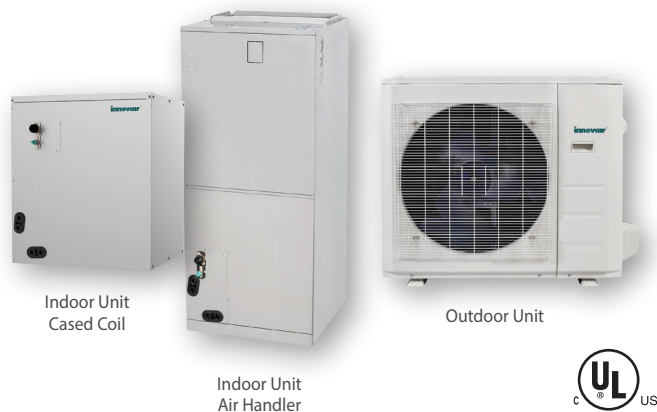


SLIM24 Hyper Heat

Central Heat Pump System and Cased Coil System



Enjoy constant comfort throughout your home with the SLIM24 HH central heat pump. Capable of generating heat in temperatures down to -30 °C, it is effective in most climates and will maximize your energy savings.



Performance up to



Cooling



Heating

Up to

20 SEER
17.4 SEER2
IN COOLING

12 HSPF
10 HSPF2
IN HEATING

Features

Operation mode

- Cooling, heating, dehumidifying, fan and auto.

Nominal capacity

- 24000, 36000, 48000, 60000 BTU/hr.

Voltage

- 230/208V, 60 Hz, 1-phase.

Indoor unit Air Handler

- Vertical or horizontal installation.
- Available with upflow or downflow.
- Washable filters.

Cased Coil

- Available in four casing dimensions.
- Horizontal or vertical installation.
- Can be matched with third-party gas furnace or blower.
- 24V or 485 communication mode.

Outdoor unit

- DC motor.
- Variable speed rotary compressor (INVERTER), with overload protection.
- Electronic expansion valve for precise control of refrigerant flow.
- Condenser fins covered with a hydrophilic coating for improved corrosion resistance.
- Large diameter quiet axial-flow fan for more efficient heat exchange.
- Multi-hole pan with smart heater to prevent ice formation.
- Compressor blanket and preheating technology.
- Installation on aluminum wall bracket or ground stand (optional).

Connection piping

- Minimum piping length of 10 ft. (3 m).
- Flared connections.

Control

- Wireless remote included.
- Wi-Fi wired wall controller included.
- 24V thermostat connection available.
- Set temperature: 16 to 30 °C (61 to 86 °F).
- Temperature display format: °C or °F.

Warranty

- 10-year basic warranty on parts and 10-year basic warranty on the compressor (labour not included).
- Labour warranty (sold separately) from the 1st to 10th year, on parts and labour with system replacement if the compressor fails.

Application

- Detached and semi-detached home, commercial building, office building, restaurant.

Features and functions

	<p>Smart Pan Heater Prevents ice formation in the base pan of the outdoor unit.</p>
	<p>Compressor Blanket and Preheating Technology Keeps the oil inside the compressor warm and prevents it from mixing with the refrigerant.</p>
	<p>Anti-Corrosion Fin Coating Condenser and evaporator fins are covered with a hydrophilic coating for greater corrosion resistance – a clear advantage for people living in coastal regions.</p>
	<p>Refrigerant Leakage Detection The indoor unit will display “EC” when the outdoor unit detects refrigerant leakage.</p>
	<p>Smart Defrosting Provides greater comfort and energy savings by eliminating unnecessary defrost cycles.</p>
	<p>Smart Preheating The system delays turning on the fan in heating mode to avoid blowing cold air out at startup.</p>
	<p>Auto Restart In case of power failure, user selection and system parameters are stored in non-volatile memory. The system will automatically return to the last operating mode when power resumes.</p>

	<p>Freeze Protection For extended absences, the temperature setpoint can be lowered to 8 °C (46 °F) in heating mode to prevent freezing.</p>
	<p>Turbo Mode The unit operates at super high speed to achieve quick cooling or heating.</p>
	<p>Timer Allows you to program the time you want the unit to start and stop over a 24-hour period.</p>
	<p>Sleep Mode This function can be used to gradually increase or decrease room temperature, so you can save energy without affecting your sleep.</p>
	<p>Silence Function The unit will operate at low frequency and the fan at the lowest speed to reduce noise level.</p>
	<p>Follow Me With this function, the room temperature is read from the remote control, not from the indoor unit. This guarantees optimal comfort because the remote control is usually closer to you.</p>

SLIM24 Hyper Heat

Models

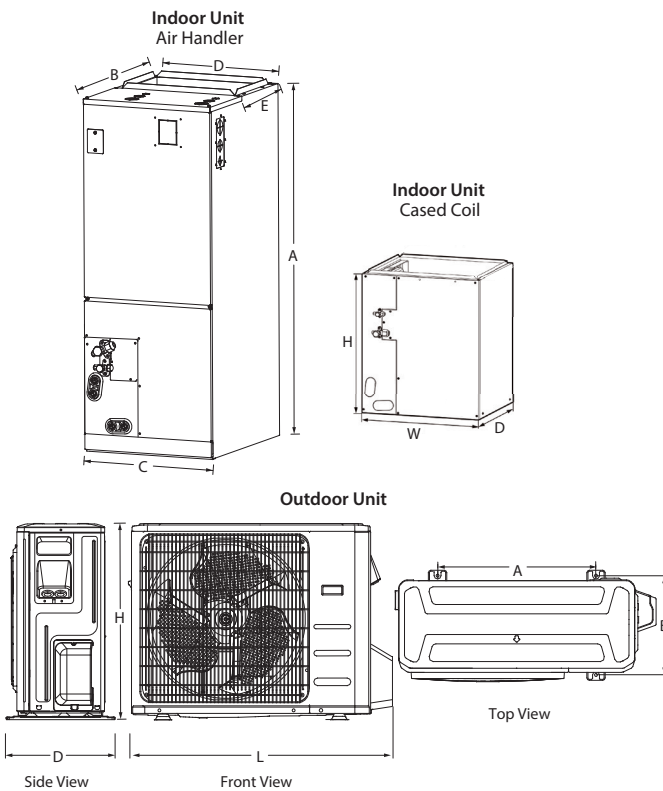
Product # ¹	Indoor Unit		DEV24H2R19	DEV36H2R19	DEV48H2R19	DEV60H2R19
	Outdoor Unit		SHV24H2R20	SHV36H2R20	SHV48H2R20	SHV60H2R20
Technical Performance						
Power supply		V / Ph / Hz	230/208 / 1 / 60			
Cooling capacity	Nominal	W (BTU/hr)	7038 (24000)	10557 (36000)	13783 (47000)	16129 (55000)
	Min. – max.	W (BTU/hr)	3225 - 7918 (11000 - 27000)	3519 - 13900 (12000 - 47400)	5279 - 14076 (18000 - 48000)	4106 - 16422 (14000 - 56000)
Heating capacity	Nominal	W (BTU/hr)	7038 (24000)	11730 (40000)	14663 (50000)	17302 (59000)
	Min. – max.	W (BTU/hr)	2962 - 9091 (10100 - 31000)	3226 - 16774 (11000 - 57200)	3226 - 16129 (11000 - 55000)	3930 - 20235 (13400 - 69000)
SEER / SEER2		-	20 / 17.4	18 / 16	16 / 15.6	16.4 / 15.3
HSPF / HSPF2		-	12 / 10	10.5 / 9.5	10 / 9.4	10.5 / 9.4
EER		W/W	13	10.5	8.5	9
COP		W/W	3	1.8	1.88	1.92
AHRI number		-	210343158	210343156	210343157	210343159
Indoor Unit (Air Handler)						
Dehumidification		pt/hr (l/hr)	3.48 (1.98)	6.1 (3.49)	4.96 (8.72)	9.77 (5.55)
Air flow volume	T / H / M / L ²	cfm	824 / 759 / 694 / 629	1188 / 1082 / 971 / 865	1471 / 1282 / 1094 / 906	1806 / 1582 / 1359 / 1135
Sound level	H / M / L ²	dB (A)	39 / 36 / 33	45 / 43 / 41	50 / 47 / 43.5	51 / 45.5 / 41.5
Fan motor RLA		A	3	4	6	7
MCOP		A	15	15	15	15
External Static Pressure (ESP)	Nominal	inH2O	0.1	0.15	0.2	0.2
	Range	inH2O	0 - 0.8	0 - 0.8	0 - 0.8	0 - 0.8
Net weight		lb (kg)	106 (48)	129 (59)	131 (59)	163 (74)
Outdoor Unit						
Air flow volume		cfm	3000	4500	4412	4500
Sound level		dB (A)	64	64	64	64
Compressor power input		W	1945	3565	3565	3770
MCA		A	20.5	41	42	42
MCOP		A	35	50	50	60
Compressor RLA		A	15	32	33	26.2
Fan motor power output		W	120	85	85	85
Fan motor RLA		A	1.35	1.2	1.2	1.2
Refrigerant volume (R410A)		oz (g)	102 (2900)	165.7 (4700)	169 (4800)	169 (4800)
Operating ambient temperature	Cooling	°C (°F)	-15 to 50 (5 to 112)			
	Heating	°C (°F)	-30 to 24 (-22 to 75)			
Net weight		lb (kg)	137 (62)	227 (103)	220 (100)	240 (108)
Connection Piping / Refrigerant						
Pre-charge length		ft. (m)	25 (7.5)	25 (7.5)	25 (7.5)	25 (7.5)
Additional refrigerant charge		oz/ft. (g/m)	0.69 (65)	0.69 (65)	0.69 (65)	0.69 (65)
Liquid pipe outer diameter		in.	3/8	3/8	3/8	3/8
Gas pipe outer diameter		in.	3/4	3/4	3/4	7/8
Maximum height between outdoor and indoor units		ft. in. (m)	82' (25)	98' 5" (30)	98' 5" (30)	98' 5" (30)
Maximum pipe length between outdoor and indoor units		ft. in. (m)	164' (50)	213' 3" (65)	213' 3" (65)	213' 3" (65)

¹ 1 indoor unit and 1 outdoor unit. Note that each unit is individually packaged.

² Fan Speeds: (T) Turbo / (H) High / (M) Medium / (L) Low.

Models – Indoor Unit (Cased Coil)

Product #	Indoor Unit		MAC24H1718E	MAC36H1724E	MAC36H2124E	MAC48H2124E	MAC60H2428E
	Outdoor Unit		SHV24H2R20	SHV36H2R20	SHV36H2R20	SHV48H2R20	SHV60H2R20
Power supply	V / Ph / Hz		230/208 / 1 / 60				
Capacity	Cooling	BTU/hr	24000	35000	36000	46000	53000
	Heating	BTU/hr	25000	38000	39000	51000	54000
AHRI number	-		213160473	213160474	213160476	213160477	213160478
Heating at -15 °C (5 °F)	SEER2		16.8	15.5	14.8	14.3	14.5
	EER2 BTU/W		10.7	10	9.8	8.6	8.6
	HSPF2		9.5	8.6	8	9	8.6
	Maximum BTU/hr		20000	31600	32000	40000	46500
	COP W/W		1.95	1.85	2	1.8	1.8
Refrigerant piping	Liquid – Gas	in.	3/8 - 3/4	3/8 - 3/4	3/8 - 3/4	3/8 - 3/4	3/8 - 7/8
Drain pipe diameter	in.		3/4	3/4	3/4	3/4	3/4
Dimension	W x D x H	in. (mm)	17 1/2 x 21 x 18 (445 x 533 x 457)	17 1/2 x 21 x 23 1/2 (445 x 533 x 599)	21 x 21 x 24 (533 x 533 x 609)	21 x 21 x 24 (533 x 533 x 609)	24 1/2 x 21 x 28 (622 x 533 x 711)
Net weight	lb (kg)		43 (19)	60 (27)	67 (30)	67 (30)	87 (39)



Indoor Unit Air Handler	A		B		C		D		E	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
DEV24H2R19	45	1143	21	534	17 1/2	445	15 3/4	400	10 1/4	260
DEV36H2R19	49	1245	21	534	21	534	19 1/4	490	10 1/4	260
DEV48H2R19	49	1245	21	534	21	534	19 1/4	490	10 1/4	260
DEV60H2R19	53	1346	21	534	24 1/2	622	22 7/8	580	10 1/4	260

Indoor Unit Cased Coil	W		H		D	
	in.	mm	in.	mm	in.	mm
MAC24H1718E	17 1/2	445	21	533	18	457
MAC36H1724E	17 1/2	445	21	533	23 1/2	599
MAC36H2124E	21	533	21	533	24	609
MAC48H2124E	21	533	21	533	24	609
MAC60H2428E	24 1/2	622	21	533	28	711

Outdoor Unit	W		H		D		A		B	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
SHV24H2R20	40 1/2	1030	32	810	17 7/8	455	26 1/2	673	15 7/8	404
SHV36H2R20	41 1/4	1045	52 1/2	1333	18	457	25	634	15 7/8	404
SHV48H2R20	41 1/4	1045	52 1/2	1333	18	457	25	634	15 7/8	404
SHV60H2R20	41 1/4	1045	52 1/2	1333	18	457	25	634	15 7/8	404

Compatibility table for electrical heating elements

Electric heater power	24K BTU	36K BTU	48K BTU	60K BTU
5kW	✓	✓	-	-
8kW	✓	✓	✓	✓
10kW	✓	✓	✓	✓
15kW	✓	✓	✓	✓
20kW	-	✓	✓	✓
25kW	-	-	-	✓

Options

Product # Kit	Description
Electric auxiliary heat module (for Air Handler only)	
OTP-EAH-05B-UL	5kW electric auxiliary heat module
OTP-EAH-10B-UL	10kW electric auxiliary heat module
OTP-EAH-15B-UL	15kW electric auxiliary heat module
OTP-EAH-20B-UL	20kW electric auxiliary heat module
QOU14100JBAF	4 poles jumper bar assy