

Keep this
manual onboard!



User Manual

Including Installation For
Proportional Power Control
PPC520, PPC820, PPC 840



SLEIPNER AS

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To download your language go to www.sleipnergroup.com

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DECLARATION OF CONFORMITY

MC_0020



Sleipner Motor AS
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Declare that this product with accompanying standard control systems complies with the essential health and safety requirements according to:

DIRECTIVE 2013/53/EU
DIRECTIVE 2014/30/EU
DIRECTIVE 2014/35/EU

It is the installers responsibility

When installing Sleipner equipment follow the outlined regulations/ classification rules (electrical/ mechanical) according to international or special national regulations. Instructions in this guide cannot be guaranteed to comply with global electric/ mechanic regulations/ classification rules.

Follow all health and safety laws in accordance with their local outlined regulations/ classification rules.

Before installation, it is important that the installer reads this guide to ensure necessary acquaintance with the product.

The recommendations made in this manual are guidelines ONLY, and Sleipner Motor AS (Sleipner) strongly recommend that before installation, advice is obtained from a naval architect familiar with the particular vessel and regulations/ classifications.

This manual is intended to support educated/ experienced staff and is therefore not sufficient in all details for professional installation. (NB: These instructions are only general instruction. If you are not skilled to do this work, please contact professional installers for assistance.)

All electrical work must be done by a licensed professional.

Faulty installation of Sleipner products will render all warranty given by Sleipner Motor AS void.

MC_0038

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Considerations and Precautions

MC_0105

IMPORTANT

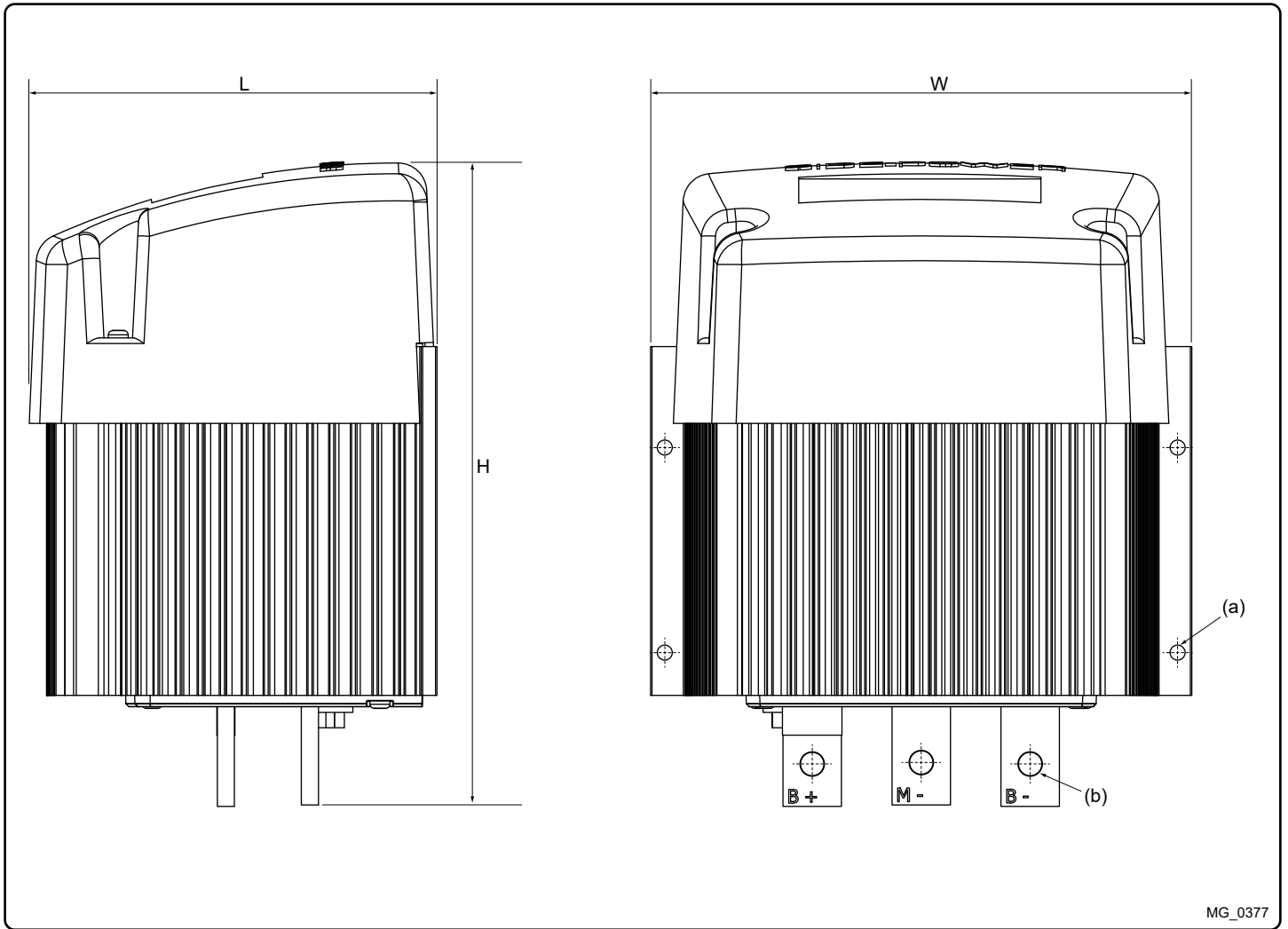
If installing S-link products DO NOT connect any other control equipment to the S-link controlled products except Sleipner original S-link products or via a Sleipner supplied interface product made for interfacing with other controls. Any attempt to directly control or at all connect into the S-link control system without the designated and approved interface will render all warranties and responsibilities for the complete line of Sleipner products connected void and null. If you are interfacing by agreement with Sleipner and through a designated Sleipner supplied interface, you are still required to also install at least one original Sleipner control panel to enable efficient troubleshooting if necessary.

EN

PPC Considerations and Precautions

MC_0342

- The PPC Power control unit should be installed in a dry, ventilated place - cable connections facing down. Mount unit with battery positive cable branching out at unit terminal, not at thruster motor. Allow free space at min 200mm over, 150mm under and min. 100mm in front and at sides. Take into consideration that a 5m multi-cable shall be plugged in between thruster motor and PPC unit.



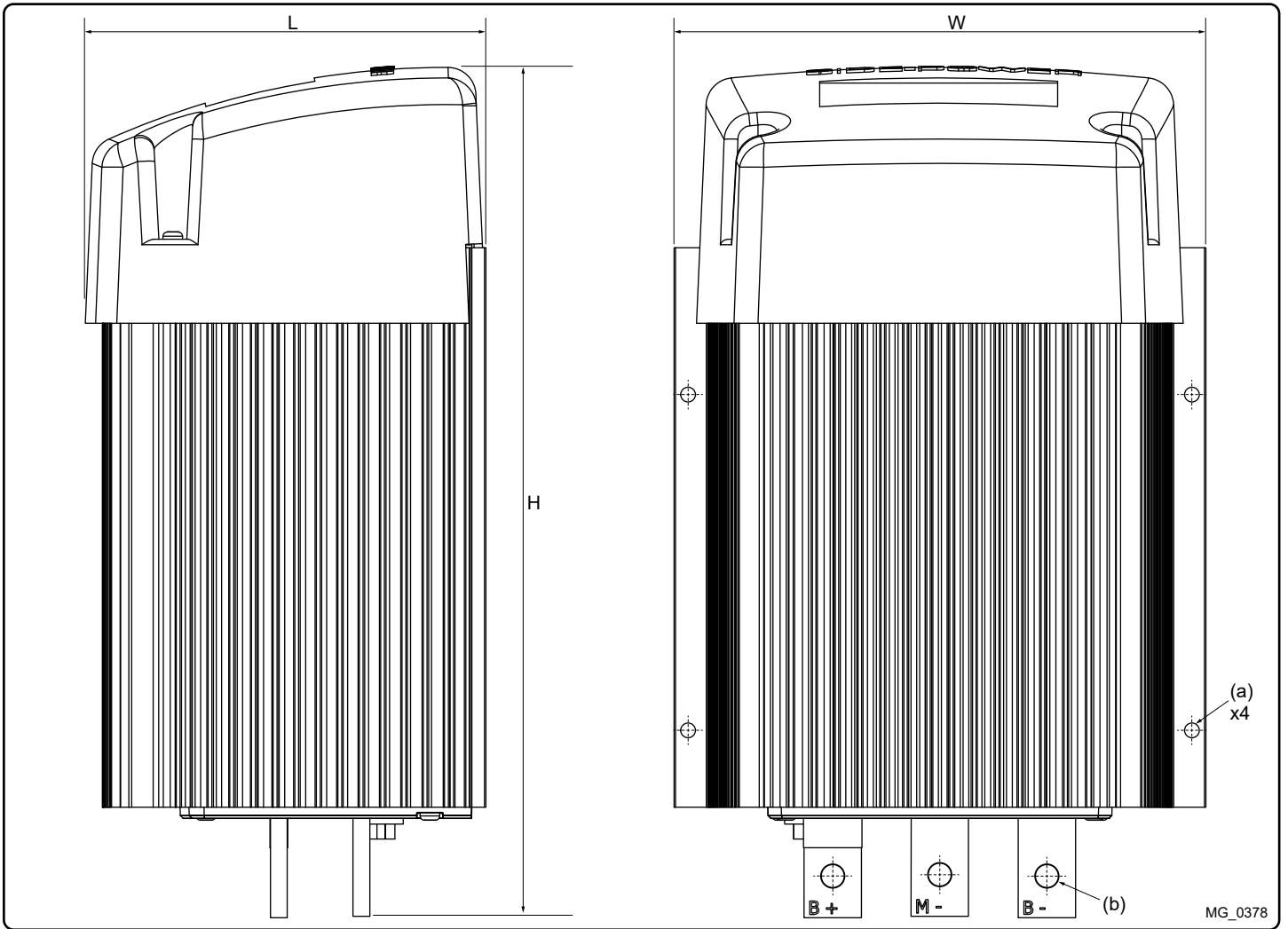
EN **PPC Measurements** **MC_0340**

Measurement code	Measurement description	*520	
		mm	inch
H	PPC Height	226	8.9
W	PPC width	190	7.5
L	PPC length	143	5.6
(a)	Minimum tunnel length	5.3	0.2
(b)	Recommended tunnel length	8.6	0.3

- Supply Voltage:** 9 - 31V (PPC 520 & PPC 820)
36 - 36V (PPC 840)
- Output Voltage:** 20-100% x Vbatt
- Output Current:** Max. 1000A (PPC 820)
Max. 500A (PPC 520)
MAX. 550A (PPC 840)
- Regulation:** PWM, S-Link controlled
- Protection:** Thermal, under-voltage, over-current.
- Safety features:** - The PPC Speed Control unit will turn off motor power each time the main solenoids are activated. This removes any possibility for solenoid lock-in. Any fault in the main solenoids will give feedback to the panel and turn off power to the electric motor.

Description	* 520
Available DC System (v)	12v & 24v
Thrust 12v (kg * lbs)	40kg* 88.2lbs - 60kg* 132lbs
Thrust 24v (kg * lbs)	60kg* 132lbs - 130kg* 284lbs
Max Output Current	500A

- Compatible Products:**
- | | | |
|------------------|---------------|------------|
| (PPC 520) | SRP | SXP |
| SEP | SRP (V&L) 80 | SXP 80 |
| SEP 40 | SRP (V&L) 100 | SXP 100 |
| SEP 50 | SRP (V&L) 130 | |
| SEP 60 | | |
| SEP 80 | | |
| SEP 100 | | |
| SEP 120 | | |
| SEP 130 | | |



EN **PPC Measurements** MC_0341

Measurement code	Measurement description	*820		*840	
		mm	inch	mm	inch
H	PPC Height	304	12	304	12
W	PPC width	190	7.5	190	7.5
L	PPC length	143	5.6	143	5.6
(a)	Minimum tunnel length	5.3	0.2	5.3	0.2
(b)	Recommended tunnel length	8.6	0.3	8.6	0.3

- Supply Voltage:** 9 - 31V (PPC 520 & PPC 820)
36 - 36V (PPC 840)
- Output Voltage:** 20-100% x Vbatt
- Output Current:** Max. 1000A (PPC 820)
Max. 500A (PPC 520)
MAX. 550A (PPC 840)
- Regulation:** PWM, S-Link controlled
- Protection:** Thermal, under-voltage, over-current.
- Safety features:** - The PPC Speed Control unit will turn off motor power each time the main solenoids are activated. This removes any possibility for solenoid lock-in. Any fault in the main solenoids will give feedback to the panel and turn off power to the electric motor.

Description	* 820	* 840
Available DC System (v)	12v & 24v	48v
Thrust 12v (kg * lbs)	80kg* 176lbs - 130kg* 284lbs	-
Thrust 24v (kg * lbs)	150kg* 330lbs - 170kg* 375lbs	-
Thrust 48v (kg * lbs)	-	285kg* 628lbs
Max Output Current	1000A	550A

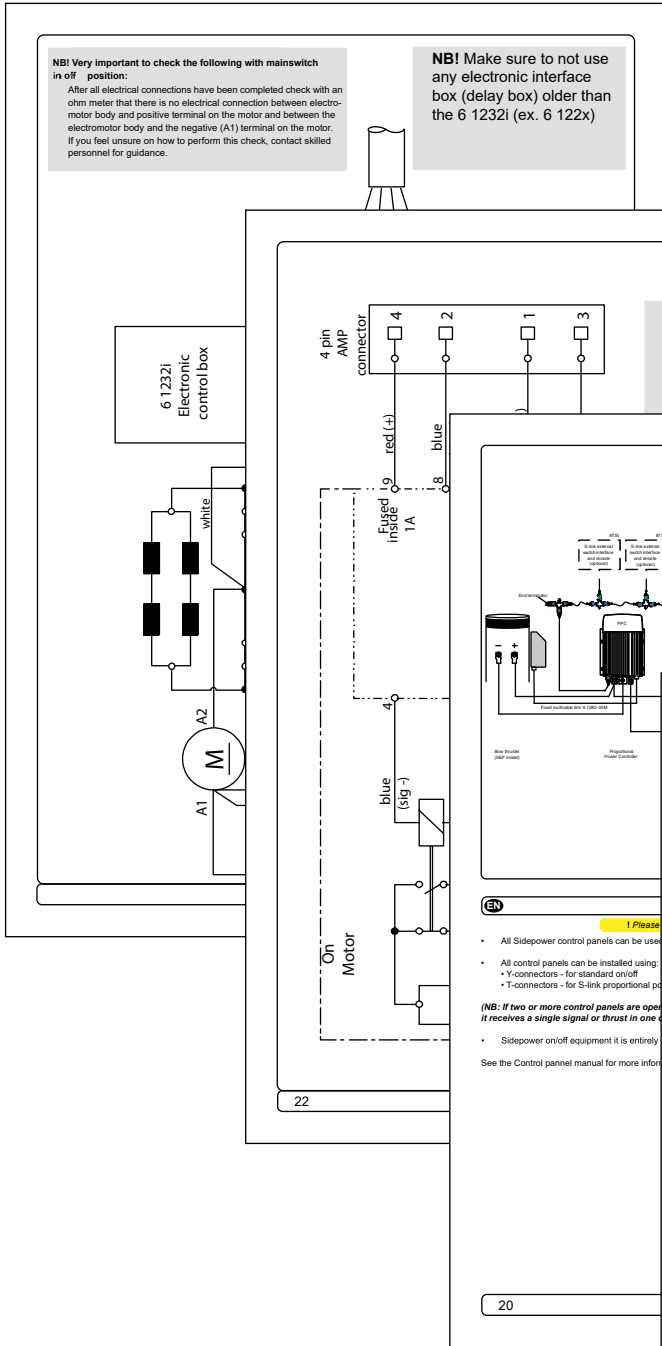
- Compatible Products:**
- | | | |
|------------------|---------------|------------|
| (PPC 820) | SRP | SXP |
| SEP | SRP (V&L) 80 | SXP 80 |
| SEP 80 | SRP (V&L) 100 | SXP 100 |
| SEP 100 | SRP (V&L) 130 | |
| SEP 130 | SRP (V&L) 170 | |
| SEP 150 | | |
| SEP 170 | | |
| SEP 210 | | |
| SEP 240 | | |
| (PPC 840) | | |
| SEP | | |
| SEP 285 | | |

See the thruster manual supplied for the electrical installation

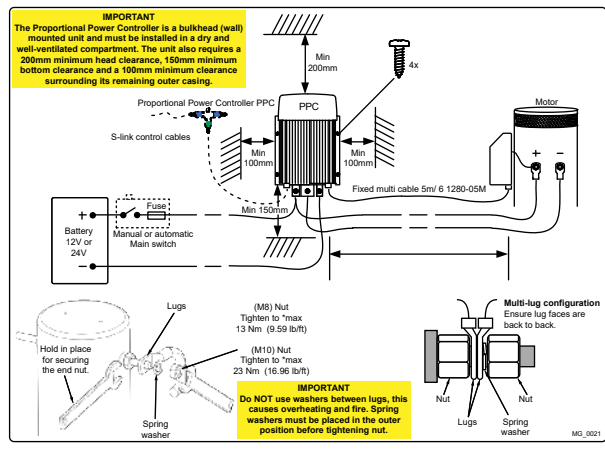
NB! Very important to check the following with mainswitch in off position:
After all electrical connections have been completed check with an ohm meter that there is no electrical connection between electro-motor body and positive terminal on the motor and between the electro-motor body and the negative (A1) terminal on the motor. If you feel unsure on how to perform this check, contact skilled personnel for guidance.

NB! Make sure to not use any electronic interface box (delay box) older than the 6 1232i (ex. 6 122x)

NB! Make sure to not use any electronic interface box (delay box) older than the 6 1232i (ex. 6 122x)



- All Sidepower control panels can be used.
 - All control panels can be installed using:
 - Y-connectors - for standard on/off.
 - T-connectors - for S-link proportional power controller.
- (NB: If two or more control panels are open it receives a single signal or thrust in one direction.)
- Sidepower on/off equipment it is entirely up to you.
- See the Control panel manual for more information.



Thruster Electrical Installation

- Information of electrical table, see next page.
 - All power cable lengths represent the total length of the combined (+) and (-) cables.
 - Battery capacity is stated as minimum cold crank capacity (CCA).
 - Use slow fuse rated to hold stated Amp-Draw for min. 5 minutes.
 - Consider the AMP hours (Ah) for your specific duty cycle.
 - Use appropriate sized cables and batteries with high cranking capacity to feed the thruster. The actual voltage at the motor while running the thruster decides the motor's output RPM and thrust. Use larger cables and stronger batteries for better results.
 - See electrical specifications for advised minimum cables and batteries (CCA).
 - Connect the battery supply to the control unit (PPC).
 - Install a main manual/ automatic switch from the positive lead terminal on the battery PPC unit). The main switch must be accessible to turn off the thruster independently from the rest of the electrical operation of the vessel when not onboard or in emergencies. **(NB: It is advised to install a fuse on the positive cable for protection against short-circuiting of the main cables. The fuse should ensure no voltage decrease, slow-blow and sized to take the amperage draw for at least 5 minutes.)**
 - A circuit breaker can be used instead of the fuse and main power switch if the functionality is the same.
- (NB: For Ignition Protected installations remember to use ignition protected fuses and switches if fitted in areas that require this feature. Ensure to follow your national regulations)
- Cable lugs must have adequate electrical and mechanical isolation and fitted with cable lug covers.
 - Fasten cables to the required torque.

WARNING
Check the following with the main switch is set to off:
After all electrical connections have been completed check with an ohm meter that there is no electrical connection between:
1. electro-motor flange and the positive terminal on the motor
2. electro-motor flange and the battery negative terminal on the motor
If unsure contact skilled personnel.

Fill in the type, location and serial numbers of the S-link devices installed.
Keeping this as a reference will make the setup procedure easier!

S-link device (ie Thruster, AMS, PPC etc)	Location (Bow, Bow-STB, Stern, Stern-STB)	Serial number

Find your local professional dealer from our certified worldwide network for expert service and support.

visit our website www.sleipnergrou.com/support

For additional supporting documentation, we advise you to visit our website www.sleipnergrou.com and find your Sleipner product.

1. Sleipner Motor AS (The "Warrantor") warrants that the equipment (parts, materials and embedded software of products) manufactured by the Warrantor is free from defects in workmanship and materials for the purpose for which the equipment is intended and under normal use and service (the "Warranty").
2. This Warranty is in effect for two years (Leisure Use) or one year (Commercial and other Non-leisure Use) from the date of purchase by the end user (for demonstration vessels, the dealer is deemed as end user).
3. This Warranty is transferable and covers the equipment for the specified warranty period.
4. The warranty does not apply to defects or damages caused by faulty installation or hook-up, abuse or misuse of the equipment including exposure to excessive heat, salt or fresh water spray, or water immersion except for equipment specifically designed as waterproof.
5. In case the equipment seems to be defective, the warranty holder (the "Claimant") must do the following to make a claim:
 - (a) Contact the dealer or service centre where the equipment was purchased and make the claim. Alternatively, the Claimant can make the claim to a dealer or service centre found at www.sleipnergrou.com. The Claimant must present a detailed written statement of the nature and circumstances of the defect, to the best of the Claimant's knowledge, including product identification and serial nbr., the date and place of purchase and the name and address of the installer. Proof of purchase date should be included with the claim, to verify that the warranty period has not expired;
 - (b) Make the equipment available for troubleshooting and repair, with direct and workable access, including dismantling of furnishings or similar, if any, either at the premises of the Warrantor or an authorised service representative approved by the Warrantor. Equipment can only be returned to the Warrantor or an authorised service representative for repair following a pre-approval by the Warrantor's Help Desk and if so, with the Return Authorisation Number visible postage/shipping prepaid and at the expense of the Claimant.
6. Examination and handling of the warranty claim:
 - (a) If upon the Warrantor's or authorised service Representative's examination, the defect is determined to result from defective material or workmanship in the warranty period, the equipment will be repaired or replaced at the Warrantor's option without charge, and returned to the Purchaser at the Warrantor's expense. If, on the other hand, the claim is determined to result from circumstances such as described in section 4 above or a result of wear and tear exceeding that for which the equipment is intended (e.g. commercial use of equipment intended for leisure use), the costs for the troubleshooting and repair shall be borne by the Claimant;
 - (b) No refund of the purchase price will be granted to the Claimant, unless the Warrantor is unable to remedy the defect after having a reasonable number of opportunities to do so. In the event that attempts to remedy the defect have failed, the Claimant may claim a refund of the purchase price, provided that the Claimant submits a statement in writing from a professional boating equipment supplier that the installation instructions of the Installation and Operation Manual have been complied with and that the defect remains.
7. Warranty service shall be performed only by the Warrantor, or an authorised service representative, and any attempt to remedy the defect by anyone else shall render this warranty void.
8. No other warranty is given beyond those described above, implied or otherwise, including any implied warranty of merchantability, fitness for a particular purpose other than the purpose for which the equipment is intended, and any other obligations on the part of the Warrantor or its employees and representatives.
9. There shall be no responsibility or liability whatsoever on the part of the Warrantor or its employees and representatives based on this Warranty for injury to any person or persons, or damage to property, loss of income or profit, or any other incidental, consequential or resulting damage or cost claimed to have been incurred through the use or sale of the equipment, including any possible failure or malfunction of the equipment or damages arising from collision with other vessels or objects.
10. This warranty gives you specific legal rights, and you may also have other rights which vary from country to country.

At Sleipner we continually reinvest to develop and offer the latest technology in marine advancements. To see the many unique designs we have patented visit our website www.sleipnergrou.com/patents

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