



Installation and operation instructions



MB, SMP
Centrifugal Pumps

Approvals

		CB TEST CERTIFICATE	Ref. Certificate No. CH-0876
IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME			
Issued by:	Electrosuisse		
Product:	Horizontal and vertical multistage pumps		
Applicant:	Swiss Pump Company AG	Mosweg 36 CH-3045 Gwatt (Thun)	Switzerland
Manufacturer:	Swiss Pump Company AG	Mosweg 36 CH-3045 Gwatt (Thun)	Switzerland
Factory:	Swiss Pump Company AG	Mosweg 36 CH-3045 Gwatt (Thun)	Switzerland
Rating and principal characteristics:	3 x 200 - 277/346 - 480V~, 50/60Hz; 220-230V~, 50/60Hz; 127-200-240V~, 60Hz class I, IP55		
Trade mark (if any):	Swiss Pump Company AG (SPCO)		
Model/Type reference:	HM..., CH..., VM..., CDL..., ND..., CC..., MB..., GB..., SBF..., CCP..., SCF..., see appendix table list in test report		
Additional information:	---		
Sample of product tested to be in conformity with IEC:	60335-1-041.1.am2 60335-2-41.041.3.am1.am2	National differences: EU Group Differences; EU Special National Conditions; EU A-Deviations	
Test Report Ref. No.:	0640-0218.01 + .02 + .03 + .05		
This CB Test Certificate is issued by the National Certification Body			
Electrosuisse Luppenstrasse 1, CH-8320 Fehraltorf			
Signed by:	Erich Obrist 2010-07-27		page 1 of 1



General Data

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Declaration of conformity



EU Declaration of conformity



**According to the Low Voltage Directive 2006/95/EC
and the Machinery Directive 2006/42/EC
and Electromagnetic Directive 2004/108/EC.**

For the following equipment:

Product: Pump
 Trademark: Monoblock Pump
 Type Designation: MB, SMP, JET
 Manufacture's Name: Swiss Pump Company AG
 Manufacture's Address: Moosweg 36, CH-3645,
 Thun-Gwatt -Switzerland

is herewith confirmed to comply with the requirements set out in the Council Directive 2006/95/EC.
 And the Machinery Directive 2006/42/EC and Electromagnetic Directive 2004/108/EC.

For the evaluation of the compliance with this Directives, the following standards are applied:

EN 60335-1:2012
 EN 60335-2-41:2003+A2 :2010
 EN 62233 :2008
 EN 55014-1 :2006/A1 :2011
 EN 55014-2 :1997/A2 :2008
 EN 61000-3-2:2006/A1:2009+A2:2009
 EN 61000-3-3 :2008

Responsible for making this declaration is the:

Manufacture Authorized representative established within the EU

Authorized representative established within the EU (if applicable):

Company Name: Swiss Pump Company AG
 Company Address: Moosweg 36, CH-3645,
 Thun-Gwatt -Switzerland

Person responsible for making this declaration

Name, Surname: Michael Bähler
 Position/Title: production Manager

(Place) (Date) (Company stamp and legal signature)

Switzerland 20/05/2013

Pump

MB & SMP series Peripheral electric pump carefully follow the instructions below to obtain the best performance and a long service life from your pump. Contact your local agent if you have any problem.

Operating conditions

- These pumps must be installed in a drywell-ventated place with an ambient temperature of no more than 40C (fig.A).
- Fix the pump in place on solid flat surface using suitable bolts to avoid vibration.
- The pump must be installed in a horizontal position to ensure that the bearings operate correctly.
- The diameter of the intake pipe must not be smaller than that of the intake mouth. If the intake height exceeds 4 meters.
- Use a pipe with large diameter.
- The diameter of the delivery pipe must be chosen to suit the flow rate and pressure required at the takeoff points.
- The intake pipe must be slightly angled up to towards the intake mouth to avoid the formation of air locks (fig.B).
- Make sure that the intake pipe is completely airtight and immersed in the water by at least half a meter to avoid the formation of vortexes. Always fit a foot valve at the end of the intake pipe.
- It is advisable to fit a non return valve between the delivery mouth and flow rate.
- Adjustment gate valve to avoid dangerous water hammering in the event of the pump suddenly stopping. This measure is compulsory if the delivery water column is over 20 meters.
- The pipe must always be fitted using the related brackets (fig.C) to avoid transmitting street to the pump body.
- Take care not to damage any part by over tightening the pipe when fitting them

Electrical connections

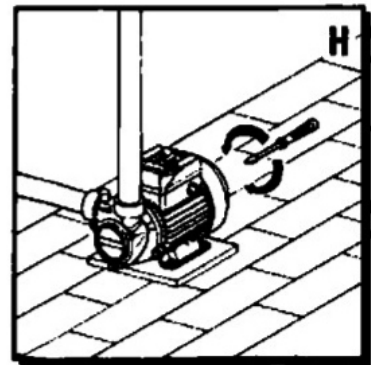
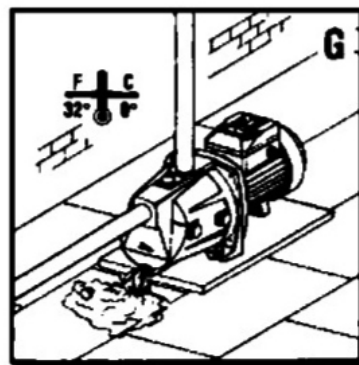
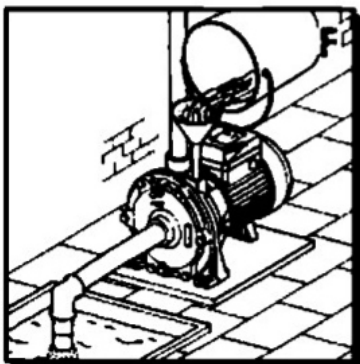
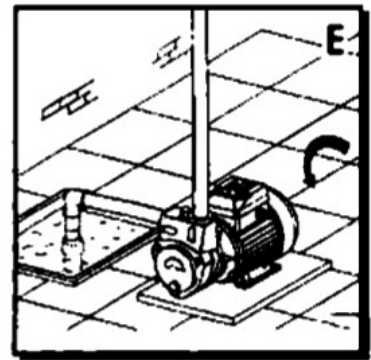
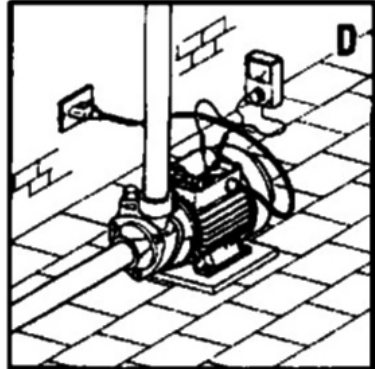
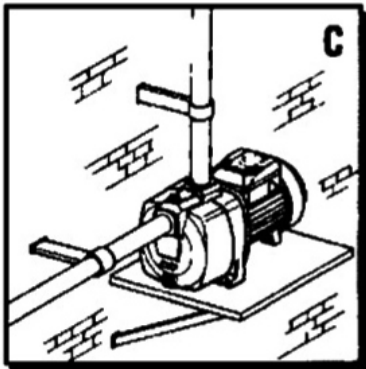
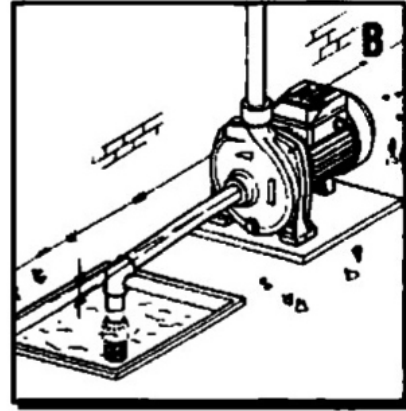
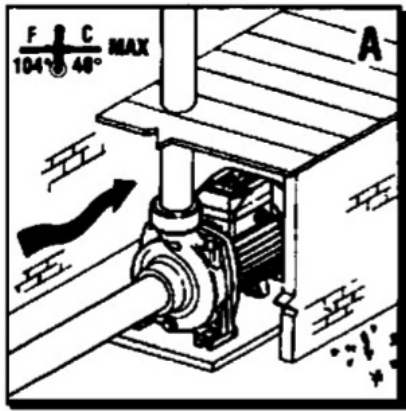
The installer is responsible for making the electrical connections to the mains supply in compliance with the relevant national wiring regulations in force:

- note that pump shall be supplied through a residual current advice (RCD) having a rated residual operating current not exceeding 30 m A.
- make sure that the specification on the pump rating plate and the rated line valves are the same (fig.D)
- connect the pump to an effective earth circuit and then connect up to phrase's following the diagram on the terminal block cover or rating plate.
- our single – phase motors are protected against overload using a thermal device (overload cutout)fitted in the winding. Uses are responsible for fitting a suitable protection device for three- phase motor.
- check that three – phase pump rotate clockwise when looking at the pump from the motor fan side . Swapping over two of the phase connections if they do not (fig. E).

PROMING: fill the pump completely with clean water before switching it on. The water should be poured in the trough the priming plug (fig.F) when you have completed the operating. Screw the plug black in again and start the pump. The pump should be primed again whenever it has not been used for a long period of time or when air has made its way into the system.

Important: never run the pump empty. If this happens by mistake. Switch the pump off. Wait for it to cool down and then prime it using prime it using clean water.

Installation



Maintenance

Our pumps do not require any maintenance provided one takes the following: precautions: when there is risk of freezing. Empty the pump through the drain plug on the bottom of the pump body, making sure you prime it when subsequently starting it again, check that the foot valve is clean at regular intervals, if the pump is to remain unused for a long period of time (e.g. in the winter) (fig. G). It is advisable to empty it completely, rinse it with clean water and store it in a dry place if the shaft does not turn freely, release it using a screwdriver inserting it in the special slot (fig. H). If this is not sufficient to solve the problem, remove the pump body, undoing the relevant mounting bolts, and clean it thoroughly to remove any encrustation.

Attention: if the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.

Never carry out any work on the pump without having first disconnected it from the mains supply

Trouble and trouble shooting

Fault	Cause	Trouble shooting
motor won't start	No power	Check connection and voltage valves
	Impeller stuck	See section on maintenance
motor turns without pumping water	Clogged filter Excessive intake height Air in intake	Clean filter Move pump closer to water outlet level Check intake pipe is airtight Make sure foot valve is immersed by at least 500cm Pump needs to be primed again
flow rate insufficient	Intake height limit Filter partially clogged Impeller blocked	Check intake height Clean foot valve and, if necessary, whole intake pipe Disassemble pump and carefully clean pump and impeller
tripped motor overload cutout	Overheated motor Impeller stuck	Check voltage and ventilation Release impeller (see section maintenance)





Swiss Pump Company AG
Moosweg 36
CH - 3645 Thun - Gwatt
Switzerland
Tel. +41 33 223 11 00
Fax +41 33 223 11 22
mail@swisspump.com

www.swisspump.com