



MANUAL

Searchlights

DHR UC
220/210/180/150
Remote controlled

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Introduction

Den Haan Rotterdam, specialist in developing and manufacturing navigation lights for ships since 1922. Besides, 40 years active in producing searchlights for pleasure craft, inland trade and seagoing vessels.

Co-workers of Den Haan Rotterdam got more and more interest in a wider assortment of high quality searchlights. Much attention has been paid to the wishes of our very valued customers

After a time-consuming development, the use of exclusive seawater resistant materials, and electrical construction conform the directives 73/23/EEC and 93/68/EEC, now the searchlight is ready to put on the market.

Voorwoord

Den Haan Rotterdam, specialist in het ontwikkelen en produceren van navigatieverlichting sinds 1922. Daarnaast reeds 40 jaar actief in de fabricage van zoeklichten voor de plezier-, binnen- en zeevaart.

Bij de medewerkers van Den Haan ontstond een steeds grotere interesse voor een breder assortiment kwalitatief hoogwaardige zoeklichten. Veel aandacht is besteed aan de geuite wensen van onze zeer gewaardeerde afnemers.

Na een tijdrovende ontwikkeling, het gebruik van uitsluitend zeewaterbestendige materialen, de elektrische constructie volgens de richtlijnen 73/23/EEG en 93/68/EEG, achten wij het zoeklicht thans geschikt om op de markt te brengen.

Den Haan Rotterdam BV



M. den Haan
Managing director / Directeur

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Safety notes

WARNING

- Turn power off before inspection, installation or removal

Risk of fire

- Keep combustible materials away from lamp
- Use eye protection when handling lamp
- Do not touch glass with bare hands
- Do not exceed 105% of rated voltage

CAUTION

Risk of burn

- Allow lamp/fixture to cool before handling
- Turn power off before installing lamp

Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Wear safety glasses and gloves when handling lamp

Mounting instructions

Mechanical

Place the searchlight horizontal with plenty of space for the head to move in any direction. For dimensions see annex 1

Electrical

Install the electrical wiring according to annex 2.

Keep the distance between the power supply and lamp as short as possible. Long wires will increase the voltage drop near the sealed beam lamp, decreasing the light output.

Warning

Den Haan Rotterdam accepts no responsibility for any damage if the searchlight is installed and / or used improper. When in doubt consult a qualified electrical technician.

Maintenance

Lamp replacement

1. Switch off the main power
Caution – hot lamp. Let the lamp cool down, wait for at least 10 minutes before going further
2. Open the drum
3. Pull the lamp out
4. Ensure that the replacement lamp is of the same type
5. Take a clean cloth to place the new lamp
(Do not touch the lamp with bare fingers, remove any fingertips with alcohol and rub it dry)
6. Check the neoprene sealing of the front glass and rub it in with talcum powder
7. Close the drum
8. The searchlight is ready to use

Preventive maintenance

Clean the searchlight with clean water regularly. Do not use any aggressive cleaning agents.

Technical specification

Control panel

- $P_{nom.}$: 15 W
- $U_{nom.}$ input : 12 – 24 VDC
- $U_{nom.}$ output motor (2x) : 4 – 10 VDC
- U output lamp : See input
- Protection class : IP 20
- Electrical insulation class : III
- Ambient temperature : 0 - 40°C

Motor housing

- $P_{nom.}$ motor : 6 W
- $U_{nom.}$ motor : 4 – 10 VDC
- Gear box motor : 1 : 370
- Tilt : + 15° / - 30°
- Max. Speed left / right approximate : 32 degree / sec
- Max. Speed up / down approximate : 5 degree / sec
- Housing:
 - Material : Stainless steel 316
 - Finish : Brushed
 - Sealing : Neoprene, black
- Electrical insulation class : III

Searchlight head

- Housing 180/150:
 - Material : Stainless steel 316
 - Finish : Brushed
 - Sealing : Silicone, black
- Electrical insulation class : III
- Optics : Sealed beam mirror reflector
- Protection class : IP X6
- Ambient temperature : -25°C / + 40°C
- $P_{\max.(\text{lamp})}$: 250W
- $U_{\text{nom.}}$: 12 - 24VDC

- Housing 220/210:
 - Material : Chromated seawater resistant aluminium
 - Finish : UV-resistant powder coating, white RAL 9016
 - Sealing : Silicone, black (220 only)
- Electrical insulation class : I
- Optics : 210 - Sealed beam mirror reflector
220 - Aluminium reflector
- Protection class : 210 - IP X5 / 220 - IP66, c/w membrane vent
- Ambient temperature : -25°C / + 40°C
- $P_{\max.(\text{lamp})}$: 210 - 1000W / 220 - 300W
- $U_{\text{nom.}}$: 12V (220 only) / 24V / 115 /230 V

DHR 220

- Halogen lamp 230V – 300W
 - Light intensity : 120.000 cd
 - Angle of divergence : 15,5 x 21°
 - Range : 345 metre
- Halogen lamp 24V – 250W
 - Light intensity : 441.000 cd
 - Angle of divergence : 10 x 14°
 - Range : 664 metre
- Halogen lamp 12V – 100W
 - Light intensity : 131.000 cd
 - Angle of divergence : 9 x 16°
 - Range : 362 metre

DHR 210

- Sealed beam lamp PAR64 230V - 1000W
 - Light intensity : 400.000 cd
 - Angle of divergence : 17 x 20°
 - Range : 630 metre
- Sealed beam lamp PAR64 115V - 1000W
 - Light intensity : 400.000 cd
 - Angle of divergence : 10 x 24°
 - Range : 630 metre
- Sealed beam lamp PAR46 24V – 250W
 - Light intensity : 500.000 cd
 - Angle of divergence : 7 x 8°
 - Range : 700 metre (at 28V)

DHR 180

- Sealed beam lamp PAR56 26V – 170W
 - Light intensity : 230.000 cd
 - Angle of divergence : 9 x 8°
 - Range : 480 metre (at 26V)
- Sealed beam lamp PAR56 12V – 100W
 - Light intensity : 225.000 cd
 - Angle of divergence : 9 x 5°
 - Range : 475 metre

DHR 150

- Sealed beam lamp PAR46 28V – 250W
 - Light intensity : 300.000 cd
 - Angle of divergence : 12 x 11°
 - Range : 550 metre (at 28V)
- Sealed beam lamp PAR46 12V – 100W
 - Light intensity : 200.000 cd
 - Angle of divergence : 11 x 6°
 - Range : 450 metre

Guarantee

For this DHR remote controlled searchlight we grant a guarantee of **2 years**. The guarantee begins with the day when the equipment is sold or before, when it is operated for the first time. The presentation of your invoice is your warranty.

Our guarantee covers faults in material or defects of fabrication. Our guarantee does not apply to claims of which the cause is due to installation and operation faults, inexperienced attempts to repair, as well as to all damages due to wear and tear on parts subject to wear.

In our fabrication first quality, seawater resistant material is worked. If nevertheless, the unit should give reason for a justified complaint, then you have, after our choice, a claim for the retouching or replacement of the defective parts free of charge. Repair work under guarantee will only be performed at our facilities or a company, duly authorized by us.

If you have to claim to our guarantee, send the defective unit or part of the unit with the receipt or copy of invoice and statement of the defect free of charge to us.

Claims for damages on the transport shall not be recognized. The shipment risks are for account of the purchaser, unless otherwise agreed with Den Haan Rotterdam.

Garantie

Op dit op afstand bedienbaar zoeklicht wordt een garantie gegeven van 2 jaar. De garantieperiode begint op de dag van aanschaf, of wanneer het zoeklicht is geïnstalleerd. De factuur is uw garantiebewijs.

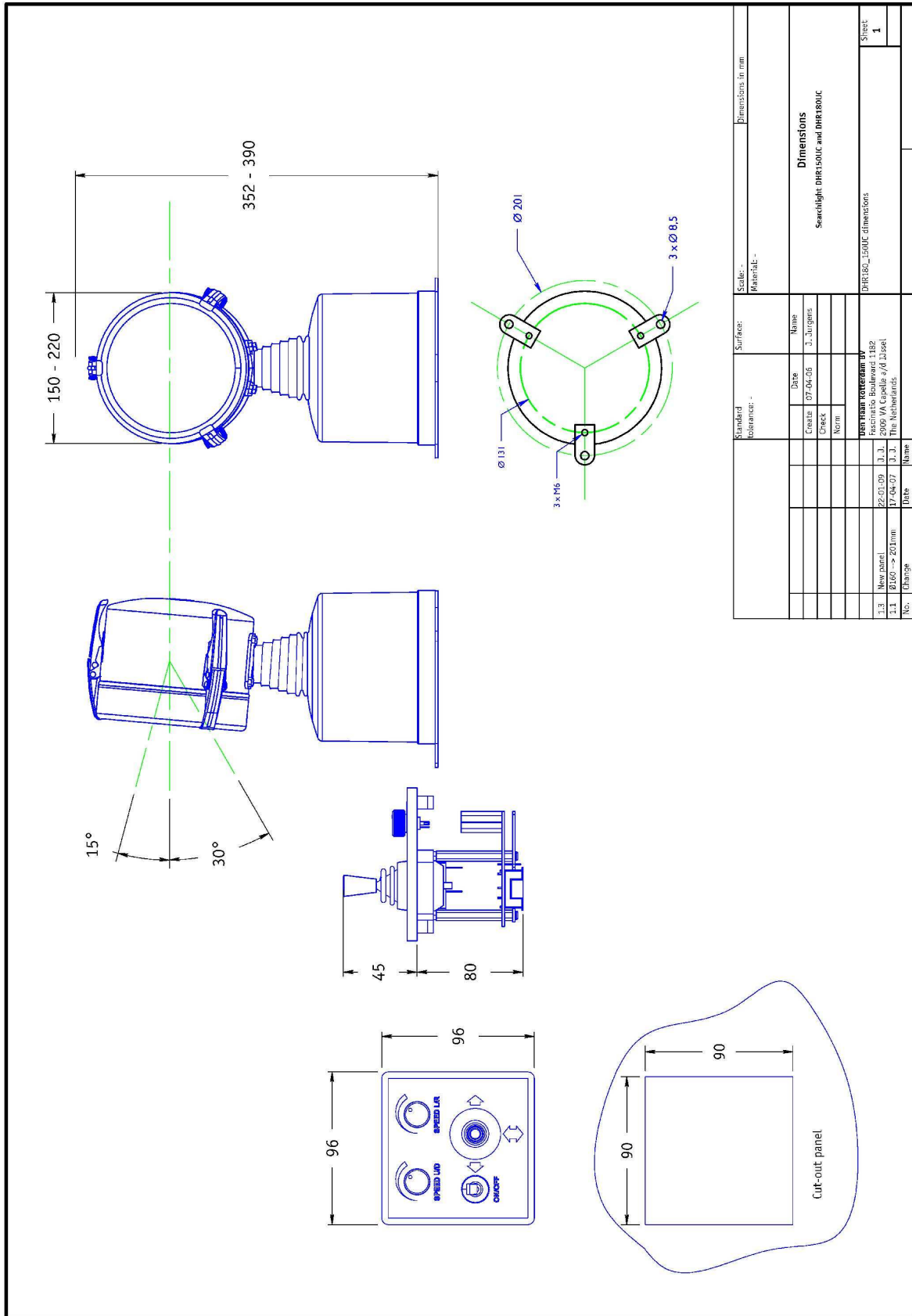
Onze garantie geldt voor fabricagefouten en materiaal gebreken. De garantie geldt niet indien door installatiefouten, verkeerd gebruik en / of slecht onderhoud gebreken ontstaan. Evenzo op slijtage en normale veroudering.

Voor de fabricage van dit zoeklicht zijn alleen zeewaterbestendige materialen gebruikt. Mocht desondanks, het zoeklicht toch reden geven tot terechte klachten, dan kunt u het zoeklicht of de defecte onderdelen na overleg onder garantie laten repareren of vervangen. Reparatie vinden alleen plaats door een medewerker van Den Haan Rotterdam of een door ons geautoriseerde persoon of onderneming.

Als u een garantie claim heeft, dan kan het defecte onderdeel of gehele zoeklicht, met een kopie van de factuur met duidelijke omschrijving van de klacht, gefrankeerd naar ons worden opgestuurd.

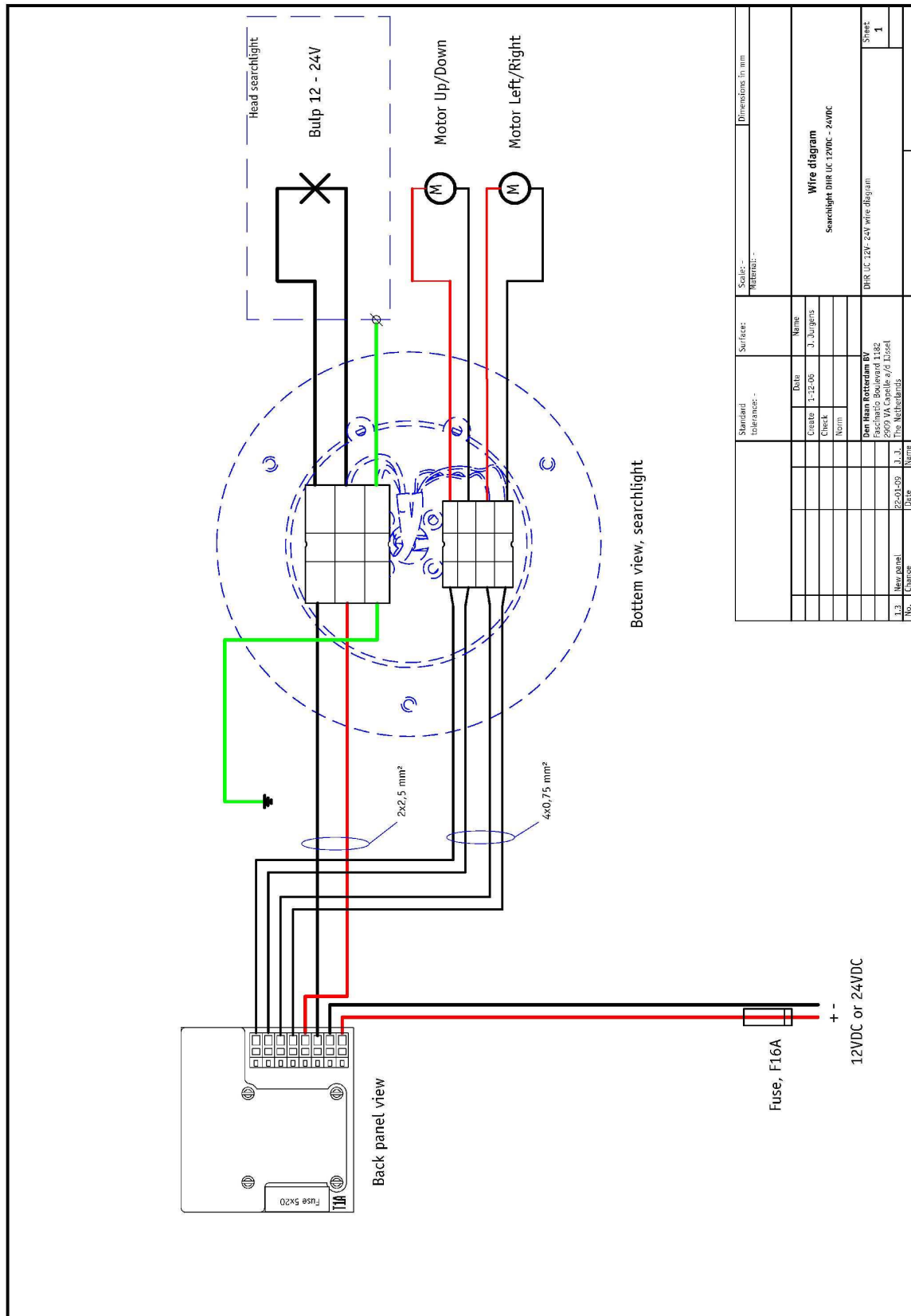
Beschadigingen door transport vallen niet onder de garantie. Het transportrisico is voor de afnemer, tenzij anders overeengekomen met Den Haan Rotterdam.

Annex 1 - Dimensions



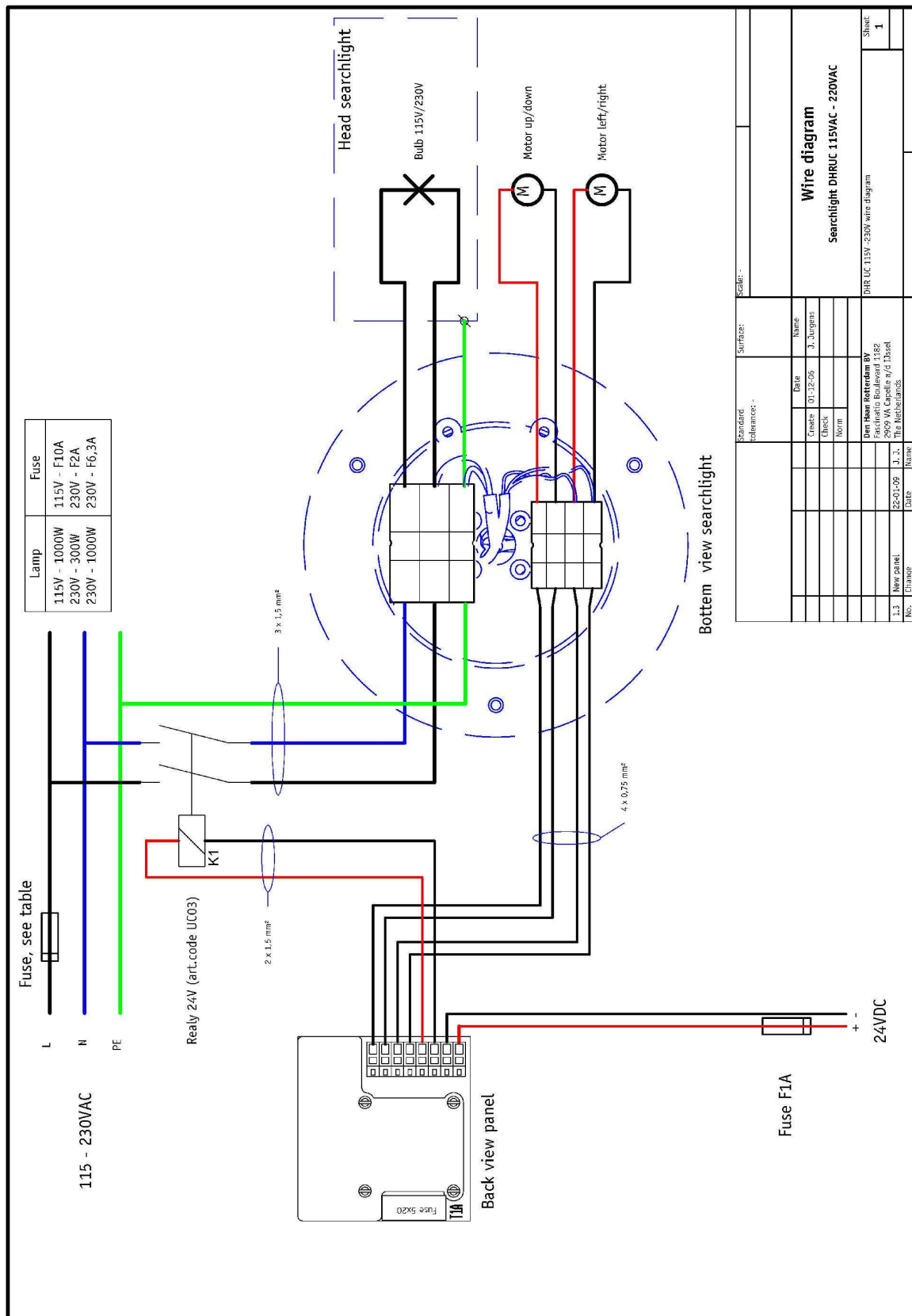
The electrical construction of the searchlight is manufactured in accordance with international standard IEC 60598-1, conform the directives 73/23/EEC and 93/68/EEC.

Annex 2 - Wire diagram DHR UC 12V – 24V with control panel



The electrical construction of the searchlight is manufactured in accordance with international standard IEC 60598-1, conform the directives 73/23/EEC and 93/68/EEC.

Annex 3 - Wire diagram DHR UC 115V – 230V with control panel



The electrical construction of the searchlight is manufactured in accordance with international standard IEC 60598-1, conform the directives 73/23/EEC and 93/68/EEC.

