

### TECHNICAL DATE SHEET

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### UVC single-lamp system - COMPACT T

SYSTEM TYPE			1 AF90 T
Product			AQUAFIDES
Manufacturer			AQUAFIDES
ÖVGW registry number			W 1.569
OPERATING RANGE			1 AF90 T
Flow rate certified (ÖNORM M 5873-1D)	from - up to	m³/h	2,65 - 9,45
Head loss flow-max certified (without geodetical height)		bar	0,038
Fluenz - biososimetric		J/m²	400
Type tested according ÖNORM M 5873-1D			yes
Tr100 @ 254nm	from - up to	%	5 - 100
Tr50 @ 254nm	from - up to	%	22,4 - 100
Tr10 @ 254nm	from - up to	%	74,1 - 100
SSK @ 254nm	from - up to	m-1	13 - 0
Temperature of process water*	from - up to	°C	0 - 40
CONTROL - CABINET			1 AF90 T
Type			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
Control display multi 3-colours (green, yellow and red)		lines	4
Control button for the operation of the system		button	5
Product (control-cabinet)			Rolec
Material (control-cabinet)			aluminium
Colour (control-cabinet)	grey	RAL	7040
Dimensions	width	mm	330
	height	mm	200
	depth	mm	120
Weight		kg	4,9
Operating voltage (nominal voltage)		V / Hz	230 / 50
Operating connection			1L / N / PE
Total consumed power (normal operation)		W	95
Power factor (normal operation)		cos φ	0,99
Current load per phase (by nominal voltage)	max.	A	0,4
Protection class			IP 65
Feed line fuse (data for cutout type D)		pc x A	1 x 13
UVC lamp cable length (control-cabinet/reactor)		m	4
Power line cable length (control-cabinet/power plug)		m	2,5
Environmental temperature control-cabinet		°C	5 - 35
EVG ELECTRONIC BALLAST			1 AF90 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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IRRADIATION CHAMBER (IC)			1 AF90 T
Irradiation chamber connection		mm	R 6/4"
Connecting dimensions acc. Norm (flange made of compressed plate PN)			DIN 2999 (tapered)
Design - lay-out inlet to outlet flange			Z - design
Irradiation chamber possible fitting positions	horizontal		yes
	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)	mm	1.084
	depth	mm	129
	ED Ø	mm	129
Height (length) IC including disassembling of the quartz tube		mm	2.212
Quartz tubes flanged with adapter	ED Ø	mm	28
	length	mm	1.093
Number of quartz tubes		pcs	1
Weight without medium		approx. kg	11
Weight with medium		approx. kg	23
Irradiation chamber volume		approx. l	12
Drain / vent (stainless steel ball valves)			G 1/4"
Irradiation chamber protection class		IP	65
Operating pressure (maximal)		bar	16
UVC LAMP			1 AF90 T
Type			AF90
Product / Manufacturer			AQUAFIDES
Number of UVC lamps		pcs	1
UVC lamp kind			low pressure
UVC lamp power (Watt UVC per lamp - new lamp)			29,3
UVC lamp power (Watt UVC after 8.760 running hours per lamp) W (UVC)			20,5
UVC lamp power @ 253,7 nm		%	≥ 85
UVC lamp wavelength @ ≤ 240 nm			filtrated
Power consumption per UVC lamp (including EVG)		W	95
UVC lamp currentconsumption per UVC lamp (normal operation)		A	0,75
UVC lamp connection		special	4-pin
Lamp service life **		hours	10.000
UVC SENSORSYSTEM			1 AF90 T
Type			DigiNorm
Numbers of UVC sensors		pc	1
Design according ÖNORM M5873-1D			yes
Type tested according ÖNORM M5873-1D			yes
Recalibration according ÖNORM M5873-1D			yes
Calibration according ÖNORM M 5873-1D			yes
Recalibration time period		year	1
System design UVC sensor			Bus-RS485
Control mode			digital
UV measurement range		W/m <sup>2</sup>	2 - 500
Output signal (switchable)		mA	0/4 - 20
Exactness of the measurements		%	± 2
Sensitive @ 254 nm		%	≥ 99
Temperature stability		°C	0 - 75
UVC sensor cable length		m	5

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

\*\* Lamp guarantee and usage agreements are mentioned in the general Terms and Conditions of UVC lamps