MITSUBISHI ELECTRIC

CYLINDER UNIT

August 2023

No. OCH814

REVISED EDITION-A

SERVICE MANUAL

[Model Name]

EHPT17X-VM2E
EHPT17X-VM6E
EHPT17X-YM9E
EHPT20X-MEHEW
EHPT20X-TM9E
EHPT20X-YM9E
EHPT30X-YM9EE
EHST17D-VM2E
EHST17D-YM9E
EHST20D-VM2E
EHST20D-VM6E
EHST20D-YM9E
EHST20D-TM9E
EHST30D-MEE
EHST30D-VM6EE
EHST30D-YM9EE
EHST30D-TM9EE
ERPT17X-VM2E
ERPT20X-VM2E
ERPT20X-VM6E
ERPT20X-YM9E
ERPT30X-VM2EE
ERPT30X-VM6EE
ERPT30X-YM9EE
ERST17D-VM2E
ERST17D-VM6E
ERST17D-VM2BE
ERST17D-VM6BE
ERST17D-YM9BE
ERST20D-VM2E
ERST20D-VM6E
ERST20D-YM9E
ERST30D-VM2EE
ERST30D-VM6EE
ERST30D-YM9EE
ERST20C-VM2E
ERST30C-VM2EE
ERST20F-VM2E
ERST20F-VM6E
ERST20F-YM9E
ERST20F-TM9E
ERST30F-VM2EE
ERST30F-VM6EE
ERST30F-YM9EE
ERST30F-TM9EE

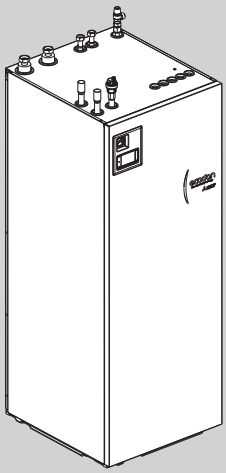
[Service Ref.]

EHPT17X-VM2E.UK
EHPT17X-VM6E.UK
EHPT17X-YM9E.UK
EHPT20X-MEHEW.UK
EHPT20X-TM9E.UK
EHPT20X-YM9E.UK
EHPT30X-YM9EE.UK
EHST17D-VM2E.UK
EHST17D-YM9E.UK
EHST20D-VM2E.UK
EHST20D-VM6E.UK
EHST20D-YM9E.UK
EHST20D-TM9E.UK
EHST30D-MEE.UK
EHST30D-VM6EE.UK
EHST30D-YM9EE.UK
EHST30D-TM9EE.UK
ERPT17X-VM2E.UK
ERPT20X-VM2E.UK
ERPT20X-VM6E.UK
ERPT20X-YM9E.UK
ERPT30X-VM2EE.UK
ERPT30X-VM6EE.UK
ERPT30X-YM9EE.UK
ERST17D-VM2E.UK
ERST17D-VM6E.UK
ERST17D-VM2BE.UK
ERST17D-VM6BE.UK
ERST17D-YM9BE.UK
ERST20D-VM2E.UK
ERST20D-VM6E.UK
ERST20D-YM9E.UK
ERST30D-VM2EE.UK
ERST30D-VM6EE.UK
ERST30D-YM9EE.UK
ERST20C-VM2E.UK
ERST30C-VM2EE.UK
ERST20F-VM2E.UK
ERST20F-VM6E.UK
ERST20F-YM9E.UK
ERST20F-TM9E.UK
ERST30F-VM2EE.UK
ERST30F-VM6EE.UK
ERST30F-YM9EE.UK
ERST30F-TM9EE.UK

Note:
This manual describes service data of cylinder unit only.

Revision:
- Added model names and service ref. in REVISED EDITION-A.

OCH814 is void.



CYLINDER UNIT



MAIN REMOTE CONTROLLER

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PARTS CATALOG (OCB814)

Model name				EHST17D-VM2E	EHST17D-YM9E	EHST20D-VM2E	EHST20D-VM6E	EHST20D-YM9E	EHST20D-TM9E	EHST30D-MEE	EHST30D-VM6EE	EHST30D-YM9EE	EHST30D-TM9EE
Nominal domestic hot water volume				170 L		200 L				300 L			
Overall unit dimensions (Height × Width × Depth)				1400 × 595 × 680 mm		1600 × 595 × 680 mm				2050 × 595 × 680 mm			
Water volume of heating circuit in the unit *1				3.4 L	5.7 L	3.5 L		5.8 L		3.9 L		6.2 L	
Unvented expansion vessel (Primary heating)		Nominal volume		12 L						-			
		Charge pressure		0.1 MPa (1 bar)						-			
Safety device	Primary circuit	Control thermistor		80 °C									
		Pressure relief valve		0.3 MPa (3 bar)									
		Flow sensor		Min. flow 5.0 L/min (See table 4.3.1 about water flow rate range)									
	Booster heater	BH manual reset thermostat		90 °C						-	90 °C		
		BH thermal cut-out		121 °C						-	121 °C		
	DHW tank	Control thermistor		75 °C									
		IH manual reset thermostat		-									
		Temperature / Pressure relief valve		1.0 MPa (10 bar)									
Connections		Water	Primary circuit	G1									
			DHW circuit	G3/4									
		Refrigerant	Liquid	φ6.35 mm									
			Gas	φ12.7 mm									
Operating range		Heating	Room temperature	10 - 30 °C									
			Flow temperature *6, *7	20 - 60 °C									
		Cooling	Room temperature	-									
			Flow temperature	-									
		DHW		40 - 60 °C						*4	40 - 60 °C		
		Legionella prevention		60 - 70 °C									
Guaranteed operating range *2		Ambient		0 - 35 °C (≤ 80 %RH)									
		Outdoor temperature	Heating	See outdoor unit spec table.									
			Cooling	-									
Electrical data		Control board (Including 4 pumps)	Power supply (Phase, voltage, frequency)	~/N, 230 V, 50 Hz									
			Input	0.30 kW									
			Current	1.95 A									
			Breaker	10 A									
		Booster heater	Power supply (Phase, voltage, frequency)	~/N, 230 V, 50 Hz	3~ , 400 V, 50 Hz	~/N, 230 V, 50 Hz		3~ , 400 V, 50 Hz	3~ , 230 V, 50 Hz	-	~/N, 230 V, 50 Hz	3~ , 400 V, 50 Hz	3~ , 230 V, 50 Hz
			Capacity	2 kW	3 kW + 6 kW	2 kW	2 kW +4 kW	3 kW + 6 kW	3 kW + 6 kW	-	2 kW + 4 kW	3 kW +6 kW	3 kW + 6 kW
			Current	9 A	13 A	9 A	26 A	13 A	23 A	-	26 A	13 A	23 A
			Breaker	16 A			32 A	16 A	32 A	-	32 A	16 A	32 A
		Immersion heater *5	Power supply (Phase, voltage, frequency)	-									
			Capacity	-									
			Current	-									
			Breaker	-									
Sound power level (PWL)				41 dB(A)									

<Table 3.1>

*1 This value does not contain: the volume of sanitary circuit, primary DHW circuit (from 3-way valve to confluent point with heating circuit), piping to expansion vessel, and expansion vessel.

*2 The environment must be frost-free.

*3 See outdoor unit spec table (min, 10°C). Cooling mode is not available in low outdoor temperature. If you use our system in cooling mode at the low ambient temperature (10°C or below), there are some risks of plate heat exchanger damages by frozen water.

*4 For the model without booster heater and immersion heater, the maximum allowable hot water temperature is "Maximum outlet water of outdoor unit -3°C". For the maximum outlet water of outdoor unit, refer to outdoor unit Data Book.

*5 Do not fit immersion heaters without thermal cut-out. Use only Mitsubishi Electric service parts as a direct replacement.

*6 Maximum temperature of E*****F model depending on the connected outdoor unit. PUZ: 70°C, Others: 60°C

*7 Maximum temperature of E*****X model depending on the connected outdoor unit. WZ: 75°C, Others: 60°C

Model name				ERST17D-VM2E	ERST17D-VM6E	ERST20D-VM2E	ERST20D-VM6E	ERST20D-YM9E	ERST30D-VM2EE	ERST30D-VM6EE	ERST30D-YM9EE	ERST20C-VM2E	ERST30C-VM2EE
Nominal domestic hot water volume				170 L		200 L			300 L			200 L	300 L
Overall unit dimensions (Height × Width × Depth)				1400 × 595 × 680 mm		1600 × 595 × 680 mm			2050 × 595 × 680 mm			1600 × 595 × 680 mm	2050 × 595 × 680 mm
Water volume of heating circuit in the unit *1				3.4 L		3.5 L		5.8 L	3.9 L		6.2 L	4.6 L	5.0 L
Unvented expansion vessel (Primary heating)		Nominal volume		12 L					-			12 L	-
		Charge pressure		0.1 MPa (1 bar)					-			0.1 MPa (1 bar)	-
Safety device	Primary circuit	Control thermistor		80 °C									
		Pressure relief valve		0.3 MPa (3 bar)									
		Flow sensor		Min. flow 5.0 L/min (See table 4.3.1 about water flow rate range)									
	Booster heater	BH manual reset thermostat		90 °C									
		BH thermal cut-out		121 °C									
	DHW tank	Control thermistor		75 °C									
		IH manual reset thermostat		-									
		Temperature / Pressure relief valve		1.0 MPa (10 bar)									
Connections		Water	Primary circuit	G1									
			DHW circuit	G3/4									
		Refrigerant	Liquid	φ6.35 mm								φ9.52 mm	
			Gas	φ12.7 mm								φ15.88 mm	
Operating range		Heating	Room temperature	10 - 30 °C									
			Flow temperature *6, *7	20 - 60 °C									
		Cooling	Room temperature	-									
			Flow temperature	5 - 25 °C									
		DHW		40 - 60 °C									
		Legionella prevention		60 - 70 °C									
Guaranteed operating range *2		Ambient		0 - 35 °C (≤ 80 %RH)									
		Outdoor temperature	Heating	See outdoor unit spec table.									
			Cooling	*3									
Electrical data		Control board (Including 4 pumps)	Power supply (Phase, voltage, frequency)	~/N, 230 V, 50 Hz									
			Input	0.30 kW									
			Current	1.95 A									
			Breaker	10 A									
		Booster heater	Power supply (Phase, voltage, frequency)	~/N, 230 V, 50 Hz				3~ , 400 V, 50 Hz	~/N, 230 V, 50 Hz		3~ , 400 V, 50 Hz	~/N, 230 V, 50 Hz	
			Capacity	2 kW	2 kW +4 kW	2 kW	2 kW + 4 kW	3 kW + 6 kW	2 kW	2 kW + 4 kW	3 kW + 6 kW	2 kW	
			Current	9 A	26 A	9 A	26 A	13 A	9 A	26 A	13 A	9 A	
			Breaker	16 A	32 A	16 A	32 A	16 A	16 A	32 A	16 A		
		Immersion heater *5	Power supply (Phase, voltage, frequency)	-									
			Capacity	-									
			Current	-									
			Breaker	-									
Sound power level (PWL)				41 dB(A)								40 dB(A)	

<Table 3.2>

*1 This value does not contain: the volume of sanitary circuit, primary DHW circuit (from 3-way valve to confluent point with heating circuit), piping to expansion vessel, and expansion vessel.

*2 The environment must be frost-free.

*3 See outdoor unit spec table (min, 10°C). Cooling mode is not available in low outdoor temperature. If you use our system in cooling mode at the low ambient temperature (10°C or below), there are some risks of plate heat exchanger damages by frozen water.

*4 For the model without booster heater and immersion heater, the maximum allowable hot water temperature is "Maximum outlet water of outdoor unit -3°C". For the maximum outlet water of outdoor unit, refer to outdoor unit Data Book.

*5 Do not fit immersion heaters without thermal cut-out. Use only Mitsubishi Electric service parts as a direct replacement.

*6 Maximum temperature of E*****F model depending on the connected outdoor unit. PUZ: 70°C, Others: 60°C

*7 Maximum temperature of E*****X model depending on the connected outdoor unit. WZ: 75°C, Others: 60°C

Model name				ERST20F-VM2E	ERST20F-VM6E	ERST20F-YM9E	ERST20F-TM9E	ERST30F-VM2EE	ERST30F-VM6EE	ERST30F-YM9EE	ERST30F-TM9EE
Nominal domestic hot water volume				200 L				300 L			
Overall unit dimensions (Height × Width × Depth)				1600 × 595 × 680 mm				2050 × 595 × 680 mm			
Water volume of heating circuit in the unit *1				3.6 L		5.9 L		4.0 L		6.3 L	
Unvented expansion vessel (Primary heating)		Nominal volume		12 L				-			
		Charge pressure		0.1 MPa (1 bar)				-			
Safety device	Primary circuit	Control thermistor		80 °C							
		Pressure relief valve		0.3 MPa (3 bar)							
		Flow sensor		Min. flow 5.0 L/min (See table 4.3.1 about water flow rate range)							
	Booster heater	BH manual reset thermostat		90 °C							
		BH thermal cut-out		121 °C							
	DHW tank	Control thermistor		75 °C							
		IH manual reset thermostat		-							
		Temperature / Pressure relief valve		1.0 MPa (10 bar)							
Connections		Water	Primary circuit	G1							
			DHW circuit	G3/4							
		Refrigerant	Liquid	φ6.35 mm							
			Gas	φ12.7 or φ15.88 mm *8							
Operating range		Heating	Room temperature	10 - 30 °C							
			Flow temperature *6, *7	20 - 70 °C							
		Cooling	Room temperature	-							
			Flow temperature	5~25 °C							
		DHW		40 - 65 °C							
		Legionella prevention		60 - 70 °C							
Guaranteed operating range *2		Ambient		0~35 °C (≤ 80 %RH)							
		Outdoor temperature	Heating	See outdoor unit spec table.							
			Cooling	*3							
Electrical data		Control board (Including 4 pumps)	Power supply (Phase, voltage, frequency)	~/N, 230 V, 50 Hz							
			Input	0.30 kW							
			Current	1.95 A							
			Breaker	10 A							
		Booster heater	Power supply (Phase, voltage, frequency)	~/N, 230 V, 50 Hz		3~ , 400 V, 50 Hz	3~ , 230 V, 50 Hz	~/N, 230 V, 50 Hz		3~ , 400 V, 50 Hz	3~ , 230 V, 50 Hz
			Capacity	2 kW	2 kW + 4 kW	3 kW + 6 kW		2 kW	2 kW + 4 kW	3 kW + 6 kW	
			Current	9 A	26 A	13 A	23 A	9 A	26 A	13 A	23 A
			Breaker	16 A	32 A	16 A	32 A	16 A	32 A	16 A	32 A
		Immersion heater *5	Power supply (Phase, voltage, frequency)	-							
			Capacity	-							
			Current	-							
			Breaker	-							
Sound power level (PWL)				41 dB(A)							

<Table 3.3>

*1 This value does not contain: the volume of sanitary circuit, primary DHW circuit (from 3-way valve to confluent point with heating circuit), piping to expansion vessel, and expansion vessel.

*2 The environment must be frost-free.

*3 See outdoor unit spec table (min, 10°C). Cooling mode is not available in low outdoor temperature. If you use our system in cooling mode at the low ambient temperature (10°C or below), there are some risks of plate heat exchanger damages by frozen water.

*4 For the model without booster heater and immersion heater, the maximum allowable hot water temperature is "Maximum outlet water of outdoor unit -3°C". For the maximum outlet water of outdoor unit, refer to outdoor unit Data Book.

*5 Do not fit immersion heaters without thermal cut-out. Use only Mitsubishi Electric service parts as a direct replacement.

*6 Maximum temperature of E*****F model depending on the connected outdoor unit. PUZ: 70°C, Others: 60°C

*7 Maximum temperature of E*****X model depending on the connected outdoor unit. WZ: 75°C, Others: 60°C

*8 For more details, refer to the installation manual of PUZ-S(H)WM.

Model name				EHPT17X-VM2E	EHPT17X-VM6E	EHPT17X-YM9E	EHPT20X-YM9E	EHPT20X-TM9E	EHPT20X-MEHEW	EHPT30X-YM9EE	ERPT17X-VM2E	ERPT20X-VM2E	ERPT20X-VM6E	ERPT20X-YM9E	ERPT30X-VM2EE	ERPT30X-VM6EE	ERPT30X-YM9EE
Nominal domestic hot water volume				170 L			200 L			300 L	170 L	200 L			300 L		
Overall unit dimensions (Height × Width × Depth)				1400 × 595 × 680 mm			1600 × 595 × 680 mm			2050 × 595 × 680 mm	1400 × 595 × 680 mm	1600 × 595 × 680 mm			2050 × 595 × 680 mm		
Water volume of heating circuit in the unit *1				3.2 L		5.5 L	6.0 L		3.7 L	6.7 L	3.2 L	3.7 L		6.0 L	4.4 L		6.7 L
Unvented expansion vessel (Primary heating)		Nominal volume		12 L					-		12 L				-		
		Charge pressure		0.1 MPa (1 bar)					-		0.1 MPa (1 bar)				-		
Safety device	Primary circuit	Control thermistor		80 °C													
		Pressure relief valve		0.3 MPa (3 bar)													
		Flow sensor		Min. flow 5.0 L/min													
	Booster heater	BH manual reset thermostat		90 °C					-	90 °C							
		BH thermal cut-out		121 °C					-	121 °C							
	DHW tank	Control thermistor		75 °C													
		IH manual reset thermostat		-					85 °C	-							
		Temperature/ Pressure relief valve		1.0 MPa (10 bar)					90°C / 0.7 MPa (7 bar)	1.0 MPa (10 bar)							
Connections		Water	Primary circuit	G1													
			DHW circuit	G3/4													
		Refrigerant	Liquid	-													
			Gas	-													
Operating range		Heating	Room temperature	10 - 30 °C													
			Flow temperature *6, *7	20 - 75 °C													
		Cooling	Room temperature	-													
			Flow temperature	-							5 - 25 °C						
		DHW		40 - 70 °C													
		Legionella prevention		60 - 70 °C													
Guaranteed operating range *2		Ambient		0~35 °C (≤ 80 %RH)													
		Outdoor temperature	Heating	See outdoor unit spec table.													
			Cooling	-							*3						
Electrical data		Control board (Including 4 pumps)	Power supply (Phase, voltage, frequency)	~/N, 230 V, 50 Hz													
			Input	0.30 kW													
			Current	1.95 A													
			Breaker	10 A													
		Booster heater	Power supply (Phase, voltage, frequency)	~/N, 230 V, 50 Hz		3~ , 400 V, 50 Hz		3~ , 230 V, 50 Hz	-	3~ , 400 V, 50 Hz	~/N, 230 V, 50 Hz			3~ , 400 V, 50 Hz	~/N, 230 V, 50 Hz		3~ , 400 V, 50 Hz
			Capacity	2 kW	2 kW +4 kW	3 kW +6 kW			-	3 kW +6 kW	2 kW		2 kW +4 kW	3 kW +6 kW	2 kW	2 kW +4 kW	3 kW +6 kW
			Current	9 A	26 A	13 A		23 A	-	13 A	9 A		26 A	13 A	9 A	26 A	13 A
			Breaker	16 A	32 A	16 A		32 A	-	16 A			32 A	16 A		32 A	16 A
		Immersion heater *5	Power supply (Phase, voltage, frequency)	-					~/N, 230 V, 50 Hz	-							
			Capacity	-					3 kW	-							
			Current	-					13 A	-							
			Breaker	-					16 A	-							
Sound power level (PWL)				40 dB(A)													

<Table 3.4>

*1 This value does not contain: the volume of sanitary circuit, primary DHW circuit (from 3-way valve to confluent point with heating circuit), piping to expansion vessel, and expansion vessel.

*2 The environment must be frost-free.

*3 See outdoor unit spec table (min, 10°C). Cooling mode is not available in low outdoor temperature. If you use our system in cooling mode at the low ambient temperature (10°C or below), there are some risks of plate heat exchanger damages by frozen water.

*4 For the model without booster heater and immersion heater, the maximum allowable hot water temperature is "Maximum outlet water of outdoor unit -3°C". For the maximum outlet water of outdoor unit, refer to outdoor unit Data Book.

*5 Do not fit immersion heaters without thermal cut-out. Use only Mitsubishi Electric service parts as a direct replacement.

*6 Maximum temperature of E*****F model depending on the connected outdoor unit. PUZ: 70°C, Others: 60°C

*7 Maximum temperature of E*****X model depending on the connected outdoor unit. WZ: 75°C, Others: 60°C

Model name				ERST17D-VM2BE	ERST17D-VM6BE	ERST17D-YM9BE
Nominal domestic hot water volume				170 L		
Overall unit dimensions (Height × Width × Depth)				1750 × 595 × 680 mm		
Water volume of heating circuit in the unit *1				4.3 L		6.2 L
Unvented expansion vessel (Primary heating)		Nominal volume		12 L		
		Charge pressure		0.1 MPa (1 bar)		
Safety device	Primary circuit	Control thermistor		80 °C		
		Pressure relief valve		0.3 MPa (3 bar)		
		Flow sensor		Min. flow 5.0 L/min (See table 4.3.1 about water flow rate range)		
	Booster heater	BH manual reset thermostat		90 °C		
		BH thermal cut-out		121 °C		
	DHW tank	Control thermistor		75 °C		
		IH manual reset thermostat		-		
		Temperature/ Pressure relief valve		1.0 MPa (10 bar)		
Connections		Water	Primary circuit	G1		
			DHW circuit	G3/4		
		Refrigerant	Liquid	φ6.35 mm		
			Gas	φ12.7 mm		
Operating range		Heating	Room temperature	10 - 30 °C		
			Flow temperature *6, *7	20 - 60 °C		
		Cooling	Room temperature	-		
			Flow temperature	5 - 25 °C		
		DHW		40 - 60 °C		
		Legionella prevention		60 - 70 °C		
Guaranteed operating range *2		Ambient		0 - 35 °C (≤ 80 %RH)		
		Outdoor temperature	Heating	See outdoor unit spec table.		
			Cooling	*3		
Electrical data		Control board (Including 4 pumps)	Power supply (Phase, voltage, frequency)	~/N, 230, 50 Hz		
			Input	0.30 kW		
			Current	1.95 A		
			Breaker	10 A		
		Booster heater	Power supply (Phase, voltage, frequency)	~/N, 230 V, 50 Hz		3~, 400 V, 50 Hz
			Capacity	2 kW	2kW +4 kW	3kW +6 kW
			Current	9 A	26 A	13 A
			Breaker	16 A	32 A	16 A
		Immersion heater *5	Power supply (Phase, voltage, frequency)	-		
			Capacity	-		
			Current	-		
			Breaker	-		
Sound power level (PWL)				41 dB(A)		

<Table 3.5>

*1 This value does not contain: the volume of sanitary circuit, primary DHW circuit (from 3-way valve to confluent point with heating circuit), piping to expansion vessel, and expansion vessel.

*2 The environment must be frost-free.

*3 See outdoor unit spec table (min, 10°C). Cooling mode is not available in low outdoor temperature. If you use our system in cooling mode at the low ambient temperature (10°C or below), there are some risks of plate heat exchanger damages by frozen water.

*4 For the model without booster heater and immersion heater, the maximum allowable hot water temperature is "Maximum outlet water of outdoor unit -3°C". For the maximum outlet water of outdoor unit, refer to outdoor unit Data Book.

*5 Do not fit immersion heaters without thermal cut-out. Use only Mitsubishi Electric service parts as a direct replacement.

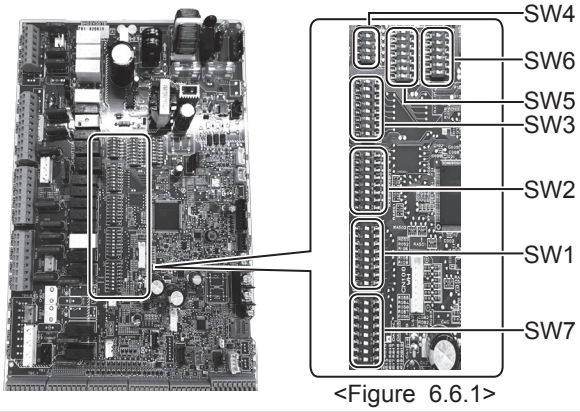
*6 Maximum temperature of E*****F model depending on the connected outdoor unit. PUZ: 70°C, Others: 60°C

*7 Maximum temperature of E*****X model depending on the connected outdoor unit. WZ: 75°C, Others: 60°C

6-10. DIP Switch Functions

The DIP switch number is printed on the circuit board next to the relevant switches. The word ON is printed on the circuit board and on the DIP switch block itself. To move the switch, you need to use a pin or the corner of a thin metal ruler or similar.

DIP switch settings are listed below in Table 6.6.1.
Only an authorised installer can change DIP switch setting under one's own responsibility according to the installation condition.
Make sure to turn off both indoor unit and outdoor unit power supplies before changing the switch settings.



<Figure 6.6.1>

DIP switch		Function	OFF	ON	Default settings: Indoor unit model
SW1	SW1-1	Boiler	WITHOUT Boiler	WITH Boiler	OFF
	SW1-2	Heat pump maximum outlet water temperature	55ºC	60ºC	ON *1
	SW1-3	DHW tank	WITHOUT DHW tank	WITH DHW tank	ON
	SW1-4	Immersion heater	WITHOUT Immersion heater	WITH Immersion heater	OFF: Except EHPT20X-MEHEW ON: EHPT20X-MEHEW
	SW1-5	Booster heater	WITHOUT Booster heater	WITH Booster heater	OFF: E**T***-M**E* ON : E**T***-*M 2/6/9*E
	SW1-6	Booster heater function	For heating only	For heating and DHW	OFF: E**T***-M**E* ON : E**T***-*M 2/6/9*E
	SW1-7	Outdoor unit type	Split type	Packaged type	OFF: E*ST***-*M**E ON : E*PT**X-*M**E*
	SW1-8	Wireless remote controller	WITHOUT Wireless remote controller	WITH Wireless remote controller	OFF
SW2	SW2-1	Room thermostat 1 input (IN1) logic change	Zone 1 operation stop at thermostat short	Zone 1 operation stop at thermostat open	OFF
	SW2-2	Flow switch 1 input (IN2) logic change	Failure detection at short	Failure detection at open	OFF
	SW2-3	Booster heater capacity restriction	Inactive	Active	OFF: Except E**T***-VM2*E ON : E**T***-VM2*E
	SW2-4	Cooling mode function	Inactive	Active	OFF: EH*T***-*M**E* ON : ER*T***-*M**E
	SW2-5	Automatic switch to backup heat source operation (When outdoor unit stops by error)	Inactive	Active *2	OFF
	SW2-6	Mixing tank	WITHOUT Mixing tank	WITH Mixing tank	OFF: Except E*ST***-*M*BE ON : E*ST***-*M*BE
	SW2-7	2-zone temperature control	Inactive	Active *3	
	SW2-8	Flow sensor	WITHOUT Flow sensor	WITH Flow sensor	ON
SW3	SW3-1	Room thermostat 2 input (IN6) logic change	Zone 2 operation stop at thermostat short	Zone 2 operation stop at thermostat open	OFF
	SW3-2	Flow switch 2 and 3 input logic change	Failure detection at short	Failure detection at open	OFF
	SW3-3	3-way valve type	AC motor	Stepping motor	OFF: Except E**T17X/17D/20D-*M**E* ON: E**T17X/17D/20D-*M**E
	SW3-4	Electric energy meter	WITHOUT Electric energy meter	WITH Electric energy meter	OFF
	SW3-5	Heating mode function *4	Inactive	Active	ON
	SW3-6	2-zone valve ON/OFF control	Inactive	Active	OFF
	SW3-7	Heat exchanger for DHW	Coil in tank	External plate HEX	ON
	SW3-8	Heat meter	WITHOUT Heat meter	WITH Heat meter	OFF
SW4	SW4-1	—	—	—	OFF
	SW4-2	—	—	—	OFF
	SW4-3	—	—	—	OFF
	SW4-4	Indoor unit only operation (during installation work) *5	Inactive	Active	OFF
	SW4-5	Emergency mode (Heater only operation)	Normal	Emergency mode (Heater only operation)	OFF *6
	SW4-6	Emergency mode (Boiler operation)	Normal	Emergency mode (Boiler operation)	OFF *6
SW5	SW5-1	—	—	—	OFF
	SW5-2	Advanced auto adaptation	Inactive	Active	ON
	SW5-3				
	SW5-4				
	SW5-5				
	SW5-6				
	SW5-7				
	SW5-8	—	—	—	OFF

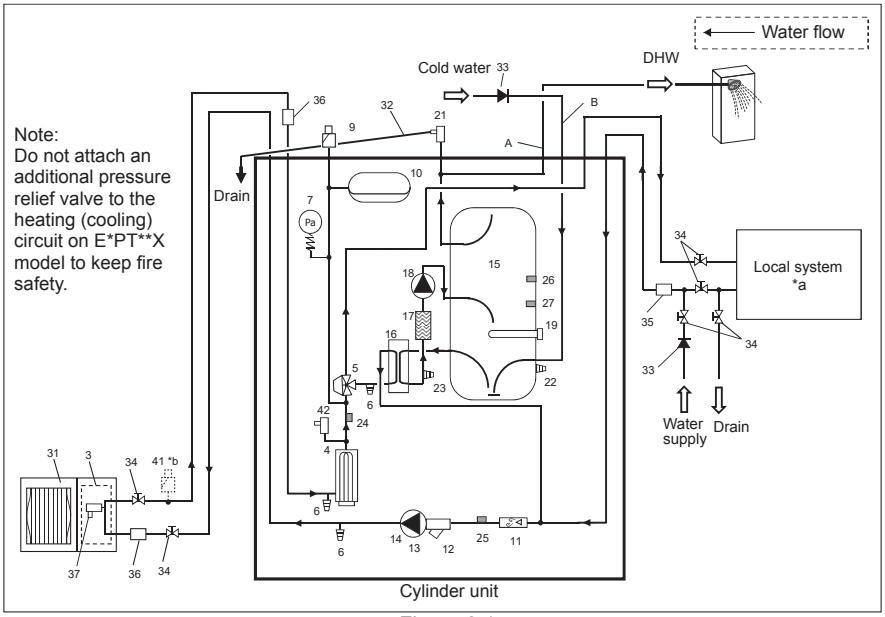
Capacity code

	SW5-3	SW5-4	SW5-5	SW5-6	SW5-7
E**T**C-*M**E	ON	ON	ON	ON	OFF
E**T**D-*M**E	ON	OFF	OFF	ON	OFF
E**T**X-*M**E*	OFF	OFF	OFF	OFF	OFF
E**T**F-*M**E*	OFF	OFF	ON	ON	OFF

<Table 6.10.1>

8 WATER SYSTEM DIAGRAM

<E*PT17X-*M*E> (Packaged model system)

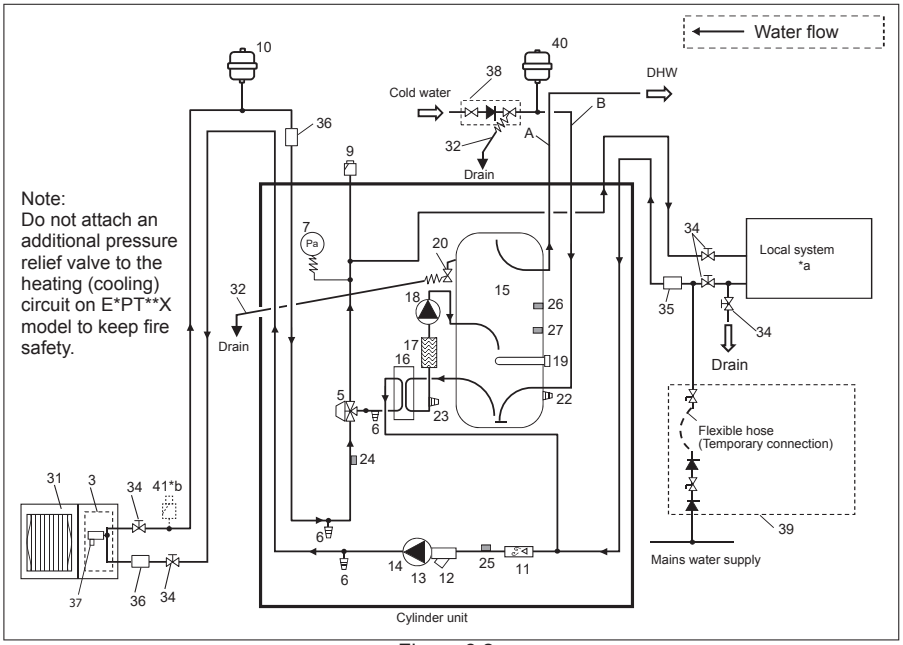


<Figure 8.1>

*a. Refer to the following section [Local system].
*b. If the outdoor unit is higher than the indoor unit, or if there is a location where air gets trapped in the upper part of the water pipe, consider adding this part.

Notes
- To enable draining of the cylinder unit, an isolating valve should be positioned on both the inlet and outlet pipework.
- Be sure to install a strainer on the inlet pipework to the cylinder unit.
- Suitable drain pipework should be attached to all relief valves in accordance with your country's regulations.
- A backflow prevention device must be installed on the cold water supply pipework (IEC 61770)
- When using components made from different metals or connecting pipes made of different metals, insulate the joints to prevent any corrosive reaction taking place which may damage the pipework.)

<EHPT20X-MEHEW> (UK model system) <Example>

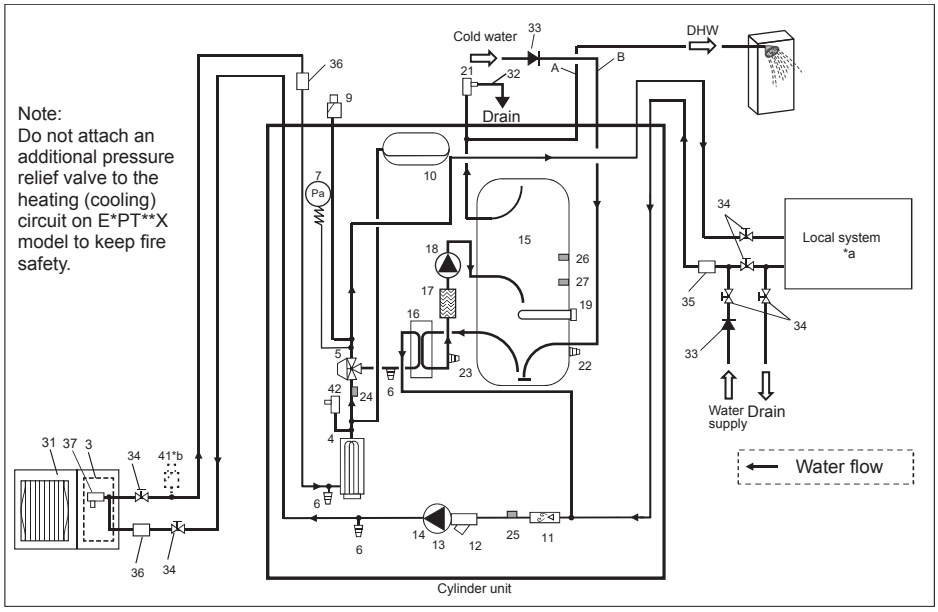


<Figure 8.2>

*a. Refer to the following section 'Local system' on the 'Paper-based manual'.

Note
- To enable draining of the cylinder unit, an isolating valve should be positioned on both the inlet and outlet pipework. No valve should be fitted between the expansion valve (item 38) and the cylinder unit (safety matter).
- For space heating (primary) circuit, a suitable expansion vessel **MUST** be supplied and fitted by installer.
- Be sure to install a strainer on the inlet pipework to the cylinder unit.
- Suitable drain pipework should be attached to all relief valves in accordance with your country's regulations.
- When using components made from different metals or connecting pipes made of different metals, insulate the joints to prevent any corrosive reaction taking place which may damage any pipework.
- Filling loop's flexible hose must be removed following the filling procedure. Item provided with unit as loose accessory.
- Install the inlet control group (item 38) above the level of the T&P relief valve (item 20). This will ensure DHW tank will not require drain down to service/maintain the inlet control group.

<E*PT20X-*M**E> (Packaged model system)



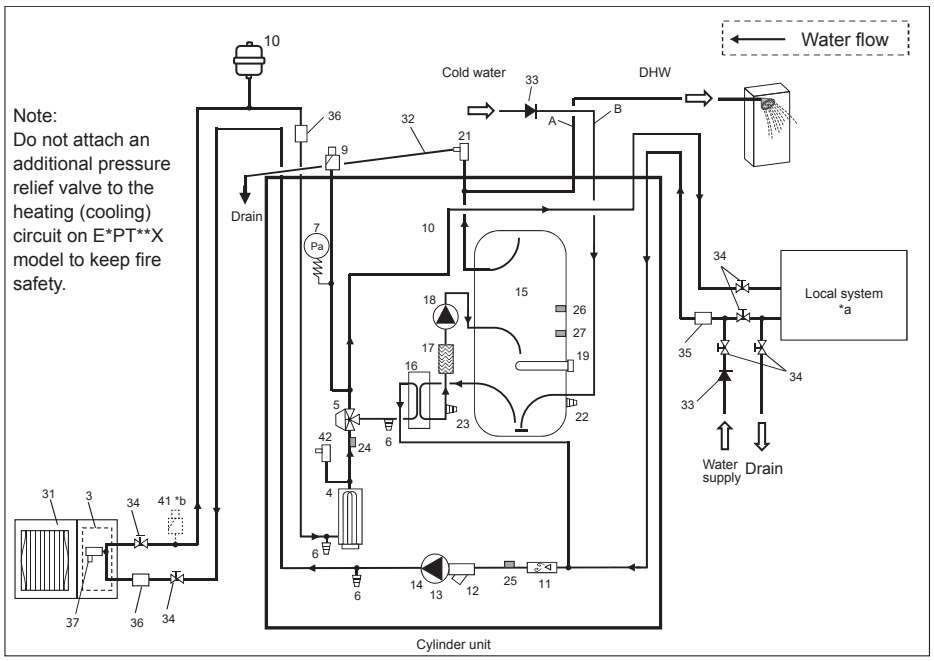
<Figure 8.3>

Go to the Mitsubishi Electric website to check the water circuit of other units and the component parts of each unit.

*a Refer to the following section "Local system".
*b If the outdoor unit is higher than the indoor unit, or if there is a location where air gets trapped in the upper part of the water pipe, consider adding this part.

Notes
- To enable draining of the cylinder unit, an isolating valve should be positioned on both the inlet and outlet pipework.
- Be sure to install a strainer on the inlet pipework to the cylinder unit.
- Suitable drain pipework should be attached to the relief valves in accordance with your country's regulations.
- A backflow prevention device must be installed on the cold water supply pipework (IEC 61770)
- When using components made from different metals or connecting pipes made of different metals, insulate the joints to prevent any corrosive reaction taking place which may damage the pipework.

<E*PT30X-*M**E> (Packaged model system)

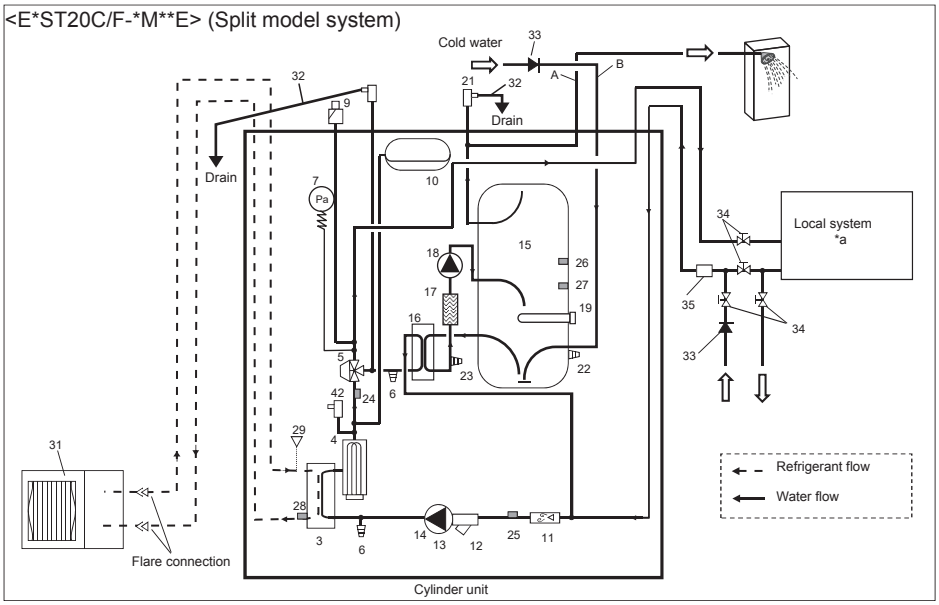


<Figure 8.4>

*a Refer to the following section "Local system" on the paper-based manual.
*b If the outdoor unit is higher than the indoor unit, or if there is a location where air gets trapped in the upper part of the water pipe, consider adding this part.

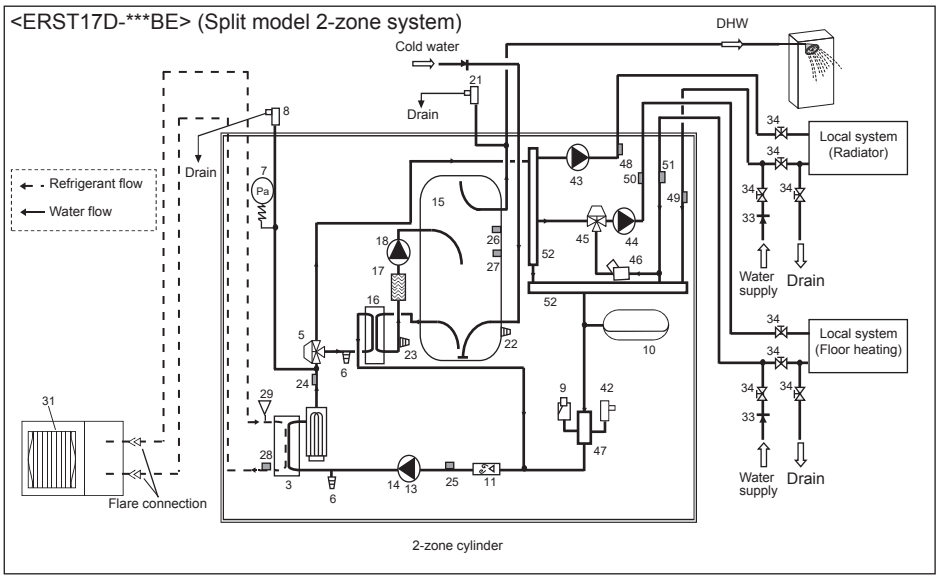
Note (Figure 8.4)
- To enable draining of the cylinder unit an isolating valve should be positioned on both the inlet and outlet pipework.
- Be sure to install a strainer on the inlet pipework to the cylinder unit.
- Suitable drain pipework should be attached to the relief valves in accordance with your country's regulations.
- A backflow prevention device must be installed on the cold water supply pipework (IEC 61770)
- When using components made from different metals or connecting pipes made of different metals insulate the joints to prevent any corrosive reaction taking place which may damage the pipework.

<E*ST20C/F-*M**E> (Split model system)



<Figure 8.5>

<ERST17D-***BE> (Split model 2-zone system)



<Figure 8.6>

Go to the Mitsubishi Electric website to check the water circuit of other units and the component parts of each unit.

*a Refer to the following section "Local system".

*b If the outdoor unit is higher than the indoor unit, or if there is a location where air gets trapped in the upper part of the water pipe, consider adding this part.

Notes

- To enable draining of the cylinder unit, an isolating valve should be positioned on both the inlet and outlet pipework.
- Be sure to install a strainer on the inlet pipework to the cylinder unit.
- Suitable drain pipework should be attached to the relief valves instructed to be connected to it in Figures 8.5 and 8.6 in accordance with your country's regulations.
- A backflow prevention device must be installed on the cold water supply pipework (IEC 61770)
- When using components made from different metals or connecting pipes made of different metals, insulate the joints to prevent any corrosive reaction taking place which may damage the pipework.

Menu subtitle	Function	Range	Unit	Default value
DHW target temp.	Desired temperature of stored hot water	40 - 70*1	°C	50
[Max. temp. drop]	Difference in temperature between the DHW maximum temperature and the temperature at which DHW mode restarts	5 - 40*2	°C	10
[Max. operation time]	Maximum time allowed for stored water heating DHW mode	30 - 120	min.	60
[Interval]	The time period after DHW mode when space heating has priority over DHW mode temporarily preventing further stored water heating (Only when DHW max. operation time has passed.)	30 - 120	min.	30

***1 The maximum temperature differs depending on the connected outdoor unit. (60°C/65°C/70°C)**
***2 When the DHW maximum temperature is set over 55°C, the temperature at which DHW mode restarts must be less than 50°C to protect the device.**

[Eco]
DHW mode can run in either normal or Eco mode. Normal mode will heat the water in the DHW tank fast using the full power of the heat pump. Eco mode takes a little longer to heat the water in the DHW tank, but the energy used is reduced. This is because heat pump operation is restricted using signals from the FTC based on measured DHW tank temperature.

Note: The actual energy saved in Eco mode will vary according to outdoor ambient temperature.

[Volume]
Select the amount of DHW tank. If you need much hot water, select [Large].

Return to the DHW/legionella prevention menu.

Legionella prevention mode settings (LP mode)

- [Legionella]: It can be activated/deactivated by the toggle.
  The target temperature can be changed by +/-.
  From the edit icon, [Start time], [Duration], [Frequency], and [Max. operation time] can be set.
- [Schedule]: It can be activated/deactivated by the toggle.
- [Always off]: It can be activated/deactivated by the toggle.

During LP mode, the temperature of the stored water is increased above 60°C to inhibit legionella bacteria growth. It is strongly recommended that this is done at regular intervals. Please check local regulations for the recommended frequency of heat ups.

Note 1: When failures occur on the hydrobox, the LP mode may not function normally.

Note 2: Even when DHW operation is prohibited, LP mode will operate.

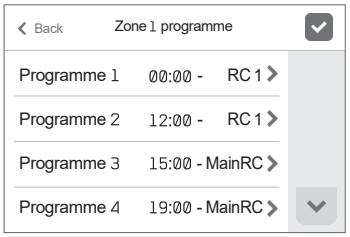
Menu subtitle	Function	Range	Unit	Default value
Hot water temp.	Desired temperature of stored hot water	60 - 70	°C	65
[Start time]	Time when LP mode will begin	0:00 - 23:00	-	03:00
[Duration]	The time period after LP mode desired water temperature has been reached	1 - 120	min.	30
[Frequency]	Time between LP mode DHW tank heat up	1 - 30	day	15
[Max. operation time]	Maximum time allowed for LP mode DHW tank heat	1 - 5	hour	3

Please note that LP mode uses the assistance of electric heaters to supplement the energy input of the heat pump. Heating water for long periods of time is not efficient and will increase running costs. The installer should give careful consideration to the necessity of legionella prevention treatment whilst not wasting energy by heating the stored water for excessive time periods. The end user should understand the importance of this feature.
ALWAYS COMPLY WITH LOCAL AND NATIONAL GUIDANCE FOR YOUR COUNTRY REGARDING LEGIONELLA PREVENTION.

9-3. Setting

From the menu icon, access [Setting].
The following items can be edited in [Setting].

- [Date / time]
- [Display] (From [Setting], the screen can be switched to the full screen or the base screen.)
- [Language]
- [Room sensors]
- [Contact number]
- [Touch screen] ([Calibrate screen]*1, [Clean screen]*2, [Brightness], and [Backlight time])



[Zone 1 programme]

Follow the procedure described in General Operation for the set up operation.

*1 Touching the 9 dots displayed on the screen starts calibration.
To properly calibrate the touch panel, use a pointy but not sharp object to touch the dots.
Note: A sharp object may damage or scratch the touch screen.

*2 You can wipe the screen while touch operations are invalid for 30 seconds.
Wipe with a soft dry cloth, a cloth soaked in water with mild detergent, or a cloth dampened with ethanol.
Do not use acidic, alkaline, or organic solvents.

[Room sensors]
For [Room sensors], it is important to choose the correct room sensor depending on the heating and cooling mode the system will operate in.

<Operation settings>

Heating operation

This function allows operational setting of flow temperature range from the Ecodan and also the time interval at which the FTC collects and processes data for the auto adaptation mode.

Menu subtitle		Function	Range	Unit	Default
Flow temp. range	Minimum temp.	To minimize the loss by frequent ON and OFF in mild outdoor ambient temperature seasons.	20 to 45	ºC	30
	Maximum temp.	To set max. possible flow temperature according to the type of heat emitters.	35 to 60/70/75	ºC	50
Room temp. control	Mode	Setting for Room temp. control At Quick mode, target outlet water temperature will set higher than the one set at Normal mode. This reduces the time to reach the target room temperature when the room temperature is relatively low.*	Auto/Quick/ Normal/Slow	—	Auto
	Interval	Selectable according to the heat emitter type and the materials of floor (i.e. radiators, floor heating-thick, -thin concrete, wood, etc.)	10 to 60	min.	10
Heat pump thermo diff.adjust	ON/OFF	To minimize the loss by frequent ON and OFF in mild outdoor ambient temperature seasons.	ON/OFF	—	ON
	Lower limit	Prohibits heat pump operation until the flow temperature drops below the target flow temperature plus lower limit value.	−9 to −1	ºC	−5
	Upper limit	Allows heat pump operation until the flow temperature rises above the target flow temperature plus upper limit value.	+3 to +5	ºC	+5

< Heating operation (Room temp. control table) >

Notes:

1. The minimum flow temperature that prohibits heat pump operation is 20ºC.
2. The maximum flow temperature that allows heat pump operation equals to the maximum temperature set in the Flow temp. range menu.

* Quick mode may be not efficient and will increase running cost compared to normal mode.

Freeze stat function

Menu subtitle		Function/ Description
Freeze stat function *1		An operational function to prevent the water circuit from freezing when outdoor ambient temperature drops.
	Flow t.	The target outlet water temperature at water circuit when operating in Freeze stat function. *2
	Outdoor ambient temp.	Minimum outdoor ambient temperature which freeze stat function will begin to operate, (3–20ºC) or choose**. If asterisk (**) is chosen freeze stat function is deactivated. (i.e. primary water freeze risk)"

*1. When the system is turned off, freeze stat function is not enabled.

*2. Flow t. is fixed to 20°C and unchangeable.

Simultaneous Operation

For periods of very low outdoor ambient temperature this mode can be used. Simultaneous operation allows both DHW and space heating to run together by using the heat pump and/or booster heater to provide space heating whilst only the immersion heater provides heating for DHW. This operation is only available if BOTH a DHW tank AND immersion heater are present on the system.

- Range of outdoor ambient temperature at which simultaneous operation starts is −30 to 10°C (default −15°C).
- System shall automatically return to routine operation. This will happen when the outdoor ambient temperature rises above the selected temperature for this specific mode of operation.

Cold weather function

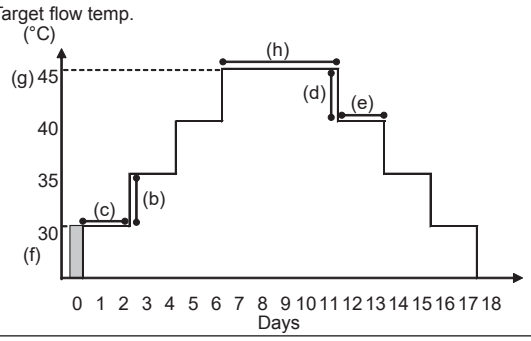
For extremely low outdoor ambient temperature conditions when the heat pump's capacity is restricted, the heating or DHW is provided only by the electric booster heater (and immersion if present). This function is intended for use during extreme cold periods only. Extensive use of direct electrical heaters ONLY will result in higher power consumption and may reduce working life of heaters and related parts.

Manual operation and heat source setting cannot be selected if the system is running. A screen will be displayed asking the installer to stop the system before these modes can be activated.
The system automatically stops 2 hours after last operation

Floor dry up function

The Floor dry up function automatically changes the target hot water temperature in stages to gradually dry concrete when this particular type of underfloor heating system is installed.

Upon completion of the operation the system stops all the operations except the Freeze stat.
For Floor dry up function, the target flow temp. of Zone1 is the same as that of Zone2.



- This function is not available when a PUHZ-FRP outdoor unit is connected.
- Disconnect wiring to external inputs of room thermostat, demand control, and outdoor thermostat, or the target flow temperature may not be maintained.

Functions		Symbol	Description	Option/Range	Unit	Default
[Floor dry up function]		a	Set the function to on and power on the system using the main remote controller, and the dry up heating operation will start.	on/off	—	off
[Flow temperature increase]	[Temperature increase step]	b	It sets the increase step of the target flow temperature.	+1 to +30	ºC	+5
	[Increase interval]	c	It sets the period for which the same target flow temperature is maintained.	1 to 7	day	2
[Flow temperature decrease]	[Temperature decrease step]	d	It sets the decrease step of the target flow temperature.	−1 to −30	ºC	−5
	[Decrease interval]	e	It sets the period for which the same target flow temperature is maintained.	1 to 7	day	2
[Target temperature]	[Start & End]	f	It sets the target flow temperature at the start and the finish of the operation.	20 to 60/70/75*	ºC	30
	[Max temperature]	g	It sets the maximum target flow temperature.	20 to 60/70/75*	ºC	45
	[Max temperature period]	h	It sets the period for which the maximum target flow temperature is maintained.	1 to 20	day	5

* The maximum temperature differs depending on the connected outdoor unit.

No.	Fault symptom	Possible cause	Explanation - Solution
23	Water discharges from expansion relief valve - part of Inlet Control Group (EHPT20X-MEHEW only) (Sanitary circuit)	1. If continual – field supplied pressure reducing valve not working. 2. If continual – expansion relief valve may be damaged. 3. If intermittent – expansion vessel charge may have reduced/bladder perished. 4. DHW tank may have subjected to backflow. 5. Unit has overheated – thermal controls have failed.	1. Check function of pressure reducing valve and replace if necessary. 2. Turn the handle on the expansion relief valve to check for foreign objects inside. If the problem is not still solved, replace the expansion relief valve with a new one. 3. Check gas-side pressure in expansion vessel. Recharge to correct precharge pressure if necessary. If bladder perished replace expansion vessel with a new one with appropriate precharge. 4. Check pressure in DHW tank. If pressure in DHW tank is similar to that in the incoming mains, cold water supply that merges with incoming mains water supply could flow back to DHW tank. Investigate source of back-feed and rectify error in pipework/fitting configuration. Adjust pressure in cold supply. 5. Switch off power to the heat pump and immersion heaters. Leave water running. Wait until discharge stops. Isolate water supply and replace if faulty.
24	Noisy water circulation pump	Air in water circulation pump	Use manual and automatic air vents to remove air from system. Top up water if necessary to achieve 1 bar on primary circuit.
25	Noise during hot water draw off typically worse in the morning.	1. Loose airing cupboard pipework 2. Heaters switching on/off	1. Install extra pipe fastening clips. 2. Normal operation no action necessary.
26	Mechanical noise heard coming from the cylinder unit.	1. Heaters switching on/off 2. 3-way valve changing position between DHW and heating mode	Normal operation no action necessary.
27	Water circulation pump runs for a short time unexpectedly.	Water circulation pump jam prevention mechanism (routine) to inhibit the build-up of scale	Normal operation no action necessary.
28	Milky/Cloudy water (Sanitary circuit)	Oxygenated water	Water from any pressurised system will release oxygen bubbles when water is running. The bubbles will settle out.
29	Heating mode has been on standby for a long time (does not start operation smoothly.)	The time of “Delay” set in “Economy settings for pump” is too short. (Go to “Service menu” → “Auxiliary settings” → “Economy settings for pump”).	Increase the time of “Delay” in “Economy settings for pump” .
30	The cylinder unit that was running in the heating mode before power failure is running in the DHW mode after power recovery.	The cylinder unit is designed to run in an operation mode with a higher priority (i.e. DHW mode in this case) at power recovery.	• Normal operation • After the DHW max. operation time has elapsed or the DHW max. temperature has been reached, the DHW mode switches to the other mode (ex. Heating mode).
31	Cooling mode is NOT available.	DIP SW2-4 is OFF.	Turn DIP SW2-4 to ON. (Refer to “6-9. DIP switch functions”.)
32	The cooling system does not cool down to the set temperature.	1. When the water in the circulation circuit is unduly hot, Cooling mode starts with a delay for the protection of the outdoor unit. 2. When the outdoor ambient temperature is lower than the preset temperature that activates the freeze stat function, Cooling mode does not start running.	1. Normal operation 2. To run Cooling mode overriding the freeze stat function, adjust the preset temperature that activates the freeze stat function. (Refer to "<Freeze stat function>" on Page 37.)
33	The electric heaters are activated shortly after DHW or LP mode starts running after Cooling mode.	The setting time period of Heat-pump-only operation is short.	Adjust the setting time period of Heat-pump only operation. (Refer to “<Electric heater (DHW)> on Page 35.)
34	During DHW or LP mode following the cooling mode, error L6 (circulation water freeze protection error) occurs and the system stops all the operations.	The unit runs in Cooling mode when the outdoor ambient temperature is lower than 10ºC (outside of the guaranteed operating range). (When defrosting operation is running at such a low outdoor ambient temperature after Cooling mode is switched to DHW or LP mode, the water temperature in the cooling circuit drops too low, which could result in L6 error to stop all the operations.	Do not run Cooling operation when the outdoor ambient temperature is lower than 10ºC. To automatically stop or recover only Cooling operation and keep other operations running, the freeze stat function can be used. Set the preset temperature that activates the freeze stat function to adjust the outdoor ambient temperature as follows. (Refer to "<Freeze stat function>" on Page 41.) **Outdoor ambient temperature** / **Cooling operation** 3ºC higher than the preset temperature / Stop 5ºC higher than the preset temperature / Recover

13 SERVICE AND MAINTENANCE

13-1. Engineers Forms

Should settings be changed from default, please enter and record new setting in 'Commissioning/Field settings record sheet' below. This will ease resetting in the future should the system use change or the circuit board need to be replaced.

Commissioning/Field settings record sheet

Main remote controller screen				Parameters	Default setting	Field setting	Notes
DHW	DHW *4		Eco	On/Off *5	Off		
			Boost	On/Off	—		
			DHW max. temp.	40°C to 55/60/65/70°C *6	50°C		
			Max. temp. drop	5°C to 40°C	10°C		
			Max. operation time	30 to 120 min.	60 min.		
			Interval	30 to 120 min.	30 min.		
			Volume	Large / Standard	Standard *7		
			Schedule	On/Off	Off		
			Always off	On/Off	Off		
	Legionella prevention *4		Legionella	On/Off	On		
			Hot water temp.	60°C to 70°C *6	65°C		
			Start time	00:00 to 23:00	03:00		
			Duration	1 to 120 min.	30 min.		
			Frequency	1 to 30 days	15 days		
			Max. operation time	1 to 5 h	3 h		
Heating / Cooling *3	Heating / Cooling		Zone 1 heating room temp.	10°C to 30°C	20°C		
			Zone 2 heating room temp. *1	10°C to 30°C	20°C		
			Zone 1 heating flow temp.	20°C to 60/70/75°C	45°C		
			Zone 2 heating flow temp. *2	20°C to 60/70/75°C	35°C		
			Zone 1 cooling flow temp. *3	5°C to 25°C	15°C		
			Zone 2 cooling flow temp. *3	5°C to 25°C	20°C		
			Zone 1 heating weather compensation curve	−9°C to +9°C	0°C		
			Zone 2 heating weather compensation curve *2	−9°C to +9°C	0°C		
			Zone 1 cooling weather compensation curve	−9°C to +9°C	0°C		
			Zone 2 cooling weather compensation curve *2	−9°C to +9°C	0°C		
			Schedule	On/Off	Off		
			Always off	On/Off	Off		
			Heating / Cooling	Heating / Cooling	Heating		
			Zone 1 control logic	Heating room temp./ Heating flow temp./ Heating weather compensation curve / Cooling flow temp./ Cooling weather compensation curve	Heating weather compensation curve		
			Zone 2 control logic *2	Heating room temp./ Heating flow temp./ Heating weather compensation curve / Cooling flow temp./ Cooling weather compensation curve	Heating weather compensation curve		
			Auto change over	On/Off	Off		
	Weather compensation curve (Heating)	Hi flow temp. set point	Zone 1 outdoor ambient temp.	−30°C to +33°C *8	−15°C		
			Zone 1 flow temp.	20°C to 60/70/75°C	50°C		
			Zone 2 outdoor ambient temp. *2	−30°C to +33°C *8	−15°C		
			Zone 2 flow temp. *2	20°C to 60/70/75°C	40°C		
		Lo flow temp. set point	Zone 1 outdoor ambient temp.	−28°C to +35°C *9	20°C		
			Zone 1 flow temp.	20°C to 60/70/75°C	25°C		
			Zone 2 outdoor ambient temp. *2	−28°C to +35°C *9	20°C		
			Zone 2 flow temp. *2	20°C to 60/70/75°C	25°C		
		Adjust	Zone 1 outdoor ambient temp.	−29°C to +34°C *10	—		
			Zone 1 flow temp.	20°C to 60/70/75°C	—		
			Zone 2 outdoor ambient temp. *2	−29°C to +34°C *10	—		
			Zone 2 flow temp. *2	20°C to 60/70/75°C	—		
	Weather compensation curve (Cooling)	Hi flow temp. set point	Zone 1 outdoor ambient temp.	10°C to 46°C	35°C		
			Zone 1 flow temp.	5°C to 25°C	15°C		
			Zone 2 outdoor ambient temp. *2	10°C to 46°C	35°C		
			Zone 2 flow temp. *2	5°C to 25°C	20°C		
		Lo flow temp. set point	Zone 1 outdoor ambient temp.	10°C to 46°C	25°C		
			Zone 1 flow temp.	5°C to 25°C	25°C		
			Zone 2 outdoor ambient temp. *2	10°C to 46°C	25°C		
			Zone 2 flow temp. *2	5°C to 25°C	25°C		
Menu	Energy		Energy monitor	Consumed electrical energy/Delivered energy	—		
	Holiday		Schedule	On/Off/Set time	—		
			DHW *4	On/Off	Off		
			Heating / Cooling *3	On/Off	On		
	Setting	Language	EN/CZ/DA/DE/ET/ES/FR/HR/IT/LV/LT/HU/NL/NO/PL/PT/RO/SK/SI/FI/SV/TR/EL/BG		EN		
		Room sensors	Zone sensor selection *2	Zone 1/Zone 2	Zone 1		
			Zone 1 programme	TH1/Main RC/Room RC1-8/"Time/Zone"	TH1		
			Zone 2 programme *2	TH1/Main RC/Room RC1-8/"Time/Zone"	TH1		
		Display	Temp. (°C) → (°F)	On/Off	Off		
		Touch screen	Clean screen	On/Off	Off		
			Calibrate screen	On/Off	Off		
			Brightness	Low / Mid / Hi	Mid		
			Backlight time	5sec./10sec./20sec./30sec./60sec./Always on	30sec.		

(Continued to next page.)