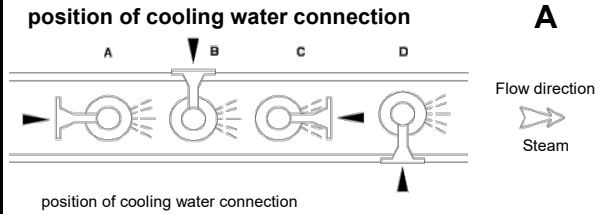


Desuperheater Type 3

1	Customer:		ARTES-ref.-no.:	5504246
2	Plant:		Pos.:	6
3	Location:	Desuperheater 1	Qty.:	1
4	TAG No.:	1 LAE11 AA001	S/N:	3168068.1

5	Pipedesign			
6	Steam Pipe	Ø D [mm] x s [mm]	168,30	x 12,50
7	Thermoshock Pipe	Ø D [mm] x s [mm]		x
8	Cooling Water Pipe	Ø D [mm] x s [mm]	33,70	x 3,20

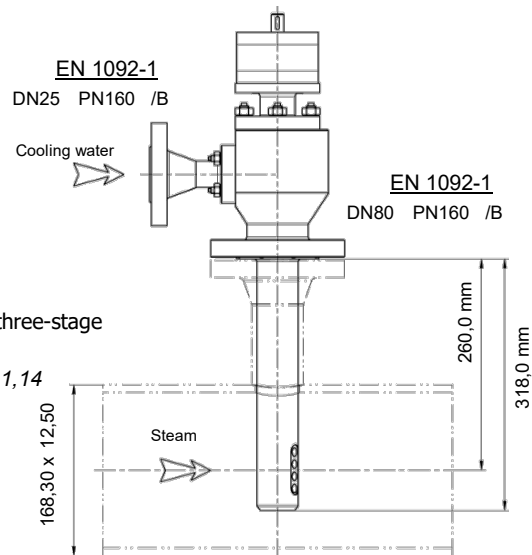
9	Valve Design			
10			steamside	waterside
11			EN 1092-1/B	EN 1092-1/B
12	Nominal Size	DN DN	80	25
13	Nominal Pressure	PN PN	160	160
14	Pressure	[bar(g)]	102	136
15	Temperature	[°C]	450	125
16				



17	Operation Data		Loading Case 1		Loading Case 2		Loading Case 3		Loading Case 4		Loading Case 5		Loading Case 6	
18	Medium:		steam	water	steam	water	steam	water	steam	water	steam	water	steam	water
19	Flow Rate	[t/h]	40,00	0,89	40,00	1,62	40,00	2,80	40,00	3,59		--		--
20	Temp. Inlet	[°C]	390,00	115,00	381,00	115,00	415,00	115,00	432,00	115,00				
21	Temp. Outlet	[°C]	372,00		351,00		358,50		357,80					
22	Pressure	[bar(a)]	89,80	123,00	89,80	120,00	89,80	120,00	89,80	105,00				
23	Flow Speed	[m/s]	19,59	0,44	18,63	0,81	19,65	1,39	19,97	1,79	--	--	--	--
24	K _v - Value	[m³/h]		0,16		0,30		0,52		0,94				

25 **Type Of Valve** Desuperheater metallic sealing

27	Material	
28	Body:	1.7380 (10CrMo9-10)
29	Cooling Water Flange:	1.5415 (16Mo3, 15Mo3)
30	Stem:	1.4122 (X39CrMo17-1), hardened
31	Nozzle Stem:	1.4301 (X5CrNi18-10), hardened
32	Seating:	1.4122 (X39CrMo17-1), hardened
33	Nozzle:	1.4122 (X39CrMo17-1), hardened
34	Seal:	Graphite
35		



36	Valveparameter	
37	Seat Diameter:	[mm] 25
38	Pressure Reduction Steps:	● single-stage ○ double-stage ○ three-stage
39	Number Of Nozzles:	6
40	K _{vs} Valve / Stage2 / Stage3 / Nozzles:	[m³/h] 1,13 -- -- 1,14
41	Characteristic Curve:	equal %
42	x-Length:	[mm] 260,0
43	Offset Δx:	[mm] 0,0
44	LL-Length:	[mm] 318,0
45	max. Δp for actuator:	[bar] 136,0
46	Lance Diameter:	[mm] 71

47	Inspection acc. to	--	Final Inspection	3.1
48	Requirements acc. to:	EN 12952	Confirmation Acc. To DIN	
49	Leakage Rate:	0,01% of K _{vs} -Value	EN 10204	

50	Mounting Instruction	Length of straight outflow pipe	6,0 m
51		Min-Distance to the temperature sensor	12,0 m

52	Actuator	pneumatic	3168049
53	Type:	ProtACT PR263S.10.090.14S36.PRH, single-acting, spring closes	
54		Positioner: Siemens Sipart PS2 - 6DR5011-0NG21-0AA1, incl. ly-Module for position feedback (4 ... 20mA)	
55		Type: 6DR4004-8J; incl. limit transmitter SIA-Module; inductive limit switches; incl.gauge block made of plastic	
56		aluminium block, filter regulator SMC AW30-F02G-B 1/4" incl. pressure gauge	
57		completely piped in stainless steel, air supply: 5,0 bar(g)	

58	Remarks			
59				
60				
61				
62				

63	Revision	0	1	2	3	4	5	6
64	Date:	11.06.2021	16.07.2021	10.09.2021	11.10.2021			
65	Prepared:	F. Lange	H. Jäkel	P. Schüler	P. Schüler			
66	Checked:	H. Jäkel	P. Schüler	F. Exner	R. Feldmann			