

# MOIST PROCESSOR Standard Specifications

As of April 1, 2020

## Model name

### I. Processor-regenerator integrated model

<b>MPRC</b>	-	<b>15*0</b>	<b>HP</b>	<b>s</b>	<b>GT</b>	-	<b>L</b>
①		②	③	④	⑤		⑥

### II. Separate processor model

<b>MPC</b>	-	<b>3*00</b>	<b>L</b>	-	<b>F</b>
①		②	⑥		⑦

### III. Separate regenerator model

<b>MPR</b>	-	<b>3*00</b>	<b>HP</b>	<b>s</b>	<b>SH</b>
①		②	③	④	⑤

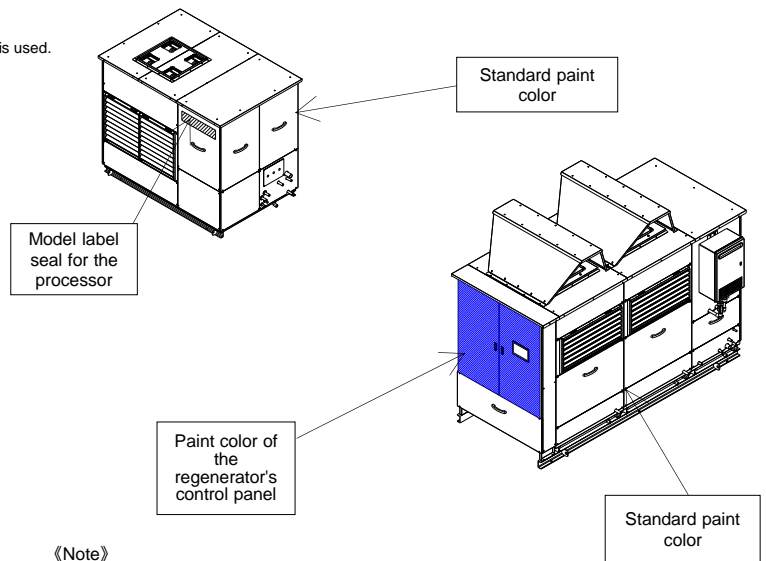
#### 《Notes》

- 3\*0 and 15\*0 models are processor-regenerator integrated type.
- Auxiliary cooling is needed when the main heat source is installed heat pump.
- Auxiliary heat source is needed when the main heat source is installed heat pump.
- Please consult us when you use well water.

Number	Category	Abbreviation	Description
①	Model	MPRC	Processor & regenerator
		MPC	Processor
		MPR	Regenerator
②	Processing air flow rate	3*0	300 m <sup>3</sup> /h
		15*0	1,500 m <sup>3</sup> /h
		3*00	3,000 m <sup>3</sup> /h
		6*00	6,000 m <sup>3</sup> /h
		9*00	9,000 m <sup>3</sup> /h
③	Main heat source	HP	Loaded heat pump
		SH	Supplied hot/cold water
④	Auxiliary cooling	None	Tap water
		s	Well water *Note 4
⑤	Auxiliary heat source	GT	Loaded gas water heater
		SH	Supplied hot water
⑥	Processor air intake	L	Louver
		F	Flange
⑦	Processor heat medium	F	CFC refrigerant (R407C)
		R	Cold/hot water

As shown below, the model and specifications differ depending on the facility where the machine is used.

	* mark for processing air flow rate	Paint color of the regenerator's control panel door	Model label on the processor exterior
Standard model	0	Blue (2.5PB3.5/10)	None
Medical model	5	Gray (N3)	MEDICAL MODEL
Agri model	8	Red (7.5R4.5/14)	AGRI MODEL



## Product specifications

Standard conditions of temperature and humidity		Dry-bulb temperature		Absolute humidity	
Outside air	Summer (dehumidification)	34.3	°C	19.5	g/kg'
	Winter (humidification)	-0.3	°C	1.3	g/kg'
Supplied air	Summer (dehumidification)	20.0	°C	7.0	g/kg'
	Winter (humidification)	28.0	°C	14.0	g/kg'

#### 《Note》

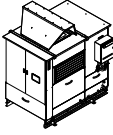
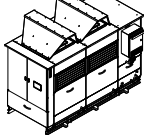
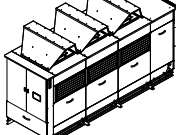
- Specifications are subject to change for improvement, etc. without notice.

### A. Processor specifications

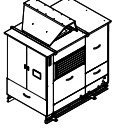
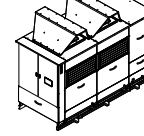
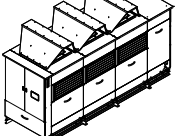
Type		Processor					
Model		MPRC-3*0HP(s)GT	MPRC-15*0HP(s)GT	MPC-3*00L/F-F/R	MPC-6*00L/F-F/R	MPC-9*00L/F-F/R	
Product image							
Power supply		Single-phase 200V 50/60Hz	Triple-phase 200V 50/60Hz	Triple-phase 200V 50/60Hz	Triple-phase 200V 50/60Hz	Triple-phase 200V 50/60Hz	
Electrical	Consumption	kW	2.3	10.0	1.8	5.0	7.1
	Circuit breaker rated current	A	16	75	20	30	40
Dimension	Width	mm	1,605	3,130	1,570	2,170	2,770
	Depth	mm	1,340	1,430	1,500	1,500	1,500
	Height	mm	2,000	2,345	1,765	1,765	1,765
	Weight (dry)	kg	770	1,550	680	970	1,250
	Liquid content	kg	50	270	200	380	560
	Operating weight	kg	820	1,820	880	1,350	1,810
Ability	Air flow rate	m <sup>3</sup> /h	300	1,500	3,000	6,000	9,000
	External static pressure	Pa		150		250	
	Dehumidification	kW	5.0	23.3	46.6	93.2	139.8
	Humidification	kW	6.1	30.5	60.9	121.8	182.7
	Dehumidification amount	kg/h	4.5	22.5	45.0	90.0	135.0
	Humidification amount	kg/h	4.7	22.9	45.7	91.4	137.2
Heat source	Supplied cold water temp(summer)	°C	-	-	13 → 19 (13°C or lower)		
	Supplied cold water flow rate	L/min	-	-	120 (180 or less)	240 (360 or less)	360 (540 or less)
	Supplied hot water temp(winter)	°C	-	-	52 → 45 (60°C or lower)		
	Supplied hot water flow rate	L/min	-	-	120 (180 or less)	240 (360 or less)	360 (540 or less)
	Internal pressure loss	kPa	-	-	65 (at 137L/min)	65 (at 273L/min)	65 (at 410L/min)
Noise level	dB	-	60.5	66.8	67.4	68.5	

\* Cold/hot water as a heat source is required when the regenerator is not equipped with a heat pump and all heat sources are supplied to the machine.

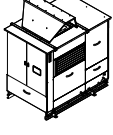
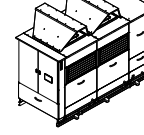
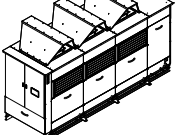
B. Regenerator specifications ①

Type		Regenerator (with a heat pump /gas water heater)					
Model		MPRC-3*0HP(s)GT	MPRC-15*0HP(s)GT	MPR-3*00HP(s)GT	MPR-6*00HP(s)GT	MPR-9*00HP(s)GT	
Product image		Processor-regenerator integrated model (See the processor specs above.)	Processor-regenerator integrated model (See the processor specs above.)				
Power supply		-	-	Triple-phase 200V 50/60Hz	Triple-phase 200V 50/60Hz	Triple-phase 200V 50/60Hz	
Electric	Consumption	kW	-	15.5	29.5	43.5	
	Circuit breaker rated current	A	-	100	150	225	
Dimension	Width	mm	-	2,310	3,470	4,901	
	Depth	mm	-	1,832	1,920	1,630	
	Height	mm	-	2,800	2,800	2,800	
	Weight (dry)	kg	-	1,420	2,240	3,050	
	Liquid content	kg	-	390	770	1,160	
Ability	Operating weight	kg	-	1,810	3,010	4,210	
	Air flow rate	m <sup>3</sup> /h	600	3,000	6,000	12,000	18,000
Heat source	Regenerating heat energy(dehumidification)	kW	6.0	28.0	55.9	111.8	167.7
	Compressor nominal output	kW	6.1	3.8	7.5	7.5 x 2	7.5 x 3
	Auxiliary cooling water temp	°C	-	-	25 → 40	-	-
	Auxiliary cooling water flow rate	L/min	1.2	3.3	6.7	13.4	20.0
	Gas heater capacity	kW	7.0	41.9	55.8	55.8x2	87.2x2
	Gas consumption	kW	8.4	50.4	69.2	112.0	69.2x2
	Noise level	dB	-	-	67.6	68.6	69.5

C. Regenerator specifications ②

Type		Regenerator (with a heat pump /auxiliary heat source supplied)					
Model		-	MPRC-15*0HP(s)SH	MPR-3*00HP(s)SH	MPR-6*00HP(s)SH	MPR-9*00HP(s)SH	
Product image		-	Processor-regenerator integrated model (See the processor specs above.)				
Power supply		-	-	Triple-phase 200V 50/60Hz	Triple-phase 200V 50/60Hz	Triple-phase 200V 50/60Hz	
Electric	Consumption	kW	-	15.5	29.5	43.5	
	Circuit breaker rated current	A	-	100	150	225	
Dimension	Width	mm	-	2,310	3,470	4,630	
	Depth	mm	-	1,630	1,630	1,630	
	Height	mm	-	2,800	2,800	2,800	
	Weight (dry)	kg	-	1,370	2,190	2,980	
	Liquid content	kg	-	390	770	1,160	
Ability	Operating weight	kg	-	1,760	2,960	4,140	
	Air flow rate	m <sup>3</sup> /h	3,000	6,000	12,000	18,000	
Heat source	Regenerating heat energy (dehumidification)	kW	-	28.0	55.9	111.8	167.7
	Compressor nominal output	kW	-	3.8	7.5	7.5 * 2	7.5 * 3
	Auxiliary cooling water temp	°C	-	-	25 → 40	-	-
	Auxiliary cooling water flow rate	L/min	-	3.3	6.7	13.4	20.0
	Supplied hot water temp for humidification	°C	-	-	60 → 39.4	-	-
	Supplied hot water flow rate for humidification	L/min	-	24.0	35.0	70.0	105.0
	Supplied hot water temp for regeneration	°C	-	-	60 → 49.7	-	-
Supplied hot water flow rate for regeneration	L/min	-	24.0	35.0	70.0	105.0	
Internal pressure loss	kPa	-	-	60.0	-	-	
Noise level	dB	-	-	67.6	68.6	69.5	

D. Regenerator specifications ③

Type		Regenerator (all heat sources supplied)					
Model		-	MPRC-15*0SH	MPR-3*00SH	MPR-6*00SH	MPR-9*00SH	
Product image		-	Processor-regenerator integrated model (See the processor specs above.)				
Power supply		-	-	Triple-phase 200V 50/60Hz	Triple-phase 200V 50/60Hz	Triple-phase 200V 50/60Hz	
Electric	Consumption	kW	-	3.0	5.0	6.5	
	Circuit breaker rated current	A	-	20	30	40	
Dimension	Width	mm	-	2,310	3,470	4,630	
	Depth	mm	-	1,630	1,630	1,630	
	Height	mm	-	2,800	2,800	2,800	
	Weight (dry)	kg	-	1,370	2,190	2,980	
	Liquid content	kg	-	390	770	1,160	
Ability	Operating weight	kg	-	1,760	2,960	4,140	
	Air flow rate	m <sup>3</sup> /h	-	6,000	12,000	18,000	
Heat source	Regenerating heat energy (dehumidification)	kW	-	55.9	111.8	167.7	
	Supplied hot water temp for regeneration	°C	-	-	52 → 45 (52°C ~ 60°C)	-	
	Supplied hot water flow rate for regeneration	L/min	-	-	120 (180 or less)	240 (360 or less)	360 (540 or less)
	Internal pressure loss	kPa	-	-	65 (at 137L/min)	65 (at 273L/min)	65 (at 410L/min)
	Noise level	dB	-	-	67.6	68.6	69.5