SAMSUNG

SUBMITTAL AC036MNHDCH/AA (Low Ambient Heating)
Samsung Low Ambient Heating "Max Heat" Duct S, Single Zone, Split System

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Job Name	Location			
Purchaser	Engineer			
Submitted to	Reference	Approval	Construction	
Jnit Designation	Schedule #			

Dunal			
Purchaser_			_
Submitted to	o		
Unit Design	ation		
		Specifications	
Model	Indoor Unit Model N		AC036MNHDCH/AA
	Outdoor Unit Model		AC036JXSCCH/AA
	Nominal Capacity	Cooling / Heating (Btu/h)	36,000 / 40,000
	Capacity Range	Cooling (Btu/h) Heating (Btu/h)	14,000 - 42,000 12,000 - 48,000
Performance 1	SEER / EER	rraamig (= tarri)	20.0 / 12.20
	COP (nominal heat	ing)	3.34
	HSPF AHRI Certification N	dumber	10.4 10347731
			I
	Voltage Working Voltage Ra	ø / V / Hz ange (VAC)	1 / 208-230 / 60 176 - 254 (max. 3% deviation from each)
Power	Operating Current	Cooling (A)	4.8 / 13.5 / 17.0
rowei	(min. / std. / max.)	Heating (A)	3.7 / 15.8 / 23.0
	Max. Breaker	Amps	45
	Min. Circuit Ampaci		32
	W X H X D (in.)	Indoor Unit Outdoor Unit	51 3/16 X 11 13/16 X 27 9/16 37 X 55 7/8 x 13
D: .	Weight	Indoor Unit	37 X 55 7/8 X 13 99.6
Dimensions	(lbs.)	Outdoor Unit	211.6
	Duct Connections	Supply (in.)	49 15/16 X 10 5/8
	(W X H)	Return (ID, in.)	49 15/16 X 10 5/8
Heat Exchanger	Туре	Indoor Unit	Aluminum Fin / Copper Tube
		Outdoor Unit	Aluminum, flat fin, micro channel
Sound Pressure	Indoor Unit dB(A)	L/M/H	30 / 34 / 38
Level	Outdoor Unit dB(A)	Cooling / Heating (high)	51 / 53
Operating	Outdoor	Cooling	23 ~ 115°F(-5 ~ 46°C)
Temperatures	Outdoor	Heating	-4 ~ 115°F(-20 ~ 46°C) w/ baffle -13 ~ 75°F(-25 ~ 24°C)
°F(°C)	la de es	Cooling	61 ~ 90°F(16 ~ 32°C)
	Indoor	Heating	T ≤ 80°F(27°C)
	Indoor & Outdoor	High side (flare)	3/8"
I=	Low side (flare)		5/8"
Pipe Connections	Maximum (ft.) Maximum Vertical S	Separation (ft)	246
		tion (with included adapter)	98 1 1/16" ID for 3/4" PVC
	Туре	, ,	I
	Control Method		R410A Electronic Expansion Valve
Refrigerant	Factory Charge oz.		102.24
	Charged for		25 ft
	Additional Refrigera	int	0.269 oz/ft over 25 ft
Compressor	Туре	1.	Inverter Driven, Twin BLDC, Rotary
	RLA	Amps	20.0
	Туре	OFNA (L(NA/LL))	BLDC (1) With Sirocco Fan (3)
Evaporator Fan	Air Volume	CFM (L/M/H) Total CFM Range ²	848 / 989 / 1165 (at standard ESP) 848 - 1,620
Evaporator r arr	Output (W) / FLA (A		244 W / 2.0 A
	Static Pressure	Standard ("WC)	0.16
	Otatio i roccuro	Min. / Max. ("WC)	0.12 - 0.8
Condenser Fan	Motor		BLDC With Axial Type Fan (2)
	FLA / Watts / CFM	(max.)	0.48 A X 2 / 125 W X 2 / 4,415 CFM
	Wired Controller	Simplified Touch Controller	MWR-SH11UN
	Wi-Fi Adapter	Advanced Wired Controller	MWR-WG00UN
	Wireless Signal	Wireless Signal Receiver	MIM-H04UN MRK-A10N
	Control	Wireless Controller	AR-EH03U
	External Temperatu	ire Sensor	MRW-TA
Optional	Filter Box	ontrol	FB-DS3
Accessories	External Contact Co	face Module for Connection	MIM-B14
	to DVM Plus Contro		MIM-N01
	Wall Bracket (for or		CKN 350

	COF (HOITIIIIai fleat	ing)	3.34		
	HSPF		10.4		
	AHRI Certification I	Number	10347731		
	Voltage ø / V / Hz		1 / 208-230 / 60		
	Working Voltage Ra	ange (VAC)	176 - 254 (max. 3% deviation from each)		
Power	Operating Current	Cooling (A)	4.8 / 13.5 / 17.0		
rowei	(min. / std. / max.)	Heating (A)	3.7 / 15.8 / 23.0		
	Max. Breaker	Amps	45		
	Min. Circuit Ampac	ity (A)	32		
	WXHXD	Indoor Unit	51 3/16 X 11 13/16 X 27 9/16		
	(in.)	Outdoor Unit	37 X 55 7/8 x 13		
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	Duct Connections	Supply (in.)	49 15/16 X 10 5/8		
	(W X H)	Return (ID, in.)	49 15/16 X 10 5/8		
		Indoor Unit	Aluminum Fin / Copper Tube		
Heat Exchanger	Туре	Outdoor Unit	Aluminum, flat fin, micro channel		
Sound Pressure	Indoor Unit 4D(A)				
	Indoor Unit dB(A)	L/M/H	30 / 34 / 38		
Level	Outdoor Unit dB(A)	Cooling / Heating (high)	51 / 53		
• "		Cooling	23 ~ 115°F(-5 ~ 46°C)		
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Temperatures		Heating	-13 ~ 75°F(-25 ~ 24°C)		
°F(°C)	Indoor	Cooling	61 ~ 90°F(16 ~ 32°C)		
		Heating	T ≤ 80°F(27°C)		
	Indoor & Outdoor	High side (flare)	3/8"		
	mador & Outdoor	Low side (flare)	5/8"		
Pipe Connections	Maximum (ft.)		246		
•	Maximum Vertical S	Separation (ft.)	98		
	Condensate Connec	tion (with included adapter)	1 1/16" ID for 3/4" PVC		
	Туре		R410A		
	Control Method		Electronic Expansion Valve		
Refrigerant	Factory Charge oz.		102.24		
Ŭ	Charged for		25 ft		
	Additional Refrigera	ant	0.269 oz/ft over 25 ft		
_	Туре		Inverter Driven, Twin BLDC, Rotary		
Compressor	RLA	Amps	20.0		
	1	T T "	BLDC (1) With Sirocco Fan (3)		
	Туре	CFM (L/M/H)	848 / 989 / 1165 (at standard ESP)		
Evaporator Fan	Air Volume	Total CFM Range ²	848 - 1,620		
Lvaporator r all	Output (W) / FLA (A		244 W / 2.0 A		
	, , ,	Standard ("WC)	0.16		
	Static Pressure	Min. / Max. ("WC)	0.16		
	Motor	, ,			
Condenser Fan	Motor	(may)	BLDC With Axial Type Fan (2)		
	FLA / Watts / CFM	(max.)	0.48 A X 2 / 125 W X 2 / 4,415 CFM		
	Wired Controlle-	Simplified Touch Controller	MWR-SH11UN		
	Wired Controller	Advanced Wired Controller	MWR-WG00UN		
	Wi-Fi Adapter		MIM-H04UN		
	Wireless Signal	Wireless Signal Receiver	MRK-A10N		



- · Horizontal discharge airflow
- High heating performance at -13°F(-25°C)
- The outdoor unit shall supply power to indoor unit via 14 AWG X 3 power wire
- · Auto-restart after power loss
- The outdoor unit shall have a snow accumulation prevention option setting to prevent snow drifting against an idle outdoor unit.
- The indoor and outdoor units shall have a removable EEPROM that stores system programming information, unit name, and other data
- All indoor unit addressing and option settings shall be done digitally; the indoor unit does not contain rotary dials or setting switches.
- The indoor unit shall have a built-in condensate pump as standard with a 29" lift (from bottom of unit) and float switch that disables indoor unit during overflow
- · The indoor unit shall have automatic air volume scanning for simple setup and optimized comfort settings for the occupant.
- · The indoor unit shall have smart-tuning function that can provide optimized comfort by allowing the occupant to offset the fan CFM curve with a wired remote controller (MWR-SH10N, MWR-WE13UN, MWR-SH11UN, MWR-WG00UN) to increase or decrease airflow.
- The indoor unit shall allow service access from four sides (top, bottom, left, right)
- Pipe connections at the outdoor unit shall be made inside the unit chassis. Refrigerant pipes can exit through the front, side, rear, or bottom sides of the outdoor unit.
- The outdoor unit shall have a night time quiet mode option to reduce operating sound during the night (automatic or manual activation with dry contact signal).
- The outdoor unit shall have a base pan heater as standard (150W)

Construction

The outdoor unit shall be galvanized steel with a baked on powder coated finish for

The indoor unit shall be insulated, galvanized steel.

Heat Exchanger

The indoor unit heat exchanger shall be mechanically bonded fin to copper tube

The outdoor unit heat exchanger shall be aluminum, flat fin, micro channel

Controls

Control signal shall be a DDC type signal

Interconnect control wire between outdoor indoor unit shall be 16AWG X 2 shielded

Wired or wireless controls must be purchased separately

Connection to optional wired controllers shall be 2 X 16AWG shielded wire

Controls shall integrate with a BMS system

The system shall integrate with the Samsung NASA Controls Solution

No additional interface modules/adapters are required when connecting to Samsung NASA DVM S central control options.

Refrigerant System

The refrigerant shall be R410A

The compressor shall be hermetically sealed, inverter controlled, twin BLDC Rotary Refrigerant flow shall be controlled by an electronic expansion valve at outdoor unit Soft-start to reduce current demand during compressor start

Warranty

CKN-250

WBF-6M

WBB-4M

25' - ILS-2510

50' - ILS-5010

10 years compressor, 10 years parts, 1 year limited labor (conditions apply)

Front

Back

Line Sets - insulated and flared, interconnect

Wall Bracket (for outdoor unit)

Wind Baffles

cables included



ETL (UL 1995) Safety Devices: PCB fuses, indoor unit terminal block thermal fuse, current transformer, over-voltage protection, crankcase heating, temperature limit protection logic, compressor overload sensing Certified in accordance with the AHRI Unitary Small Air-Source Heat Pumps (USHP) Certification Program which is based on the

 $^{^2}$ Refer to installation manual for full fan curve details Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice.

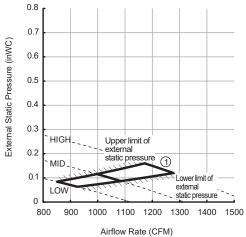
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Samsung Low Ambient Heating "Max Heat" Duct S, Single Zone, Split System AC036MNHDCH/AA Fan Characteristics (P-Q Curve)

Fan performance characteristics based on installation option setting (6 fan options)

Option Code

	Externa	l Static Pressure (inWC)		Option Code	•	1
lacksquare		0.12≤P≤0.16		01B0EC-1	1E5403-2764	70-376045]
							_
	0.8 -						

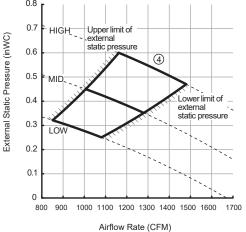


കി	Exter	nai Static Pressure (invvC)	Option Code			
U		0.16 < P≤ 0.30	01B0EC-1E546A-276470-376045			
External Static Pressure (inWC)	0.8 0.7 0.6 0.5 0.4 0.3 0.2	0.16 < P ≤ 0.30 HIGH Upper limit of external static pressure	'			
	Airflow Rate (CFM)					

<u> </u>	0.30 < P≤ 0.47	01B0EC-1E55D1-276470-376045
	0.8	
$\widehat{\Omega}$	0.7	
External Static Pressure (inWC)	0.6 HIGH	
ressur	0.5 Upper limit of external static pressure	
static P	0.4 MID.	3
ernal S	0.3	
Exte	0.2 LOW	Lower limit of external static pressure
	0.1	
	_	1.

External Static Pressure (inWC)

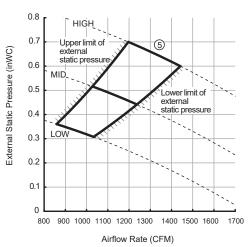
(4)	External Static Pressure (inWC)						Option Code						
4		0.47 <	P≤0	.60			01B0E	C-1E	5926-	27647	7 0-37	6045	
	0.8 💂												

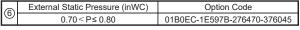


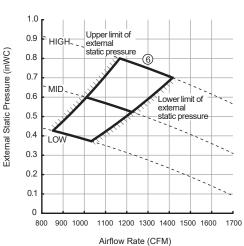
(5)	External Static Pressure (inWC)	Option Code
9	0.60 < P≤ 0.70	01B0EC-1E5959-276470-376045
	0.8 HIGH	

Airflow Rate (CFM)

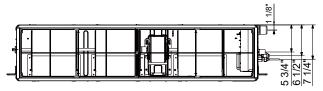
1100 1200 1300 1400 1500 1600 1700



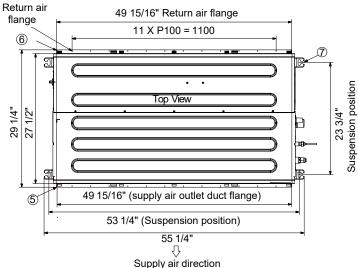




Samsung Low Ambient Heating "Max Heat" Duct S, Single Zone, Split System AC036MNHDCH/AA Dimensional Drawing



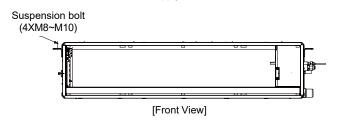
30-Ø 0.13" hole

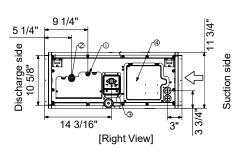


51 3/16"
55 1/8"

Inspection opening

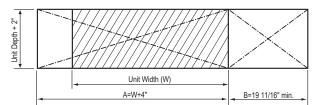
19 11/16"





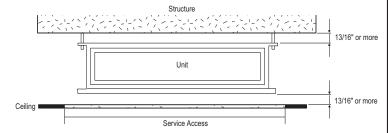
NO	Name	Description
1	Liquid pipe connection	Ø3/8"
2	Gas pipe connection	Ø5/8"
3	Drain pipe connection	1 1/16" ID for 3/4" PVC
4	Power supply connection	-
5	Air discharge flange	-
6	Air filter	-
7	Suspension point	5/16" ~ 3/8"

Inspection Opening Requirements

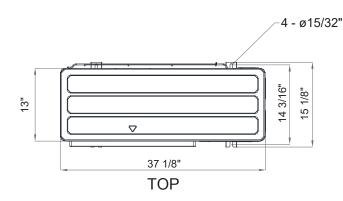


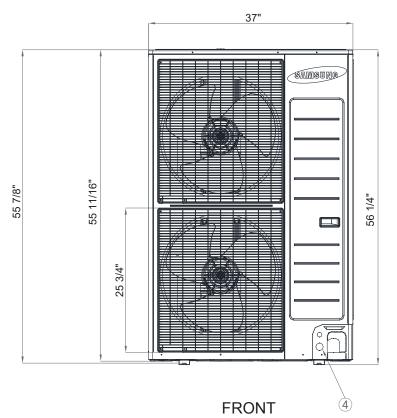
In applications where there is not a tile ceiling, an inspection hole is required. If height between ceiling and structure is 3.25' or more, inspection opening "B" is recommended. If height between ceiling and structure is less than 3.25', inspection opening "A" and "B" is recommended.(verify state and local codes).

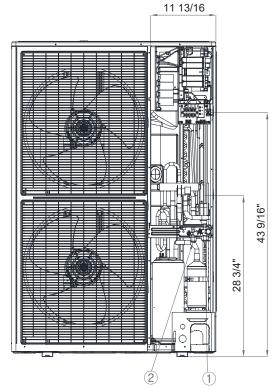
Unit Clearance From Structure



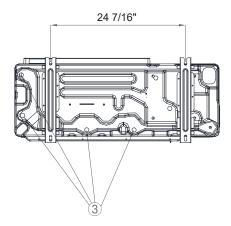
System AC036JXSCCH/AA Dimensional Drawing







FRONT WITHOUT SERVICE COVER



No.	Description
1	Suction service valve
2	Liquid service valve
3	Drain opening
4	Power and communication conduit openings

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