

TECHNICAL DATA SHEET

4 AF400 T
Multi-lamp UV system 400 W



System type			4 AF400 T
Manufacturer	AQUAFIDES		
Productfamily	COMPACT T		
DVGW registry number	DW-9181BU0280		
Operating range			4 AF400 T
Flow rate certified	from - up to	m ³ /h	0,1 - 217
Head loss Q-max certified		bar	0,066
Fluenz - biososimetric (W294-2)		J/m ²	400
Type approval according DVGW W294-2 (01.06.2006)			yes
T ₁₀₀ (100mm) @ 254nm	from - up to	%	10 - 100
T ₅₀ (50mm) @ 254nm	from - up to	%	31,6 - 100
T ₁₀ (10mm) @ 254nm	from - up to	%	79,4 - 100
SSK @ 254nm	from - up to	m ⁻¹	10 - 0
Temperature of process water ¹	from - up to	°C	0 - 65
Control cabinet			4 AF400 T
Control-cabinet type	DigiSys with SlaveCard 4 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	37,8
Operating voltage (nominal voltage)		V / Hz	230 / 50
Operating connection			1L / N / PE
Total consumed power (normal operation)		W	1.650
Power factor (normal operation)		cos φ	0,99
Current load per phase (by nominal voltage)		A	7,3
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 cabel length		m	9
Power line cable length (control-cabinet/power plug)			provided by the customer
Environmental temperature control-cabinet		°C	5 - 35
Electronic ballast			4 AF400 T
Type	EVG 300 - 400 3,4 Ampere PH		
Design	EVG	housing	
Number of EVG´s	pcs	4	
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

TECHNICAL DATA SHEET

4 AF400 T
Multi-lamp UV system 400 W



Irradiation chamber			4 AF400 T
Irradiation chamber connection			DN 200
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	432
	height (length)	mm	1.658
	Vessel Ø	mm	324
Centre distance in- and outlet		mm	1.318
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	4
Weight without medium		kg	79
Weight with medium		kg	195
Irradiation chamber volume		l	116
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			4 AF400 T
UVC lamp type			AF400A
Manufacturer			AQUAFIDES
Number of UVC lamps		pcs	4
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 ²		h	12000
Temperature of process water ¹		°C	0 - 65
UVC Sensorsystem			4 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 ²	2 - 500
Output signal (switchable)		mA	0/4 - 20
Exactness of the measurements		%	± 2
Sensitive @ 254 nm		%	≥ 99
Temperature stability		°C	0 - 75

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

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