

## Definition of terms

- Max :Performance at Maximum compressor frequency
- Nominal :Performance at Nominal compressor frequency
- Mid :Performance at Medium compressor frequency (80% of Nominal)
- Min :Performance at Minimum compressor frequency

:This icon means injection circuit is active.

## NOTES:

- The reference data at water outlet temperatures of 35°C,40°C,45°C,50°C,55°C and 60°C are shown.
- The data at water outlet temperature of 25°C are shown except for SHW230 model.
- Gray highlighted data means integrated data including defrost operation.
- Actual performance may vary depending on operating conditions.
- These data are measured based on EN14511-2013.

## 5.1 Cooling performance data

### ■ Power inverter

Water outlet temperature[°C]		7		18		Water outlet temperature[°C]		7		18			
Model	Ambient temperature [°C]	Capacity	COP	Capacity	COP	Model	Ambient temperature [°C]	Capacity	COP	Capacity	COP		
PUHZ-W50 VHA2(-BS)	Nominal	35	4.5	2.94	4.5	4.44	PUHZ-W85V/ YAA(-BS)	Max	35	7.5	2.70	10.5	3.49
		30	4.5	3.52	4.5	5.37			30	7.9	3.05	10.9	3.95
		25	4.5	4.06	4.5	6.30			25	7.5	2.72	10.2	3.23
		20	4.5	4.10	4.5	6.31			20	7.2	2.47	9.5	2.73
	Mid	35	3.2	3.76	3.4	5.46		Nominal	35	7.5	2.70	7.5	4.42
		30	3.2	4.40	3.4	6.69			30	7.5	3.18	7.5	6.38
		25	3.2	4.82	3.4	7.52			25	7.5	2.72	7.5	6.20
		20	3.2	4.92	3.4	7.78			20	7.2	2.47	7.5	5.89
	Min	35	2.0	4.26	2.8	5.98		Mid	35	6.0	3.14	6.0	4.85
		30	2.1	4.55	2.9	6.30			30	6.0	3.71	5.9	6.87
		25	2.2	5.21	3.0	7.13			25	6.0	3.54	5.9	7.15
		20	2.3	5.71	3.1	7.71			20	6.0	3.33	5.9	7.26
PUHZ-W85 VHA2(-BS)	Nominal	35	7.5	2.47	7.5	3.93	PUHZ-W112V/ YAA(-BS)	Max	35	10.0	2.83	13.9	3.85
		30	7.5	2.91	7.5	4.61			30	10.6	3.35	14.8	4.52
		25	7.5	2.95	7.5	5.00			25	10.4	3.19	14.1	4.04
		20	7.5	2.87	7.5	4.90			20	10.1	2.95	13.4	3.51
	Mid	35	5.4	3.16	5.7	4.83		Nominal	35	10.0	2.83	10.0	4.74
		30	5.4	3.70	5.7	5.92			30	10.0	3.55	10.0	5.64
		25	5.4	4.05	5.7	6.65			25	10.0	3.36	10.0	5.62
		20	5.4	4.13	5.7	6.88			20	10.0	2.99	10.0	5.30
	Min	35	3.3	3.58	4.7	5.29		Mid	35	8.0	3.26	8.0	4.88
		30	3.5	3.86	4.9	5.61			30	8.0	3.92	8.0	5.75
		25	3.6	4.35	5.1	6.39			25	8.0	4.00	8.0	6.07
		20	3.7	4.68	5.1	6.69			20	8.0	3.93	8.0	6.07
PUHZ- W112VHA (-BS)	Nominal	35	10.0	2.80	10.0	4.50	SUHZ-SW 45VA(H)	Max	35	4.9	2.48	6.5	2.99
		30	10.0	3.41	10.0	4.97			30	5.1	2.82	6.8	3.39
		25	10.0	3.82	10.0	5.57			25	5.3	3.16	7.1	3.73
		20	10.0	4.38	10.0	6.26			20	5.3	3.13	7.1	3.54
	Mid	35	8.0	3.08	8.0	4.60		Nominal	35	4.0	2.73	3.8	4.28
		30	8.0	3.72	8.0	5.04			30	4.0	3.26	3.8	5.17
		25	8.0	4.29	8.0	5.46			25	4.0	3.77	3.8	6.07
		20	8.0	4.95	8.0	6.11			20	4.0	3.81	3.8	6.09
	Min	35	3.2	3.10	4.6	4.37		Mid	35	2.4	3.13	3.5	4.46
		30	3.4	3.63	4.8	5.05			30	2.4	3.74	3.5	5.34
		25	3.6	4.45	4.9	5.75			25	2.4	4.38	3.5	6.24
		20	3.7	5.02	5.1	6.54			20	2.4	4.62	4.2	6.08
PUHZ-W60 VAA(-BS)	Max	35	6.0	2.95	7.9	3.67	Min	35	1.3	2.94	2.1	4.98	
		30	6.4	3.40	8.3	4.22		30	3.0	3.92	4.5	6.18	
		25	6.2	3.25	8.0	3.80		25	3.1	4.45	4.8	7.05	
		20	6.1	3.11	7.8	3.46		20	3.9	4.46	5.9	6.54	
	Nominal	35	6.0	2.95	6.0	4.26		Mid	35	4.8	3.26	4.8	4.87
		30	6.0	3.71	6.0	6.81			30	4.8	3.89	4.8	6.90
		25	6.0	3.54	6.0	7.06			25	4.8	3.96	4.8	7.18
		20	6.0	3.33	6.0	7.15			20	4.8	3.98	4.8	7.29
	Mid	35	4.8	3.26	4.8	4.87		Min	35	2.3	3.75	3.2	5.42
		30	4.8	3.89	4.8	6.90			30	2.4	4.53	3.3	6.77
		25	4.8	3.96	4.8	7.18			25	2.5	4.65	3.4	7.67
		20	4.8	3.98	4.8	7.29			20	2.6	4.53	3.4	8.35

## Zubadan

Water outlet temperature[°C]		7		18		
Model	Ambient temperature [°C]	Capacity	COP	Capacity	COP	
PUHZ-HW 112YHA2 (-BS)	Nominal	35	10.0	2.78	10.0	4.10
		30	10.0	3.39	10.0	4.84
		25	10.0	3.80	10.0	5.43
		20	10.0	4.35	10.0	6.11
	Mid	35	7.3	3.49	6.7	4.75
		30	7.3	4.22	6.7	5.57
		25	7.3	4.86	6.7	6.03
		20	7.3	5.61	6.7	6.75
	Min	35	4.0	3.29	5.9	4.79
		30	4.2	3.81	6.1	5.49
		25	4.5	4.72	6.3	6.00
		20	4.6	5.29	6.5	6.80
PUHZ-HW 140V/YHA2 (-BS)	Nominal	35	12.5	2.50	12.5	3.60
		30	12.5	2.96	12.5	4.26
		25	12.5	3.21	12.5	4.65
		20	12.5	3.62	12.5	5.15
	Mid	35	9.1	3.14	8.4	4.17
		30	9.1	3.69	8.4	4.89
		25	9.1	4.14	8.4	5.29
		20	9.1	4.72	8.4	5.92
	Min	35	5.0	2.96	7.4	4.21
		30	5.3	3.37	7.7	4.85
		25	5.5	3.96	7.9	5.35
		20	5.7	4.38	8.1	6.02
PUHZ-SHW 80VHA(-BS)	Max	35	9.6	2.83	10.0	4.74
		30	10.2	3.30	10.7	5.49
		25	10.2	3.45	11.0	5.80
		20	10.8	3.69	11.7	5.14
	Nominal	35	7.1	3.31	7.1	4.52
		30	7.2	3.85	9.3	5.19
		25	7.6	4.44	9.4	5.67
		20	9.3	4.29	10.8	4.91
	Mid	35	5.7	3.28	5.7	4.43
		30	7.2	3.85	9.3	5.19
		25	7.6	4.44	9.4	5.67
		20	9.3	4.29	10.8	4.91
Min	35	3.4	3.10	4.5	4.40	
	30	7.2	3.85	9.3	5.19	
	25	7.6	4.44	9.4	5.67	
	20	9.3	4.29	10.8	4.91	
PUHZ-SHW 112V/YHA(-BS)	Max	35	11.2	2.46	14.0	3.78
		30	11.9	2.86	14.8	4.37
		25	11.9	3.00	14.9	4.50
		20	12.7	3.23	15.3	5.02
	Nominal	35	10.0	2.83	10.0	4.74
		30	10.0	3.36	10.0	5.54
		25	10.0	3.72	10.0	6.19
		20	10.0	4.49	10.8	4.90
	Mid	35	8.0	3.18	8.0	4.61
		30	8.0	3.85	9.3	5.18
		25	8.0	4.40	9.4	5.66
		20	9.3	4.27	10.8	4.90
Min	35	3.4	3.09	4.5	4.39	
	30	7.2	3.84	9.3	5.18	
	25	7.6	4.43	9.4	5.66	
	20	9.3	4.27	10.8	4.90	

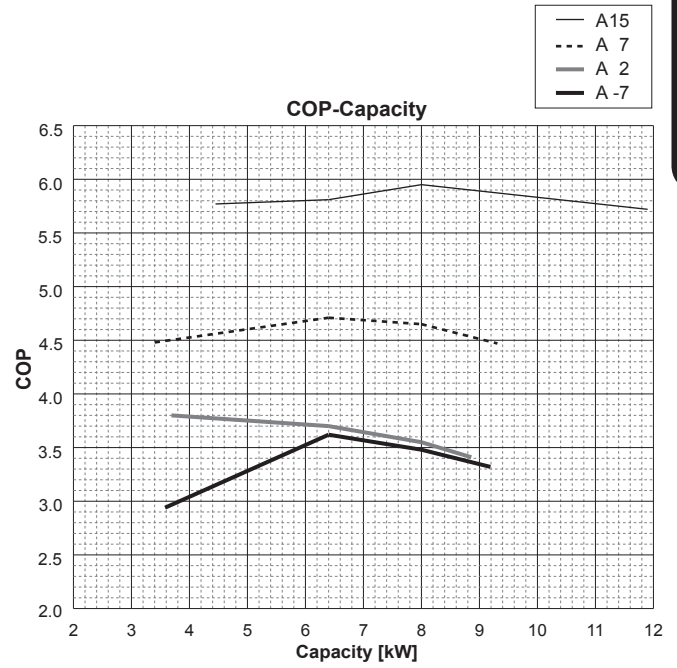
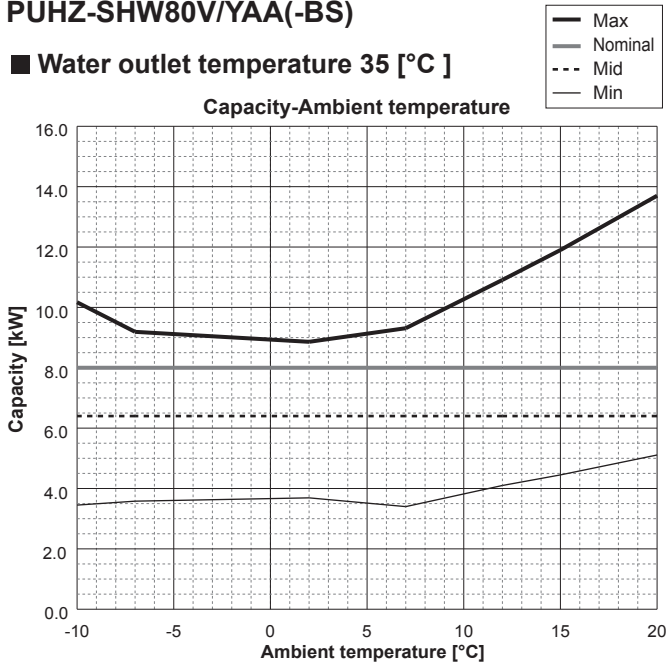
Water outlet temperature[°C]		7		18		
Model	Ambient temperature [°C]	Capacity	COP	Capacity	COP	
PUHZ-SHW 140YHA(-BS)	Max	35	12.5	2.17	16.0	3.23
		30	13.3	2.43	16.9	3.58
		25	13.3	2.48	17.0	3.58
		20	14.1	2.84	17.5	3.96
	Nominal	35	12.5	2.17	12.5	4.26
		30	12.5	2.59	12.5	4.96
		25	12.5	2.75	12.5	5.35
		20	12.5	3.38	12.5	6.35
	Mid	35	10.0	2.74	10.0	4.73
		30	10.0	3.25	10.0	5.53
		25	10.0	3.60	10.0	6.18
		20	10.0	4.35	10.8	4.89
Min	35	3.4	3.09	4.5	4.39	
	30	7.2	3.83	9.3	5.16	
	25	7.6	4.42	9.4	5.64	
	20	9.3	4.26	10.8	4.89	
PUHZ-SHW 230YKA2	Max	35	20.0	2.22	24.0	2.65
		30	21.1	2.46	25.1	2.89
		25	22.6	2.88	26.6	3.34
		20	22.4	2.88	26.0	3.20
	Nominal	35	20.0	2.22	20.0	3.55
		30	20.0	2.60	20.0	4.09
		25	20.0	3.19	20.0	4.85
		20	20.0	3.35	20.1	3.90
	Mid	35	16.0	2.47	16.0	4.15
		30	16.0	2.88	17.4	4.43
		25	16.0	3.48	17.6	4.82
		20	16.0	3.83	20.1	3.90
Min	35	8.9	2.98	13.7	4.37	
	30	11.9	3.24	17.4	4.43	
	25	12.3	3.69	17.6	4.82	
	20	14.4	3.24	20.1	3.90	
PUHZ-SHW 80VAA/YAA (-BS)	Max	35	7.1	3.31	10.4	4.18
		30	8.0	4.24	11.0	4.93
		25	8.0	4.34	10.8	4.75
		20	7.4	3.96	10.5	4.42
	Nominal	35	7.1	3.31	7.1	4.52
		30	7.1	4.36	7.1	5.34
		25	7.1	4.57	7.1	5.74
		20	7.1	4.09	7.1	5.83
	Mid	35	5.6	4.03	5.6	4.46
		30	5.6	4.42	5.6	5.24
		25	5.6	4.84	5.6	5.87
		20	5.6	4.57	5.6	6.19
Min	35	2.8	3.10	4.1	4.15	
	30	3.1	3.91	4.3	4.90	
	25	3.2	4.64	4.4	5.75	
	20	3.1	4.70	4.4	6.27	
PUHZ-SHW 112VAA/YAA (-BS)	Max	35	10.0	2.83	14.8	3.69
		30	11.5	3.68	15.7	4.34
		25	11.1	3.42	14.8	3.75
		20	10.0	2.91	13.8	3.20
	Nominal	35	10.0	2.83	10.0	4.74
		30	10.0	4.05	10.0	5.69
		25	10.0	3.85	10.0	5.57
		20	10.0	2.93	10.0	5.21
	Mid	35	8.0	3.26	8.0	5.01
		30	8.0	4.42	8.0	5.95
		25	8.0	4.51	8.0	6.20
		20	8.0	3.87	8.0	6.17
Min	35	2.8	3.25	4.1	4.66	
	30	3.1	4.09	4.3	5.51	
	25	3.2	4.86	4.4	6.46	
	20	3.1	4.93	4.4	7.04	

## ■ PUAZ-SHW80V/YAA(-BS)

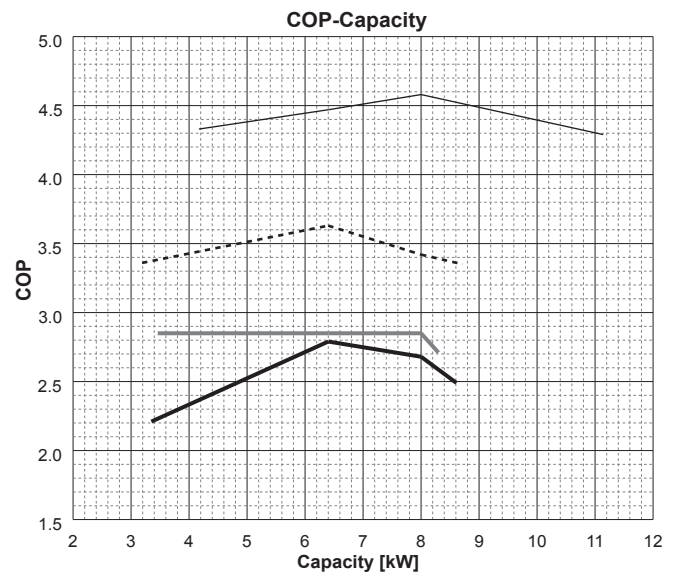
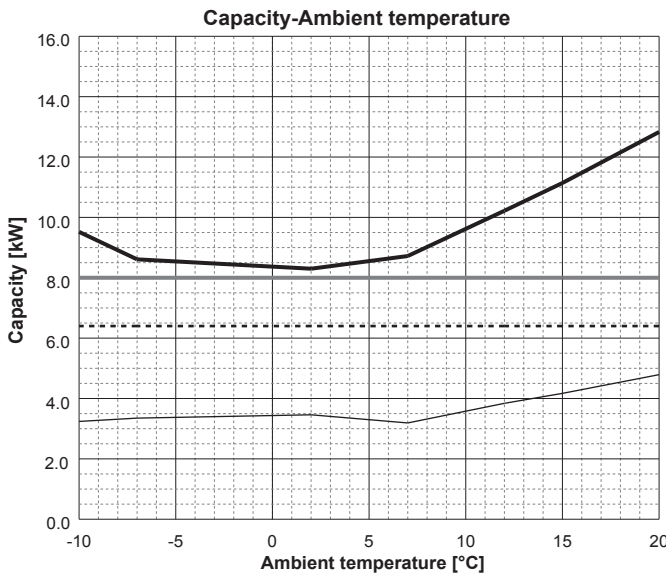
Water outlet temperature[°C]		25		35		40		45		50		55		60	
Ambient temperature[°C]		Capacity	COP	Capacity	COP	Capacity	COP	Capacity	COP	Capacity	COP	Capacity	COP	Capacity	COP
Max	(INJ) -28	-	-	8.1	2.04	7.8	1.79	7.5	1.55	-	-	-	-	-	-
	(INJ) -25	-	-	8.3	2.18	8.0	1.91	7.6	1.65	-	-	-	-	-	-
	(INJ) -20	-	-	8.5	2.40	8.2	2.11	7.8	1.83	-	-	-	-	-	-
	(INJ) -15	-	-	8.7	2.63	8.4	2.30	8.0	2.00	7.7	1.84	7.4	1.59	-	-
	(INJ) -10	10.8	3.65	10.2	3.04	9.9	2.64	9.5	2.28	9.2	1.98	8.8	1.71	-	-
	(INJ) -7	9.7	3.99	9.2	3.32	8.9	2.88	8.6	2.49	8.3	2.16	8.0	2.02	-	-
	(INJ) 2	9.4	4.09	8.9	3.41	8.6	2.96	8.3	2.56	8.0	2.49	7.7	2.15	7.4	1.86
	7	9.9	5.36	9.3	4.47	9.0	3.87	8.7	3.35	8.4	2.90	8.1	2.51	7.7	2.17
	12	11.5	6.29	10.9	5.24	10.6	4.54	10.2	3.93	9.9	3.40	9.5	2.94	9.1	2.55
	15	12.6	6.87	11.9	5.72	11.5	4.96	11.1	4.29	10.7	3.72	10.3	3.21	9.9	2.78
20	14.5	7.95	13.7	6.63	13.3	5.74	12.8	4.97	12.4	4.30	11.9	3.72	11.4	3.22	
Nominal	(INJ) -28	-	-	8.1	2.04	7.8	1.79	7.5	1.55	-	-	-	-	-	-
	(INJ) -25	-	-	8.3	2.18	8.0	1.91	7.6	1.65	-	-	-	-	-	-
	(INJ) -20	-	-	8.5	2.40	8.2	2.11	7.8	1.83	-	-	-	-	-	-
	(INJ) -15	-	-	8.0	2.74	8.0	2.38	8.0	2.00	7.7	1.84	7.4	1.59	-	-
	(INJ) -10	8.0	3.52	8.0	2.93	8.0	2.55	8.0	2.26	8.0	1.96	8.0	1.70	-	-
	(INJ) -7	8.0	4.17	8.0	3.48	8.0	3.02	8.0	2.68	8.0	2.33	8.0	2.02	-	-
	(INJ) 2	8.0	4.26	8.0	3.55	8.0	3.20	8.0	2.85	8.0	2.49	7.7	2.15	7.4	1.86
	7	8.0	5.58	8.0	4.65	8.0	4.05	8.0	3.42	8.0	3.12	8.0	2.70	7.7	2.17
	12	8.0	6.54	8.0	5.45	8.0	4.74	8.0	4.20	8.0	3.65	8.0	3.16	8.0	2.78
	15	8.0	7.14	8.0	5.95	8.0	5.18	8.0	4.58	8.0	3.99	8.0	3.45	8.0	3.03
20	8.0	8.15	8.0	6.79	8.0	5.91	8.0	5.23	8.0	4.55	8.0	3.94	8.0	3.46	
Mid	-28	-	-	6.4	2.11	6.3	1.84	6.0	1.60	-	-	-	-	-	-
	-25	-	-	6.4	2.34	6.3	2.03	6.1	1.75	-	-	-	-	-	-
	-20	-	-	6.4	2.65	6.4	2.32	6.2	2.01	-	-	-	-	-	-
	-15	-	-	6.4	2.95	6.4	2.57	6.4	2.27	6.4	1.98	6.4	1.71	-	-
	-10	6.4	3.87	6.4	3.22	6.4	2.80	6.4	2.48	6.4	2.16	6.4	1.87	-	-
	-7	6.4	4.34	6.4	3.62	6.4	3.15	6.4	2.79	6.4	2.42	6.4	2.10	-	-
	2	6.4	4.43	6.4	3.70	6.4	3.21	6.4	2.85	6.4	2.48	6.4	2.14	6.4	1.88
	7	6.4	5.65	6.4	4.71	6.4	4.10	6.4	3.63	6.4	3.16	6.4	2.73	6.4	2.40
	12	6.4	6.47	6.4	5.39	6.4	4.69	6.4	4.15	6.4	3.61	6.4	3.13	6.4	2.75
	15	6.4	6.97	6.4	5.81	6.4	5.06	6.4	4.47	6.4	3.89	6.4	3.37	6.4	2.96
20	6.4	8.04	6.4	6.70	6.4	5.83	6.4	5.16	6.4	4.49	6.4	3.88	6.4	3.42	
Min	-28	-	-	3.9	1.88	3.8	1.63	3.7	1.41	-	-	-	-	-	-
	-25	-	-	4.3	2.07	4.2	1.79	4.1	1.55	-	-	-	-	-	-
	-20	-	-	5.0	2.37	4.8	2.06	4.7	1.78	4.5	1.54	-	-	-	-
	-15	-	-	5.7	2.68	5.5	2.32	5.3	2.01	5.1	1.74	4.9	1.51	-	-
	-10	3.7	3.42	3.5	2.85	3.3	2.47	3.2	2.14	3.1	1.85	3.0	1.60	-	-
	-7	3.8	3.53	3.6	2.94	3.5	2.55	3.3	2.21	3.2	1.91	3.1	1.65	-	-
	2	3.9	4.56	3.7	3.80	3.6	3.29	3.5	2.85	3.3	2.47	3.2	2.13	3.1	1.85
	7	3.6	5.38	3.4	4.48	3.3	3.89	3.2	3.36	3.1	2.91	3.0	2.52	2.8	2.18
	12	4.3	6.38	4.1	5.32	4.0	4.61	3.8	3.99	3.7	3.45	3.6	2.99	3.4	2.58
	15	4.7	6.92	4.5	5.77	4.3	5.00	4.2	4.33	4.0	3.74	3.9	3.24	3.7	2.80
20	5.4	8.00	5.1	6.67	5.0	5.78	4.8	5.00	4.6	4.33	4.4	3.74	4.2	3.24	

## PUHZ-SHW80V/YAA(-BS)

■ Water outlet temperature 35 [°C]



■ Water outlet temperature 45 [°C]



■ Water outlet temperature 55 [°C]

