

Model Name			PUHZ-SHW80VAA(-BS)	PUHZ-SHW80YAA(-BS)
Power supply (phase, cycle, voltage)			1φ, 230V, 50Hz	3φ, 400V, 50Hz
	Max. current	A	22.0	13.0
Breaker size			25.0	16.0
Outer casing			Galvanized plate	Galvanized plate
External finish			Munsell: N8.75 Munsell N2.75 (FRONT PANEL)	Munsell: N8.75 Munsell N2.75 (FRONT PANEL)
Refrigerant control			Linear expansion valve	Linear expansion valve
Compressor			Hermetic scroll	Hermetic scroll
	Model		DNK28FBAMT	DNK28FBBMT
	Motor output	kW	2.2	2.2
Start type			Inverter	Inverter
Protection devices			HP switch LP switch Discharge thermo Overcurrent detection Comp. surface thermo	HP switch LP switch Discharge thermo Overcurrent detection Comp. surface thermo
	Oil (Model)	L	1.00 (FVC68D)	1.00 (FVC68D)
Crankcase heater			W	-
Heat exchanger		Air	Plate fin coil	Plate fin coil
		Water	-	-
Fan	Fan(drive) x No.		Propeller fan x 1	Propeller fan x 1
	Fan motor output	kW	0.2	0.2
	Air flow	m ³ /min (CFM)	50 (1,760)	50 (1,760)
Defrost method			Reverse cycle	Reverse cycle
Noise level (SPL)	Heating	dB(A)	45	45
	Cooling	dB(A)	48	48
Noise level (PWL)	Heating	dB(A)	59	59
Dimensions	Width	mm(in)	1050 (41-5/16)	1050 (41-5/16)
	Depth	mm(in)	480 (18-7/8)	480 (18-7/8)
	Height	mm(in)	1020 (40-3/16)	1020 (40-3/16)
Weight		kg(lbs)	116 (256)	128 (282)
Refrigerant (GWP)			R410A (1975)	R410A (1975)
	Quantity	kg(lbs)	4.6 (10.1)	4.6 (10.1)
Pipe size O.D.	Liquid	mm(in)	9.52 (3/8)	9.52 (3/8)
	Gas	mm(in)	15.88 (5/8)	15.88 (5/8)
Connection method			Flared	Flared
Between the indoor & outdoor unit	Height difference	m	Max. 30	Max. 30
	Piping length	m	2 to 75	2 to 75
Guaranteed operating range (Outdoor)	Heating	°C	-28 to +21	-28 to +21
	DHW	°C	-28 to +35	-28 to +35
	Cooling*	°C	-15 to +46	-15 to +46
Outlet water temp. (Max in heating, Min in cooling)	Heating	°C	+60	+60
	Cooling	°C	+5	+5
Nominal return water temperature range	Heating	°C	+5 to +59	+5 to +59
	Cooling	°C	+8 to +28	+8 to +28
Water flow rate range		L/min	10.2 to 22.9	10.2 to 22.9

* Optional air protection guide is required where ambient temperature is lower than -5°C.
 The temperature is 10°C when the unit is connected with Cylinder unit or Hydrobox.
 For more details, refer to "Cylinder unit / Hydrobox".

Model name		PUHZ-SHW230YKA2	
Nominal water flow rate (Heating mode)		L/min	65.9
Heating (A7/W35)	Capacity	kW	23.00
	COP		3.65
	Power input	kW	6.31
Heating (A2/W35)	Capacity	kW	23.00
	COP		2.37
	Power input	kW	9.71
Pressure difference (water circuit)		kPa	-
Heating pump input (based on EN14511)		kW	-
Nominal water flow rate (Cooling mode)		L/min	57.3
Cooling (A35/W7)	Capacity	kW	20.00
	EER (COP)		2.22
	Power input	kW	9.01
Cooling (A35/W18)	Capacity	kW	20.00
	EER (COP)		3.55
	Power input	kW	5.63
Pressure difference (water circuit)		kPa	-
Cooling pump input (based on EN14511)		kW	-
Recommended plate heat exchanger		ACH70-40 x 2 Parallel connection	

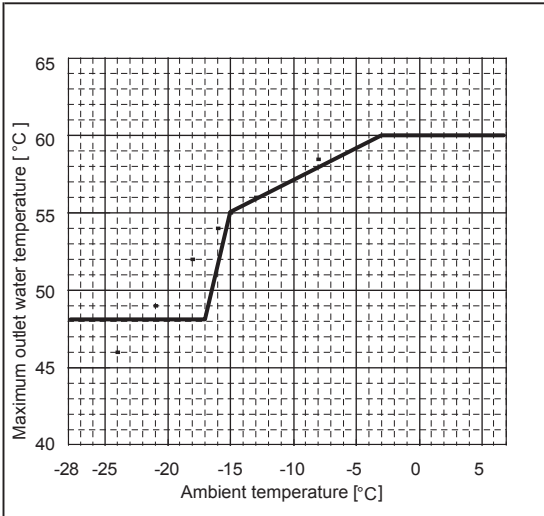
The table shows performance data obtained when a plate heat exchanger is connected.

Model name		PUHZ-SHW80VAA(-BS)		PUHZ-SHW80YAA(-BS)	
Nominal water flow rate (Heating mode)		L/min	22.9	22.9	
Heating (A7/W35)	Capacity	kW	8.0	8.0	
	COP		4.65	4.65	
	Power input	kW	1.72	1.72	
Heating (A2/W35)	Capacity	kW	8.0	8.0	
	COP		3.55	3.55	
	Power input	kW	2.25	2.25	
Pressure difference (water circuit)		kPa	-	-	
Heating pump input (based on EN14511)		kW	-	-	
Nominal water flow rate (Cooling mode)		L/min	20.4	20.4	
Cooling (A35/W7)	Capacity	kW	7.1	7.1	
	EER (COP)		3.31	3.31	
	Power input	kW	2.15	2.15	
Cooling (A35/W18)	Capacity	kW	7.1	7.1	
	EER (COP)		4.52	4.52	
	Power input	kW	1.57	1.57	
Pressure difference (water circuit)		kPa	-	-	
Cooling pump input (based on EN14511)		kW	-	-	
Recommended plate heat exchanger		MWA2-38PA		MWA2-38PA	

The table shows performance data obtained when a plate heat exchanger is connected.

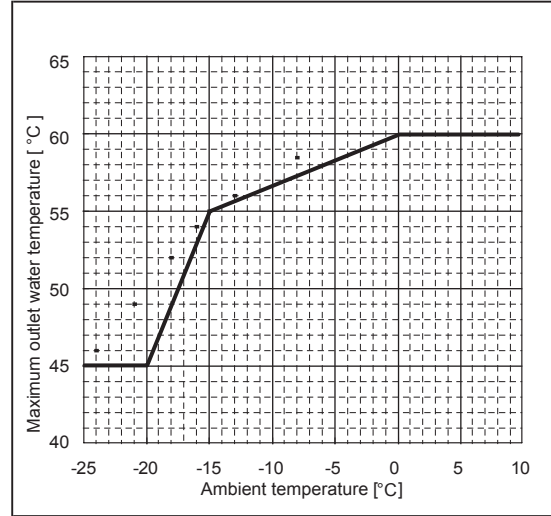
■Zubadan

PUHZ-SHW80/112VHA(-BS)
 PUHZ-SHW112/140YHA(-BS)
 PUHZ-SHW230YKA2



*PUHZ-SHW80/112/140 Service reference number from "R2": down to -28°C
 Before "R2" and PUHZ-SHW230 : down to -25°C

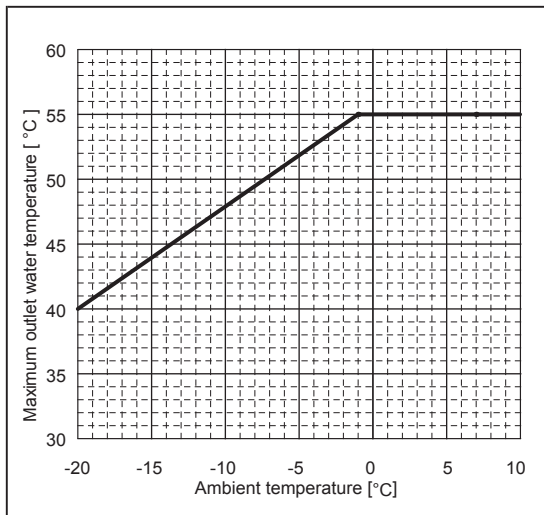
PUHZ-SHW80/112VAA(-BS)
 PUHZ-SHW80/112YAA(-BS)



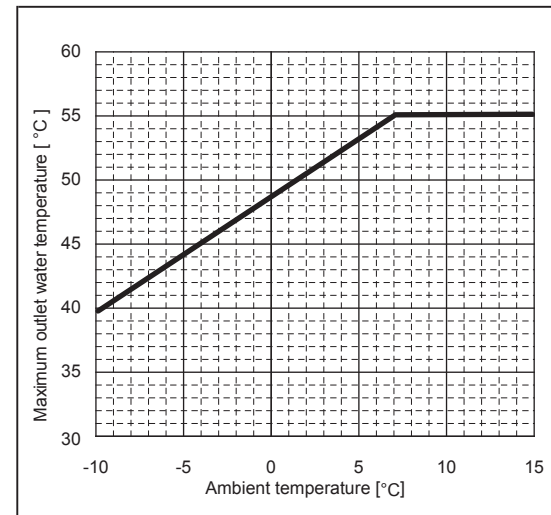
■Inverter multi

PUMY-P112/125/140VKM4(-BS)
 PUMY-P112/125/140YKM4(-BS)
 PUMY-P112/125/140YKME4(-BS)

Maximum outlet water temperature curve at single operation of ATW Heating



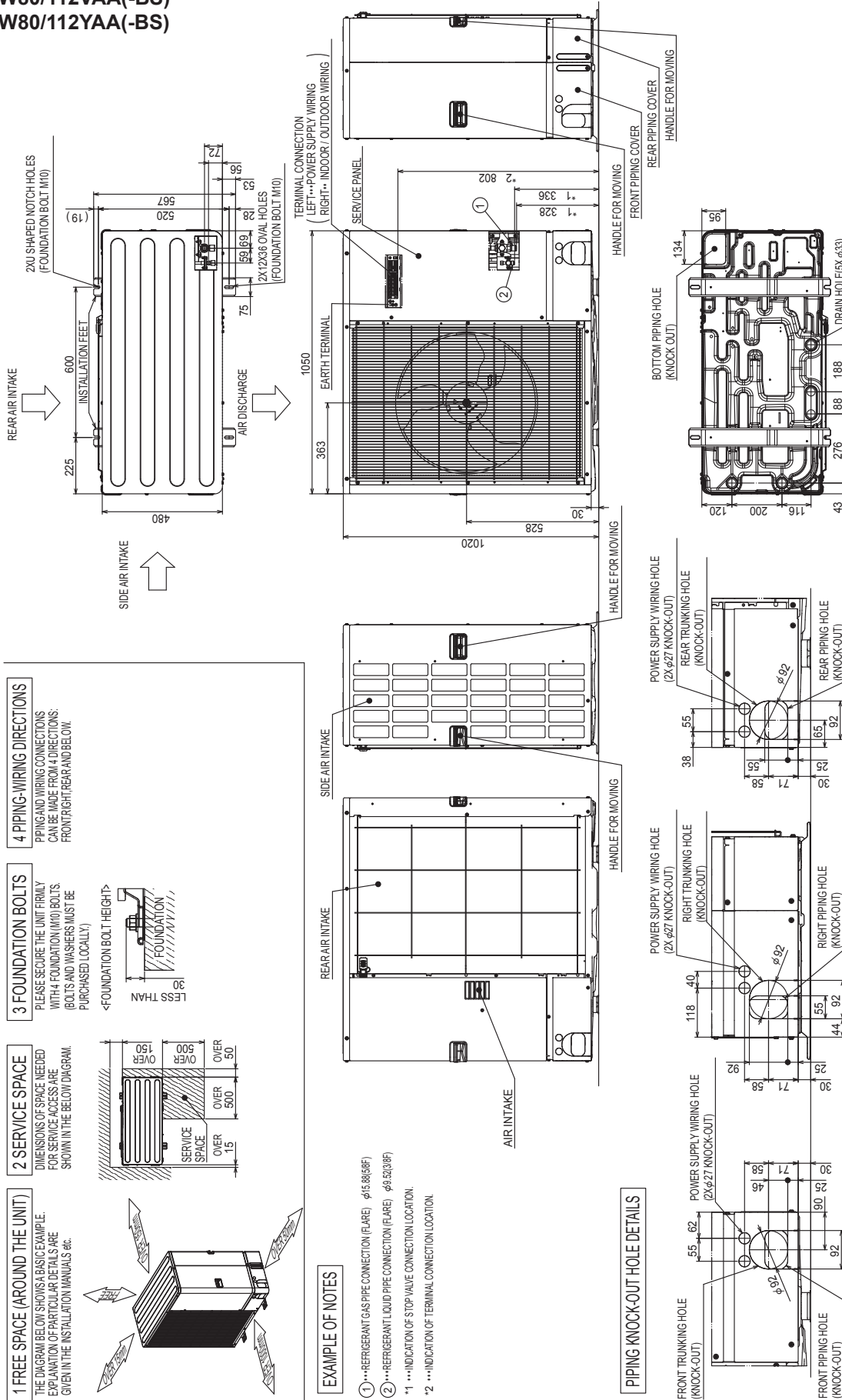
Maximum outlet water temperature curve at simultaneous operation of ATA Heating and ATW heating



Unit : mm

- PUAZ-SW75/100VAA(-BS)
- PUAZ-SW75/100YAA(-BS)
- PUAZ-SHW80/112VAA(-BS)
- PUAZ-SHW80/112YAA(-BS)

Outdoor unit



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	

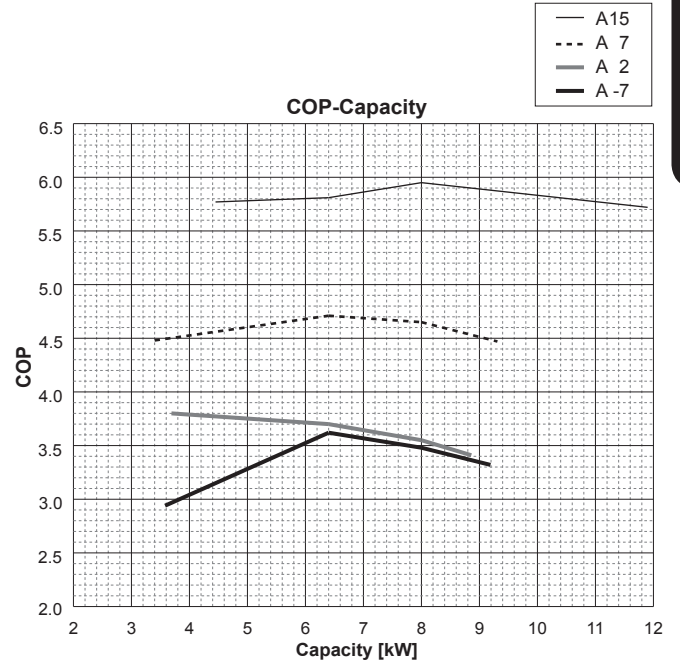
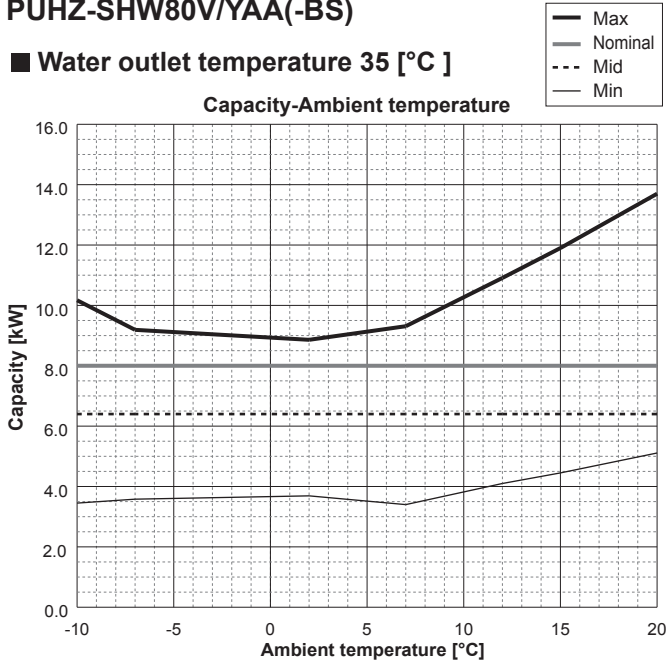
Water outlet temperature[°C]		7		18		
Model	Ambient temperature [°C]	Capacity	COP	Capacity	COP	
PUHZ-SHW 140YHA(-BS)	Max	35	12.5	2.17	16.0	3.23
		30	13.3	2.43	16.9	3.58
		25	13.3	2.48	17.0	3.58
		20	14.1	2.84	17.5	3.96
	Nominal	35	12.5	2.17	12.5	4.26
		30	12.5	2.59	12.5	4.96
		25	12.5	2.75	12.5	5.35
		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	

■ PUHZ-SHW80V/YAA(-BS)

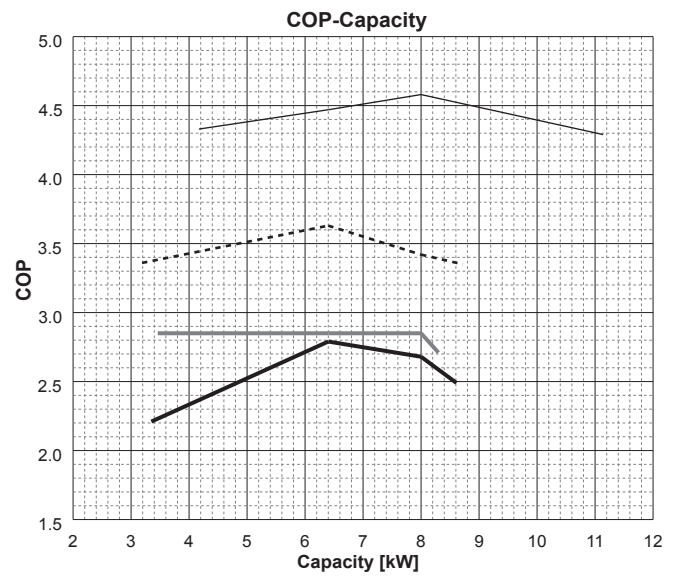
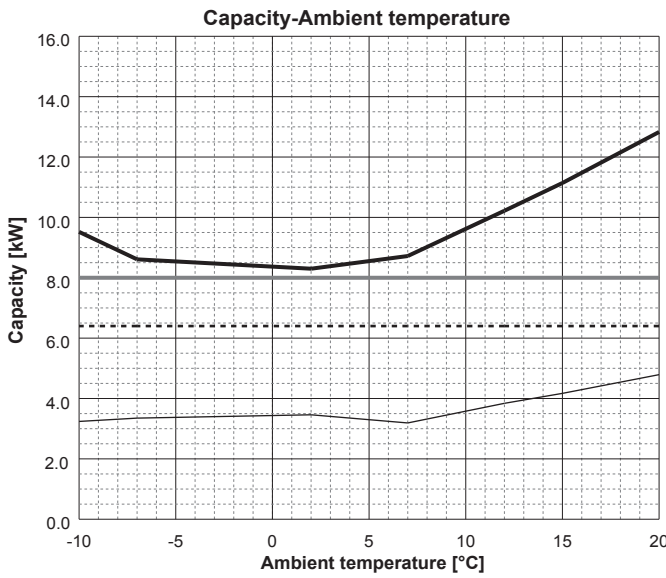
Water outlet temperature[°C]		25		35		40		45		50		55		60	
Ambient temperature[°C]		Capacity	COP	Capacity	COP	Capacity	COP	Capacity	COP	Capacity	COP	Capacity	COP	Capacity	COP
Max	(INJ) -28	-	-	8.1	2.04	7.8	1.79	7.5	1.55	-	-	-	-	-	-
	(INJ) -25	-	-	8.3	2.18	8.0	1.91	7.6	1.65	-	-	-	-	-	-
	(INJ) -20	-	-	8.5	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)

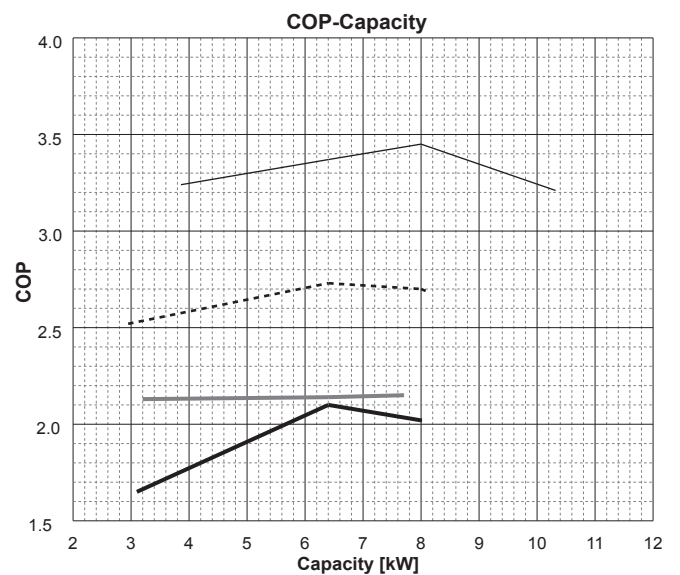
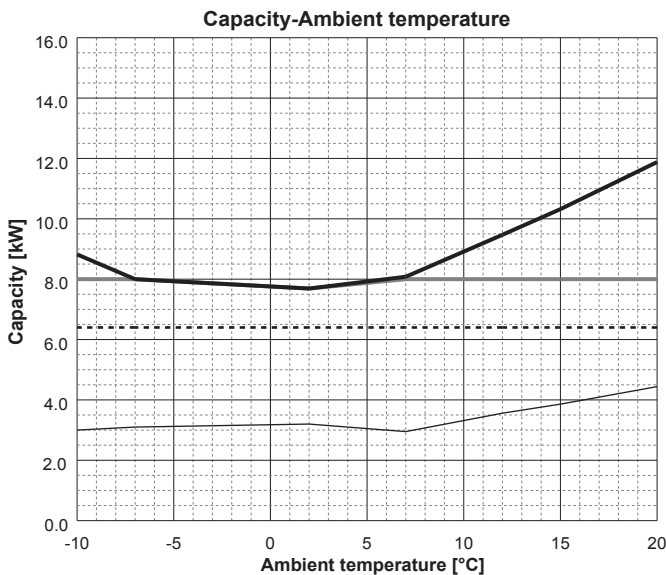
Water outlet temperature 35 [°C]



Water outlet temperature 45 [°C]



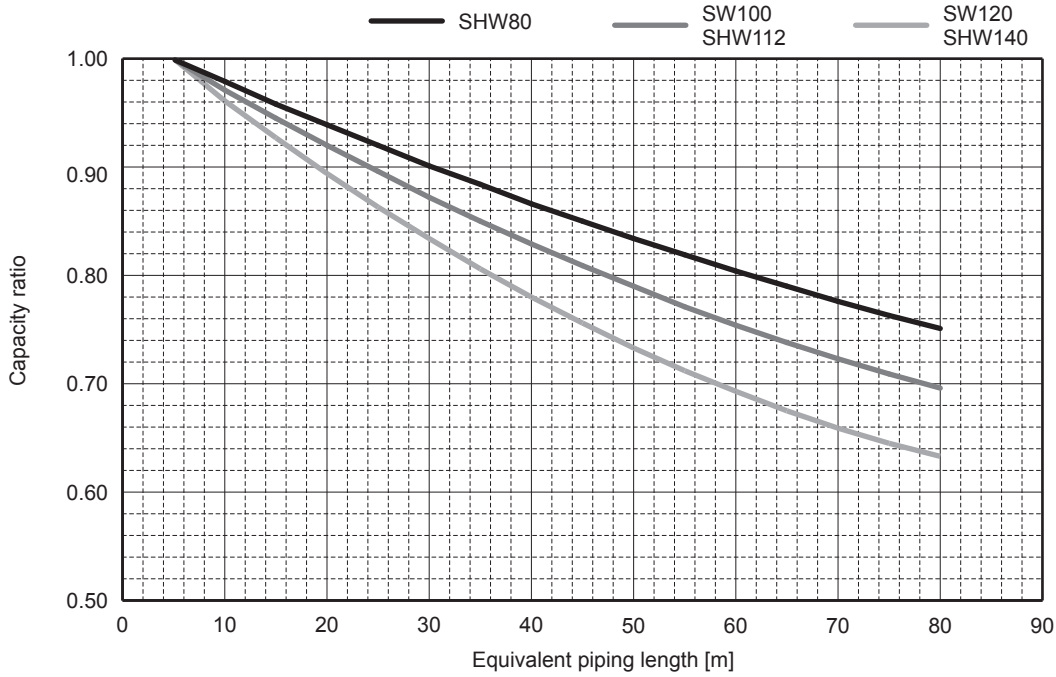
Water outlet temperature 55 [°C]



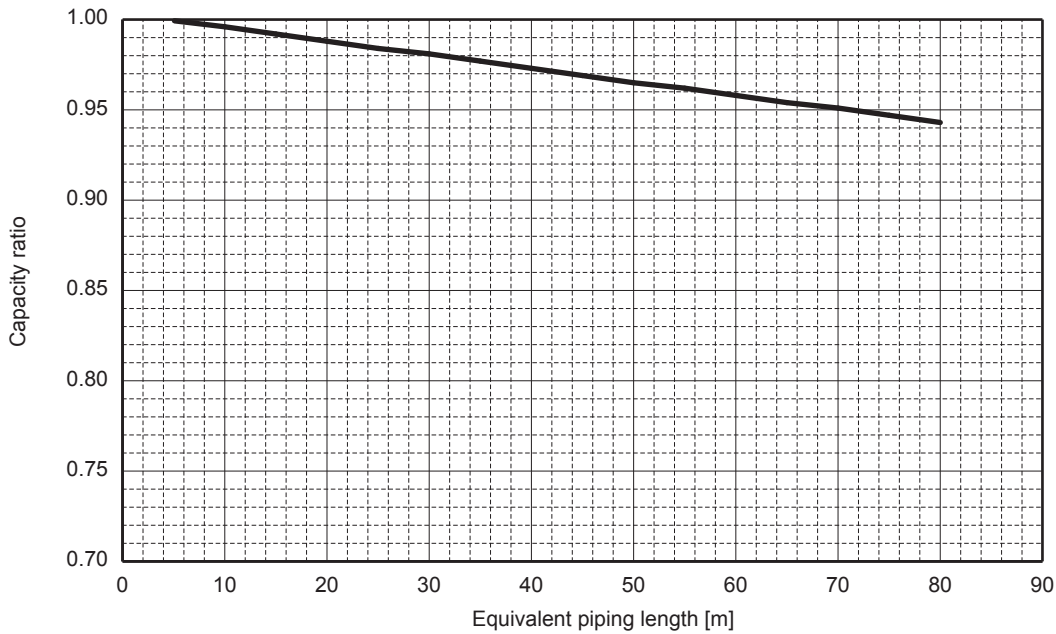
- PUAZ-SW100/120VHA(-BS)
- PUAZ-SW100/120YHA(-BS)
- PUAZ-SW100VAA(-BS)
- PUAZ-SW100YAA(-BS)

- PUAZ-SHW80/112VHA(-BS)
- PUAZ-SHW112/140YHA(-BS)
- PUAZ-SHW80/112VAA(-BS)
- PUAZ-SHW80/112YAA(-BS)

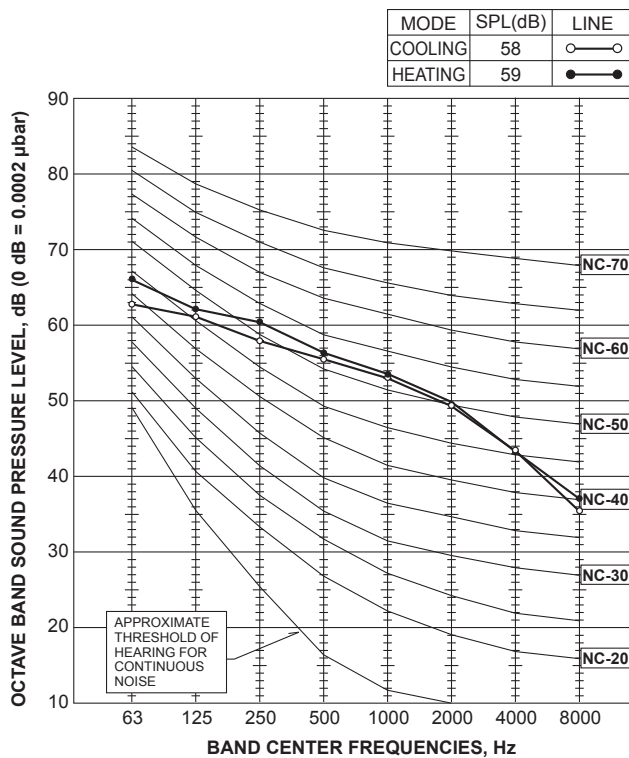
<Cooling>



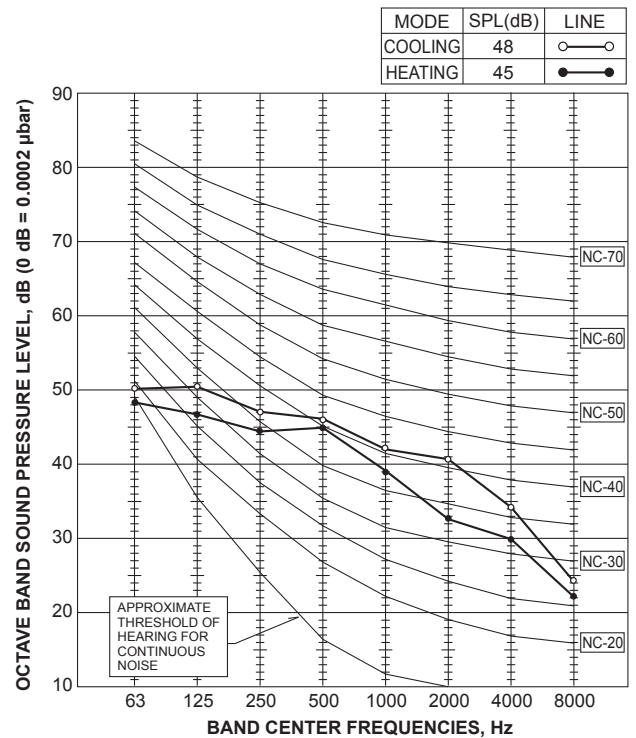
<Heating>



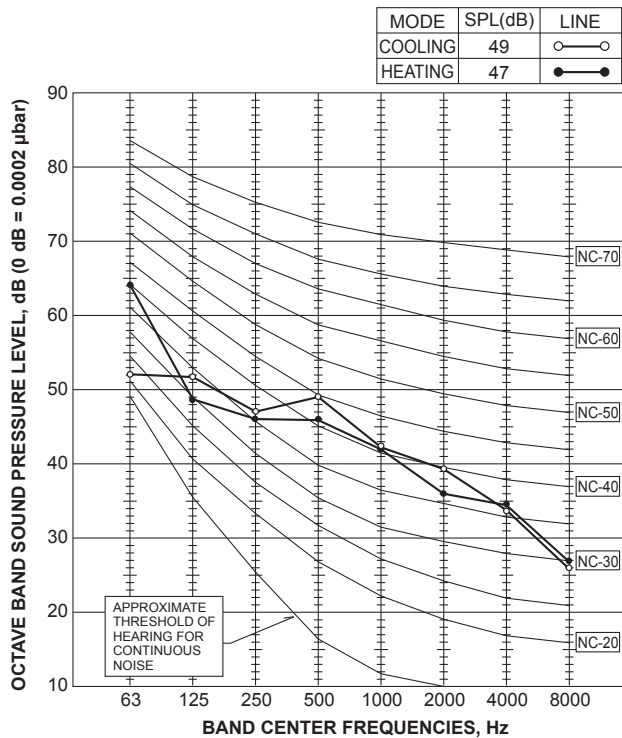
PUHZ-SHW230YKA2



PUHZ-SHW80VAA(-BS) PUHZ-SHW80YAA(-BS)



PUHZ-SHW112VAA(-BS) PUHZ-SHW112YAA(-BS)



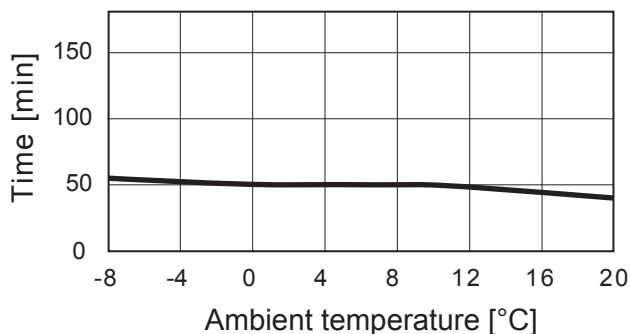
<Notes>

- 1) Sound data is taken when the system is running stably.
- 2) Relatively large noise could be heard transiently in the case 4-way valve, or LEV operates.

Outdoor unit

■ **PUHZ-SHW140YHA(-BS)**

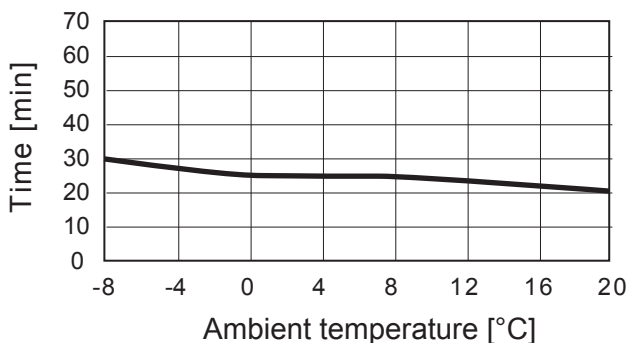
Heat time



	Ambient temperature [°C]			
	-7	2	7	20
Heat time (min)	55	50	50	40

- Mitsubishi's domestic hot water tank (200 [L])
- Time to raise DHW tank temperature 15 – 55[°C]

Reheat time

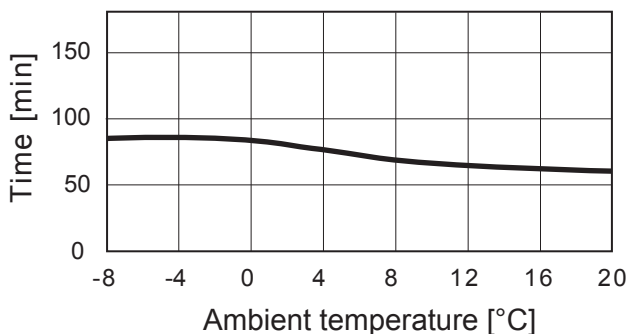


	Ambient temperature [°C]			
	-7	2	7	20
Reheat time (min)	30	25	25	20

- Mitsubishi's domestic hot water tank (200 [L])
- Time to reheat 50%(100 [L]) of DHW tank to 55 [°C]

■ **PUHZ-SHW80VAA/YAA(-BS)**

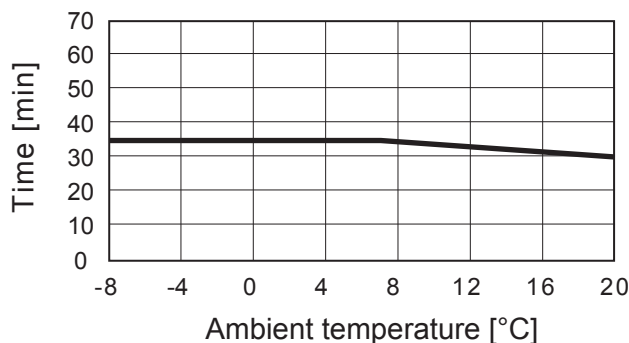
Heat time



	Ambient temperature [°C]			
	-7	2	7	20
Heat time (min)	85	80	70	60

- Mitsubishi's domestic hot water tank (200 [L])
- Time to raise DHW tank temperature 15 – 55[°C]

Reheat time

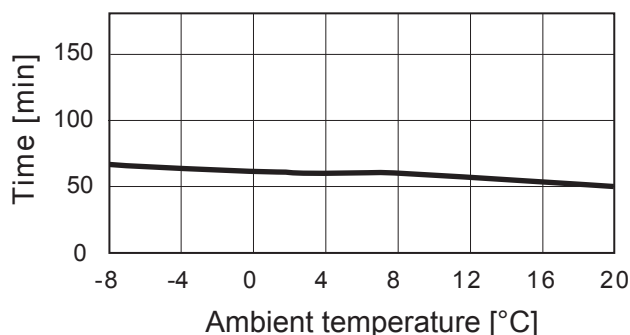


	Ambient temperature [°C]			
	-7	2	7	20
Reheat time (min)	35	35	35	30

- Mitsubishi's domestic hot water tank (200 [L])
- Time to reheat 50%(100 [L]) of DHW tank to 55 [°C]

■ **PUHZ-SHW112VAA/YAA(-BS)**

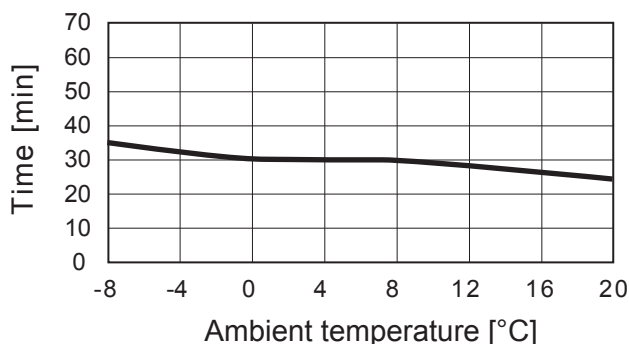
Heat time



	Ambient temperature [°C]			
	-7	2	7	20
Heat time (min)	65	60	60	50

- Mitsubishi's domestic hot water tank (200 [L])
- Time to raise DHW tank temperature 15 – 55[°C]

Reheat time



	Ambient temperature [°C]			
	-7	2	7	20
Reheat time (min)	35	30	30	25

- Mitsubishi's domestic hot water tank (200 [L])
- Time to reheat 50%(100 [L]) of DHW tank to 55 [°C]