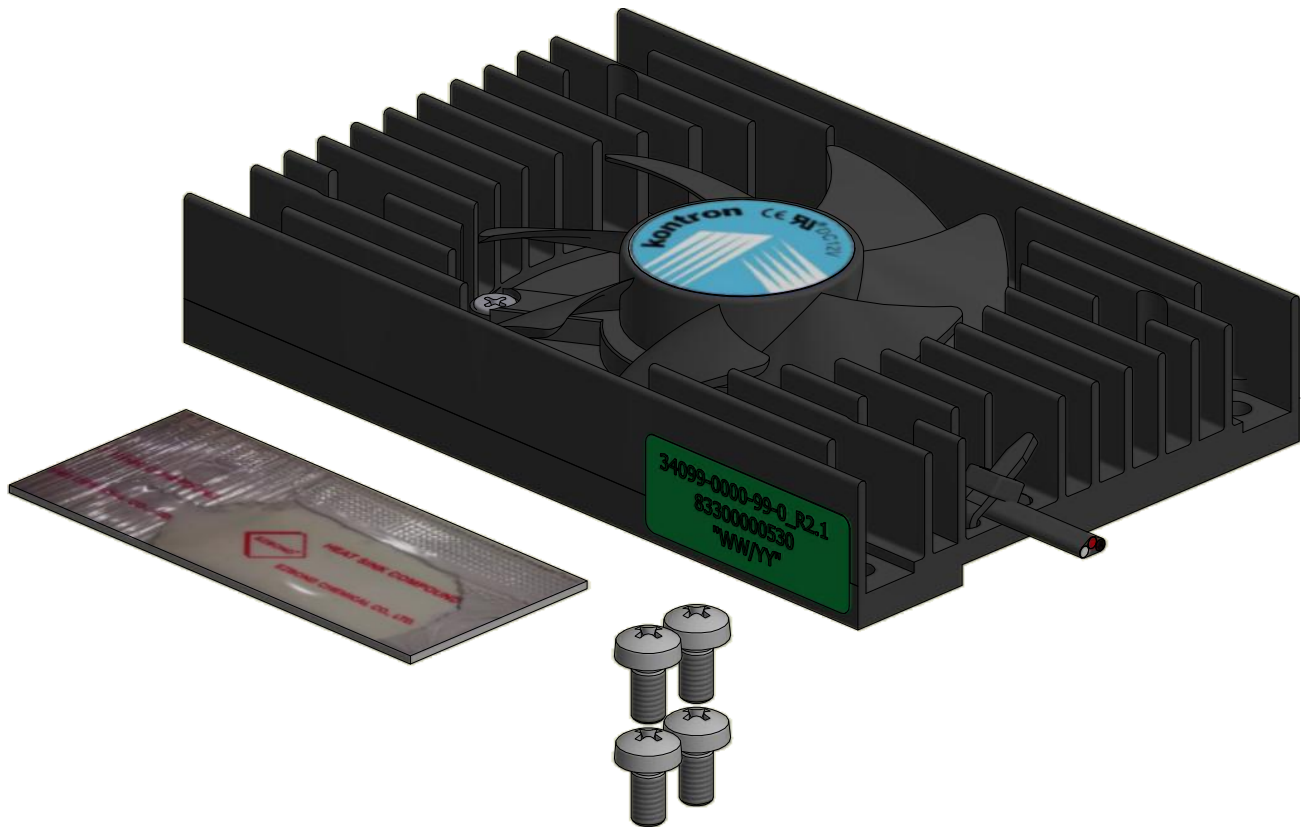



# Picture of Product

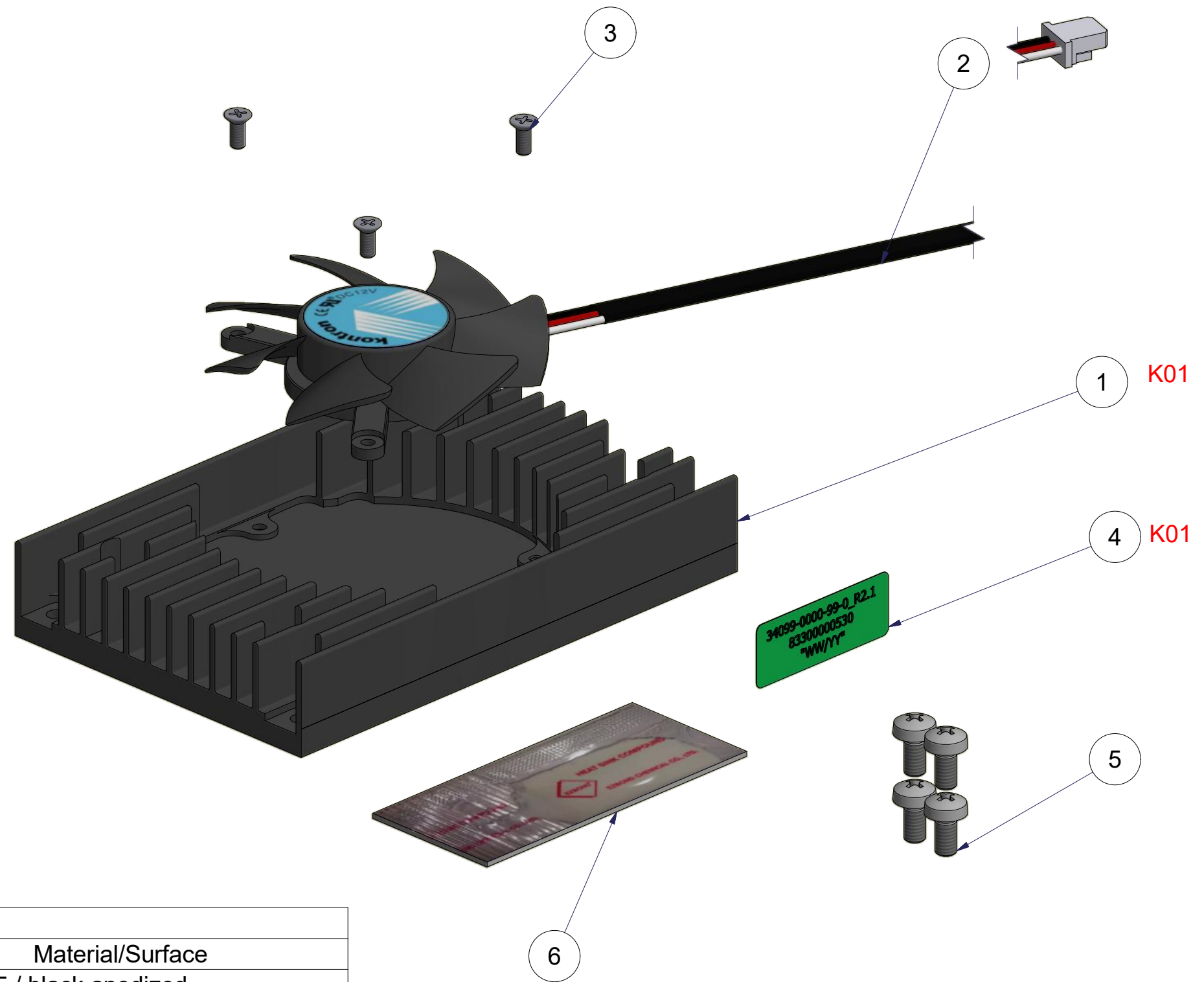


part number of customer:  
34099-0000-99-0\_R2.1

mass ~ 95g

| ---    | -----   | --.--    | --   | Date  | Name     | Part.-<br>No.: 83300000530_K01                                  | Scale |
|--------|---|----------|------|---|----------|---|-------|
| ---    | -----   | --.--    | --   | Designer 09.11.2016   | A.Netzer |   | 1,5:1 |
| ---    | -----   | --.--    | --   | Checked 20.03.2018  | A.Rauh   |   |       |
| ---    | -----   | --.--    | --   | Enabled 20.03.2018  | A.Rauh   |   |       |
| ---    | -----   | --.--    | --   |  Nadlerstraße 10<br>88299 Leutkirch<br>07561 / 9837-0<br>electronics cooling |          | 1 of 7  |       |
| K01    | PCN_2018-03-15_DW_20090: fan cutout and sticker changed | 20.03.18 | AN   |   |          | Heatspreader Alu, aktiv mit Lüfter, schwarz eloxiert, SC102, ev | A4    |
| Status | Modifications   | Date     | Name |   |          |   |       |

Part list



Part List

| Object | Quantity | Name of Item        | Details | Material/Surface  |
|--------|----------|---------------------|---------|---|
| 1      | 1        | Heatsink <b>K01</b> | page 6  | Al6063-T5 / black anodized  |
| 2      | 1        | Fan_PLD05010B12M    | Ø47x10  | Power Logic fan, 12V, Molex51021 3pin, insulation tube, cable length ~200mm, PVC tube length ~170mm |
| 3      | 3        | Screw M2x5          | -       | material: SAE1018 nickel plated   |
| 4      | 1        | Label <b>K01</b>    | page 7  | -   |
| 5      | 4        | Screw M3x6          | -       | material: SAE1018 nickel plated   |
| 6      | 1        | SC102 1g            | page 3  | SC102   |
| 7      | 1        | Packaging           | page 4  | -   |

| ---    | -----   | ---:---  | --   | Date  | Name     |
|--------|---|----------|------|---|----------|
| ---    | -----   | ---:---  | --   | Designer 09.11.2016   | A.Netzer |
| ---    | -----   | ---:---  | --   | Checked 20.03.2018  | A.Rauh   |
| ---    | -----   | ---:---  | --   | Enabled 20.03.2018  | A.Rauh   |
| ---    | -----   | ---:---  | --   | <b>EKL</b><br>Nadlerstraße 10<br>88299 Leutkirch<br>07561 / 9837-0<br>electronics cooling |          |
| K01    | PCN_2018-03-15_DW_20090: fan cutout and sticker changed | 20.03.18 | AN   |   |          |
| Status | Modifications   | Date     | Name |   |          |

|             |   |              |
|-------------|---|--------------|
| Part.- No.: | 83300000530_K01   | Scale 1,5:1  |
|             | Heatspreader Alu, aktiv mit Lüfter, schwarz eloxiert, SC102, ev | 2 of 7<br>A3 |

# Single packaging

6 5 4 3 2 1

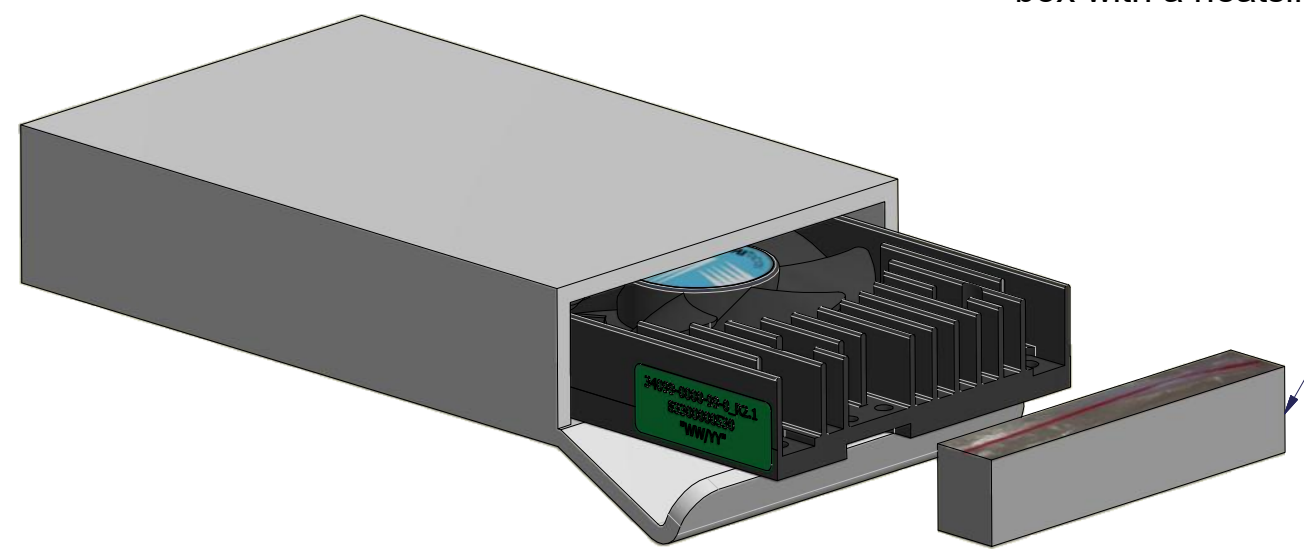
D D

C C

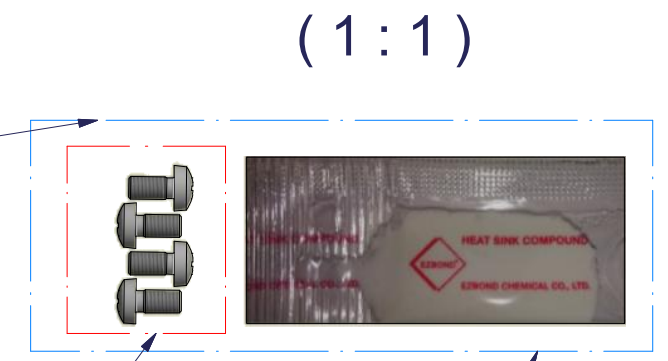
B B

A A

6 5 4 3 2 1



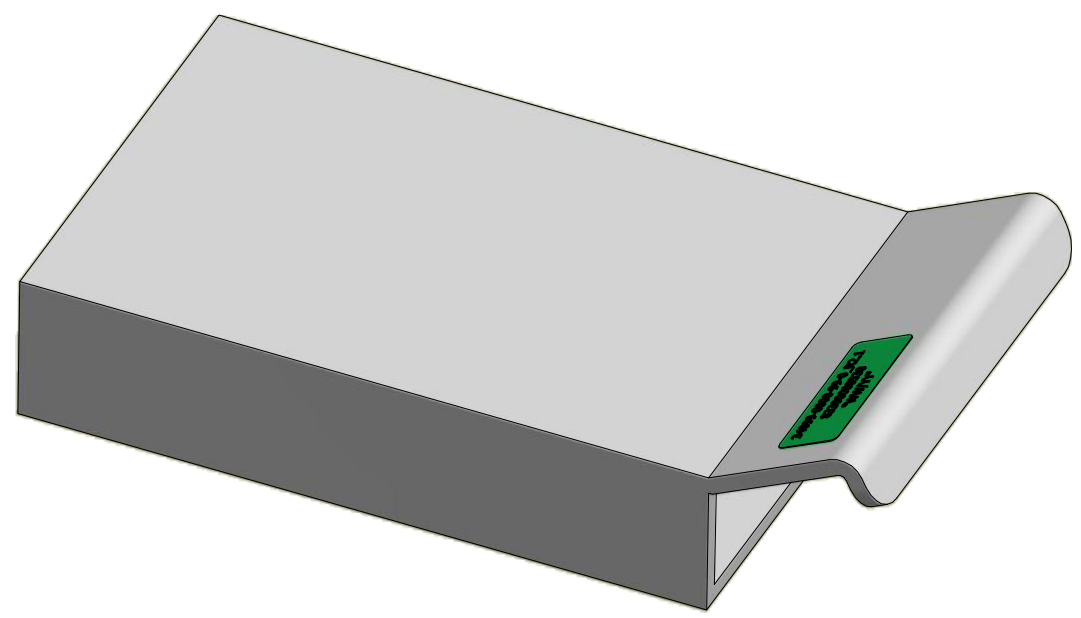
one zipper bag in every box with a heatsink



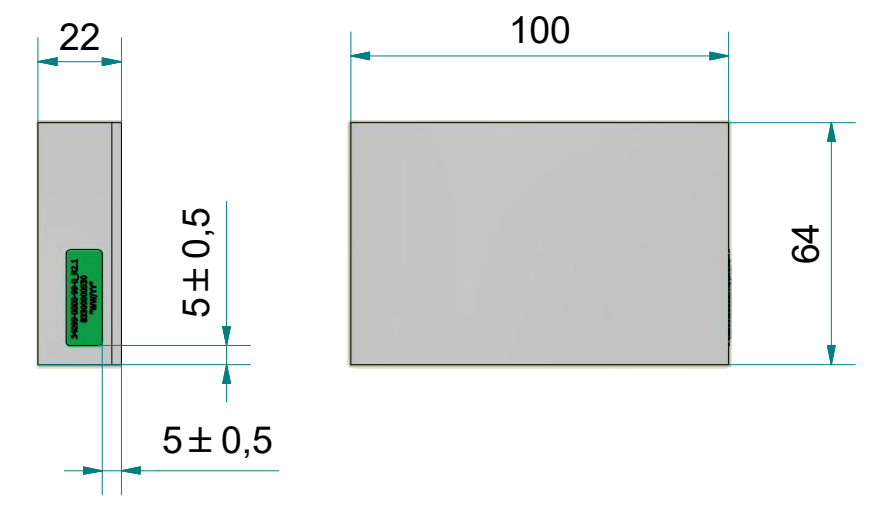
(1:1)

The 4 screws are packed in a small zipper bag.

The SC102 bag and the small zipper bag are packed together in a zipper bag.



(1:2)

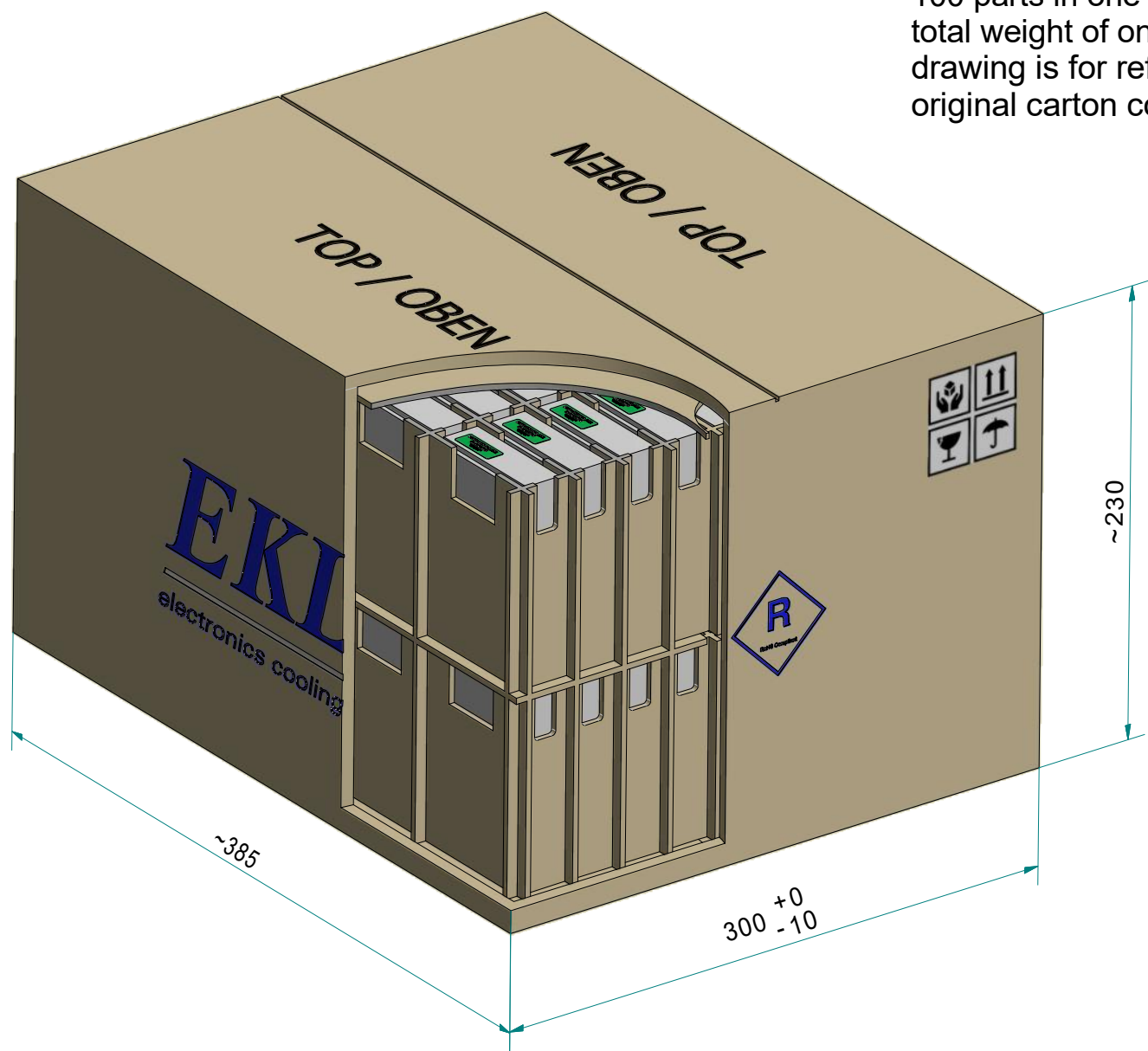



| ---    | -----   | --,--,--- | --   | Date   | Name     | Part.-<br>No.: 83300000530_K01                                  | Scale<br>1:1 |
|--------|---|-----------|------|--|----------|---|--------------|
| ---    | -----   | --,--,--- | --   | Designer 09.11.2016                                  | A.Netzer |   |              |
| ---    | -----   | --,--,--- | --   | Checked 20.03.2018                                   | A.Rauh   |   |              |
| ---    | -----   | --,--,--- | --   | Enabled 20.03.2018                                   | A.Rauh   |   |              |
| ---    | -----   | --,--,--- | --   | Nadlerstraße 10<br>88299 Leutkirch<br>07561 / 9837-0 |          | Heatspreader Alu, aktiv mit Lüfter, schwarz eloxiert, SC102, ev | 3 of 7<br>A3 |
| K01    | PCN_2018-03-15_DW_20090: fan cutout and sticker changed | 20.03.18  | AN   |  |          |   |              |
| Status | Modifications   | Date      | Name |  |          |   |              |

6 5 4 3 2 1

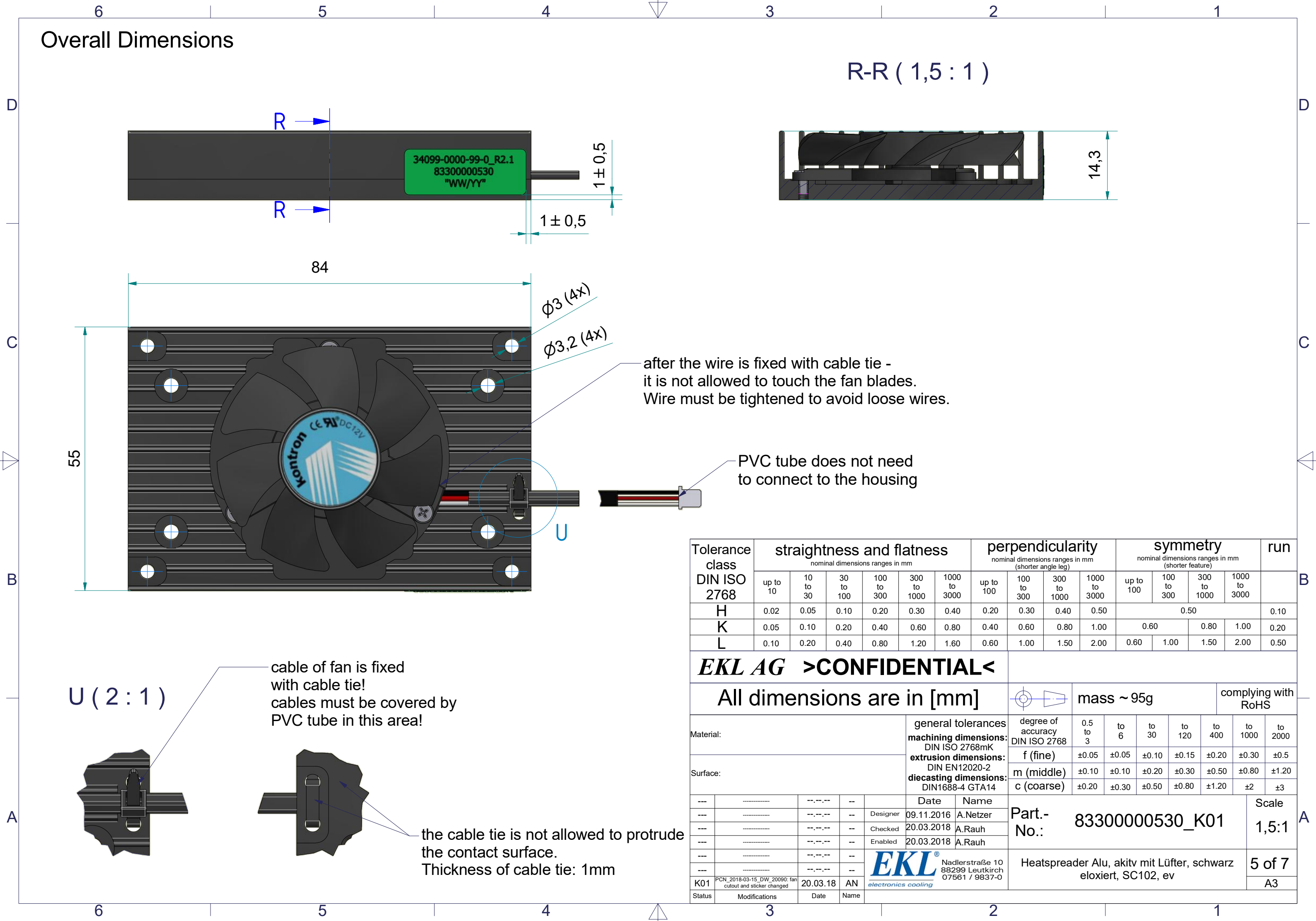
# Bulk Packaging

10x5 single cartons in one layer  
 2 layer in one carton  
 100 parts in one carton  
 total weight of one full carton ~ 11kg  
 drawing is for reference  
 original carton could vary



| ---    | -----   | --,--,--- | --   |  | Date       | Name     | Part.-<br>No.: 83300000530_K01 | Scale<br>1:3 |   |        |    |
|--------|---|-----------|------|--|------------|----------|--------------------------------|--------------|---|--------|----|
| ---    | -----   | --,--,--- | --   | Designer   | 09.11.2016 | A.Netzer |                                |              | Heatspreader Alu, aktiv mit Lüfter, schwarz eloxiert, SC102, ev | 4 of 7 |    |
| ---    | -----   | --,--,--- | --   | Checked  | 20.03.2018 | A.Rauh   |                                |              |   |        | A3 |
| ---    | -----   | --,--,--- | --   | Enabled  | 20.03.2018 | A.Rauh   |                                |              |   |        |    |
| ---    | -----   | --,--,--- | --   |  Nadlerstraße 10<br>88299 Leutkirch<br>07561 / 9837-0 |            |          |                                |              |   |        |    |
| K01    | PCN_2018-03-15_DW_20090: fan cutout and sticker changed | 20.03.18  | AN   |  |            |          |                                |              |   |        |    |
| Status | Modifications   | Date      | Name |  |            |          |                                |              |   |        |    |

# Overall Dimensions



34099-0000-99-0\_R2.1  
83300000530  
"WW/YY"

R-R ( 1,5 : 1 )

after the wire is fixed with cable tie - it is not allowed to touch the fan blades. Wire must be tightened to avoid loose wires.

PVC tube does not need to connect to the housing

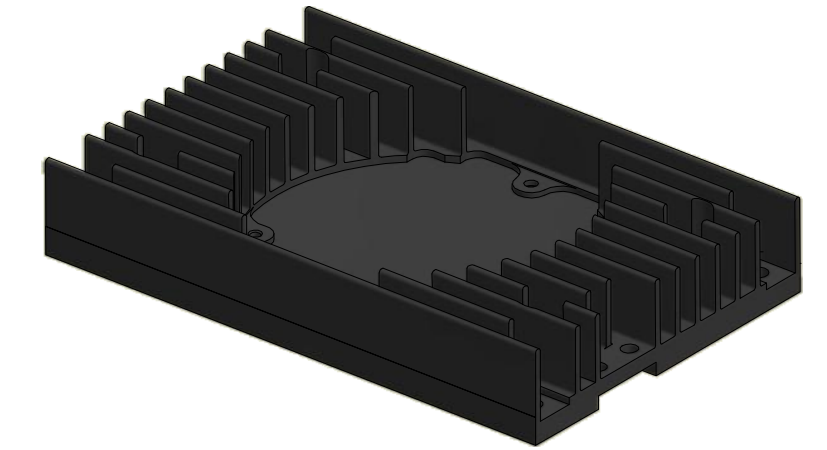
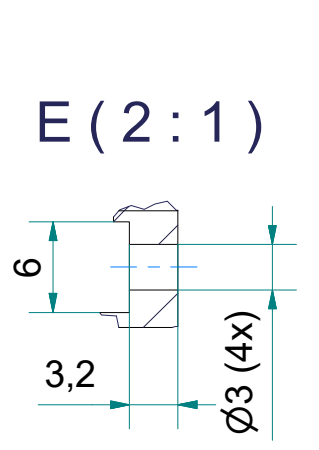
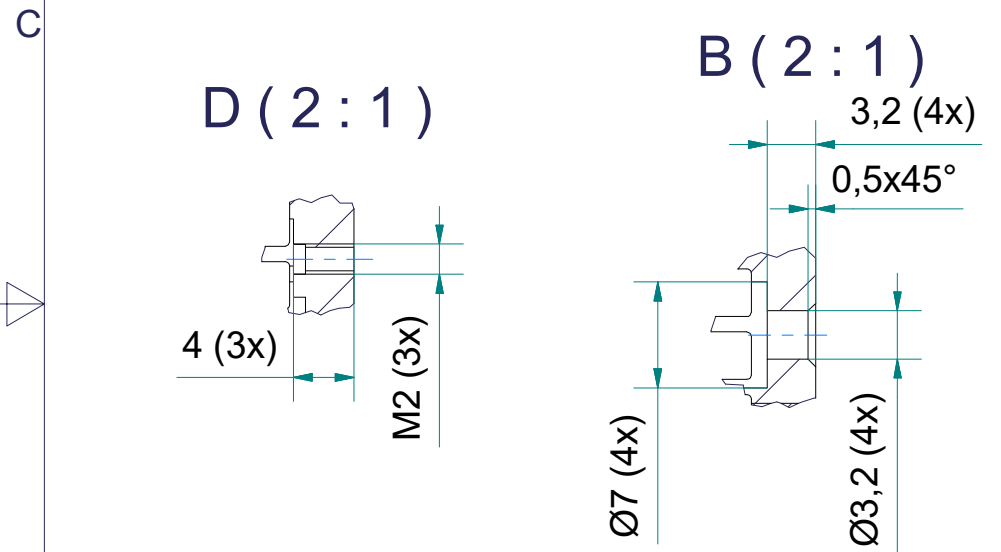
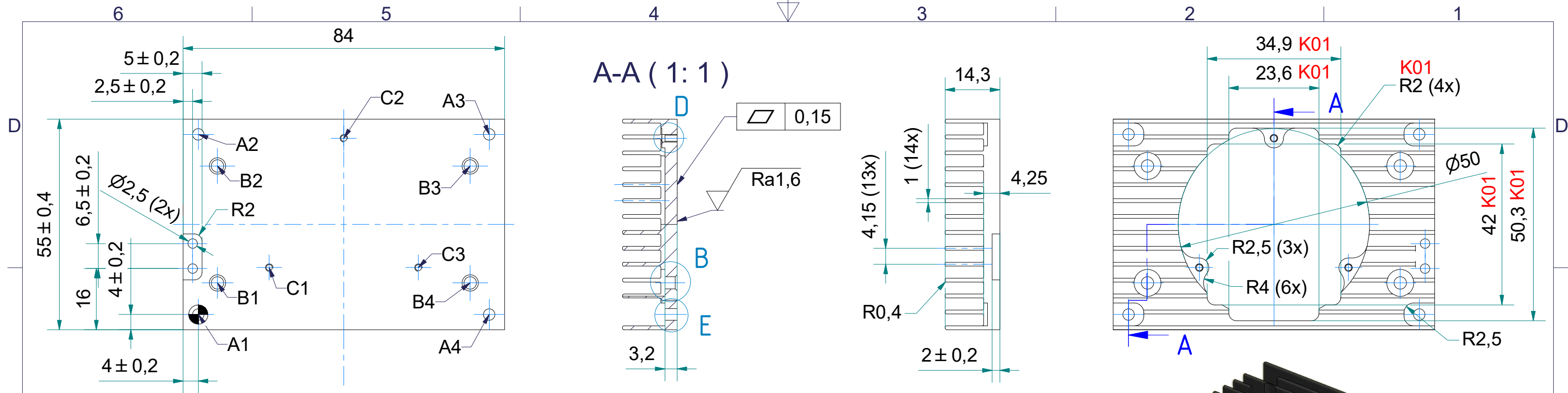
U ( 2 : 1 )  
cable of fan is fixed with cable tie! cables must be covered by PVC tube in this area!

the cable tie is not allowed to protrude the contact surface. Thickness of cable tie: 1mm

| Tolerance class<br>DIN ISO 2768 | straightness and flatness<br>nominal dimensions ranges in mm |          |           |            |             |              | perpendicularity<br>nominal dimensions ranges in mm (shorter angle leg) |            |             |              | symmetry<br>nominal dimensions ranges in mm (shorter feature) |            |             |              | run  |
|---------------------------------|--|----------|-----------|------------|-------------|--------------|---|------------|-------------|--------------|---|------------|-------------|--------------|------|
|                                 | up to 10   | 10 to 30 | 30 to 100 | 100 to 300 | 300 to 1000 | 1000 to 3000 | up to 100   | 100 to 300 | 300 to 1000 | 1000 to 3000 | up to 100   | 100 to 300 | 300 to 1000 | 1000 to 3000 |      |
| H                               | 0.02   | 0.05     | 0.10      | 0.20       | 0.30        | 0.40         | 0.20  | 0.30       | 0.40        | 0.50         | 0.50  |            |             |              | 0.10 |
| K                               | 0.05   | 0.10     | 0.20      | 0.40       | 0.60        | 0.80         | 0.40  | 0.60       | 0.80        | 1.00         | 0.60  |            | 0.80        | 1.00         | 0.20 |
| L                               | 0.10   | 0.20     | 0.40      | 0.80       | 1.20        | 1.60         | 0.60  | 1.00       | 1.50        | 2.00         | 0.60  | 1.00       | 1.50        | 2.00         | 0.50 |

|                                    |  |  |  |  |   |  |                    |  |   |  |                     |  |
|------------------------------------|--|--|--|--|---|--|--------------------|--|---|--|---------------------|--|
| <b>EKL AG &gt;CONFIDENTIAL&lt;</b> |  |  |  |  |   |  |                    |  |   |  |                     |  |
| All dimensions are in [mm]         |  |  |  |  |   |  |                    |  |   |  |                     |  |
| Material:                          |  |  |  |  | general tolerances                                      |  | degree of accuracy |  | mass ~ 95g  |  | complying with RoHS |  |
| Surface:                           |  |  |  |  | machining dimensions:<br>DIN ISO 2768mK                 |  | DIN ISO 2768       |  | 0.5 to 3  |  |                     |  |
|                                    |  |  |  |  | extrusion dimensions:<br>DIN EN12020-2                  |  | f (fine)           |  | to 6  |  |                     |  |
|                                    |  |  |  |  | diecasting dimensions:<br>DIN1688-4 GTA14               |  | m (middle)         |  | to 30   |  |                     |  |
|                                    |  |  |  |  |   |  | c (coarse)         |  | to 120  |  |                     |  |
|                                    |  |  |  |  |   |  |                    |  | to 400  |  |                     |  |
|                                    |  |  |  |  |   |  |                    |  | to 1000   |  |                     |  |
|                                    |  |  |  |  |   |  |                    |  | to 2000   |  |                     |  |
|                                    |  |  |  |  | Date  |  | Name               |  | Part.- No.:   |  | Scale               |  |
|                                    |  |  |  |  | 09.11.2016  |  | A.Netzer           |  | 83300000530_K01   |  | 1,5:1               |  |
|                                    |  |  |  |  | 20.03.2018  |  | A.Rauh             |  | Heatspreader Alu, aktiv mit Lüfter, schwarz eloxiert, SC102, ev |  | 5 of 7<br>A3        |  |
|                                    |  |  |  |  | 20.03.2018  |  | A.Rauh             |  |   |  |                     |  |
| K01                                |  |  |  |  | PCN_2018-03-15_DW_20090: fan cutout and sticker changed |  | 20.03.18           |  | AN  |  |                     |  |
| Status                             |  |  |  |  | Modifications   |  | Date               |  | Name  |  |                     |  |





all dimensions of coordinate dimension have a tolerance of  $\pm 0,2\text{mm}$

bore table

| hole | x-dim | y-dim | details        |
|------|-------|-------|----------------|
| A1   | 0     | 0     | see detail "E" |
| A2   | 0     | 47    |                |
| A3   | 76    | 47    |                |
| A4   | 76    | 0     |                |
| B1   | 5     | 8,25  | see detail "B" |
| B2   | 5     | 38,75 |                |
| B3   | 71,04 | 38,75 |                |
| B4   | 71,04 | 8,25  |                |
| C1   | 18,51 | 12,25 | see detail "D" |
| C2   | 38    | 46    |                |
| C3   | 57,49 | 12,25 |                |

Extruded Profile:  
According to DIN EN 12020-2  
(all Radii R=0,8mm)  
If flatness and roughness could be made  
by extrusion it is OK - If not the manufacturer  
has to define a machining allowance in tooling.

| Tolerance class<br>DIN ISO 2768 | straightness and flatness<br>nominal dimensions ranges in mm |          |           |            |             |              | perpendicularity<br>nominal dimensions ranges in mm<br>(shorter angle leg) |            |             |              | symmetry<br>nominal dimensions ranges in mm<br>(shorter feature) |            |             |              | run  |
|---------------------------------|--|----------|-----------|------------|-------------|--------------|--|------------|-------------|--------------|--|------------|-------------|--------------|------|
|                                 | up to 10   | 10 to 30 | 30 to 100 | 100 to 300 | 300 to 1000 | 1000 to 3000 | up to 100  | 100 to 300 | 300 to 1000 | 1000 to 3000 | up to 100  | 100 to 300 | 300 to 1000 | 1000 to 3000 |      |
| H                               | 0.02   | 0.05     | 0.10      | 0.20       | 0.30        | 0.40         | 0.20   | 0.30       | 0.40        | 0.50         | 0.50   |            |             |              | 0.10 |
| K                               | 0.05   | 0.10     | 0.20      | 0.40       | 0.60        | 0.80         | 0.40   | 0.60       | 0.80        | 1.00         | 0.60   |            | 0.80        | 1.00         | 0.20 |
| L                               | 0.10   | 0.20     | 0.40      | 0.80       | 1.20        | 1.60         | 0.60   | 1.00       | 1.50        | 2.00         | 0.60   | 1.00       | 1.50        | 2.00         | 0.50 |

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All dimensions are in [mm]

Material: **AL6063-T5**

Surface: **black anodized**

mass ~ 63g

complying with RoHS

general tolerances  
machining dimensions: DIN ISO 2768mK  
extrusion dimensions: DIN EN12020-2  
diecasting dimensions: DIN1688-4 GTA14

degree of accuracy DIN ISO 2768

|            | 0.5 to 3   | to 6       | to 30      | to 120     | to 400     | to 1000    | to 2000    |
|------------|------------|------------|------------|------------|------------|------------|------------|
| f (fine)   | $\pm 0.05$ | $\pm 0.05$ | $\pm 0.10$ | $\pm 0.15$ | $\pm 0.20$ | $\pm 0.30$ | $\pm 0.5$  |
| m (middle) | $\pm 0.10$ | $\pm 0.10$ | $\pm 0.20$ | $\pm 0.30$ | $\pm 0.50$ | $\pm 0.80$ | $\pm 1.20$ |
| c (coarse) | $\pm 0.20$ | $\pm 0.30$ | $\pm 0.50$ | $\pm 0.80$ | $\pm 1.20$ | $\pm 2$    | $\pm 3$    |

| Date       | Name     |
|------------|----------|
| 09.11.2016 | A.Netzer |
| 20.03.2018 | A.Rauh   |
| 20.03.2018 | A.Rauh   |

Part.- No.: **83300000530\_K01**

Scale: **1:1**

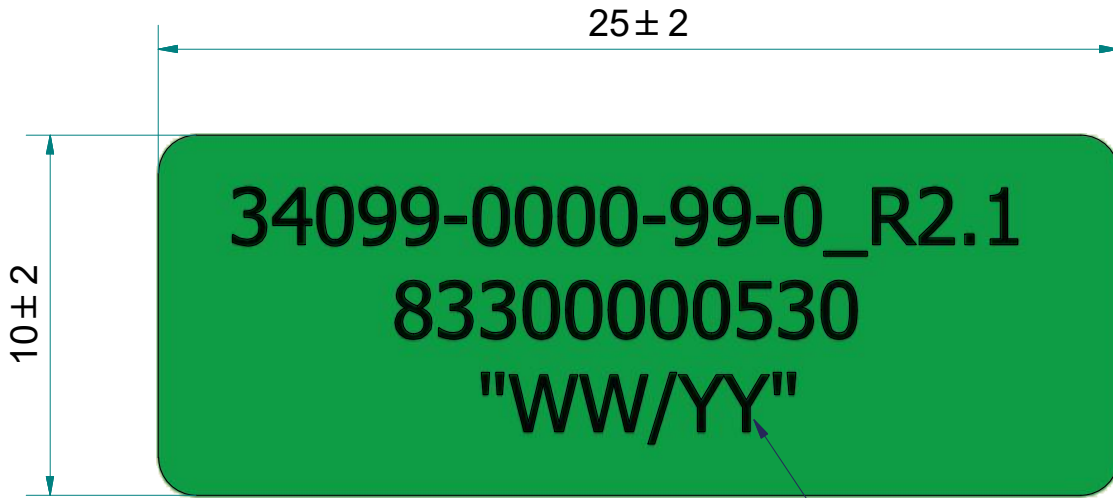
Heatspreader Alu, aktiv mit Lüfter, schwarz eloxiert, SC102, ev

6 of 7  
A3

Status: K01  
Modifications: PCN\_2018-03-15\_DW\_20090: fan cutout and sticker changed  
Date: 20.03.18  
Name: AN

**EKL** electronics cooling  
Nadlerstraße 10  
88299 Leutkirch  
07561 / 9837-0

K01

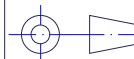


Datecode:  
 WW: production week  
 YY: production year

| Tolerance class<br>DIN ISO 2768 | straightness and flatness<br>nominal dimensions ranges in mm |          |           |            |             |              | perpendicularity<br>nominal dimensions ranges in mm (shorter angle leg) |            |             |              | symmetry<br>nominal dimensions ranges in mm (shorter feature) |            |             |              | run  |
|---------------------------------|--|----------|-----------|------------|-------------|--------------|---|------------|-------------|--------------|---|------------|-------------|--------------|------|
|                                 | up to 10   | 10 to 30 | 30 to 100 | 100 to 300 | 300 to 1000 | 1000 to 3000 | up to 100   | 100 to 300 | 300 to 1000 | 1000 to 3000 | up to 100   | 100 to 300 | 300 to 1000 | 1000 to 3000 |      |
| H                               | 0.02   | 0.05     | 0.10      | 0.20       | 0.30        | 0.40         | 0.20  | 0.30       | 0.40        | 0.50         | 0.50  |            |             |              | 0.10 |
| K                               | 0.05   | 0.10     | 0.20      | 0.40       | 0.60        | 0.80         | 0.40  | 0.60       | 0.80        | 1.00         | 0.60  |            | 0.80        | 1.00         | 0.20 |
| L                               | 0.10   | 0.20     | 0.40      | 0.80       | 1.20        | 1.60         | 0.60  | 1.00       | 1.50        | 2.00         | 0.60  | 1.00       | 1.50        | 2.00         | 0.50 |

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All dimensions are in [mm]



mass ~

complying with RoHS

|           |   |          |   |  |   |  |          |       |       |        |        |         |          |     |  |
|-----------|---|----------|---|--|---|--|----------|-------|-------|--------|--------|---------|----------|-----|--|
| Material: | sticker (green)   |          | general tolerances                        |  | degree of accuracy<br>DIN ISO 2768                              |  | 0.5 to 3 | to 6  | to 30 | to 120 | to 400 | to 1000 | to 2000  |     |  |
| Surface:  | backside self adhesive                                  |          | machining dimensions:<br>DIN ISO 2768mK   |  | f (fine)  |  | ±0.05    | ±0.05 | ±0.10 | ±0.15  | ±0.20  | ±0.30   | ±0.5     |     |  |
|           |   |          | extrusion dimensions:<br>DIN EN12020-2    |  | m (middle)  |  | ±0.10    | ±0.10 | ±0.20 | ±0.30  | ±0.50  | ±0.80   | ±1.20    |     |  |
|           |   |          | diecasting dimensions:<br>DIN1688-4 GTA14 |  | c (coarse)  |  | ±0.20    | ±0.30 | ±0.50 | ±0.80  | ±1.20  | ±2      | ±3       |     |  |
|           |   |          | Date                                      | Name   | Part.- No.: 83300000530_K01                                     |  |          |       |       |        |        |         | Scale    |     |  |
|           |   |          | Designer                                  | 09.11.2016   |   |  |          |       |       |        |        |         | A.Netzer | 5:1 |  |
|           |   |          | Checked                                   | 20.03.2018   |   |  |          |       |       |        |        |         | A.Rauh   |     |  |
|           |   |          | Enabled                                   | 20.03.2018   |   |  |          |       |       |        |        |         | A.Rauh   |     |  |
|           |   |          |   |  | Heatspreader Alu, aktiv mit Lüfter, schwarz eloxiert, SC102, ev |  |          |       |       |        |        |         | 7 of 7   |     |  |
| K01       | PCN_2018-03-15_DW_20090: fan cutout and sticker changed | 20.03.18 | AN  | Nadlerstraße 10<br>88299 Leutkirch<br>07561 / 9837-0 |   |  |          |       |       |        |        |         | A4       |     |  |
| Status    | Modifications   | Date     | Name                                      |  |   |  |          |       |       |        |        |         |          |     |  |