

UVC DESINFECTION SYSTEM DVGW 1 AF45 T

TECHNICAL DATE SHEET

page 1/2

UVC single-lamp system - COMPACT T

| SYSTEM TYPE | | | 1 AF45 T |
|--|--------------|----------|-----------------------------|
| OTOTEM TITE | | | 1 71 40 1 |
| Product | | | AQUAFIDES |
| Manufacturer | | | AQUAFIDES |
| DVGW type approval registry number - W294-2 (01.06.2006) OPERATING RANGE | | | DW-9181BU0073 |
| | | | 1 AF45 T |
| Flow rate certified (DVGW W294-2) | from - up to | m³/h | 1,45 - 3,45 |
| Interpolation between the test points allowed | | | yes |
| Head loss flow-max certified (without geodetical height) bar | | | 0,032 |
| Fluenz - biodosimetric (W294-2) J/m² | | | 400 |
| Type approval according DVGW W294-2 (01. | | | ja |
| Tr100 @ 254nm | from - up to | % | 10 - 100 |
| Tr50 @ 254nm | from - up to | % | 31,6 - 100 |
| Tr10 @ 254nm | from - up to | % | 79,4 - 100 |
| SSK @ 254nm | from - up to | m-1 | 10 - 0 |
| Temperature of process water* | from - up to | °C | 0 - 40 |
| CONTROL - CABINET | | | 1 AF45 T |
| Time | | | DigiOus |
| Туре | | | DigiSys Compact |
| | | | 45 - 90 |
| System design | | | Bus-RS485 |
| Control mode | | | digital |
| Control data and software update access | | | USB |
| Software service and settings via laptop | | | yes |
| , , | | | 4 |
| | | | 5 |
| Control button for the operation of the system button Product (control-cabinet) | | | Rolec |
| Material (control-cabinet) | | | aluminium |
| Colour (control-cabinet) | grey | RAL | 7040 |
| Dimensions | width | mm | 330 |
| Billiendiens | height | mm | 200 |
| | depth | mm | 120 |
| Weight | черит | kg | 4,9 |
| Operating voltage (nominal voltage) | | V / Hz | 230 / 50 |
| Operating connection | | V / I IZ | 1L / N / PE |
| Total consumed power (normal operation) | | W | 55 |
| Power factor (normal operation) | | cos φ | 0,99 |
| Current load per phase (by nominal voltage) | max. | Α | 0,2 |
| Protection class | max. | IP | 65 |
| Feed line fuse (data for cutout type D) | | pc x A | 1 x 13 |
| UVC lamp cable length (control-cabinet/reactor | or) | m pc x A | 4 |
| Power line cable length (control-cabinet/power | | m | 2.5 |
| Environmental temperature control-cabinet | si piug) | °C | 5 - 35 |
| EVG ELECTRONIC BALLAST | | | 1 AF45 T |
| | | | |
| Type | | | Compact 45 -90 |
| Design EVG | | | combined with controll mode |
| Number of EVG's pcs | | | 1 |
| UVC lamps per EVG | | pcs | 1 |
| System design | | · | Bus-RS485 |
| Control mode | | | digital |
| UVC power line regulation % | | | 50 - 120 |
| Overall efficiency (normal operation EVG and | UVC lamp) | % | ≥ 90 |
| | | | |



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page 2/2

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| IRRADIATION CHAMBER (IC) | | | 1 AF45 T |
|---|-------------------|--|--|
| Irradiation chamber connection | | mm | R 1" |
| Connecting dimensions acc. Norm (flange made of compressed plate PN | | | DIN 2999 (tapered) |
| Design - lay-out inlet to outlet flange | · · | · | Z - design |
| Irradiation chamber | horizontal | | yes |
| possible fitting positions | vertical | | yes |
| | reverse | (UVC lamp) | yes |
| Material water-swept parts | | | stainless steel |
| Material number | | | 1.4404 |
| Material water-swept seals | O-rings | | EPDM |
| Dimensions | width | mm | 265 |
| | height (length) | | 634 |
| | depth | mm | 129 |
| | ED Ø | mm | 129 |
| Height (length) IC including disassembling of | | | 1.312 |
| Height (length) IC including disassembling of the quartz tube mm | | | |
| Quartz tubes flanged with adapter | ED Ø | mm | 28 |
| | length | mm | 643 |
| Number of quartz tubes | | pcs | 1 |
| Weight without medium | approx. | kg | 8 |
| Weight with medium | approx. | kg | 15 |
| Irradiation chamber volume | approx. | I | 7 |
| Drain / vent (stainless steel ball valves) | | | G 1/4" |
| Irradiation chamber protection class | | IP | 65 |
| Operating pressure (maximal) | | bar | 16 |
| UVC LAMP | | | 1 AF45 T |
| Туре | | | AF45 |
| Product / Manufacturer | | | AQUAFIDES |
| Number of UVC lamps | | pcs | 1 |
| UVC lamp kind | | | low pressure |
| UVC lamp power (Watt UVC per lamp - new lamp) | | | 15.0 |
| | | | • |
| UVC lamp power (Watt UVC after 8.760 runi | ning nours per ia | 10,5 | |
| UVC lamp power @ 253,7 nm % | | | > 0.5 |
| | | | ≥ 85 |
| UVC lamp wavelength @ ≤ 240 nm | | % | filtrated |
| UVC lamp wavelength @ ≤ 240 nm Power consumption per UVC lamp (including | • | % W | filtrated 55 |
| UVC lamp wavelength @ ≤ 240 nm Power consumption per UVC lamp (including UVC lamp currentconsumption per UVC lamp | • | W t A | filtrated 55 0,75 |
| UVC lamp wavelength @ ≤ 240 nm Power consumption per UVC lamp (including UVC lamp currentconsumption per UVC lam UVC lamp connection | • | % W | filtrated 55 |
| UVC lamp wavelength @ ≤ 240 nm Power consumption per UVC lamp (including UVC lamp currentconsumption per UVC lamp | • | W t A | filtrated 55 0,75 |
| UVC lamp wavelength @ ≤ 240 nm Power consumption per UVC lamp (including UVC lamp currentconsumption per UVC lam UVC lamp connection | • | % W t A special | filtrated 55 0,75 4-pin |
| UVC lamp wavelength @ ≤ 240 nm Power consumption per UVC lamp (including UVC lamp currentconsumption per UVC lam UVC lamp connection Lamp service life ** UVC SENSORSYSTEM | • | % W t A special | filtrated 55 0,75 4-pin 10.000 |
| UVC lamp wavelength @ ≤ 240 nm Power consumption per UVC lamp (including UVC lamp currentconsumption per UVC lam UVC lamp connection Lamp service life ** UVC SENSORSYSTEM Type | • | W t A special hours | filtrated 55 0,75 4-pin 10.000 |
| UVC lamp wavelength @ ≤ 240 nm Power consumption per UVC lamp (including UVC lamp currentconsumption per UVC lam UVC lamp connection Lamp service life ** UVC SENSORSYSTEM Type Numbers of UVC sensors | • | % W t A special | filtrated 55 0,75 4-pin 10.000 1 AF45 T DigiNorm 1 |
| UVC lamp wavelength @ ≤ 240 nm Power consumption per UVC lamp (including UVC lamp currentconsumption per UVC lam UVC lamp connection Lamp service life ** UVC SENSORSYSTEM Type Numbers of UVC sensors Design according ÖNORM M5873-1D | • | W t A special hours | filtrated 55 0,75 4-pin 10.000 1 AF45 T DigiNorm 1 yes |
| UVC lamp wavelength @ ≤ 240 nm Power consumption per UVC lamp (including UVC lamp currentconsumption per UVC lam UVC lamp connection Lamp service life ** UVC SENSORSYSTEM Type Numbers of UVC sensors Design according ÖNORM M5873-1D Type tested according ÖNORM M5873-1D | p (normal operat | W t A special hours | filtrated 55 0,75 4-pin 10.000 1 AF45 T DigiNorm 1 yes yes |
| UVC lamp wavelength @ ≤ 240 nm Power consumption per UVC lamp (including UVC lamp currentconsumption per UVC lam UVC lamp connection Lamp service life ** UVC SENSORSYSTEM Type Numbers of UVC sensors Design according ÖNORM M5873-1D Type tested according ÖNORM M5873-1D Recalibration according ÖNORM M5873-1D | p (normal operat | W t A special hours | filtrated 55 0,75 4-pin 10.000 1 AF45 T DigiNorm 1 yes yes yes |
| UVC lamp wavelength @ ≤ 240 nm Power consumption per UVC lamp (including UVC lamp currentconsumption per UVC lam UVC lamp connection Lamp service life ** UVC SENSORSYSTEM Type Numbers of UVC sensors Design according ÖNORM M5873-1D Type tested according ÖNORM M5873-1D Recalibration according ÖNORM M 5873-1D Calibration according ÖNORM M 5873-1D | p (normal operat | W t A special hours pc | filtrated 55 0,75 4-pin 10.000 1 AF45 T DigiNorm 1 yes yes yes yes yes |
| UVC lamp wavelength @ ≤ 240 nm Power consumption per UVC lamp (including UVC lamp currentconsumption per UVC lam UVC lamp connection Lamp service life ** UVC SENSORSYSTEM Type Numbers of UVC sensors Design according ÖNORM M5873-1D Type tested according ÖNORM M5873-1D Recalibration according ÖNORM M 5873-1D Calibration according ÖNORM M 5873-1D Recalibration time period | p (normal operat | W t A special hours | filtrated 55 0,75 4-pin 10.000 1 AF45 T DigiNorm 1 yes yes yes yes yes yes 1 |
| UVC lamp wavelength @ ≤ 240 nm Power consumption per UVC lamp (including UVC lamp currentconsumption per UVC lam UVC lamp connection Lamp service life ** UVC SENSORSYSTEM Type Numbers of UVC sensors Design according ÖNORM M5873-1D Type tested according ÖNORM M5873-1D Recalibration according ÖNORM M 5873-1D Calibration according ÖNORM M 5873-1D Recalibration time period System design UVC sensor | p (normal operat | W t A special hours pc | filtrated 55 0,75 4-pin 10.000 1 AF45 T DigiNorm 1 yes yes yes yes yes yes 1 Bus-RS485 |
| UVC lamp wavelength @ ≤ 240 nm Power consumption per UVC lamp (including UVC lamp currentconsumption per UVC lam UVC lamp connection Lamp service life ** UVC SENSORSYSTEM Type Numbers of UVC sensors Design according ÖNORM M5873-1D Type tested according ÖNORM M5873-1D Recalibration according ÖNORM M5873-1D Calibration according ÖNORM M 5873-1D Recalibration time period System design UVC sensor Control mode | p (normal operat | W t A special hours pc year | filtrated 55 0,75 4-pin 10.000 1 AF45 T DigiNorm 1 yes yes yes yes yes yes 1 Bus-RS485 digital |
| UVC lamp wavelength @ ≤ 240 nm Power consumption per UVC lamp (including UVC lamp currentconsumption per UVC lam UVC lamp connection Lamp service life ** UVC SENSORSYSTEM Type Numbers of UVC sensors Design according ÖNORM M5873-1D Type tested according ÖNORM M5873-1D Recalibration according ÖNORM M5873-1D Calibration according ÖNORM M 5873-1D Recalibration time period System design UVC sensor Control mode UV measurement range | p (normal operat | W t A special hours pc year | filtrated 55 0,75 4-pin 10.000 1 AF45 T DigiNorm 1 yes yes yes yes yes 1 Bus-RS485 digital 2 - 500 |
| UVC lamp wavelength @ ≤ 240 nm Power consumption per UVC lamp (including UVC lamp currentconsumption per UVC lam UVC lamp connection Lamp service life ** UVC SENSORSYSTEM Type Numbers of UVC sensors Design according ÖNORM M5873-1D Type tested according ÖNORM M5873-1D Recalibration according ÖNORM M5873-1D Calibration according ÖNORM M 5873-1D Recalibration time period System design UVC sensor Control mode UV measurement range Output signal (switchable) | p (normal operat | w t A special hours pc year W/m² mA | filtrated 55 0,75 4-pin 10.000 1 AF45 T DigiNorm 1 yes yes yes yes yes 1 Bus-RS485 digital 2 - 500 0/4 - 20 |
| UVC lamp wavelength @ ≤ 240 nm Power consumption per UVC lamp (including UVC lamp currentconsumption per UVC lam UVC lamp currentconsumption per UVC lam UVC lamp connection Lamp service life ** UVC SENSORSYSTEM Type Numbers of UVC sensors Design according ÖNORM M5873-1D Type tested according ÖNORM M5873-1D Recalibration according ÖNORM M5873-1D Recalibration according ÖNORM M 5873-1D Recalibration time period System design UVC sensor Control mode UV measurement range Output signal (switchable) Exactness of the measurements | p (normal operat | w t A special hours pc year W/m² mA % | filtrated 55 0,75 4-pin 10.000 1 AF45 T DigiNorm 1 yes yes yes yes 1 Bus-RS485 digital 2 - 500 0/4 - 20 ± 2 |
| UVC lamp wavelength @ ≤ 240 nm Power consumption per UVC lamp (including UVC lamp currentconsumption per UVC lam UVC lamp currentconsumption per UVC lam UVC lamp connection Lamp service life ** UVC SENSORSYSTEM Type Numbers of UVC sensors Design according ÖNORM M5873-1D Type tested according ÖNORM M5873-1D Recalibration according ÖNORM M5873-1D Recalibration according ÖNORM M 5873-1D Recalibration time period System design UVC sensor Control mode UV measurement range Output signal (switchable) Exactness of the measurements Sensitive @ 254 nm | p (normal operat | w t A special hours pc year W/m² mA % % | filtrated 55 0,75 4-pin 10.000 1 AF45 T DigiNorm 1 yes yes yes yes yes 1 Bus-RS485 digital 2 - 500 0/4 - 20 ± 2 ≥ 99 |
| UVC lamp wavelength @ ≤ 240 nm Power consumption per UVC lamp (including UVC lamp currentconsumption per UVC lam UVC lamp currentconsumption per UVC lam UVC lamp connection Lamp service life ** UVC SENSORSYSTEM Type Numbers of UVC sensors Design according ÖNORM M5873-1D Type tested according ÖNORM M5873-1D Recalibration according ÖNORM M5873-1D Recalibration according ÖNORM M 5873-1D Recalibration time period System design UVC sensor Control mode UV measurement range Output signal (switchable) Exactness of the measurements | p (normal operat | w t A special hours pc year W/m² mA % | filtrated 55 0,75 4-pin 10.000 1 AF45 T DigiNorm 1 yes yes yes yes 1 Bus-RS485 digital 2 - 500 0/4 - 20 ± 2 |

^{*} Medium temperature: in connection with the disinfection performance – please absolutely taking into account at dimensioning the plants

Version 6 / 05.03.2012 Seite 2 von 2 Friedrich Stadler

^{**} Lamp quarantee and usage agreements are mentioned in the general Terms and Conditions of UVC lamps