

The production data sheet for Plustherm Preheater, Tab 1

Cable data		Cu-Cable $\Delta T = 100^{\circ}\text{C}$ ($T_1 = 20^{\circ}\text{C}$ $T_2 = 120^{\circ}\text{C}$)						Coil
Cable Area mm ²	Cable diameter mm	60 kW	75 kW	100 kW	150 kW	200 kW	300 kW	Cable dia. min. - max. (Standard)
		m/min	m/min	m/min	m/min	m/min	m/min	
10	4.1	55	68	91	136	182	200	D = 6 - 10
16	5.1	48	59	79	119	158	200	
25	6.3	40	50	66	99	132	200	
35	7.5	35	44	59	89	118	178	
50	9	30	37.5	50	75	100	150	
70	10.5	26	33	44	66	88	132	
95	12.5	13	16	21.5	32	43	64	D = 11 - 18
120	14	12.5	15.5	21	31	42	62	
150	15.8	12	15	20	30	40	60	
185	17.5	11.5	14	19	29	38	58	
240	20.3	6.5	8	11	17	22	33	D = 19 - 29
300	22.5	6	7.5	10	15	20	30	
400	26	5.5	7	9	13	18	26	
500	29.1	5	6.5	8.5	12.5	17	25	
630	32.7	3	3.8	5	7.5	10	15	D = 30 - 42
800	36.9	2.8	3.4	4.5	6.8	9	13.5	
1000	41.1	2.5	3.2	4.2	6.4	8.4	13	
1500	50	1.7	2	2.8	4	5.6	8	D = 43 - 55
2000	55	1.5	1.9	2.5	3.8	5	7.5	
3000	70	1	1.3	1.7	2.5	3.4	5	D = 56 - 70



The production data sheet for Plustherm Preheater, Tab 2

Cable data		Cu-Cable $\Delta T = 120^{\circ}\text{C}$ ($T_1 = 20^{\circ}\text{C}$ $T_2 = 140^{\circ}\text{C}$)						Coil
Cable Area mm ²	Cable diameter mm	60 kW	75 kW	100 kW	150 kW	200 kW	300 kW	Cable dia. min. - max. (Standard)
		m/min	m/min	m/min	m/min	m/min	m/min	
10	4.1	49	61	81	132	162	200	D = 6 - 10
16	5.1	42	53	70	105	140	200	
25	6.3	35	44	59	89	118	178	
35	7.5	31	39	52	78	104	156	
50	9	26	33	44	66	88	132	
70	10.5	23	29	39	59	78	118	
95	12.5	11.5	14	19	29	38	58	D = 11 - 18
120	14	11	13.5	18.5	27	37	54	
150	15.8	10.8	13	18	26.5	36	53	
185	17.5	10.2	12.5	17	25	34	51	
240	20.3	6	7.5	10	15	20	30	D = 19 - 29
300	22.5	5.4	6.8	9	13.5	18	27	
400	26	4.8	6	8	12	16	24	
500	29.1	4.5	5.6	7.5	11	15	22	
630	32.7	2.7	3.4	4.5	6.8	9	13.5	D = 30 - 42
800	36.9	2.4	3	4	6	8	12	
1000	41.1	2.3	2.8	3.8	5.7	7.6	11.4	
1500	50	1.5	1.9	2.5	3.7	5	7.5	D = 43 - 55
2000	55	1.3	1.7	2.2	3.3	4.4	6.6	
3000	70	0.9	1.1	1.5	2.3	3	4.6	D = 56 - 70

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The production data sheet for Plustherm Preheater, Tab 3

Cable data		Al-Cable $\Delta T = 100^{\circ}\text{C}$ ($T_1 = 20^{\circ}\text{C}$ $T_2 = 120^{\circ}\text{C}$)						Coil
Cable Area mm ²	Cable diameter mm	60 kW	75 kW	100 kW	150 kW	200 kW	300 kW	Cable dia. min. - max. (Standard)
		m/min	m/min	m/min	m/min	m/min	m/min	
10	4.1	162	200	200	200	200	200	D = 6 - 10
16	5.1	133	166	200	200	200	200	
25	6.3	105	131	174	200	200	200	
35	7.5	89	112	149	200	200	200	
50	9	76	94.5	126	189	200	200	
70	10.5	64	80	107	160	200	200	
95	12.5	34	42	56	84	112	168	D = 11 - 18
120	14	31	38	51	76	102	152	
150	15.8	30	37.5	50	75	100	150	
185	17.5	27	34	45	68	90	136	
240	20.3	16	20	27	40	54	80	D = 19 - 29
300	22.5	15	19	25	38	50	76	
400	26	13	16.5	22	33	44	66	
500	29.1	12.5	16	21	32	42	64	
630	32.7	8	10	13	20	26	39	D = 30 - 42
800	36.9	6.5	8.3	11	16.5	22	33	
1000	41.1	5.7	7	9.5	14.5	19	29	
1500	50	4	5	6.5	9.5	13	19	D = 43 - 55
2000	55	3.3	4	5.5	8	11	17	
3000	70	1.8	2.3	3	4.6	6	9	D = 56 - 70

The production data sheet for Plustherm Preheater, Tab 4

Cable data		Al-Cable $\Delta T = 120^{\circ}\text{C}$ ($T_1 = 20^{\circ}\text{C}$ $T_2 = 140^{\circ}\text{C}$)						Coil
Cable Area mm ²	Cable diameter mm	60 kW	75 kW	100 kW	150 kW	200 kW	300 kW	Cable dia. min. - max. (Standard)
		m/min	m/min	m/min	m/min	m/min	m/min	
10	4.1	135	166	200	200	200	200	D = 6 - 10
16	5.1	115	141	170	200	200	200	
25	6.3	81	101	135	200	200	200	
35	7.5	70	87	116	174	200	200	
50	9	59	73.5	98	147	196	200	
70	10.5	50	62	83	125	166	200	
95	12.5	27	33	44	66	88	132	D = 11 - 18
120	14	24	30	40	60	80	120	
150	15.8	23.5	29	39	58.5	78	117	
185	17.5	21	26	35	52.5	70	105	
240	20.3	12.5	16	21	31.5	42	63	D = 19 - 29
300	22.5	11.5	14.5	19	28.5	38	57	
400	26	10	13	17	25.5	34	51	
500	29.1	9.6	12	16	24	32	48	
630	32.7	6	7.5	10	15	20	30	D = 30 - 42
800	36.9	5	6.5	8.5	13	17	26	
1000	41.1	4.5	5.5	7.5	11.5	15	23	
1500	50	3	3.8	5	7.5	10	15	D = 43 - 55
2000	55	2.5	3.2	4.2	6.3	8.5	12.5	
3000	70	1.5	1.8	2.4	3.6	5	7.2	D = 56 - 70

Pre-heating of conductor for Co-axial cable, Table 5

Pre-heating temperature : about 100 °C (Delta T = 80 °C)

Conductor dia (mm)	Material	Max. speed with 10kW Unit	Max. speed with 20kW Unit
0.7	Copper	100	200
0.8	Copper	100	200
1	Copper	90	180
1.2	Copper	90	180
1.6	Copper	90	180
1.8	Copper	100	200
2.4	Copper	65	130
2.7	Copper	52	104
3.15	Copper	45	90
3.45	Copper	35	70
4.2	Copper	25	50
4.9	Copper	18	36
5.16	Copper	17	35
5.6	Copper	15	30
6.7	Copper	10	20
9 *	copper pipe	17	35
13 *	copper pipe	8	17
17 *	corrugated pipe	5	10

10kW Unit



thickness=1mm
thickness=1mm
thickness=2mm

Pre-heating of conductor for Copper Covered Steel cable, Table 6

Pre-heating temperature : about 100 °C (Delta T = 80 °C)

Conductor dia	Material	Max. speed with	Max. speed with
(mm)	Copper Covered Steel	10kW Unit	20kW Unit
0.7	CCS	200	400
0.8	CCS	200	400
1	CCS	180	360
1.2	CCS	180	360
1.6	CCS	180	360
1.8	CCS	200	400
2.4	CCS	130	260
2.7	CCS	104	208
3.15	CCS	90	180
3.45	CCS	70	140
4.2	CCS	50	100
4.9	CCS	40	90
5.16	CCS	35	70
5.6	CCS	30	60
6.7	CCS	20	40



Pre-heating of conductor for Copper covered alum. cable, Table 7

Pre-heating temperature : about 100 °C (Delta T = 80 °C)

Thickness of copper cladding = 0.07 to 0.1 mm

Conductor dia (mm)	Material Copper covered alum.	Max. speed with 10kW Unit	Max. speed with 20kW Unit
0.7	CCA	200	400
0.8	CCA	200	400
1	CCA	180	360
1.2	CCA	180	360
1.6	CCA	180	360
1.8	CCA	200	400
2.4	CCA	130	260
2.7	CCA	104	208
3.15	CCA	90	180
3.45	CCA	70	140
4.2	CCA	50	100
4.9	CCA	40	90
5.16	CCA	35	70
5.6	CCA	30	60
6.7	CCA	20	40