

TECHNISCHES DATENBLATT WECHSELRICHTERSTATION

Smart PCS 2.0

Noise Performance Baseline (Preliminary)



1.4 Test Equipment

Test Items	equipment	Model	Factory No.	Calibration Validity Period
Noise test	LMS 40 data collecting instrument	SCM2E05	25214004	2023-07-20~2024-07-19
	Microphone sensor	46AE	471533	2024-01-31~2025-01-30
	acoustic calibrator	CAL200	19062	2023-07-29~2024-07-28
	tape measure	DL9005B	848678	2023-10-29~2024-10-28

1.5 Test Conditions

No.	Working Condition
Working condition 1	temperature 25°C, power 186kW
Working condition 2	temperature 25°C, power 167kW
Working condition 3	temperature 25°C, power 150kW
Working condition 4	temperature 25°C, power 125kW
Working condition 5	temperature 25°C, power 110kW
Working condition 6	temperature 40°C, power 186kW
Working condition 7	temperature 40°C, power 167kW
Working condition 8	temperature 40°C, power 150kW
Working condition 9	temperature 40°C, power 125kW
Working condition 10	temperature 40°C, power 110kW

500	38.464	50
630	26.286	50.4
800	41.062	52.8
1000	36.418	51.9
1250	28.382	50
1600	22.436	31.2
2000	33.642	38.5
2500	32.396	45
3150	23.85	43.8
4000	29.138	45
5000	25.142	50
6300	22.388	50.4
8000	41.626	53.6
10000	19.396	52.3

2.2.6 Octave band spectrum of sound power level (Working condition 6)

1/3 octave (Hz)	average sound pressure level (dBA)	average sound power level (dBA)
50	11.098	18
63	9.654	21.8
80	9.436	21
100	16.946	25
125	22.166	39
160	26.834	43
200	34.144	47.8
250	34.32	51
315	34.514	53
400	38.846	55
500	43.708	62
630	41.484	67
800	45.814	73.5
1000	40.828	63
1250	36.288	61.5
1600	36.96	64
2000	36.202	60
2500	36.018	59.8
3150	31.876	61.5
4000	29.73	58.5

5000	31.55	57
6300	33.558	57
8000	41.688	57.3
10000	24.378	52

2.2.7 Octave band spectrum of sound power level (Working condition 7)

1/3 octave (Hz)	average sound pressure level (dBA)	average sound power level (dBA)
50	11.40	17.85
63	9.72	20.88
80	9.36	20.16
100	22.29	27.90
125	18.11	34.73
160	25.88	41.26
200	34.13	48.80
250	33.96	51.36
315	34.85	51.96
400	38.00	54.29
500	43.58	59.70
630	38.88	64.50
800	46.90	72.76
1000	41.33	63.00
1250	36.57	60.95
1600	38.03	64.09
2000	39.40	59.74
2500	39.87	60.49
3150	29.43	60.21
4000	30.64	59.03
5000	31.41	57.38
6300	29.83	55.93
8000	41.27	57.66
10000	23.26	50.47

2.2.8 Octave band spectrum of sound power level (Working condition 8)

1/3 octave (Hz)	average sound pressure level (dBA)	average sound power level (dBA)
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