

## 1 Specifications

Outdoor Unit Model MHA-				V4W/D2N8-B	V6W/D2N8-B	V8W/D2N8-B	V10W/D2N8-B
Indoor Unit Model				HBT-A100/190CD30GN8-B			
Heating	A7W35	Capacity	kW	4.25	6.20	8.30	10.00
		Rated input	kW	0.82	1.24	1.60	2.00
		COP			5.20	5.00	5.20
	A7W45	Capacity	kW	4.35	6.35	8.20	10.00
		Rated input	kW	1.14	1.69	2.08	2.63
		COP			3.80	3.75	3.95
	A-7W35	Capacity	kW	4.7	6.00	7.00	8.00
		Rated input	kW	1.52	2.00	2.19	2.62
		COP			3.10	3.00	3.20
	A-7W55	Capacity	kW	4.00	5.15	6.15	6.85
		Rated input	kW	2.05	2.58	3.00	3.43
		COP			1.95	2.00	2.05
Cooling	A35W18	Capacity	kW	4.50	6.55	8.40	10.00
		Rated input	kW	0.81	1.34	1.66	2.08
		EER			5.55	4.90	5.05
	A35W7	Capacity	kW	4.70	7.00	7.40	8.20
		Rated input	kW	1.36	2.33	2.19	2.48
		EER			3.45	3.00	3.38
DHW	Tapping profile according EN16147			L			
	Water heating energy efficiency class(1)	Warm climate	class	A+	A+	A+	A+
			COP	3.80	3.80	3.66	3.66
			SCOPdhw	4.03	4.03	3.85	3.85
		Average climate	class	A+	A+	A+	A+
			COP	3.10	3.10	3.02	3.02
			SCOPdhw	3.28	3.28	3.20	3.20
		Cold climate	class	A	A	A	A
			COP	2.50	2.50	2.61	2.61
			SCOPdhw	2.65	2.65	2.75	2.75
	Seasonal space heating energy efficiency class(2)	Water outlet at 35°C	class	A+++	A+++	A+++	A+++
			SCOP	4.85	4.95	5.21	5.19
Water outlet at 55°C		class	A++	A++	A++	A++	
		SCOP	3.31	3.52	3.36	3.49	
Rated water flow			m <sup>3</sup> /h	0.73	1.07	1.43	1.72
Outdoor Unit	Power supply		V/Ph/Hz	220-240/1/50			
	Rated input		W	2200	2600	3300	3600
	Rated current		A	10.5	12.0	14.5	16.0
	Unit dimension (W×H×D)		mm	1008×712×426		1118×865×523	
	Packing dimension (W×H×D)		mm	1065×810×485		1190×970×560	
	Net/Gross weight		kg	60 / 65.5		78.5 / 92	
	Refrigerant	Type(GWP)		R32(675)			

		Charged volume	kg	1.50	1.65		
		Refrigerant to be added	g/m	20	38		
	Refrigerant piping connections	Liquid/Gas side	mm	φ6.35 / φ15.9		φ9.52 / φ15.9	
		Max. piping length	m	30			
		Max. difference in height	m	20			
	Drain connection			DN32			
	Outdoor unit sound Power Level(3)		dB	56	58	59	60
	Ambient temperature range	Heating	°C	-25~35			
		Cooling	°C	-5~43			
		Domestic hot water	°C	-25~43			
Indoor Unit	Power supply		V/Ph/Hz	220-240/1/50			
	Rated input		W	3095			
	Rated current		A	13.5			
	DHW Tank	Type		Stainless steel			
		Material		-	SUS 316L		
		Water Volume		l	190		
		Maximum water temperature(Disinfection mode)		°C	70		
		Maximum water pressure limit		bar	10		
		Insulation	Material	-	Polyurethane (Cyclopentane)		
	Thickness		mm	45			
	Heat Exchanger			Plate heat exchanger			
	Backup E-heater	Standard mounted		kW	3		
		Capacity steps			1		
	Water Pump	Type		DC-inverter			
		Max. head		m	9		
		Water flow range		m <sup>3</sup> /h	0.4~2.1		
	Expansion vessel	Volume		L	8		
	Water Piping connection	Water circuit	Inlet	G1			
			Outlet				
		DHW tank water circuit	Cold Inlet	G3/4			
			Hot Outlet				
	Recirculation						
	Unit dimension (W×H×D)		mm	600*600*1683			
	Packing dimension (W×H×D)		mm	653*653*1900			
	Net/Gross weight		kg	138.6 / 153.8			
Ambient temperature range		°C	5~35				
LWT setting range	Heating	°C	25~65				
	Cooling	°C	5~25				
	Domestic hot water	°C	30~60				
Indoor unit sound Power Level(3)		dB	38	40			

Notes:

(1)According to EN16147/2017;EU No:811/2013

(2)According to EN14511/2018; EN14825/2018; EU No:811/2013

(3)Sound power in heating mode, measured according to the EN 12102 under conditions of the EN 14825

# M thermal Arctic Split



Outdoor Unit Model MHA-				V4W/D2N8-B	V6W/D2N8-B	V8W/D2N8-B	V10W/D2N8-B
Indoor Unit Model				HBT-A100/240CD30GN8-B			
Heating	A7W35	Capacity	kW	4.25	6.20	8.30	10.00
		Rated input	kW	0.82	1.24	1.60	2.00
		COP		5.20	5.00	5.20	5.00
	A7W45	Capacity	kW	4.35	6.35	8.20	10.00
		Rated input	kW	1.14	1.69	2.08	2.63
		COP		3.80	3.75	3.95	3.80
	A-7W35	Capacity	kW	4.7	6.00	7.00	8.00
		Rated input	kW	1.52	2.00	2.19	2.62
		COP		3.10	3.00	3.20	3.05
	A-7W55	Capacity	kW	4.00	5.15	6.15	6.85
		Rated input	kW	2.05	2.58	3.00	3.43
		COP		1.95	2.00	2.05	2.00
Cooling	A35W18	Capacity	kW	4.50	6.55	8.40	10.00
		Rated input	kW	0.81	1.34	1.66	2.08
		EER		5.55	4.90	5.05	4.80
	A35W7	Capacity	kW	4.70	7.00	7.40	8.20
		Rated input	kW	1.36	2.33	2.19	2.48
		EER		3.45	3.00	3.38	3.30
DHW	Tapping profile according EN16147			XL			
	Water heating energy efficiency class(1)	Warm climate	class	A+	A+	A+	A+
			COP	4.24	4.24	4.18	4.18
			SCOPdhw	4.43	4.43	4.35	4.35
		Average climate	class	A+	A+	A+	A+
			COP	3.34	3.34	3.36	3.36
			SCOPdhw	3.48	3.48	3.50	3.50
		Cold climate	class	A	A	A	A
			COP	2.63	2.63	2.72	2.72
			SCOPdhw	2.75	2.75	2.85	2.85
	Seasonal space heating energy efficiency class(2)	Water outlet at 35°C	class	A+++	A+++	A+++	A+++
			SCOP	4.85	4.95	5.21	5.19
Water outlet at 55°C		class	A++	A++	A++	A++	
		SCOP	3.31	3.52	3.36	3.49	
Rated water flow			m <sup>3</sup> /h	0.73	1.07	1.43	1.72
Outdoor Unit	Power supply		V/Ph/Hz	220-240/1/50			
	Rated input		W	2200	2600	3300	3600
	Rated current		A	10.5	12.0	14.5	16.0
	Unit dimension (W×H×D)		mm	1008×712×426		1118×865×523	
	Packing dimension (W×H×D)		mm	1065×810×485		1190×970×560	
	Net/Gross weight		kg	60 / 65.5		78.5 / 92	
	Refrigerant	Type(GWP)		R32(675)			
		Charged volume	kg	1.50		1.65	
		Refrigerant to be added	g/m	20.00		38.00	
	Refrigerant	Liquid/Gas side	mm	φ6.35 / φ15.9		φ9.52 / φ15.9	

	piping	Max. piping length	m	30			
	connections	Max. difference in height	m	20			
	Drain connection			DN32			
	Outdoor unit sound Power Level(3)		dB	56	58	59	60
	Ambient temperature range	Heating	°C	-25~35			
		Cooling	°C	-5~43			
Domestic hot water		°C	-25~43				
Indoor Unit	Power supply		V/Ph/Hz	220-240/1/50			
	Rated input		W	3095			
	Rated current		A	13.5			
	DHW Tank	Type		Stainless steel			
		Material		-	SUS 316L		
		Water Volume		l	240		
		Maximum water temperature(Disinfection mode)		°C	70		
		Maximum water pressure limit		bar	10		
		Insulation	Material	-	Polyurethane (Cyclopentane)		
	Thickness		mm	45			
	Heat Exchanger			Plate heat exchanger			
	Backup E-heater	Standard mounted		kW	3		
		Capacity steps		1			
	Water Pump	Type		DC Inverter			
		Max. head		m	9		
		Water flow range		m <sup>3</sup> /h	0.4~2.1		
	Expansion vessel	Volume		L	8		
	Water Piping connection	Water circuit	Inlet	G1			
			Outlet				
		DHW tank water circuit	Cold Inlet	G3/4			
			Hot Outlet				
Recirculation							
Unit dimension (W×H×D)			mm	600*600*1943			
Packing dimension (W×H×D)			mm	653*653*2160			
Net/Gross weight			kg	155.3 / 170.2			
Ambient temperature range			°C	5~35			
LWT setting range	Heating		°C	25~65			
	Cooling		°C	5~25			
	Domestic hot water		°C	30~60			
Indoor unit sound Power Level(3)			dB	38		40	

Notes:

(1)According to EN16147/2017;EU No:811/2013

(2)According to EN14511/2018; EN14825/2018; EU No:811/2013

(3)Sound power in heating mode, measured according to the EN 12102 under conditions of the EN 14825

# M thermal Arctic Split



Outdoor Unit Model MHA-				V12W/D2N8-B	V14W/D2N8-B	V16W/D2N8-B	
Indoor Unit Model				HBT-A160/240CD30GN8-B			
Heating	A7W35	Capacity	kW	12.10	14.50	16.00	
		Rated input	kW	2.44	3.09	3.56	
		COP			4.95	4.70	4.50
	A7W45	Capacity	kW	12.30	14.20	16.00	
		Rated input	kW	3.24	3.89	4.44	
		COP			3.80	3.65	3.60
	A-7W35	Capacity	kW	10.00	12.00	13.10	
		Rated input	kW	3.33	4.21	4.85	
		COP			3.00	2.85	2.70
	A-7W55	Capacity	kW	9.80	11.00	12.50	
		Rated input	kW	4.78	5.37	6.25	
		COP			2.05	2.05	2.00
Cooling	A35W18	Capacity	kW	12.00	13.50	14.90	
		Rated input	kW	3.00	3.75	4.38	
		EER			4.00	3.60	3.40
	A35W7	Capacity	kW	11.60	12.70	14.00	
		Rated input	kW	4.22	4.98	5.71	
		EER			2.75	2.55	2.45
DHW	Tapping profile according EN16147			XL			
	Water heating energy efficiency class(1)	Warm climate	class	A+	A+	A+	
			COP	3.73	3.73	3.73	
			SCOPdhw	3.95	3.95	3.95	
		Average climate	class	A+	A+	A+	
			COP	3.00	3.00	3.00	
			SCOPdhw	3.18	3.18	3.18	
		Cold climate	class	A	A	A	
			COP	2.24	2.24	2.24	
			SCOPdhw	2.38	2.38	2.38	
Seasonal space heating energy efficiency class(2)	Water outlet at 35°C	class	A+++	A+++	A+++		
		SCOP	4.81	4.72	4.62		
	Water outlet at 55°C	class	A++	A++	A++		
		SCOP	3.45	3.47	3.41		
Rated water flow			m <sup>3</sup> /h	2.08	2.49	2.75	
Outdoor Unit	Power supply		V/Ph/Hz	220-240/1/50			
	Rated input		W	5400	5700	6100	
	Rated current		A	24.5	25.0	26.0	
	Unit dimension (W×H×D)		mm	1118×865×523			
	Packing dimension (W×H×D)		mm	1190×970×560			
	Net/Gross weight		kg	100 / 113.5			
	Refrigerant	Type(GWP)			R32(675)		
		Charged volume		kg	1.84		
		Refrigerant to be added		g/m	38		
Refrigerant	Liquid/Gas side	mm	φ9.52 / φ15.9				

	piping	Max. piping length	m	30			
	connections	Max. difference in height	m	20			
	Drain connection			DN32			
	Outdoor unit sound Power Level(3)		dB	64	65	68	
	Ambient temperature range	Heating	°C	-25~35			
		Cooling	°C	-5~43			
Domestic hot water		°C	-25~43				
Indoor Unit	Power supply		V/Ph/Hz	220-240/1/50			
	Rated input		W	3095			
	Rated current		A	13.5			
	DHW Tank	Type		Stainless steel			
		Material		-	SUS 316L		
		Water Volume		l	240		
		Maximum water temperature(Disinfection mode)		°C	70		
		Maximum water pressure limit		bar	10		
		Insulation	Material	-	Polyurethane (Cyclopentane)		
	Thickness		mm	45			
	Heat Exchanger			Plate heat exchanger			
	Backup E-heater	Standard mounted		kW	3		
		Capacity steps		1			
	Water Pump	Type		DC Inverter			
		Max. head		m	9		
		Water flow range		m <sup>3</sup> /h	0.7~3.0		
	Expansion vessel	Volume		L	8		
	Water Piping connection	Water circuit	Inlet	G1			
			Outlet				
		DHW tank water circuit	Cold Inlet	G3/4			
			Hot Outlet				
Recirculation							
Unit dimension (W×H×D)			mm	600*600*1943			
Packing dimension (W×H×D)			mm	653*653*2160			
Net/Gross weight			kg	157.3 / 172.2			
Ambient temperature range			°C	5~35			
LWT setting range	Heating		°C	25~65			
	Cooling		°C	5~25			
	Domestic hot water		°C	30~60			
Indoor unit sound Power Level(3)			dB	44			

Notes:

(1)According to EN16147/2017;EU No:811/2013

(2)According to EN14511/2018; EN14825/2018; EU No:811/2013

(3)Sound power in heating mode, measured according to the EN 12102 under conditions of the EN 14825

# M thermal Arctic Split



Outdoor Unit Model MHA-				V12W/D2RN8-B	V14W/D2RN8-B	V16W/D2RN8-B	
Indoor Unit Model				HBT-A160/240CD30GN8-B			
Heating	A7W35	Capacity	kW	12.10	14.50	16.00	
		Rated input	kW	2.44	3.09	3.56	
		COP			4.95	4.70	4.50
	A7W45	Capacity	kW	12.30	14.20	16.00	
		Rated input	kW	3.24	3.89	4.44	
		COP			3.80	3.65	3.60
	A-7W35	Capacity	kW	10.00	12.00	13.10	
		Rated input	kW	3.33	4.21	4.85	
		COP			3.00	2.85	2.70
	A-7W55	Capacity	kW	9.80	11.00	12.50	
		Rated input	kW	4.78	5.37	6.25	
		COP			2.05	2.05	2.00
Cooling	A35W18	Capacity	kW	12.00	13.50	14.90	
		Rated input	kW	3.00	3.75	4.38	
		EER			4.00	3.60	3.40
	A35W7	Capacity	kW	11.60	12.70	14.00	
		Rated input	kW	4.22	4.98	5.71	
		EER			2.75	2.55	2.45
DHW	Tapping profile according EN16147			XL			
	Water heating energy efficiency class(1)	Warm climate	class	A+	A+	A+	
			COP	3.73	3.73	3.73	
			SCOPdhw	3.93	3.93	3.93	
		Average climate	class	A+	A+	A+	
			COP	3.00	3.00	3.00	
			SCOPdhw	3.18	3.18	3.18	
	Cold climate	class	A	A	A		
		COP	2.24	2.24	2.24		
		SCOPdhw	2.38	2.38	2.38		
Seasonal space heating energy efficiency class(2)	Water outlet at 35°C	class	A+++	A+++	A+++		
		SCOP	4.81	4.72	4.62		
	Water outlet at 55°C	class	A++	A++	A++		
		SCOP	3.45	3.47	3.41		
Rated water flow			m <sup>3</sup> /h	2.08	2.49	2.75	
Outdoor Unit	Power supply		V/Ph/Hz	380-415/3/50			
	Rated input		W	5400	5700	6100	
	Rated current		A	9.0	10.0	11.0	
	Unit dimension (W×H×D)		mm	1118×865×523			
	Packing dimension (W×H×D)		mm	1190×970×560			
	Net/Gross weight		kg	116 / 129.5			
	Refrigerant	Type(GWP)		R32(675)			
		Charged volume		kg	1.84		
		Refrigerant to be added		g/m	38		
	Refrigerant	Liquid/Gas side	mm	φ9.52 / φ15.9			