TECHNICAL DATA SHEET

4 AF300 T
Multi-lamp UV system 300 W

System type			4 AF300 T
Manufacturer			AQUAFIDES
Productfamily			COMPACT T
DVGW registry number			DW-9181BU0279

Operating range			4 AF300 T
Flow rate certified	from - up to	m³/h	0,1 - 125
Head loss Q-max certified		bar	0,061
Fluenz - biodosimetric (W294-2)		J/m²	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 AF300 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	1.090
Power factor (normal operation)		cos φ	0,99
Current load per phase (by nominal voltage)		A	4,9
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 AF300 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

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Irradiation chamber			4 AF300 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	432
	height (length)	mm	1.203
	Vessel Ø	mm	285
Centre distance in- and outlet		mm	918
Height (length) IC including disassembling of the quartz tube		mm	2.365
Quarz tube flanged	ED Ø	mm	38
	length	mm	1.157
Number of quartz tubes		pcs	4
Weight without medium		kg	58
Weight with medium		kg	141
Irradiation chamber volume		l	83
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 AF300 T
UVC lamp type		AF300A
Manufacturer		AQUAFIDES
Number of UVC lamps	pcs	4
UVC lamp kind		amalgam
UVC lamp power (Watt UVC per lamp - new lamp)	W (UVC)	78,6
UVC lamp power per lamp after 8.760 h	W (UVC)	55
UVC lamp power @ 253,7 nm	%	≥ 85
UVC lamp wavelength @ ≤ 240 nm		filtrated
Power consumption per UVC lamp (including EVG)	W	270
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 AF300 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	Wm²	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 quarantee and usage agreements are mentioned in the general Terms and Conditions of UVC lamps