Rev. 1.0

MANUAL

Searchlights

DHR 260
Cabin control

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15 December 2004

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
Risk of electrical shock
- Turn power off before inspection, installation or removal

Risk of fire
- Keep combustible materials away from lamp

Pressurized lamp—unexpected rupture may cause injury, fire, or property damage
- Use eye protection when handling lamp
- Do not touch glass with bare hands
- Do not use lamp if outer glass is scratched or broken
- Operate lamp only in specified position
- Do not exceed 110% 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

The metal halide lamp emits UV radiation which may cause eye/skin injury
- Turn power off, if **front UV-filter glass** is broken and replace the front glass.

Mounting instructions

Mechanical

1) Before placing the searchlight be sure that there is plenty of space for the head to move in any direction. For dimensions see annex 1
2) Drill the mounting holes according to figure 1 (annex 2).
3) Loosen the bolds M8 x 25, see figure 2 (annex 2).
4) Place the head on the roof and put the bolts M10 x L in the drilled holes, see figure 2 (annex 2).
5) Take the cabin control unit and unscrew the two set screws M6 x 10, see figure 3 (annex 2). The prop with deck plate can now be moved up and down across pipe.
6) Unscrew the set screw M4 x 8 and remove the pin of the triangle, see figure 3 (annex 2).
7) Push the pull rod in the pipe of the cabin control unit and place the pin back in the triangle, see figure 3 and 4 (annex 2).
8) Place the cabin control unit carefully against the roof, whereby the pull rod is pushed in the upper deck plate. See figure 5 (annex 2)
9) Secure both parts of the searchlight by bolting them together with the bolds M10. See figure 5 and 6 (annex 2)
10) Place the hinge piece on top of the pull rod and secure them with de bolds M8 x 25. See figure 6 (annex 2)

> **Warning**
> When mounting the searchlight always push the pull rod from the underside of the cabin control unit in the searchlight, else you will damage the gaskets

Electrical

Install the electrical wiring according to annex 3. Keep the distance between the power supply and halogen lamp so sort as possible. Long wires will increase the voltage drop near the halogen 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

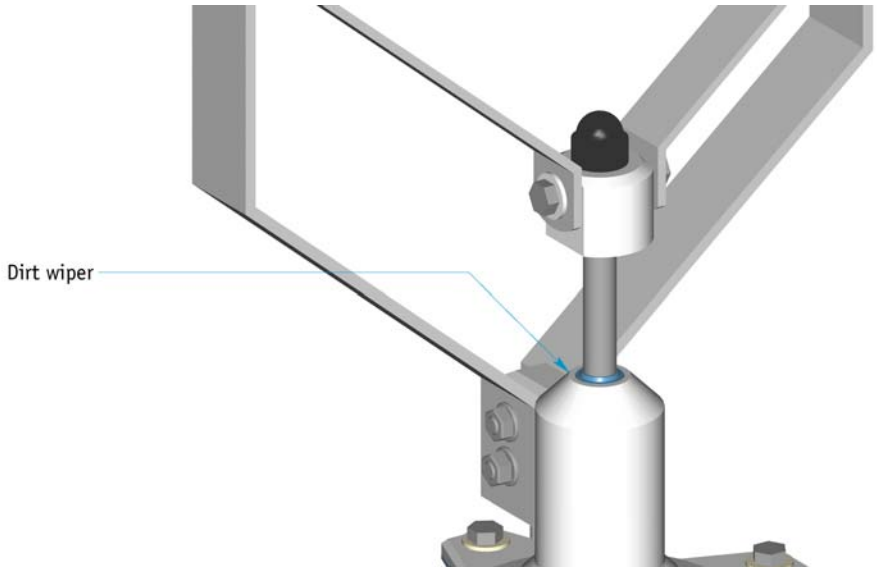
Lamp replacement

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

It is highly recommended by the lamp manufacturer that de **metal halide lamp** is replaced after 400 hour of service, in view of the increased shattering risk.

Preventive maintenance

Clean the searchlight with clean water regularly. Do not use any aggressive cleaning agents.
At least twice a year rub the dirt wiper, on top deck plate (see drawing 1), in with silicone grease.



Technical specification

- Tilt : -30° / +40°
- Materials:
  - Material : Seawater resistant Aluminium - yellow chromatted
  - Finish : epoxy powder coated - white RAL9016
  - Sealing : Silicone, natural
  - Glass : - Therm. toughened glass 267 x 4 mm
    - With metal halide-lamp: UV-filter glass 267 x 4 mm
  - Reflector : Parabolic mirror 260/50 - normal beam)
    Parabolic mirror 260/90 - (narrow beam)
  - Cable : Head resistant cable 3 x 1,5 mm²
    (with metal halide lamp 4 x 1,5 mm²)
  - Cable glands : PG 13,5
- Electrical insulation class : I
- Protection class : Min. IP 66 c/w membrane vent
- Ambient temperature : -25°C / + 40°C
- $P_{max.(lamp)}$: Metal halide 200W
  Halogen lamp 250W
- $U_{nom.}$ (dependant on type lamp) : 230VAC or 24VDC
- metal halide lamp 200W (Narrow Beam):
  - Light intensity : 3.300.000 cd
  - Angle of divergence : 2,2°
  - Range : 1800 metre
- Halogen lamp 24V – 250W:
  - Light intensity : 1.200.000 cd
  - Angle of divergence : 4,4°
  - Range : 1100 metre

Guarantee

For this DHR cabin 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, inexpert 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 by our house or 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 onderdeks bedienbare 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.

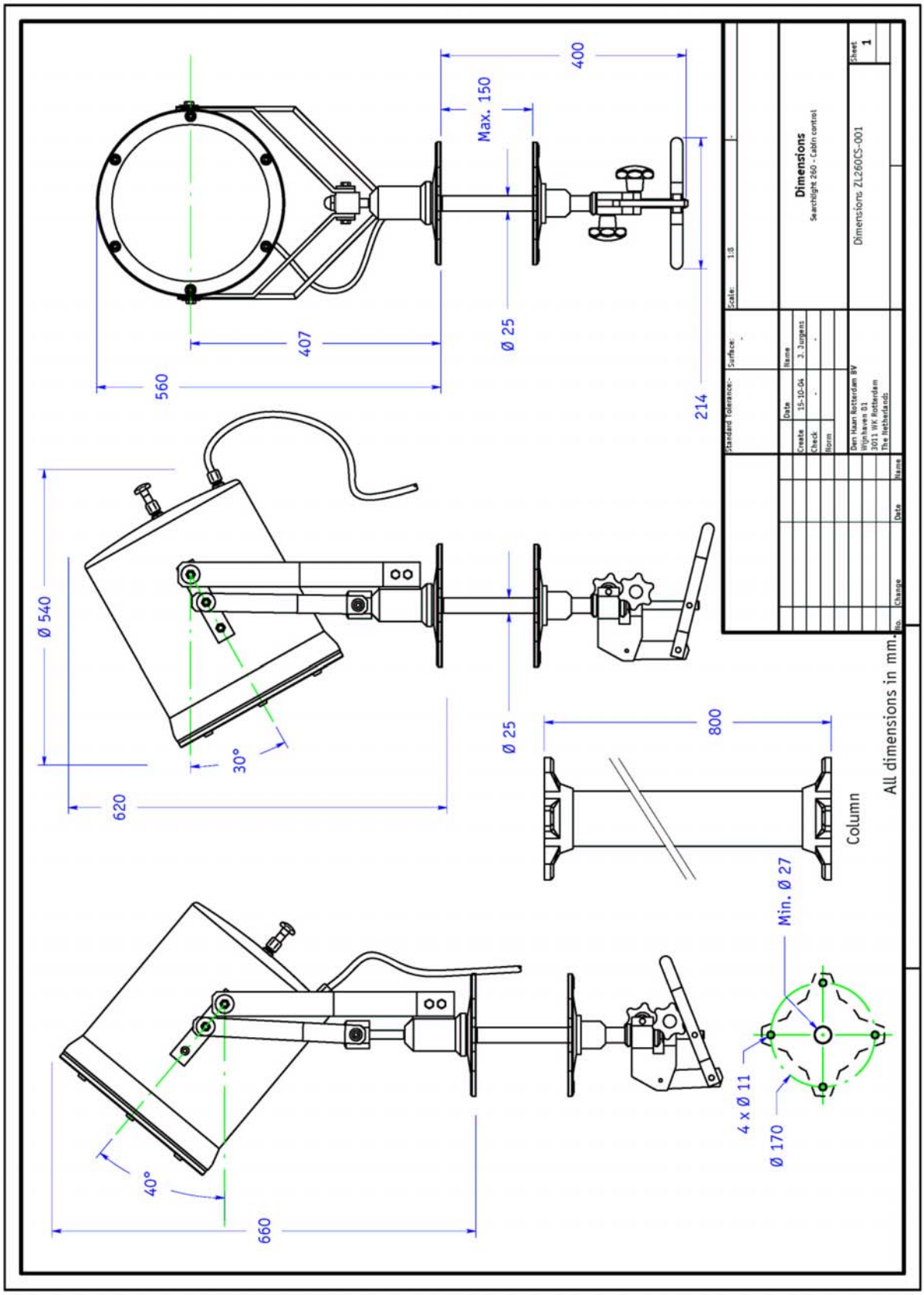
Onze garantie geldt voor fabricagefouten en materiaal gebreken. De garantie geldt niet indien door installatiefouten, verkeerd gebruik en / of slecht onderhoud gebreken ontstaan. Evenzo op slijtage en normale veroudering.

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.

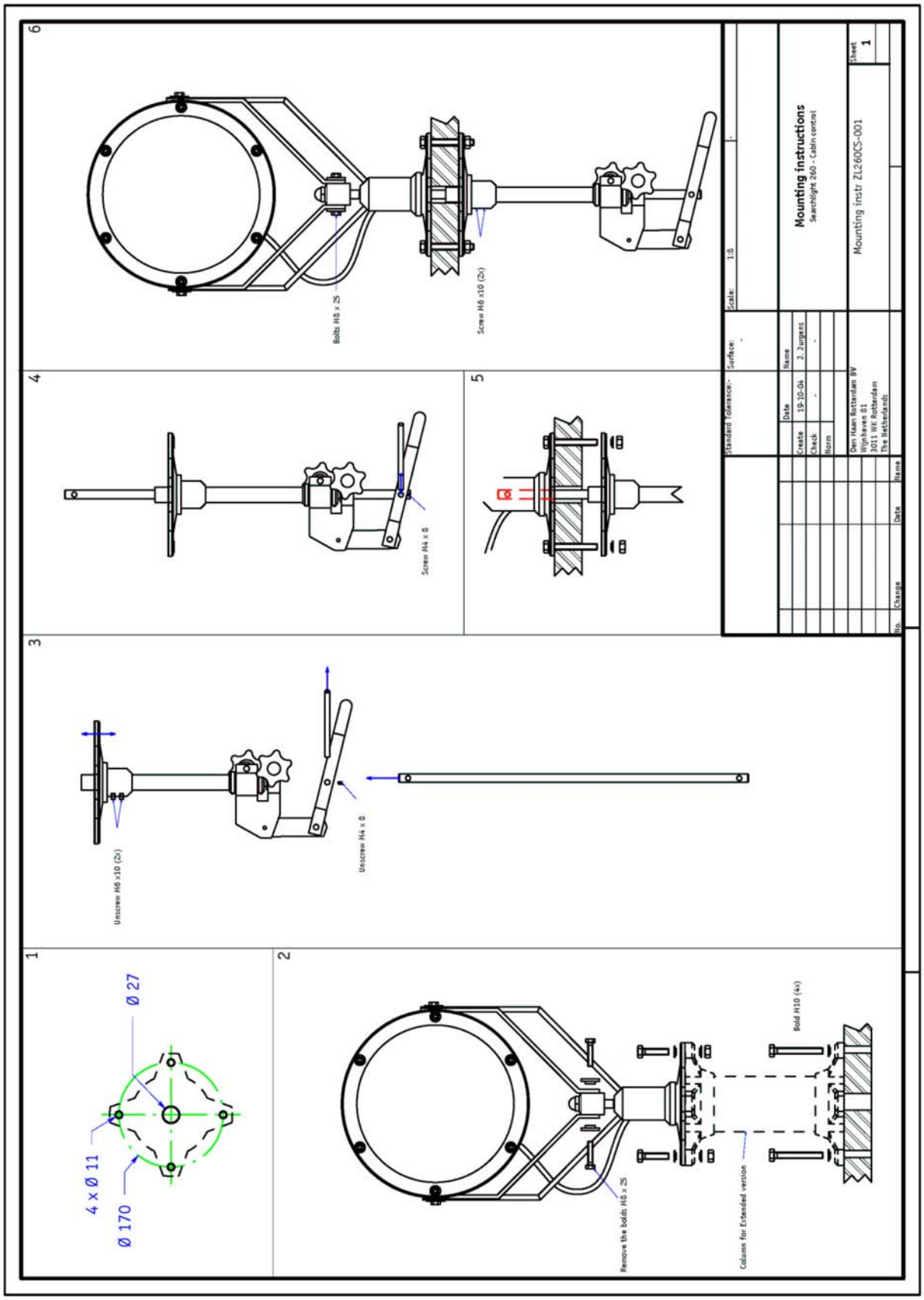
Beschadigingen door transport vallen niet onder de garantie. Het transportrisico is voor de afnemer, tenzij anders overeengekomen met Den Haan Rotterdam.

Annex 1 - Dimensions Searchlight DHR 260 - Cabin control



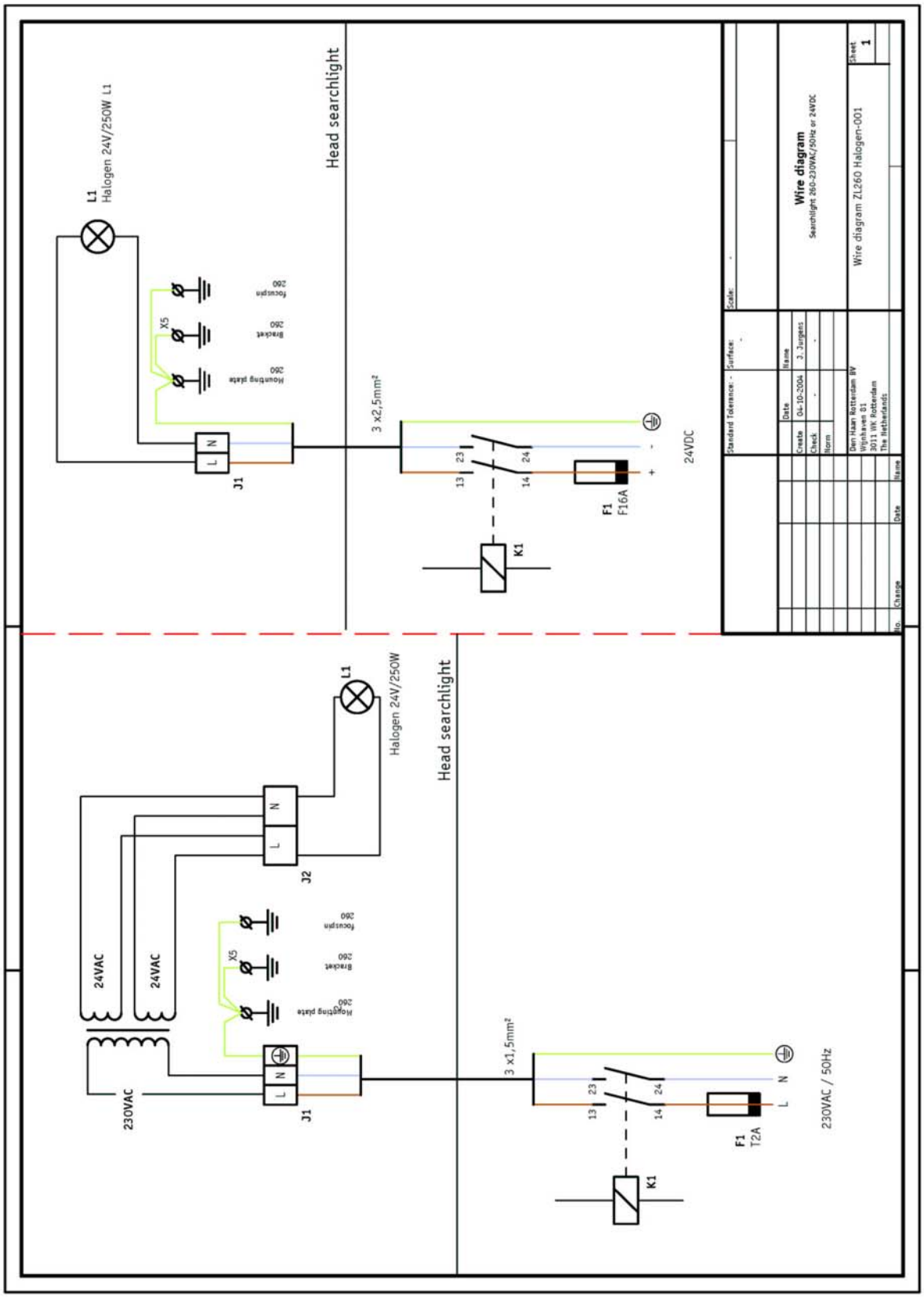
The electrical construction of the searchlight is manufactured in accordance with international standard IEC 60598-1, conform the directives 73/23/EEC and 93/68/EEC.

Annex 2 - Mounting instructions 260 – Cabin control



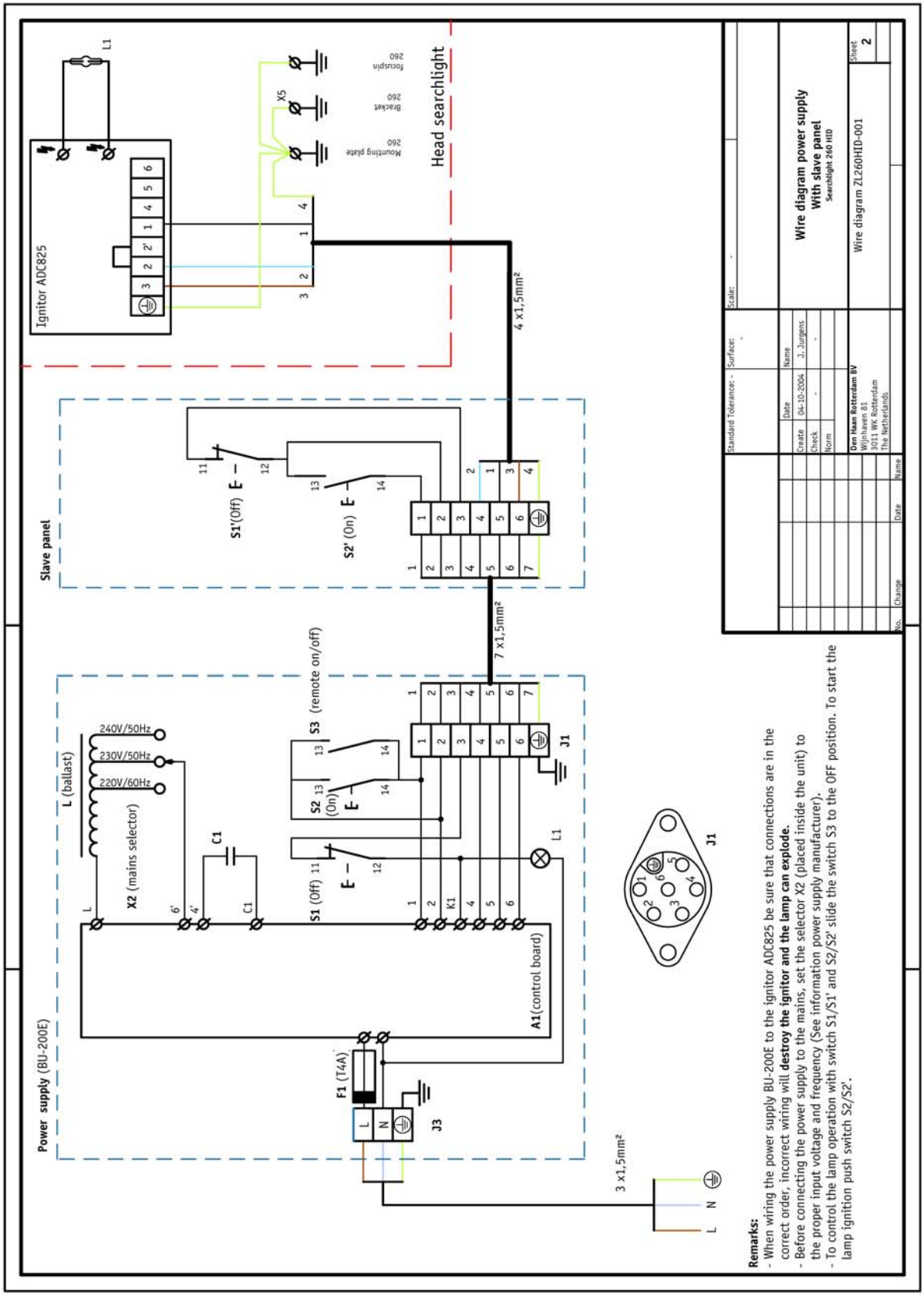
The electrical construction of the searchlight is manufactured in accordance with international standard IEC 60598-1, conform the directives 73/23/EEC and 93/68/EEC.

Annex 3 - Wire diagram with halogen lamp

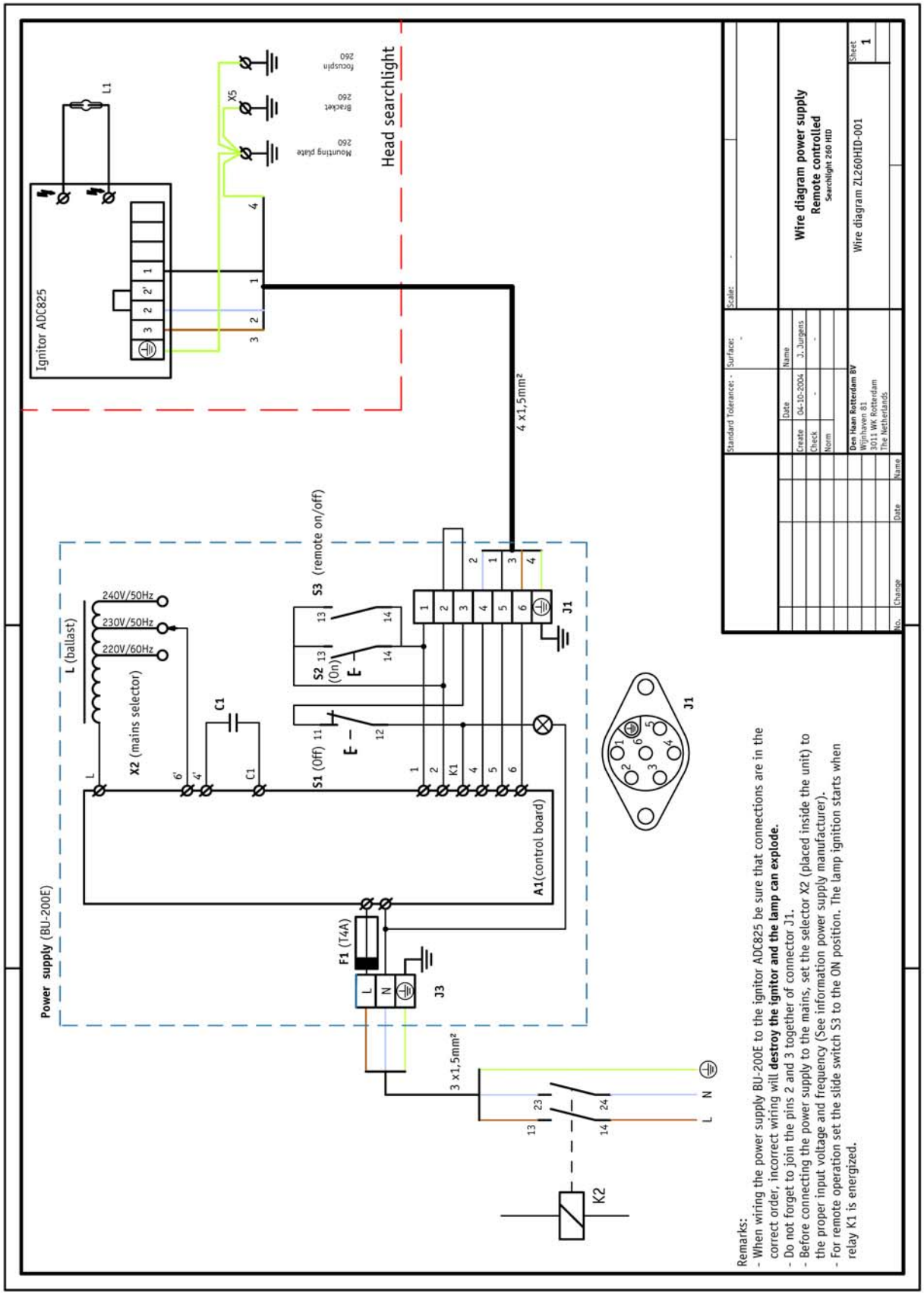


The electrical construction of the searchlight is manufactured in accordance with international standard IEC 60598-1, conform the directives 73/23/EEC and 93/68/EEC.

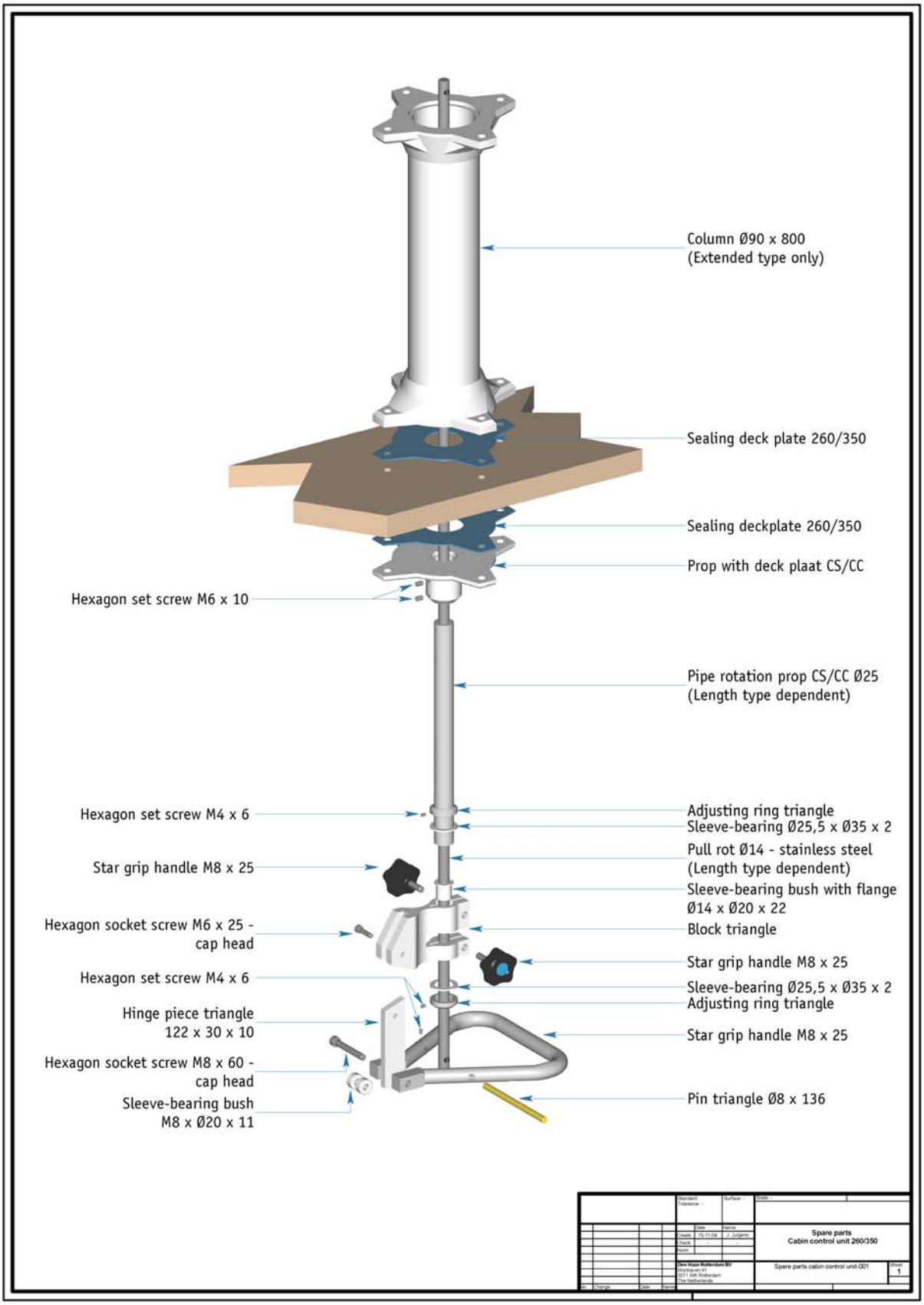
Annex 4 - Wire diagram with metal halide lamp - slave panel



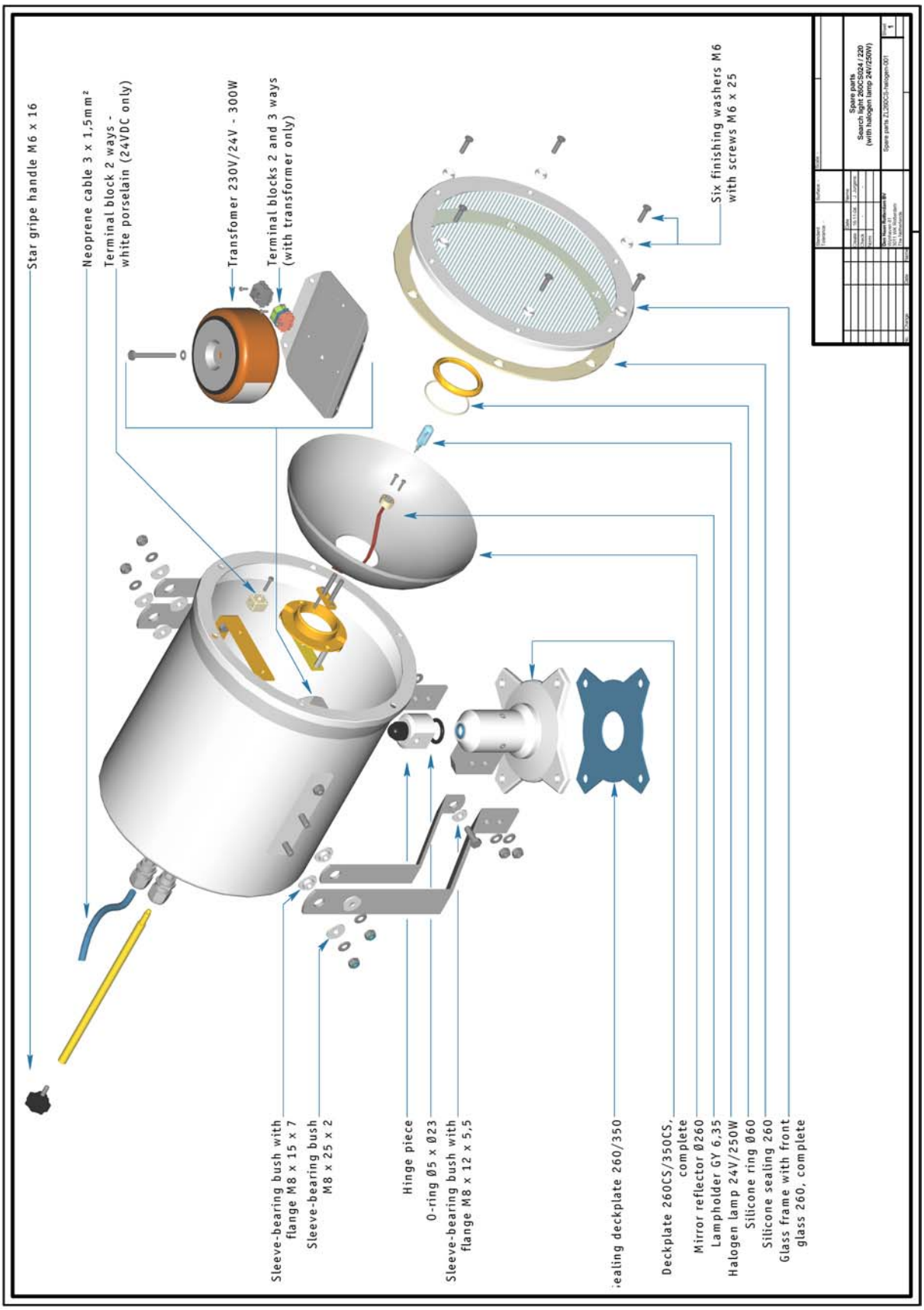
Annex 5 - Wire diagram with metal halide lamp - remote controlled



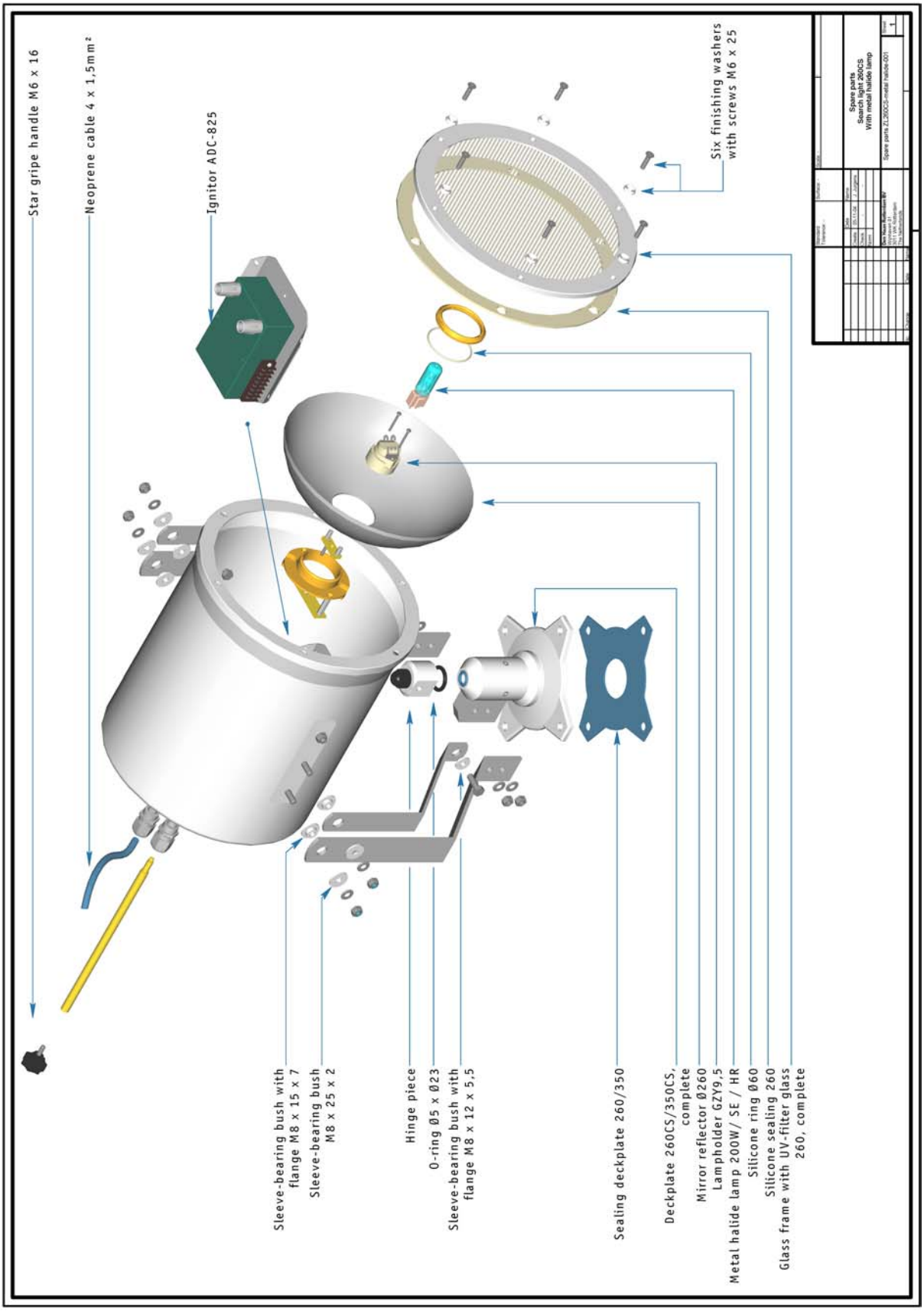
Annex 6 - Cross-section cabin control



Annex 7 - Spare parts DHR260CS - With halogen lamp



Annex 8 - Spare parts DHR260CS - With metal halide lamp



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