

### A.1.1 Berechnete energetische Stoffwerte idealer Gase

$\vartheta$ °C	Stickstoff				Sauerstoff			
	$c_p$ kJ/(kg K)	$\bar{c}_p$	$h$ kJ/kg	$s_0$ kJ/(kg K)	$c_p$ kJ/(kg K)	$\bar{c}_p$	$h$ kJ/kg	$s_0$ kJ/(kg K)
-60	1,0392	1,0392	-62,350	-0,2577	0,9105	0,9123	-54,74	-0,2263
-40	1,0391	1,0392	-41,566	-0,1645	0,9115	0,9130	-36,52	-0,1446
-20	1,0391	1,0392	-20,784	-0,0790	0,9129	0,9138	-18,28	-0,0695
0	1,0393	1,0393	0,000	0,0000	0,9148	0,9148	0,00	0,0000
20	1,0396	1,0395	20,789	0,0735	0,9173	0,9160	18,32	0,0647
40	1,0400	1,0396	41,585	0,1421	0,9205	0,9174	36,70	0,1254
60	1,0406	1,0399	62,391	0,2065	0,9243	0,9191	55,15	0,1825
80	1,0413	1,0401	83,209	0,2672	0,9287	0,9209	73,68	0,2365
100	1,0423	1,0405	104,05	0,3246	0,9336	0,9230	92,30	0,2878
150	1,0461	1,0416	156,25	0,4558	0,9477	0,9288	139,32	0,4060
200	1,0519	1,0434	208,69	0,5730	0,9631	0,9354	187,09	0,5127
250	1,0597	1,0459	261,47	0,6790	0,9791	0,9426	235,64	0,6102
300	1,0692	1,0490	314,69	0,7762	0,9948	0,9500	284,99	0,7003
350	1,0799	1,0526	368,41	0,8660	1,0097	0,9575	335,11	0,7842
400	1,0915	1,0567	422,69	0,9498	1,0237	0,9649	385,95	0,8626
450	1,1035	1,0613	477,57	1,0284	1,0367	0,9721	437,46	0,9364
500	1,1156	1,0661	533,04	1,1026	1,0485	0,9792	489,60	1,0061
550	1,1276	1,0711	589,13	1,1729	1,0592	0,9860	542,30	1,0722
600	1,1394	1,0763	645,80	1,2397	1,0690	0,9925	595,51	1,1349
650	1,1507	1,0816	703,06	1,3035	1,0779	0,9987	649,18	1,1947
700	1,1616	1,0870	760,87	1,3645	1,0860	1,0047	703,28	1,2518
750	1,1720	1,0923	819,21	1,4229	1,0934	1,0104	757,77	1,3064
800	1,1817	1,0976	878,05	1,4791	1,1001	1,0158	812,61	1,3587
850	1,1909	1,1028	937,37	1,5331	1,1064	1,0209	867,78	1,4090
900	1,1996	1,1079	997,14	1,5852	1,1121	1,0258	923,24	1,4573
950	1,2077	1,1130	1057,32	1,6354	1,1175	1,0305	978,98	1,5038
950	1,2077	1,1130	1057,32	1,6354	1,1175	1,0305	978,98	1,5038
1000	1,2153	1,1179	1117,90	1,6839	1,1226	1,0350	1034,98	1,5487
1100	1,2290	1,1274	1240,13	1,7764	1,1319	1,0434	1147,72	1,6339
1200	1,2409	1,1364	1363,64	1,8632	1,1405	1,0511	1261,34	1,7138
1300	1,2514	1,1448	1488,27	1,9450	1,1486	1,0583	1375,80	1,7889
1400	1,2606	1,1528	1613,88	2,0224	1,1564	1,0650	1491,05	1,8600
1500	1,2687	1,1602	1740,36	2,0958	1,1640	1,0714	1607,07	1,9273
1600	1,2759	1,1672	1867,60	2,1657	1,1714	1,0774	1723,84	1,9914
1700	1,2824	1,1738	1995,52	2,2322	1,1788	1,0831	1841,35	2,0525
1800	1,2881	1,1800	2124,05	2,2957	1,1861	1,0887	1959,59	2,1110
1900	1,2933	1,1859	2253,12	2,3565	1,1933	1,0940	2078,57	2,1670
2000	1,2980	1,1913	2382,69	2,4148	1,2005	1,0991	2198,26	2,2208
2100	1,3022	1,1965	2512,71	2,4708	1,2077	1,1041	2318,67	2,2727
2200	1,3061	1,2014	2643,13	2,5246	1,2147	1,1090	2439,79	2,3227
2300	1,3097	1,2061	2773,92	2,5765	1,2216	1,1137	2561,61	2,3710
2400	1,3129	1,2104	2905,05	2,6265	1,2284	1,1184	2684,11	2,4177
2500	1,3159	1,2146	3036,50	2,6747	1,2351	1,1229	2807,29	2,4629
2600	1,3187	1,2185	3168,23	2,7214	1,2416	1,1274	2931,12	2,5068
2700	1,3212	1,2223	3300,22	2,7666	1,2479	1,1317	3055,60	2,5494

Die Entropiewerte  $s_0$  gelten beim Normaldruck von  $p_0 = 1,01325$  bar

### A.7.2

## Berechnete energetische Stoffwerte idealer Gase (Fortsetzung 1)

$\vartheta$ °C	Kohlenmonoxid				Kohlendioxid			
	$c_p$ kJ/(kg K)	$\bar{c}_p$ kJ/(kg K)	$h$ kJ/kg	$s_0$ kJ/(kg K)	$c_p$ kJ/(kg K)	$\bar{c}_p$ kJ/(kg K)	$h$ kJ/kg	$s_0$ kJ/(kg K)
-60	1,0392	1,0392	-62,350	-0,2577	0,9105	0,9123	-54,74	-0,2263
-60	1,0390	1,0391	-62,35	-0,2577	0,7501	0,7838	-47,03	-0,1941
-40	1,0390	1,0392	-41,57	-0,1645	0,7726	0,7951	-31,80	-0,1258
-20	1,0392	1,0393	-20,79	-0,0790	0,7952	0,8063	-16,13	-0,0613
0	1,0394	1,0394	0,00	0,0000	0,8173	0,8173	0,00	0,0000
20	1,0399	1,0396	20,79	0,0735	0,8387	0,8280	16,56	0,0585
40	1,0405	1,0399	41,60	0,1421	0,8593	0,8386	33,54	0,1145
60	1,0415	1,0403	62,42	0,2066	0,8791	0,8488	50,93	0,1683
80	1,0427	1,0407	83,26	0,2673	0,8980	0,8588	68,70	0,2201
100	1,0443	1,0413	104,13	0,3248	0,9161	0,8684	86,84	0,2701
150	1,0500	1,0431	156,47	0,4564	0,9580	0,8914	133,72	0,3879
200	1,0581	1,0458	209,16	0,5741	0,9955	0,9129	182,57	0,4970
250	1,0683	1,0493	262,32	0,6809	1,0295	0,9328	233,21	0,5987
300	1,0800	1,0534	316,02	0,7789	1,0602	0,9515	285,46	0,6941
350	1,0927	1,0581	370,33	0,8698	1,0881	0,9691	339,18	0,7840
400	1,1058	1,0632	425,30	0,9546	1,1136	0,9856	394,24	0,8689
450	1,1191	1,0687	480,92	1,0343	1,1369	1,0011	450,51	0,9496
500	1,1321	1,0744	537,20	1,1096	1,1582	1,0158	507,89	1,0263
550	1,1448	1,0802	594,13	1,1809	1,1776	1,0296	566,29	1,0995
600	1,1569	1,0861	651,67	1,2488	1,1954	1,0427	625,63	1,1694
650	1,1684	1,0920	709,81	1,3135	1,2117	1,0551	685,81	1,2365
700	1,1793	1,0979	768,50	1,3754	1,2267	1,0668	746,78	1,3008
750	1,1894	1,1036	827,72	1,4348	1,2404	1,0779	808,46	1,3626
800	1,1989	1,1093	887,43	1,4917	1,2530	1,0885	870,80	1,4221
850	1,2077	1,1148	947,60	1,5465	1,2645	1,0985	933,74	1,4794
900	1,2159	1,1202	1008,19	1,5993	1,2752	1,1080	997,24	1,5347
950	1,2235	1,1255	1069,18	1,6502	1,2850	1,1171	1061,24	1,5881
1000	1,2306	1,1305	1130,54	1,6994	1,2940	1,1257	1125,72	1,6398
1100	1,2433	1,1402	1254,25	1,7929	1,3100	1,1418	1255,94	1,7382
1200	1,2543	1,1493	1379,14	1,8807	1,3237	1,1564	1387,64	1,8308
1300	1,2638	1,1577	1505,05	1,9634	1,3355	1,1697	1520,62	1,9181
1400	1,2722	1,1656	1631,86	2,0416	1,3458	1,1819	1654,69	2,0008
1500	1,2796	1,1730	1759,46	2,1156	1,3547	1,1932	1789,73	2,0792
1600	1,2862	1,1799	1887,76	2,1860	1,3626	1,2035	1925,60	2,1537
1700	1,2921	1,1863	2016,69	2,2531	1,3696	1,2131	2062,21	2,2247
1800	1,2974	1,1923	2146,17	2,3171	1,3758	1,2219	2199,48	2,2926
1900	1,3022	1,1980	2276,16	2,3783	1,3814	1,2302	2337,35	2,3576
2000	1,3066	1,2033	2406,60	2,4370	1,3865	1,2379	2475,74	2,4198
2100	1,3105	1,2083	2537,46	2,4933	1,3911	1,2451	2614,63	2,4796
2200	1,3141	1,2130	2668,69	2,5475	1,3953	1,2518	2753,95	2,5371
2300	1,3173	1,2175	2800,26	2,5997	1,3992	1,2581	2893,68	2,5925
2400	1,3203	1,2217	2932,14	2,6499	1,4029	1,2641	3033,79	2,6459
2500	1,3230	1,2257	3064,31	2,6985	1,4062	1,2697	3174,24	2,6975
2600	1,3254	1,2295	3196,73	2,7454	1,4093	1,2750	3315,02	2,7474
2700	1,3277	1,2331	3329,39	2,7908	1,4123	1,2800	3456,11	2,7956

Die Entropiewerte  $s_0$  gelten beim Normaldruck von  $p_0 = 1,01325$  bar

## A.7.2 Berechnete energetische Stoffwerte idealer Gase (Fortsetzung 2)

$\vartheta$ °C	Schwefeldioxid				Wasserdampf			
	$c_p$ kJ/(kg K)	$\bar{c}_p$	$h$ kJ/kg	$s_0$ kJ/(kg K)	$c_p$ kJ/(kg K)	$\bar{c}_p$	$h$ kJ/kg	$s_0$ kJ/(kg K)
-60	0,5749	0,5913	-35,480	-0,1465	1,8515	1,8547	2389,63	6,3368
-40	0,5858	0,5968	-23,870	-0,0945	1,8533	1,8560	2426,67	6,5029
-20	0,5968	0,6025	-12,050	-0,0458	1,8558	1,8575	2463,76	6,6555
0	0,6079	0,6079	0,000	0,0000	1,8589	1,8589	2500,91	6,7968
20	0,6191	0,6135	12,270	0,0433	1,8629	1,8610	2538,13	6,9282
40	0,6303	0,6190	24,760	0,0846	1,8681	1,8633	2575,44	7,0514
60	0,6415	0,6247	37,480	0,1239	1,8743	1,8658	2612,86	7,1672
80	0,6526	0,6303	50,420	0,1617	1,8816	1,8689	2650,42	7,2767
100	0,6635	0,6358	63,58	0,1979	1,8898	1,8722	2688,13	7,3806
150	0,6897	0,6495	97,42	0,2830	1,9134	1,8819	2783,19	7,6196
200	0,7138	0,6626	132,52	0,3613	1,9402	1,8931	2879,52	7,8348
250	0,7354	0,6750	168,76	0,4341	1,9690	1,9054	2977,25	8,0311
300	0,7546	0,6867	206,02	0,5021	1,9993	1,9185	3076,45	8,2121
350	0,7714	0,6977	244,18	0,5660	2,0308	1,9323	3177,20	8,3807
400	0,7862	0,7078	283,13	0,6261	2,0633	1,9466	3279,55	8,5386
450	0,7992	0,7173	322,77	0,6829	2,0968	1,9614	3383,54	8,6876
500	0,8106	0,7260	363,02	0,7367	2,1310	1,9767	3489,24	8,8290
550	0,8205	0,7342	403,80	0,7878	2,1659	1,9923	3596,66	8,9636
600	0,8293	0,7418	445,06	0,8365	2,2013	2,0082	3705,84	9,0923
650	0,8371	0,7488	486,72	0,8829	2,2371	2,0244	3816,80	9,2159
700	0,8440	0,7554	528,75	0,9272	2,2729	2,0409	3929,55	9,3348
750	0,8502	0,7615	571,11	0,9696	2,3088	2,0576	4044,09	9,4496
800	0,8557	0,7672	613,76	1,0103	2,3446	2,0744	4160,43	9,5606
850	0,8606	0,7726	656,67	1,0494	2,3800	2,0913	4278,54	9,6682
900	0,8651	0,7776	699,81	1,0870	2,4149	2,1083	4398,42	9,7726
950	0,8691	0,7823	743,17	1,1232	2,4494	2,1254	4520,03	9,8741
1000	0,8728	0,7867	786,72	1,1581	2,4831	2,1424	4643,34	9,9729
1100	0,8792	0,7948	874,33	1,2243	2,5483	2,1764	4894,94	10,1631
1200	0,8847	0,8021	962,53	1,2863	2,6101	2,2100	5152,89	10,3444
1300	0,8893	0,8086	1051,24	1,3446	2,6681	2,2430	5416,83	10,5178
1400	0,8934	0,8146	1140,38	1,3995	2,7223	2,2753	5686,38	10,6839
1500	0,8970	0,8199	1229,90	1,4515	2,7726	2,3068	5961,16	10,8433
1600	0,9001	0,8248	1319,75	1,5008	2,8192	2,3374	6240,78	10,9967
1700	0,9029	0,8294	1409,91	1,5477	2,8623	2,3670	6524,89	11,1445
1800	0,9055	0,8335	1500,34	1,5924	2,9021	2,3957	6813,14	11,2870
1900	0,9079	0,8374	1591,01	1,6351	2,9387	2,4233	7105,20	11,4246
2000	0,9101	0,8410	1681,91	1,6760	2,9726	2,4499	7400,79	11,5576
2100	0,9121	0,8443	1773,02	1,7152	3,0039	2,4756	7699,63	11,6862
2200	0,9141	0,8474	1864,33	1,7529	3,0328	2,5003	8001,48	11,8108
2300	0,9159	0,8504	1955,83	1,7892	3,0596	2,5240	8306,12	11,9315
2400	0,9177	0,8531	2047,52	1,8241	3,0844	2,5468	8613,33	12,0487
2500	0,9195	0,8557	2139,37	1,8579	3,1075	2,5688	8922,95	12,1624
2600	0,9211	0,8582	2231,40	1,8905	3,1290	2,5900	9234,79	12,2728
2700	0,9228	0,8606	2323,60	1,9220	3,1490	2,6103	9548,70	12,3802

Die Entropiewerte  $s_0$  gelten beim Normaldruck von  $p_0 = 1,01325$  bar

### A.7.2 Berechnete energetische Stoffwerte idealer Gase (Fortsetzung 3)

$\vartheta$ °C	Luft (Trocken)				Luftstickstoff			
	$c_p$ kJ/(kg K)	$\bar{c}_p$ kJ/(kg K)	$h$ kJ/kg	$s_0$ kJ/(kg K)	$c_p$ kJ/(kg K)	$\bar{c}_p$ kJ/(kg K)	$h$ kJ/kg	$s_0$ kJ/(kg K)
-60	1,0027	1,0032	-60,19	-0,0868	1,0305	1,0305	-61,83	-0,2366
-40	1,0029	1,0033	-40,13	0,0031	1,0304	1,0305	-41,22	-0,1442
-20	1,0032	1,0035	-20,07	0,0857	1,0304	1,0305	-20,61	-0,0594
0	1,0038	1,0038	0,00	0,1620	1,0306	1,0306	0,00	0,0190
20	1,0046	1,0040	20,08	0,2329	1,0309	1,0307	20,61	0,0918
40	1,0057	1,0048	40,19	0,2992	1,0313	1,0309	41,24	0,1598
60	1,007	1,0052	60,31	0,3615	1,0319	1,0311	61,87	0,2237
80	1,0085	1,0059	80,47	0,4203	1,0326	1,0314	82,51	0,2839
100	1,0104	1,0066	100,66	0,4759	1,0336	1,0317	103,17	0,3408
150	1,0165	1,0088	151,32	0,6033	1,0373	1,0329	154,94	0,4710
200	1,0245	1,0117	202,34	0,7173	1,0430	1,0347	206,93	0,5871
250	1,0341	1,0152	253,80	0,8206	1,0507	1,0371	259,27	0,6923
300	1,0449	1,0192	305,77	0,9155	1,0600	1,0401	312,03	0,7886
350	1,0565	1,0237	358,30	1,0034	1,0705	1,0437	365,29	0,8776
400	1,0684	1,0286	411,42	1,0854	1,0819	1,0477	419,10	0,9607
450	1,0805	1,0336	465,14	1,1624	1,0937	1,0522	473,48	1,0386
500	1,0924	1,0389	519,47	1,2350	1,1056	1,0569	528,47	1,1121
550	1,1040	1,0443	574,38	1,3038	1,1174	1,0619	584,04	1,1818
600	1,1151	1,0498	629,86	1,3692	1,1290	1,0670	640,21	1,2480
650	1,1258	1,0552	685,88	1,4316	1,1402	1,0722	696,94	1,3112
700	1,1358	1,0606	742,42	1,4913	1,1509	1,0775	754,22	1,3716
750	1,1454	1,0659	799,46	1,5484	1,1610	1,0827	812,02	1,4296
800	1,1543	1,0712	856,95	1,6033	1,1706	1,0879	870,31	1,4852
850	1,1627	1,0763	914,88	1,6560	1,1797	1,0930	929,07	1,5387
900	1,1706	1,0813	973,21	1,7069	1,1882	1,0981	988,27	1,5903
950	1,1779	1,0862	1031,93	1,7559	1,1962	1,1030	1047,88	1,6400
1000	1,1848	1,0910	1091,00	1,8032	1,2036	1,1079	1107,88	1,6881
1100	1,1974	1,1001	1210,12	1,8933	1,2171	1,1172	1228,93	1,7796
1200	1,2084	1,1087	1330,42	1,9778	1,2289	1,1260	1351,24	1,8656
1300	1,2182	1,1167	1451,76	2,0575	1,2392	1,1343	1474,65	1,9466
1400	1,2270	1,1243	1574,03	2,1329	1,2482	1,1422	1599,03	2,0233
1500	1,2348	1,1314	1697,12	2,2043	1,2562	1,1495	1724,26	2,0960
1600	1,2420	1,1381	1820,97	2,2723	1,2633	1,1564	1850,24	2,1651
1700	1,2486	1,1444	1945,51	2,3370	1,2696	1,1629	1976,89	2,2310
1800	1,2546	1,1504	2070,67	2,3989	1,2752	1,1690	2104,13	2,2939
1900	1,2602	1,1560	2196,41	2,4581	1,2803	1,1747	2231,92	2,3541
2000	1,2654	1,1613	2322,69	2,5150	1,2850	1,1801	2360,19	2,4118
2100	1,2703	1,1664	2449,48	2,5695	1,2891	1,1852	2488,89	2,4672
2200	1,2748	1,1712	2576,74	2,6221	1,2929	1,1900	2618,00	2,5205
2300	1,2791	1,1758	2704,44	2,6727	1,2964	1,1946	2747,47	2,5718
2400	1,2831	1,1802	2832,55	2,7215	1,2996	1,1989	2877,28	2,6213
2500	1,2869	1,1844	2961,06	2,7687	1,3026	1,2030	3007,39	2,6691
2600	1,2905	1,1884	3 089,93	2,8144	1,3053	1,2068	3 137,78	2,7153
2700	1,2939	1,1923	3 219,16	2,8586	1,3078	1,2105	3 268,44	2,7600

Die Entropiewerte  $s_0$  gelten beim Normaldruck von  $p_0 = 1,01325$  bar

Quelle: [2.11], berechnet mit den angegebenen Gleichungen

### A.1.2 Absolute, normierte spezifische Entropie $s^0$ idealer Gase

$\vartheta$ °C	N <sub>2</sub>	O <sub>2</sub>	CO	CO <sub>2</sub>	H <sub>2</sub> O	SO <sub>2</sub>	Luft	N <sub>2</sub> *
	kJ/(kg K)							
-100	6,2752	5,9152	6,4890	4,4389	9,4736	3,5569	6,3193	6,2492
-80	6,3888	6,0146	6,6024	4,5173	9,6759	3,6180	6,4288	6,3618
-60	6,4911	6,1043	6,7048	4,5901	9,8583	3,6741	6,5276	6,4633
-40	6,5843	6,1860	6,7980	4,6583	10,0245	3,7261	6,6175	6,5557
-20	6,6698	6,2611	6,8836	4,7227	10,1771	3,7748	6,7001	6,6405
0	6,7489	6,3305	6,9626	4,7839	10,3184	3,8206	6,7764	6,7188
20	6,8223	6,3953	7,0361	4,8424	10,4499	3,8640	6,8473	6,7917
40	6,8909	6,4559	7,1048	4,8984	10,5730	3,9053	6,9136	6,8597
60	6,9553	6,5130	7,1693	4,9521	10,6889	3,9447	6,9759	6,9236
80	7,0160	6,5670	7,2300	5,0039	10,7983	3,9824	7,0347	6,9837
100	7,0734	6,6183	7,2875	5,0538	10,9022	4,0187	7,0903	7,0406
150	7,2047	6,7366	7,4192	5,1716	11,1413	4,1039	7,2177	7,1708
200	7,3218	6,8433	7,5370	5,2806	11,3564	4,1824	7,3316	7,2869
250	7,4279	6,9408	7,6438	5,3822	11,5527	4,2553	7,4350	7,3921
300	7,5250	7,0309	7,7418	5,4775	11,7338	4,3234	7,5299	7,4884
350	7,6149	7,1147	7,8327	5,5673	11,9023	4,3874	7,6178	7,5775
400	7,6987	7,1932	7,9175	5,6523	12,0603	4,4476	7,6998	7,6605
450	7,7773	7,2670	7,9972	5,7329	12,2093	4,5046	7,7767	7,7385
500	7,8515	7,3367	8,0724	5,8096	12,3506	4,5586	7,8494	7,8120
600	7,9886	7,4655	8,2116	5,9527	12,6140	4,6586	7,9836	7,9479
700	8,1133	7,5824	8,3382	6,0840	12,8564	4,7497	8,1057	8,0715
800	8,2279	7,6893	8,4545	6,2053	13,0820	4,8331	8,2177	8,1850
900	8,3340	7,7878	8,5621	6,3179	13,2937	4,9102	8,3213	8,2901
1000	8,4327	7,8793	8,6622	6,4230	13,4936	4,9816	8,4176	8,3879
1100	8,5251	7,9645	8,7557	6,5214	13,6833	5,0482	8,5077	8,4794
1200	8,6119	8,0444	8,8435	6,6139	13,8640	5,1106	8,5922	8,5654
1300	8,6938	8,1196	8,9262	6,7012	14,0365	5,1692	8,6719	8,6464
1400	8,7712	8,1906	9,0044	6,7839	14,2015	5,2245	8,7473	8,7231
1500	8,8446	8,2580	9,0785	6,8622	14,3598	5,2769	8,8187	8,7958
1600	8,9144	8,3221	9,1489	6,9368	14,5118	5,3266	8,8867	8,8649
1700	8,9810	8,3832	9,2160	7,0078	14,6581	5,3738	8,9515	8,9308
1800	9,0445	8,4417	9,2800	7,0757	14,7989	5,4190	9,0133	8,9937
1900	9,1053	8,4977	9,3412	7,1407	14,9348	5,4621	9,0726	9,0539
2000	9,1636	8,5516	9,3999	7,2030	15,0659	5,5034	9,1294	9,1116
2100	9,2196	8,6035	9,4562	7,2628	15,1927	5,5431	9,1840	9,1670
2200	9,2734	8,6535	9,5104	7,3203	15,3153	5,5812	9,2365	9,2203
2300	9,3252	8,7018	9,5625	7,3757	15,4340	5,6180	9,2872	9,2716

$$s^0 = s_0 + R \cdot 1000 \cdot \left[ \sum_{i=1}^{12} \frac{C_i}{i-6} \cdot (T_R^{i-6} - T_{R0}^{i-6}) + C_6 \cdot \ln(T_R / T_{R25}) \right]$$

$$s(\vartheta_2, p_2) - s(\vartheta_1, p_1) = s^0(\vartheta_2) - s^0(\vartheta_1) - R \cdot \ln(p_2 / p_1)$$

Berechnet nach [3.3]