

### TECHNICAL DATA SHEET

**3 AF400 T**  
Multi-lamp UV system 400 W



System type			3 AF400 T
Manufacturer	AQUAFIDES		
Productfamily	COMPACT T		
Registry number	W 1.577		
Operating range			3 AF400 T
Flow rate certified	from - up to	m <sup>3</sup> /h	0,1 - 193,48
Head loss Q-max certified		bar	0,146
Fluenz - biososimetric (ÖNORM M 5873-1D)		J/m <sup>2</sup>	400
Type tested according ÖNORM M 5873-1D			yes
T <sub>100</sub> (100mm) @ 254nm	from - up to	%	7 - 100
T <sub>50</sub> (50mm) @ 254nm	from - up to	%	26,5 - 100
T <sub>10</sub> (10mm) @ 254nm	from - up to	%	76,6 - 100
SSK @ 254nm	from - up to	m <sup>-1</sup>	11,55 - 0
Temperature of process water <sup>1</sup>	from - up to	°C	0 - 65
Control cabinet			3 AF400 T
Control-cabinet type	DigiSys with SlaveCard 3 AF 300-400		
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)	Rittal AE		
Material (control-cabinet)	steel plate		
Colour (control-cabinet)	RAL 7035 Light gray		
Dimensions	Width	mm	500
	Height	mm	700
	Depth	mm	250
Weight		kg	36,4
Operating voltage (nominal voltage)		V / Hz	230 / 50
Operating connection			1L / N / PE
Total consumed power (normal operation)		W	1.250
Power factor (normal operation)		cos φ	0,99
Current load per phase (by nominal voltage)		A	5,5
Protection class			IP 55
Feed line fuse (data for cutout type D)		pc x A	1 x 16
UVC lamp cable length (control-cabinet/reactor)		m	8
UVC sensor cable length		m	9
Power line cable length (control-cabinet/power plug)			provided by the customer
Environmental temperature control-cabinet		°C	5 - 35
Electronic ballast			3 AF400 T
Type	EVG 300 - 400 3,4 Ampere PH		
Design	EVG	housing	
Number of EVG's	pcs	3	
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		3 AF400 T	
Irradiation chamber connection		DN 150	
Connection	similar	Lap joint flange with welding collar (PN10) or welding rim (PN16)	
Connection Norm (DIN)	similar	EN 1092-1 Type 2 (DIN 2642)	
Design - lay-out inlet to outlet flange		U - shape	
Irradiation chamber possible fitting positions	horizontal	yes	
	vertical	yes	
	reverse UVC lamp	yes	
Material water-swept parts		stainless steel	
Material number according	EN 10088-3	1.4404	
	AISI	316L	
	B.S.	316S11	
Material water-swept seals	O-Ringe	EPDM	
Pressure		PN10/16	
Dimensions	width	mm	364
	height (length)	mm	1.653
	Vessel Ø	mm	256
Centre distance in- and outlet		mm	1.368
Height (length) IC including disassembling of the quartz tube		mm	3.265
Quarz tube flanged	ED Ø	mm	38
	length	mm	1.607
Number of quartz tubes		pcs	3
Weight without medium		kg	64
Weight with medium		kg	120
Irradiation chamber volume		l	56
Vent Valve and Drainage Square Plug			G 1/2"
Sampling Valve at In- and Outlet			G 1/4"
Irradiation chamber protection class			IP 65
Flange drilling		bar	10
UVC Lamp		3 AF400 T	
UVC lamp type		AF400A	
Manufacturer		AQUAFIDES	
Number of UVC lamps	pcs	3	
UVC lamp kind		amalgam	
UVC lamp power (Watt UVC per lamp - new lamp)	W (UVC)	130,7	
UVC lamp power per lamp after 8.760 h	W (UVC)	91,5	
UVC lamp power @ 253,7 nm	%	≥ 85	
UVC lamp wavelength @ ≤ 240 nm		filtrated	
Power consumption per UVC lamp (including EVG)	W	395	
UVC lamp current consumption per UVC lamp (normal operation)	A	3,4	
UVC lamp connection		4-pin	
Expected lamp life time <sup>2</sup>	h	12000	
Temperature of process water <sup>1</sup>	°C	0 - 65	
UVC Sensorsystem		3 AF400 T	
UVC sensortype		DigiNorm	
Numbers of UVC sensors	pc	1	
Design according ÖNORM M 5873-1D		yes	
Type tested according ÖNORM M 5873-1D		yes	
Recalibration according ÖNORM M 5873-1D		yes	
Calibration according ÖNORM M 5873-1D		yes	
Recalibration time period	year	1	
System design UVC sensor		Bus-RS485	
Control mode		digital	
UVC measurement range	Wm <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	

<sup>1</sup>) Medium temperature: in connection with the disinfection performance – please absolutely taking into account at dimensioning the plants

<sup>2</sup>) Lamp guarantee and usage agreements are mentioned in the general Terms and Conditions of UVC lamps