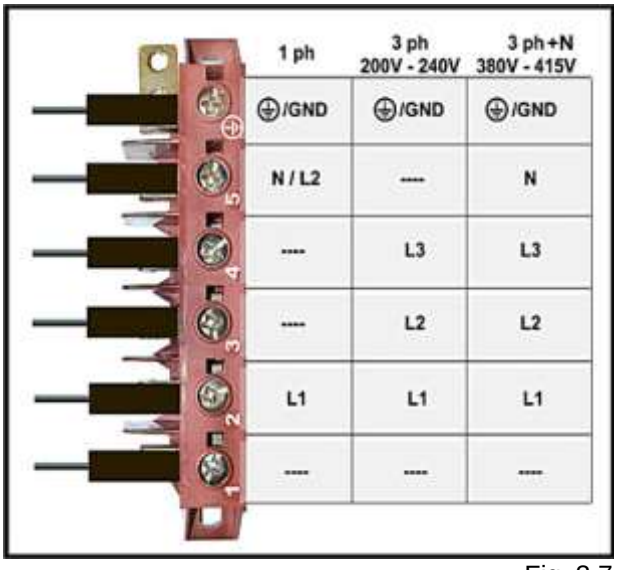


Fig. 3.7

RMS/RMG613, RMS/RMG617; RMS/RMG623, RMS/RMG628, REM/RMG033, REM/RMG040, REM/RMG055, REM/RMG070 models

- Disconnect and mechanically lock the external automatic switch.
- Open machine terminal box at the rear panel. Remove the support cover of the entry switch to the washer.
- On the entry hole of the electrical supply (**E** identified in figure 1.4) install a lock mechanism (not supplied with the washer) to fasten the cable or cable pipe protector, depending on the cable and pipe protector used. Refer to dimensions and connection diameter in INSTALLATION SPECS, section **1.4**.
- Connect the wires directly to the switch breaker (Fig. 3.9).
- The wire connection sequence to the main switch varies according to the machine connection and the power supply. This connection is indicated on the label posted next to the main switch.
- In models **RMS/RMG628** and **REM/RMG070**, pass the conductor through the cable tie (**A**) and secure it as shown in Fig.3.8.

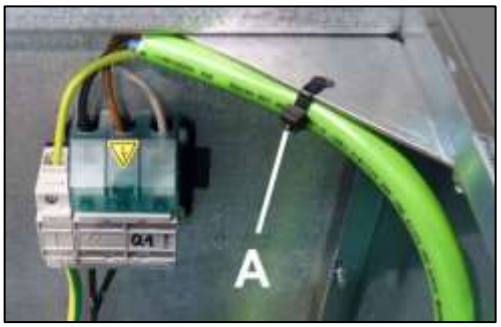


Fig. 3.8

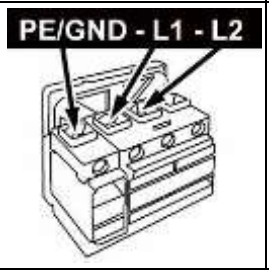
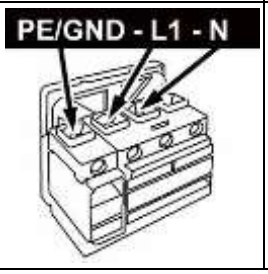
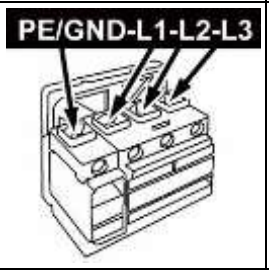
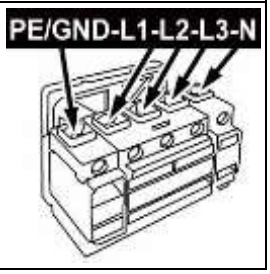
LABEL	PE/GND L1 L2/N	PE/GND L1 L2/N	PE/GND L1 L2 L3	PE/GND L1 L2 L3 N
SUPPLY LINE	⏚ L1 L2	⏚ L1 N	⏚ L1 L2 L3	⏚ L1 L2 L3 N
RMS/RMG REM/RMG CONNECTION				

Fig. 3.9

Electrical connection. 1ph, 120V units with power cord
(USA / CANADA only)

These models, available only for USA/CANADA installations are supplied with power cord built-in the washer.

Connection characteristics
These machines must be connected to an individual 15 amp branch circuit socket.
Do not use any adaptor or extension cord between plug and socket.

GROUNDING INSTRUCTIONS
This appliance must be grounded. In the event of malfunction or breakdown, grounding will reduce the risk of electric shock by providing a path of least resistance for electric current. This appliance is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

CAUTION!
Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the appliance is properly grounded.
Do not modify the plug provided with the appliance. If it will not fit the outlet, have a proper outlet installed by an Authorised Installation Contractors.

3.4. Steam connection (RMS610/REM025 models not available)

In some models the body of the steam solenoid valve and the filter are shipped inside the drum of the washing machine, separate from the electrical wiring system. The coil connector is connected to the end of the electrical installation.
In other models, the assembly solenoid valve and filter are supplied connected to the electrical wiring system.

Installation characteristics
Before connecting the installation to the solenoid valve, purge the pipe conduits.
Place a mechanically lockable flow valve in the steam inlet in an accessible place.
Check dimensions and connection diameters in the Installation specs (section 1.4).

Assembly and solenoid valve connection

SEAL ALL THREADED UNIONS WITH A PRODUCT WHICH IS APPROPRIATE FOR STEAM PIPE CONDUITS.

Respect the steam circulation direction indicated by an arrow on each part.
The coil has been previously removed from shipping position or disconnected from the solenoid valve (according to shipping braces).
The electrical wiring must be fastened to the cut out **VE** on the rear cover (see Fig. 1.4 and section **1.4**).
Place the solenoid valve on the end of the steam inlet pipe of the machine.
Machines in **USA/Canada**: place the small steam inlet hose (Fig. 3.10/**A**) to the filter inlet.
Connect the steam supply of the installation to the washer inlet.
Safeguard the installation against accidental contact. It is advisable to insulate the installation to prevent heat loss.
Connect the connector to the solenoid valve coil and fasten it with the screw located at the end of the connector.
Open the manual valve and check for leaks in the installation.

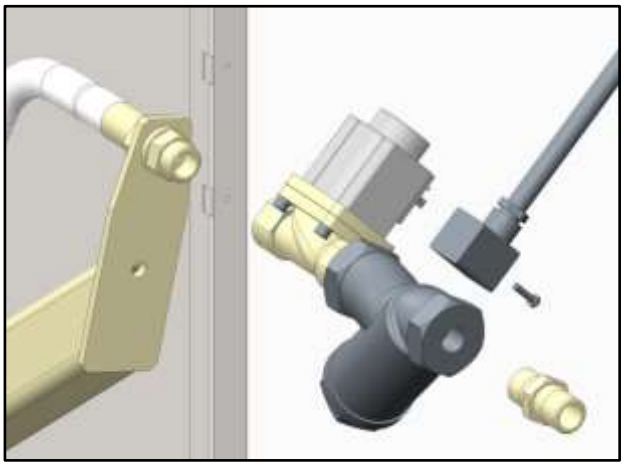


Fig.3.10

3.5. External dosing (option)

The washer can communicate with external dosing equipment via electrical signals produced by the closure of relay contacts during wash cycle.
These relays are mounted on the board **A4**, located in the electrical supply input box, at the rear of the washer.
The relay contacts close the circuit between a COMMON input and the four outputs corresponding to each one of the dosing that the washer program runs.
The connection of the signal conductors is made on the various terminals of the terminal strip (board **A4)**.
Terminal strip **X6** (board **A4**) for all models except RMS610.
The icons on the label associated with the X6 terminal strip indicate the correspondence between each of the dosing and the terminals.
According to the characteristics of the external dosing equipment, two different connections can be used:

- dry contacts: see section 3.5.1.c.
- powered output signals, from the control washer circuit: see section 3.5.d. (power supply: 200…240 V; 50/60 Hz according to the washing machine).

Refer to the electrical connection specifications in the INSTALLATION SPECS, section **1.4**.

3.6. External dosing electrical connection

3.6.1. Steps prior to connection

- Disconnect and mechanically lock the external automatic switch.
- Open the machine's terminal box.
- On the entry hole of the external dosing electrical supply (**Ed** identified in figure 1.3 and 1.4) install a lock mechanism (not supplied with the washer) to fasten the cable or cable pipe protector, depending on the cable and pipe protector used. Refer to dimensions and connection diameter in INSTALLATION SPECS, section **14**.
- In models **RMS/RMG628** and **REM/RMG070**, secure the conductor using the cable ties on the outside of the electrical cabinet, as shown in Fig. 3.11/**A**.

Fig.3.11

3.6.2. Signal conductor

- Recommended section of signal wire: 0.75/1 mm^2 (#16-18 AWG), 400V.
- If using single-wire conductors, these must be encased within a safety conduit.
- The conductor must be affixed to the inlet opening of the machine using a secure connection appropriate for the type of conductor.
- The conductor must be protected against traction, crushing and friction.
- Additional specifications for the conductor: must comply with the statutory regulations of the country in which it is to be installed.

3.6.3. Free voltage relay contact

External dosing equipment connection (Fig. 3.12)
Origin of the dosing signals: external to the washer (usually from the external dosing equipment).
Relay contacts from the external dosing control board act as dry contacts (not powered).

Dosing signals connection on X6 terminal strip:
- Follow the instructions on sections 3.5.1.a & b.

Connect in the order indicated in the following chart.

X6	Logi / Coin control
I / 1	Pre-wash dosing
II / 2	Wash dosing
△ / 3	Bleach dosing
❀ / 4	Sour / softener dosing
COM	Dosing equipment COMMON wire

The dosing signals ARE NOT PROTECTED by the washer fuses.

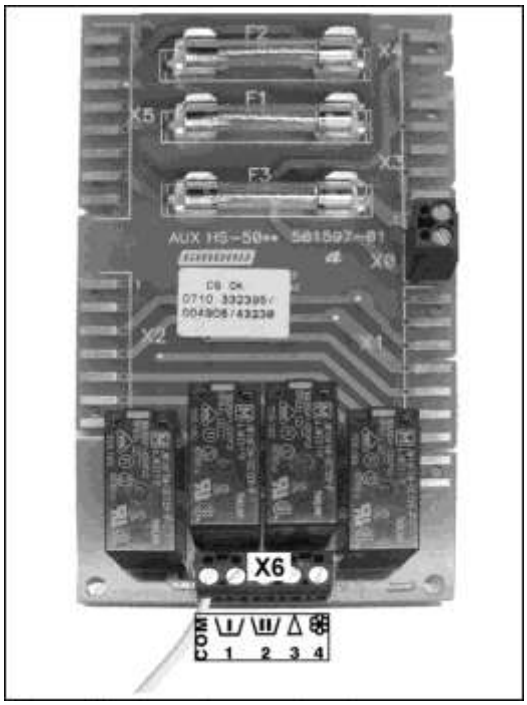


Fig. 3.12

3.6.4. Relay contacts powered from the washer control circuit

External dosing equipment connection (Fig. 3.13)

IMPORTANT

This connection allows for the maximum strength at each of the 50 mA outputs. Higher consumption can prevent the washer from functioning correctly.
This connection can aggravate any problems produced by a fault in the grounding connection, both of the washer itself and of the external dosing equipment.

The external dosing control board incorporates a connection point (terminals identified as **X0) allowing to generate dosing signals from the washer control circuit.**

Dosing signals connection (Fig. 3.13)

- Follow the instructions on sections 3.6.1.a & 3.6.1.b
- Supply **X6-COM** from terminal **X0-A** (wire not delivered).
- Supply the common phase of the signal outputs from **XO-B.**
- Dosing outputs: Connect in the order indicated in the following chart.

X6	Logi / Coin control
I / 1	Pre-wash dosing
II / 2	Wash dosing
△ / 3	Bleach dosing
❀ / 4	Sour / softener dosing

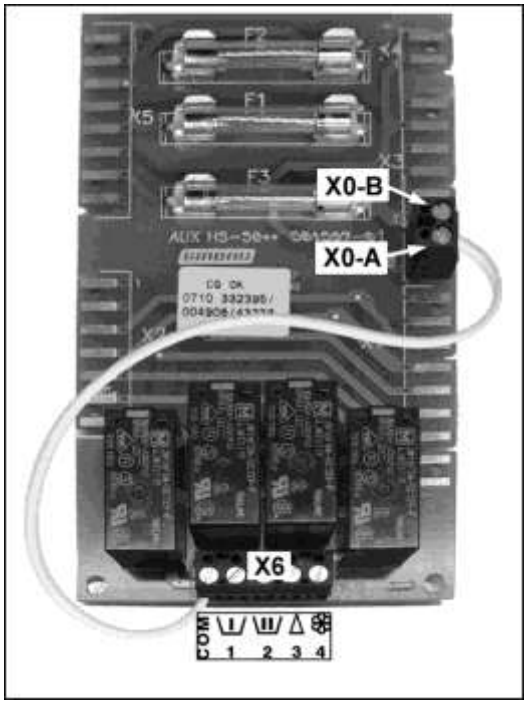


Fig. 3.13

IMPORTANT
Voltage between each dosing output signal X6 and X0-B, will be the same as electrical control circuit (200…240V; 50/60Hz according to the washer.)

3.6.5. External dosing electrical connection (RMS610 / REM025 only)

Signal conductor

- If using single-wire conductors, these must be encased within a safety conduit.
- The conductor must be affixed to the inlet opening of the machine using a secure connection appropriate for the type of conductor.
- The conductor must be protected against traction, crushing and friction.
- Additional specifications for the conductor: must comply with the statutory regulations of the country in which it is to be installed.

Connection of the dispenser equipment to the washer (Fig. 3.14).

- Disconnect and mechanically lock the external automatic switch.
- Open the machine's terminal box.
- Fix a conductor bracket (not supplied with the washer) to the inlet hole and secure the conductor in place.
- Connect the dispenser signal conductor to the terminal board **A**, according to the functions specified on the corresponding label. (This terminal board is identified on the electrical schematic as A-4)
- Connect the electrical supply of the dispenser equipment to an electrical inlet separate from the washer. The electrical protection of the dispenser equipment must be separate from the washer protection.

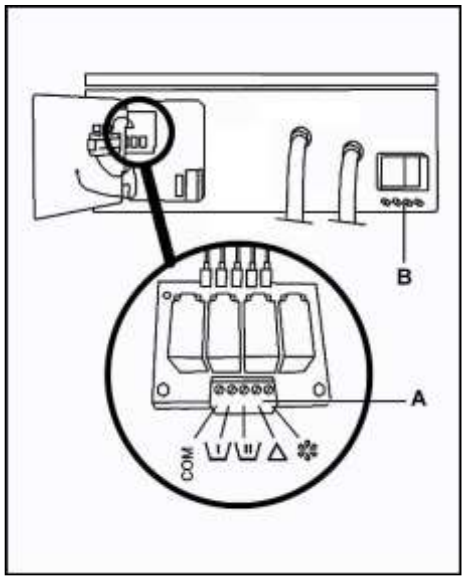


Fig. 3.14

NEVER CONNECT THE DISPENSER EQUIPMENT SUPPLY TO THE WASHER

3.7. External dosing hoses connection

The external dosing inlets are perforated and protected by a tube cap.
Refer to dimensions and dosing inlets diameter in INSTALLATION SPECS, section **1.4**.
To connect the product cables:

- Locate the dosing inlets in the back of the machine.
- Remove the tube caps and save them.
- Connect the hoses to the nipples **A** on the manifold (Fig. 3.15).
- Fasten the dosing hoses to the washing machine with the appropriate clamps.

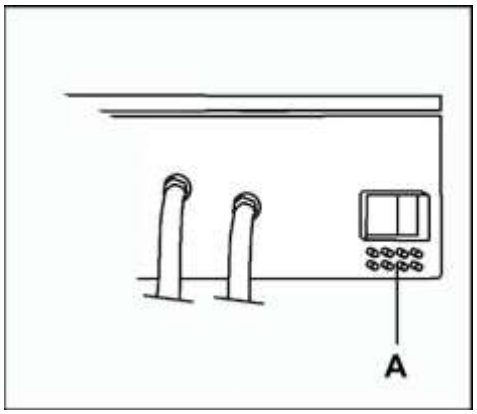


Fig. 3.15

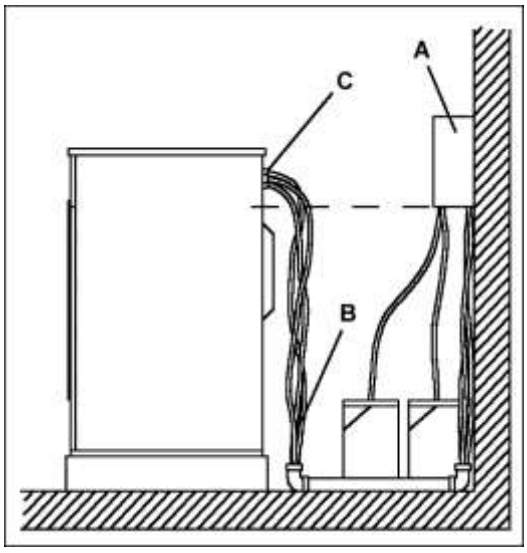


Fig. 3.16

CAUTION!

To avoid that non dissolved chemical products drip inside the washer, install the external dosing pumps (Fig. **3.16/A)** and the chemical products conduction hoses (Fig. **3.16/B**) below the dosing injection point (Fig. **3.16/C)** to the washer. A simple bend of the conduction hoses below the level is not enough to avoid the dripping.
Omission of following this instruction can cause damage to the washer and void warranty.

COIN CONTROL units:

To enable the external dosing system, you must modify the **Ed** parameter at the **Mod** menu (see Operation Instructions Manual, for **COIN CONTROL** washing machines)

3.8. Initial start-up

The washer must be put into service by an AUTHORIZED TECHNICAL SERVICE.
BEFORE THE STARTING-UP OF THE WASHER, BEAR IN MIND ALL THE SAFETY INSTRUCTIONS AT THE BEGINNING SECTION OF THIS MANUAL.

Before the initial start-up, make sure that you accomplish the following points:

- Remove all packing materials. (Break them down in order to appropriately recycle them).
- Remove all tools used during the installation.
- Verify that all accessories have been removed from the drum interior.
- Verify the correct installation of all the accessories necessary for the washer operation.
- Check that the electrical installation corresponds with the voltage and the frequency of the machine.
- Verify that the four washer feet come in contact with the floor.
- Verify that all the shipping restraints are removed.
- Connect all the water, steam (steam heated washers) and power inlets according to the technical specifications.
- Open the manual water inlet valves (and steam if necessary) and check for any leaks around the manual flow valves and connection couplings.
- Connect the electricity supply.
- Check the operation (it is recommended to use the TEST program).
- Keep the manual in a safe place and in good condition for its possible consultation.
- Before washing clothes for the first time we recommend to run a complete cycle with detergent (1/4 the normal recommended amount).

3.9. Emergency stop in coin-op installations

IN ACCORDANCE WITH SAFETY REQUIREMENTS FOR INDUSTRIAL MACHINERY STANDARD (UNE-EN ISO 10472-1,5-2) AND OTHER SAFETY REQUIREMENTS, THE LAUNDRY OWNER / USER IS RESPONSIBLE FOR INSTALLING A REMOTE LOCATED EMERGENCY STOP DEVICE, CONNECTED TO EACH MACHINE.

Device conditions

- To be located in a visible place, separated from all machines and easily accessible.
- To break the electrical supply for all machines.
- To safely isolate all machines at maximum consumption.
- To require a RUN order for a new connection for the whole installation once the Emergency Stop button is unlocked.

3.10. Wash cycle start-up from an external device to the washing machine

VERY IMPORTANT!!!
Washing machine cycle start-up should only be started by voluntary activation using an actuating element designated for this purpose.
For machines connected to a remote control start-up system (e.g. a central vending point, etc.), the control must be located so as to ensure that the operator may be absolutely certain that no person is exposed to any dangerous area of the washing machine (pursuant to Machine Directive 98/37/CE, Annex 1)

3.10.1. Connecting to a central vending unit and configuring the machine

Consult the manual for INSTALLING AND CONFIGURING THE VENDING CIRCUIT part number 430731.