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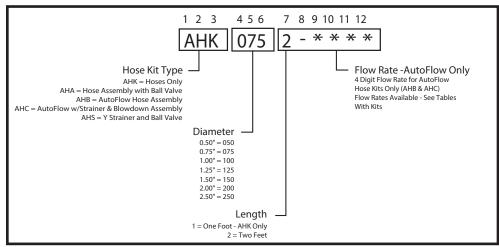
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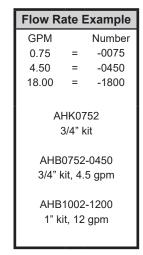
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# Stainless Steel Braided Hose Kit Nomenclature

#### **Hose Kit Nomenclature**





All hose kit part numbers contain two hoses

#### Hose Kit Installation Procedure

Most products come assembled to factory specifications. Accessories on valves larger than 2-½-inch do not come assembled. ClimateMaster recommends tightening accessories to the following torque specifications:

- 1/4-inch NPT to 13-15ft-lb
- ½-inch NPT to 20-25ft-lb
- 3/4-inch NPT to 23-30ft-lb

# **Unit Water Connection Sizes**

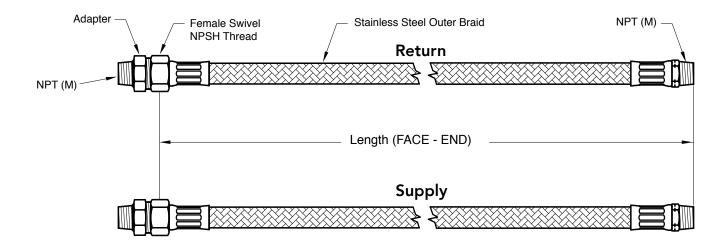
#### **Unit Water Connection Sizes**

			W	ater Co	nnectio	n Diame	ter Tabl	le				Autoflow
Unit Size	TRC	тс	TR	TS	TT	TY	TZ	TMW	TL	TRE	_	Rate (gpm)
006		0.50	0.50	0.50							1.25	1.50
009	0.50	0.50	0.50	0.50							1.75	2.25
012	0.50	0.50	0.50	0.50							2.25	3
015	0.50	0.50	0.50								3	4
018	0.75	0.50	0.50	0.75							3.50	4.50
024 / 026		0.75	0.75	0.75	0.75	0.75	0.75				4.50	6
030		0.75	0.75	0.75		0.75	0.75				6	8
036 / 038		0.75	0.75	0.75	0.75	0.75	0.75	0.75		0.75	7	9
041 / 042		0.75	0.75	1.00		0.75	0.75				8	11
048 / 049		1.00	1.00	1.00	1.00	1.00	1.00			0.75	9	12
060 / 064		1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	12	15
070 / 072		1.25		1.00	1.00					1.25	14	18
084									1.50		15	20
096		1.25							1.50	1.50	18	24
120		1.50						1.5	1.50	1.50	23	30
144										1.50	30	40
150									2.00		30	40
160		2.00									30	40
168		2.00							2.00	2.00	30	40
192									2.00		40	50
240		2.00							2.00	2.00	45	60
300		2.50							2.50		60	75
170								2.00			18	35
340								2.00			35	70
360								2.00			45	90
600								2.50			75	150
840								2.50			105	210

# AHK 1/2" to 2" Hose Kit

#### **Specifications:**

- Designed for water-source heat pump applications
- Kevlar® reinforced EPDM core with ANSI 302/304 stainless steel outer braid
- Fire-rated materials per ASTM E 84-00 (NFPA 255, ANSI/UL 723 & UBC 8-1)
- NPT (External Pipe Thread) fitting at one end; swivel connector and adapter with NPT (External Pipe Thread) at the other end (swivel to adapter connection via fiber or EPDM gasket)
- The swivel connection provides union between the heat pump and piping system
- Brass fittings, stainless steel ferrules for ½-inch to 1-inch, aluminum ferrules for 1¼-inch to 2-inch
- FluidTemperature range of 15°F [9°C] to 180°F [82°C] (Operation below 32°F [0°C] requires antifreeze)

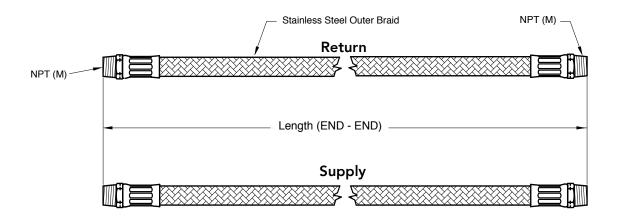


#### **Physical Data**

Part #	Hose Size inches [mm]	Length feet [cm]	Working Pressure psi [kPa]	Min. Burst Pressure psi [kPa]	Min. Bend Radius inches [mm]	Cv
AHK0501	0.50 [12.7]	1 [30.5]	400 [2756]	1600 [11024]	2.5 [63.5]	3.9
AHK0502	0.50 [12.7]	2 [61]	400 [2756]	1600 [11024]	2.5 [63.5]	3.5
AHK0752	0.75 [19.1]	2 [61]	400 [2756]	1600 [11024]	4.5 [114.3]	12.8
AHK1002	1.00 [25.4]	2 [61]	400 [2756]	1600 [11024]	5.5 [139.7]	21.5
AHK1252	1.25 [31.8]	2 [61]	300 [2067]	1200 [8268]	7 [177.8]	29.0
AHK1502	1.50 [38.1]	2 [61]	300 [2067]	1200 [8268]	8.5 [216]	54.0
AHK2002	2.00 [50.8]	2 [61]	300 [2067]	1200 [8268]	9.5 [241.3]	68.0

#### **Specifications:**

- Designed for water source heat pump applications
- Kevlar® reinforced EPDM core with ANSI 302/304 stainless steel outer braid
- Fire-rated materials per ASTM E 84-00 (NFPA 255, ANSI/UL 723 & UBC 8-1)
- NPT (External Pipe Thread) fitting at both ends
- Brass fittings and aluminum ferrules
- Fluid Temperature range of 15°F [9°C] to 180°F [82°C] (Operation below 32°F [0°C] requires antifreeze)



#### **Physical Data**

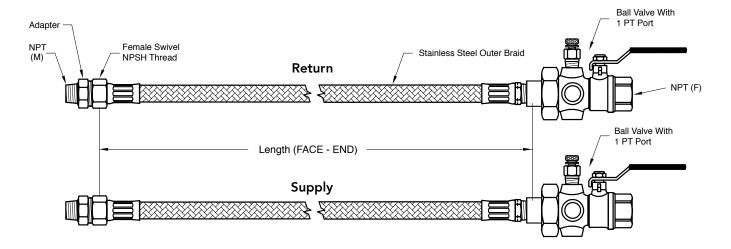
Part #	Hose Size inches [mm]	Length feet [cm]	Working Pressure psi [kPa]	Min. Burst Pressure psi [kPa]	Min. Bend Radius inches [mm]	Cv
AHK2502	2.5 [63.5]	2 [61]	300 [2067]	1200 [8268]	16.0 [406.4]	200.0

Note: The field must provide and install swivels (install swivels prevent the hose from twisting)

# AHA 1/2" to 1-1/4" Hose Kit with Ball Valves

#### **Specifications:**

- Designed for water source heat pump applications
- Kevlar® reinforced EPDM core with ANSI 302/304 stainless steel outer braid
- Fire-rated materials per ASTM E 84-00 (NFPA 255, ANSI/UL 723 & UBC 8-1)
- NPT (Internal Pipe Thread) Ball valve at one end; swivel connector and adapter with NPT (External Pipe Thread) at the other end (swivel to adapter connection via fiber or EPDM gasket)
- Swivel connection provides union between heat pump and piping system
- Brass fittings, stainless steel ferrules
- Full port ball valve with integral P/T (pressure/temperature) ports
- Fluid Temperature range of 15°F [9°C] to 180°F [82°C] (Operation below 32°F [0°C] requires antifreeze)



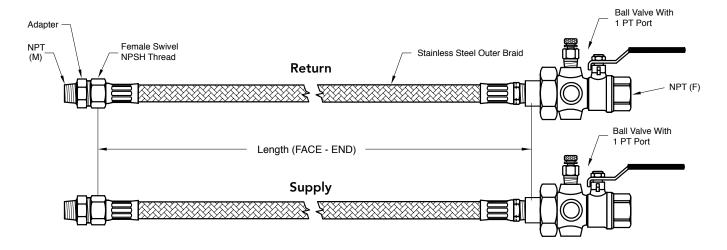
#### **Physical Data**

Part #	Hose Size inches [mm]	Length feet [cm]	Working Pressure psi [kPa]	Min. Burst Pressure psi [kPa]	Min. Bend Radius inches [mm]
AHA0502	0.50 [12.7]	2 [61]	400 [2756]	1600 [11024]	2.5 [63.5]
AHA0752	0.75 [19.1]	2 [61]	400 [2756]	1600 [11024]	4.5 [114.3]
AHA1002	1.00 [25.4]	2 [61]	400 [2756]	1600 [11024]	5.5 [139.7]
AHA1252	1.25 [31.8]	2 [61]	300 [2067]	1200 [8268]	7 [177.8]

# AHA 1-1/2" to 2" Hose Kit with Ball Valves

#### **Specifications:**

- Designed for water source heat pump applications
- Kevlar® reinforced EPDM core with ANSI 302/304 stainless steel outer braid
- Fire-rated materials per ASTM E 84-00 (NFPA 255, ANSI/UL 723 & UBC 8-1)
- NPT (Internal Pipe Thread) Ball valve at one end with hose swivel connector; with NPT (External Pipe Thread) connection at the other end
- Swivel connection provides union between heat pump and piping system
- Brass fittings; aluminum ferrules
- Full port ball valve with integral P/T (pressure/temperature) ports
- Fluid Temperature range of 15°F [9°C] to 180°F [82°C] (Operation below 32°F [0°C] requires antifreeze)



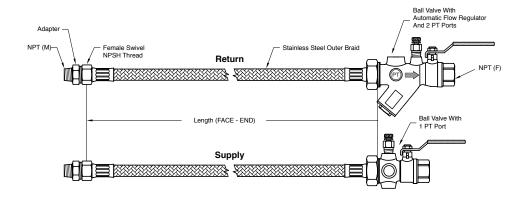
#### **Physical Data**

Part #	Hose Size inches [mm]	Length feet [cm]	Working Pressure psi [kPa]	Min. Burst Pressure psi [kPa]	Min. Bend Radius inches [mm]
AHA1502	1.5 [38.1]	2 [61]	300 [2067]	1200 [8268]	8.5 [216]
AHA2002	2.0 [50.8]	2 [61]	300 [2067]	1200 [8268]	9.5 [241.3]

# AHB 1/2" to 1-1/4" Hose Kit with Automatic Balancing Valve and Ball Valves

#### **Specifications:**

- Designed for water source heat pump applications
- Kevlar® reinforced EPDM core with ANSI 302/304 stainless steel outer braid
- Fire-rated materials per ASTM E 84-00 (NFPA 255, ANSI/UL 723 & UBC 8-1)
- NPT (Internal Pipe Thread) Ball valve at one end; swivel connector and adapter with NPT (External Pipe Thread) at the other end (swivel to adapter connection via fiber or EPDM gasket)
- Swivel connection provides union between heat pump and piping system
- Brass fittings, stainless steel ferrules for 1/2" to 1", aluminum ferrules for 1-1/4"
- Full port ball valve with integral P/T (pressure/temperature) port on supply hose
- Automatic balancing valve with integral P/T ports and full port ball valve on return hose
- Fluid Temperature range of 15°F [9°C] to 180°F [82°C] (Operation below 32°F [0°C] requires antifreeze)



#### **Physical Data**

Part #	Hose Size inches [mm]	Length feet [cm]	Working Pressure psi [kPa]	Min. Burst Pressurepsi [kPa]	Min. Bend Radius inches [mm]	Typ. Flow Rate Range U.S. GPM [l/s]
AHB0502-***	0.50 [12.7]	2 [61]	400 [2756]	1600 [11024]	2.5 [63.5]	See Table
AHB0752-***	0.75 [19.1]	2 [61]	400 [2756]	1600 [11024]	4.5 [114.3]	See Table
AHB1002-***	1.00 [25.4]	2 [61]	400 [2756]	1600 [11024]	5.5 [139.7]	See Table
AHB1252-***	1.25 [31.8]	2 [61]	300 [2067]	1200 [8268]	7.0 [177.8]	See Table

#### **Available Flow Rates**

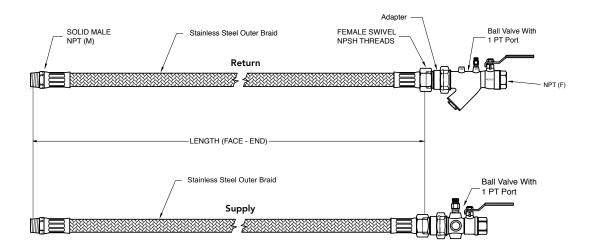
Model Suffix -***	Flow Rate U.S. GPM [I/s]	Hose Kit Diam. inches	Operating Differential PSI [xPa]
-0050	0.50 [0.032]	1/2" & 3/4"	2 - 45 [13.8 - 310]
-0100	1.00 [0.063]	1/2" & 3/4"	2 - 45 [13.8 - 310]
-0150	1.50 [0.095]	1/2" & 3/4"	2 - 45 [13.8 - 310]
-0200	2.00 [0.126]	1/2" & 3/4"	2 - 45 [13.8 - 310]
-0250	2.50 [0.158]	1/2" & 3/4"	2 - 45 [13.8 - 310]
-0300	3.00 [0.189]	1/2" & 3/4"	2 - 45 [13.8 - 310]
-0350	3.50 [0.221]	1/2" & 3/4"	2 - 45 [13.8 - 310]
-0400	4.00 [0.252]	1/2" & 3/4"	2 - 45 [13.8 - 310]
-0500	5.00 [0.315]	1/2" & 3/4"	2 - 45 [13.8 - 310]
-0600	6.00 [0.378]	1/2" & 3/4"	2 - 45 [13.8 - 310]
-0650	6.50 [0.410]	1/2" & 3/4"	2 - 45 [13.8 - 310]
-0700	7.00 [0.441]	1/2" & 3/4"	2 - 45 [13.8 - 310]
-0800	8.00 [0.504]	1/2" & 3/4" & 1"	2 - 45 [13.8 - 310]

Model Suffix -****	Flow Rate U.S. GPM [I/s]	Hose Kit Diam. inches	Operating Differential PSI [xPa]
-0900	9.00 [0.567]	3/4" & 1"	5 - 50 [34.5 - 344.5]
-1050	10.5 [0.663]	3/4"	5 - 50 [34.5 - 344.5]
-1100	11.0 [0.693]	1" & 1 1/4"	2 - 45 [13.8 - 310]
-1200	12.0 [0.756]	1" & 1 1/4"	2 - 45 [13.8 - 310]
-1300	13.0 [0.819]	1" & 1 1/4"	2 - 45 [13.8 - 310]
-1400	14.0 [0.882]	1" & 1 1/4"	2 - 45 [13.8 - 310]
-1500	15.0 [0.945]	1" & 1 1/4"	2 - 45 [13.8 - 310]
-1600	16.0 [1.008]	1" & 1 1/4"	2 - 45 [13.8 - 310]
-1800	18.0 [1.134]	1" & 1 1/4"	2 - 45 [13.8 - 310]
-2000	20.0 [1.260]	1" & 1 1/4"	2 - 45 [13.8 - 310]
-2100	21.0 [1.323]	1" & 1 1/4"	2 - 45 [13.8 - 310]
-2200	22.0 [1.386]	1" & 1 1/4"	2 - 45 [13.8 - 310]
-2500	25.0 [1.575]	1 1/4"	2 - 45 [13.8 - 310]
-3000	30.0 [1.890]	1 1/4"	2 - 45 [13.8 - 310]

# AHB 1-1/2" to 2" Hose Kit with Automatic Balancing Valve and Ball Valves

#### **Specifications:**

- Designed for water source heat pump applications
- Kevlar® reinforced EPDM core with ANSI 302/304 stainless steel outer braid
- Fire-rated materials per ASTM E 84-00 (NFPA 255, ANSI/UL 723 & UBC 8-1)
- NPT (Internal Pipe Thread) Ball valve at one end with hose swivel connector; with NPT (External Pipe Thread) connection at the other end
- Swivel connection provides union between heat pump and piping system
- Brass fittings; aluminum ferrules
- Full port ball valve with integral P/T (pressure/temperature) port on supply hose
- Automatic balancing valve with integral P/T ports and full port ball valve on return hose
- Fluid Temperature range of 15°F [9°C] to 180°F [82°C] (Operation below 32°F [0°C] requires antifreeze)



#### **Physical Data**

Part #	Hose Size inches [mm]	Length feet [cm]	Working Pressure psi [kPa]	Min. Burst Pressure psi [kPa]	Min. Bend Radius inches [mm]	Typ. Flow Rate Range U.S. GPM [I/s]
AHB1502-****	1.50 [38.1]	2 [61]	300 [2067]	1200 [8268]	8.5 [216.0]	See Table
AHB2002-****	2.00 [50.8]	2 [61]	300 [2067]	1200 [8268]	9.5 [241.3]	See Table

#### **Available Flow Rates**

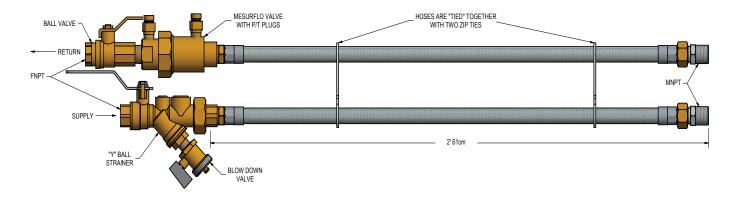
Model Suffix _****			Operating Differential PSI [kPa]
-1500	15.0 [0.945]	1-1/2" & 2"	2 - 45 [13.8 - 310]
-2000	20.0 [1.260]	1-1/2" & 2"	2 - 45 [13.8 - 310]
-2500	25.0 [1.575]	1-1/2" & 2"	2 - 45 [13.8 - 310]
-3000	30.0 [1.890]	1-1/2" & 2"	2 - 45 [13.8 - 310]
-3500	35.0 [2.205]	1-1/2" & 2"	2 - 45 [13.8 - 310]
-4000	40.0 [2.520]	1-1/2" & 2"	2 - 45 [13.8 - 310]

Model Suffix -****	Flow Rate U.S. GPM [I/s]	Hose Kit Diam. inches	Operating Differential PSI [kPa]
-4500	45.0 [2.835]	1-1/2" & 2"	2 - 45 [13.8 - 310]
-5000	50.0 [3.150]	1-1/2" & 2"	2 - 45 [13.8 - 310]
-6000	60.0 [3.780]	1-1/2" & 2"	2 - 45 [13.8 - 310]
-6500	65.0 [4.095]	1-1/2" & 2"	2 - 45 [13.8 - 310]
-7000	70.0 [4.410]	1-1/2" & 2"	2 - 45 [13.8 - 310]
-9000	90.0 [5.670]	2"	2 - 45 [13.8 - 310]

# AHC 1/2" to 1-1/4" Hose Kit with Automatic Balancing Valve, "Y" Strainer and Ball Valves

#### **Specifications:**

- Designed for water source heat pump applications
- EPDM core with 304 stainless steel outer braid
- FNPT (Internal Pipe Thread) Ball valve at one end; swivel connector and adapter with MNPT (External Pipe Thread) at the other end (swivel to adapter connection via fiber or EPDM gasket)
- Swivel connection provides union between heat pump and piping system
- Brass fittings; stainless steel ferrules
- Full port ball valve with "Y" strainer/blowdown valve on supply hose
- Automatic balancing valve with integral P/T ports and full port ball valve on return hose
- Fluid Temperature range of 15°F [9°C] to 180°F [82°C] (Operation below 32°F [0°C] requires antifreeze and may cause the flow rate of automatic balancing valve to be out of the ± 10% tolerance range)



#### **Physical Data**

Part #	Hose Size inches [mm]	Length feet [cm]	Working Pressure psi [kPa]	Min. Burst Pressure psi [kPa]	Min. Bend Radius inches [mm]	Typ. Flow Rate Range U.S. GPM [I/s]
AHC0502-***	0.50 [12.7]	2 [61]	400 [2756]	1600 [11024]	2.0 [50.8]	See Table
AHC0752-***	0.75 [19.1]	2 [61]	400 [2756]	1600 [11024]	3.5 [88.9]	See Table
AHC1002-***	1.00 [25.4]	2 [61]	400 [2756]	1600 [11024]	4.5 [114.3]	See Table
AHC1252-***	1.25 [31.8]	2 [61]	400 [2756]	1600 [11024]	6.0 [152.4]	See Table

#### **Available Flow Rates**

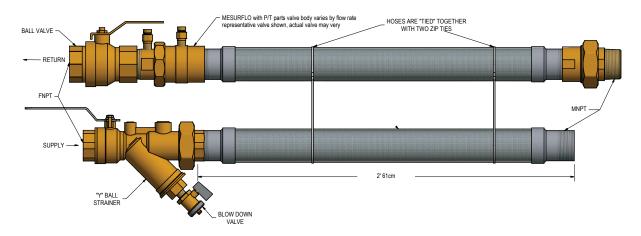
Model Suffix -***	Flow Rate U.S. GPM [I/s]	Hose Kit Diam. inches	Operating Differential PSI [kPa]
-0050	0.50 [0.032]	1/2" & 3/4"	2 - 80 [13.8 - 551.6]
-0100	1.00 [0.063]	1/2" & 3/4"	2 - 80 [13.8 - 551.6]
-0150	1.50 [0.095]	1/2" & 3/4"	2 - 80 [13.8 - 551.6]
-0200	2.00 [0.126]	1/2" & 3/4"	2 - 80 [13.8 - 551.6]
-0250	2.50 [0.158]	1/2" & 3/4"	2 - 80 [13.8 - 551.6]
-0300	3.00 [0.189]	1/2" & 3/4"	2 - 80 [13.8 - 551.6]
-0350	3.50 [0.221]	1/2" & 3/4"	2 - 80 [13.8 - 551.6]
-0400	4.00 [0.252]	1/2" & 3/4"	2 - 80 [13.8 - 551.6]
-0500	5.00 [0.315]	1/2" & 3/4"	2 - 80 [13.8 - 551.6]
-0600	6.00 [0.378]	1/2" & 3/4"	3 - 80 [20.7 - 551.6]
-0650	6.50 [0.410]	1/2" & 3/4"	3 - 80 [20.7 - 551.6]
-0700	7.00 [0.441]	1/2" & 3/4"	3 - 80 [20.7 - 551.6]
-0800	8.00 [0.504]	1/2" & 3/4" & 1"	3 - 80 [20.7 - 551.6]

Model Suffix -****	Flow Rate U.S. GPM [I/s]	Hose Kit Diam. inches	Operating Differential PSI [kPa]
-0900	9.00 [0.567]	3/4" & 1"	3 - 80 [20.7 - 551.6]
-1100	11.0 [0.693]	1" & 1 1/4"	3 - 80 [20.7 - 551.6]
-1200	12.0 [0.756]	1" & 1 1/4"	3 - 80 [20.7 - 551.6]
-1300	13.0 [0.819]	1" & 1 1/4"	3 - 80 [20.7 - 551.6]
-1400	14.0 [0.882]	1" & 1 1/4"	3 - 80 [20.7 - 551.6]
-1500	15.0 [0.945]	1" & 1 1/4"	3 - 80 [20.7 - 551.6]
-1600	16.0 [1.008]	1" & 1 1/4"	3 - 80 [20.7 - 551.6]
-1800	18.0 [1.134]	1" & 1 1/4"	5 - 80 [34.5 - 551.6]
-2000	20.0 [1.260]	1" & 1 1/4"	5 - 80 [34.5 - 551.6]
-2100	21.0 [1.323]	1" & 1 1/4"	5 - 80 [34.5 - 551.6]
-2200	22.0 [1.386]	1" & 1 1/4"	5 - 80 [34.5 - 551.6]
-2500	25.0 [1.575]	1 1/4"	5 - 80 [34.5 - 551.6]

# AHC 1-1/2" to 2" Hose Kit with Automatic Balancing Valve, "Y" Strainer and Ball Valves

#### **Specifications:**

- Designed for water source heat pump applications
- 321 stainless steel core with 304 stainless steel outer braid
- FNPT (Internal Pipe Thread) Ball valve at one end; with MNPT (External Pipe Thread) fitting at the other end
- Thread end: carbon steel
- Full port ball valve with "Y" strainer/blowdown valve on supply hose
- Automatic balancing valve with integral P/T ports and full port ball valve on return hose
- Fluid Temperature range of 15°F [9°C] to 180°F [82°C] (Operation below 32°F [0°C] requires antifreeze and may cause the flow rate of automatic balancing valve to be out of the +/- 10% tolerance range)



#### **Physical Data**

Part #	Hose Size inches [mm]	Length feet [cm]	Working Pressure psi [kPa]	Min. Burst Pressure psi [kPa]	Min. Bend Radius inches [mm]	Typ. Flow Rate Range U.S. GPM [l/s]
AHC1502-***	1.50 [38.1]	2 [61]	400 [2756]	1600 [11024]	5.0 [127]	See Table
AHC2002-***	2.00 [50.8]	2 [61]	400 [2756]	1600 [11024]	6.0 [152]	See Table

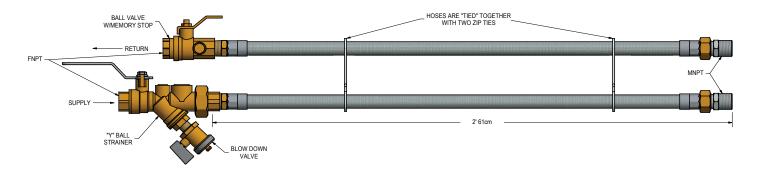
#### **Available Flow Rates**

Model Suffix -***	Flow Rate U.S. GPM [I/s]	Hose Kit Diam. inches	Operating Differential PSI [kPa]
-2500	25.0 [1.575]	1-1/2" & 2"	5 - 80 [34.5 - 551.6]
-3000	30.0 [1.890]	1-1/2" & 2"	5 - 80 [34.5 - 551.6]
-3500	35.0 [2.205]	1-1/2" & 2"	5 - 80 [34.5 - 551.6]
-4000	40.0 [2.520]	1-1/2" & 2"	5 - 80 [34.5 - 551.6]
-4500	45.0 [2.835]	1-1/2" & 2"	5 - 80 [34.5 - 551.6]
-5000	50.0 [3.150]	1-1/2" & 2"	5 - 80 [34.5 - 551.6]
-6000	60.0 [3.780]	1-1/2" & 2"	5 - 80 [34.5 - 551.6]
-6500	65.0 [4.095]	1-1/2" & 2"	5 - 80 [34.5 - 551.6]

# AHS 1/2" to 1-1/4" Hose Kit with "Y" Strainer and Ball Valves

#### **Specifications:**

- Designed for water source heat pump applications
- EPDM core with 304 stainless steel outer braid
- FNPT (Internal Pipe Thread) Ball valve at one end; swivel connector and adapter with MNPT (External Pipe Thread) at the other end (swivel to adapter connection via fiber or EPDM gasket)
- Swivel connection provides union between heat pump and piping system
- Brass fittings; stainless steel ferrules
- Full port ball valve with "Y" strainer/blowdown valve on supply hose
- Fluid Temperature range of 15°F [9°C] to 180°F [82°C]



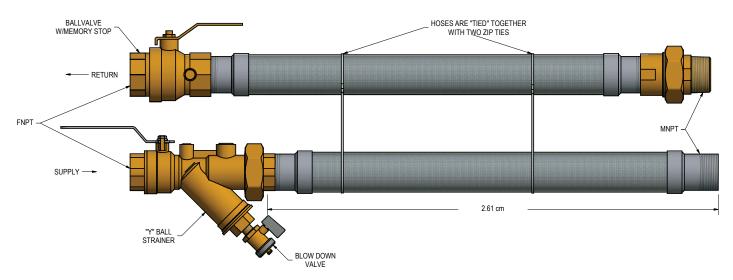
#### **Physical Data**

Part #	Hose Size inches [mm]	Length feet [cm]	Working Pressure psi [kPa]	Min. Burst Pressure psi [kPa]	Min. Bend Radius inches [mm]
AHS0502	0.50 [12.7]	2 [61]	400 [2756]	1600 [11024]	2.0 [50.8]
AHS0752	0.75 [19.1]	2 [61]	400 [2756]	1600 [11024]	3.5 [88.9]
AHS1002	1.00 [25.4]	2 [61]	400 [2756]	1600 [11024]	4.5 [114.3]
AHS1252	1.25 [31.8]	2 [61]	400 [2756]	1600 [11024]	6.0 [152.4]

# AHS 1-1/2" to 2" Hose Kit with "Y" Strainer and Ball Valves

#### **Specifications:**

- Designed for water source heat pump applications
- 321 stainless steel core with 304 stainless steel outer braid
- FNPT (Internal Pipe Thread) Ball valve at one end with MNPT (External Pipe Thread) connection at the other end
- Thread ends: carbon steel
- Full port ball valve with "Y" strainer/blowdown valve on supply hose
- Temperature range of 15°F [9°C] to 180°F [82°C]



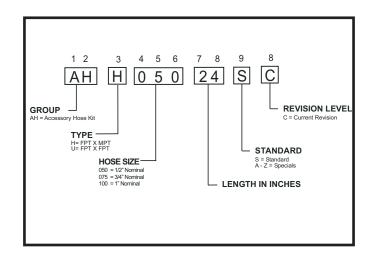
### **Physical Data**

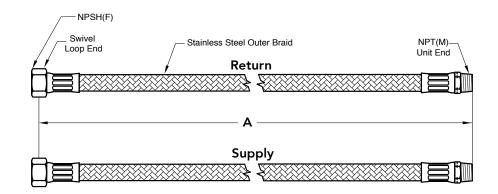
Part #	Hose Size inches [mm]	Length feet [cm]	Working Pressure psi [kPa]	Min. Burst Pressure psi [kPa]	Min. Bend Radius inches [mm]
AHS1502	1.50 [38.1]	2 [61]	400 [2756]	1600 [11024]	5.0 [127]
AHS2002	2.00 [50.8]	2 [61]	400 [2756]	1600 [11024]	6.0 [152]

# AHH 1/2", 3/4" and 1" Vertical Stack Hose Kit

#### **Specifications:**

- Designed for water source heat pump applications.
- Kevlar® reinforced EPDM core with ANSI 302/304 stainless steel outer braid.
- Fire-rated materials per ASTM E 84-00 (NFPA 255, ANSI/UL 723 & UBC 8-1).
- NPT (M) (Internal Pipe Thread) Ball valve at one end; swivel connector and adapter with NPSH\* Threads with fiber or EPDM washer, shipped inside connection.
- Swivel connection provides union between chassis and risers.
- Brass fittings; stainless steel ferrules.
- Fluid Temperature range of 15°F [9°C] to 180°F [82°C] (Operation below 32°F [0°C] requires antifreeze).





Unit Size	Hose Diameter	Α
09, 12	.50"	24" [61 cm]
15, 18	.75"	36" [91 cm]
24, 30, 36	1.00	36" [91 cm]

#### **Physical Data**

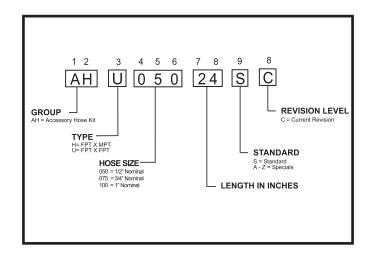
Part #	Hose Size inches [mm]	Length feet [cm]	Working Pressure psi [kPa]	Min. Burst Pressure psi [kPa]	Min. Bend Radius inches [mm]
AHH05024SC	0.50 [12.7]	2 [61]	400 [2756]	1600 [11024]	2.5 [63.5]
AHH07536SC	0.75 [19.1]	3 [91]	400 [2756]	1600 [11024]	4.5 [114.3]
AHH10036SC	1.00 [25.4]	3 [91]	400 [2756]	1600 [11024]	5.5 [139.7]

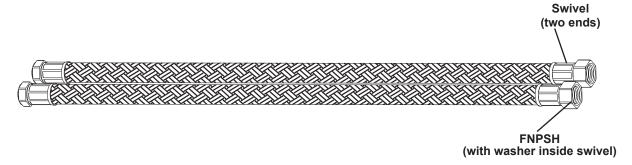
<sup>\*</sup> Compatible with BSPPM fitting in TSM/TS4/TRM/817 chassis.

# AHU 1/2", 3/4" and 1" Vertical Stack Hose Kit

#### **AHU Series Hose Kit Specifications:**

- AHU hose kits are used for connection with ClimateMaster standard ball valves.
- Designed for vertical high rise water-source heat pump applications.
- Kevlar® reinforced EPDM core with ANSI 302/304 stainless steel outer braid
- Fire-rated materials per ASTM E 84-00 (NFPA 255, ANSI/UL 723 & UBC 8-1)
- Swivel connection provides union between chassis and riser shutoff
- Brass fittings, stainless steel ferrules
- Temperature range of 15°F [9°C] to 180°F [82°C] (Operation below 32°F [0°C] requires antifreeze)
- Max. working pressure of 400 psi [2756 kPa]
- Min. burst pressure of four times working pressure

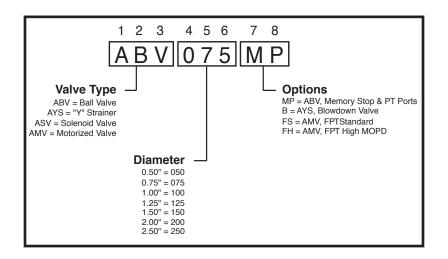




#### **Physical Data**

Unit	Inside Diameter inches	Length feet [cm]	Working Pressure psi [kPa]	Min. Burst Pressure psi [kPa]	Min. Bend Radius inches [mm]
09 - 12	0.50	3 [91]	400 [2756]	1600 [11024]	3.56 [91]
15 - 18	0.75	3 [91]	400 [2756]	1600 [11024]	3.56 [91]
24 - 36	1.00	3 [91]	400 [2756]	1600 [11024]	4.3 [109]

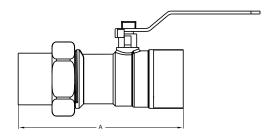
#### Water Valves and Strainers



#### ABV\*\*\* Ball Valve

- Brass body with union
- FPT connection both ends except 1/2" (union end is MPT)
- Designed for water source heat pump applications
- Temperature range of -40° to 200°F [-40° to 93°C]
- Full port ball valve Class 125 (400 psig [2763 kPa] WOG @150°F [66°C])

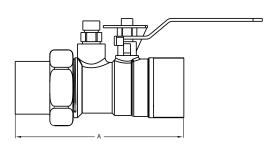
Model	Diameter (inch)	A Max (in)	Cv
ABV050	1/2"	3.9"	21
ABV075	3/4"	4.1"	44
ABV100	1"	4.5"	42
ABV125	1-1/4"	5.7"	132
ABV150	1-1/2"	5.5"	132
ABV200	2"	6.4"	345
ABV250	2-1/2'	6.9"	345



#### ABV\*\*\*MP Ball Valve with Memory Stop and PT Port

- Brass body with union
- FPT connection both ends except 1/2" (union end is MPT)
- Designed for water source heat pump applications
- Temperature range of -40° to 200°F [-40° to 93°C]
- Full port ball valve Class 125 (400 psig [2763 kPa] WOG @ 150°F [66°C] with integral pressure/temperature (P/T) plug and memory stop

Model	Diameter inch	A Max (in)	Cv
ABV050MP	1/2"	3.9"	21
ABV075MP	3/4"	4.1"	44
ABV100MP	1"	4.5"	42
ABV125MP	1-1/4"	5.7"	132
ABV150MP	1-1/2"	5.5"	132
ABV200MP	2"	6.4"	345
ABV250MP	2-1/2"	6.9"	345



### Water Valves and Strainers

#### AMV\*\*\*F\* Motorized Water Valve Kit with End Switch

- FPT x FPT with brass body material
- Designed for water source heat pump applications
- Slow Closing Quiet operation 24VAC with 60" [152 cm] leads
- Temperature range of 32° to 240°F [0° to 115°C]
- Working pressure (300 psig [2072 kPa] WOG @ 150°F [66°C])

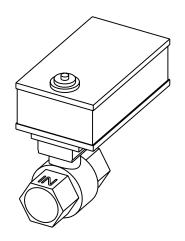
Model	Diameter inch	MOPD	Cv
AMV050FHS	0.50"	150	4.9
AMV075FHS	0.75"	150	10.3
AMV100FHS	1.00"	150	8.9



#### AMV\*\*\*F\* Motorized Water Valve Kit with End Switch

- FPT x FPT with brass body material
- Designed for water source heat pump applications
- Full Port Stainless Steel ball, spring return
- Slow Closing Quiet operation 24VAC with 48" [121cm] leads
- Temperature range of -22° to 250°F [-30° to 121°C]
- Working pressure (360 psig [2482 kPa] WOG @ 250°F [121°C])

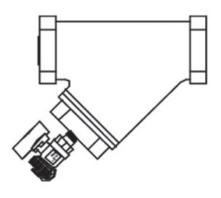
Model	Diameter inch	MOPD	Cv
S23S0252N01	1.25"	100	25
<b>S23S0253N01</b> 1.50"		100	41
S23S0254N01	2.00"	100	57



#### AYS\*\*\*B "Y" Strainer with Blowdown

- FPT x FPT with Bronze material
- Designed for water source heat pump applications
- Temperature range of -40° to 200°F [-40° to 93°C]
- Strainer includes #20 stainless steel wire mesh
- Class 125 working pressure (400 psig [2763 kPa] WOG @ 150°F [66°C])

Model	Diameter inch
AYS050B	0.50"
AYS075B	0.75"
AYS100B	1.00"
AYS120B	1.25"
AYS150B	1.50"
AYS200B	2.00"
AYS250B	2.50"



# **ALCP Loop Control Panel**

#### **Description**

The Micro Temp Controller is a completely programmable loop control panel. Each output may operate based upon time and day, water temperature, or both, for a total of 12 control outputs. Three additional outputs are supplied for time and day programming for auxiliary equipment, i.e. lighting. The main loop pumps are programmable for lead/lag control and time and day on/off with a dry contact input to override the schedule and bring pumps on.

As each system may require a different switch. It is recommended to purchase a flow switch based upon the system GPM.

#### **Application**

Boiler and Cooling tower loop control are supported. Geothermal units are not supported.

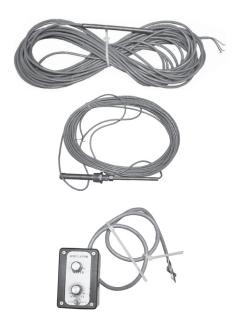
#### Standard Control Features:

- Dimensions 16.5" H x 15" W x 6.5" D [41.9cm x 38.1cm x 16.5cm]
- Input Power 120Vac -1-60
- Microprocessor based control
- Lock code to protect against unauthorized use
- Time out so user cannot leave in program mode
- Indicator lights display pump, alarm and output status
- Solid state relays
- LCD displays temperatures, flow time & programming data
- Seven day timer with provisions for Monday Friday, Saturday, and Sunday
- Automatic pump switch-over in the event of flow loss
- Outputs can be programmed to operate on time and temperature
- Alarm initiated by high temp, low temp, or no flow.
- Range Low temp alarm (35°F to 75°F) low temp shutdown (33°F to 90°F); high temp alarm (75°F to 120°F).
- Of the 16 outputs, four are dedicated to pumps 1 and 2, alarm and shutdown. The remaining 12 outputs available to control your system requirements. The ALCP2004-20 has eight additional outputs available.
- Dry contacts are rated for 2.0 A @ 14 to 240 VAC
- Relays connections are made through screw type terminal block
- Simulator provided to test program prior to start-up
- Outdoor air temperature sensor with 50 feet of cable
- Water temperature sensor with 50 feet of cable
- The enclosure shall be CSA and UL listed

Model	Description
ALCP2004	2 Pump with 14 programmable outputs
ALCP2004-20	2 Pump with 22 programmable outputs



**ALCP Controller** 



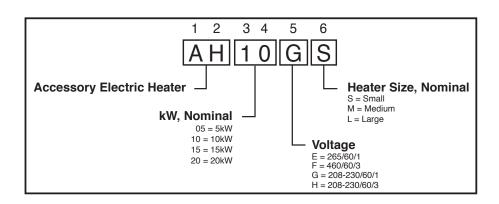
Outdoor Air Sensor, Water Temperature Sensor and Simulator (Included)

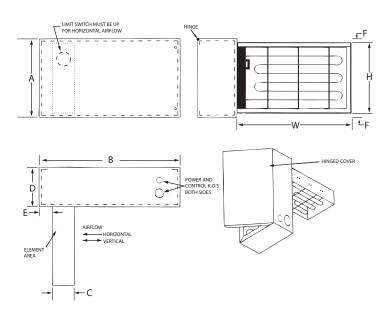
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# Accessory Electric Heater - AH

#### **Description**

- UL and CSA Listed
- Integral control box
- "Stab in" configuration
- Primary and secondary limit protection
- Recessed terminal connection
- Magnetic de-energizing contactors
- Fan relay control
- UL/NEC circuit fusing
- Hinged control box door
- Leaving air temperature should not exceed 135°F [57°C], auto reset limit switch is 145°F [62°C]





#### **Electrical Data**

Model	Voltage	Hz	Phase	*kW	Amps	Steps	Minimum Air Velocity Ft/Min.
	208	60	1	3.6	17.3		420
	240	60	1	4.8	20.0		520
5	208	60	3	3.8	10.4	1	480
"	240	60	3	5.0	12.0		480
	277	60	1	5.0	18.1		480
	480	60	3	5.0	6.0		530
	208	60	1	7.2	34.6	2	500
	240	60	1	9.6	40.0	2	680
10	208	60	3	7.4	20.7	2	500
10	240	60	3	9.9	23.9	2	650
	277	60	1	10.0	36.1	2	640
	480	60	3	10.0	12.0	1	640
	208	60	1	10.0	51.9	3	600
	240	60	1	14.4	60.0	3	900
15	208	60	3	11.2	31.0	2	800
'3	240	60	3	15.0	36.0	2	900
	277	60	1	15.0	54.2	3	870
	480	60	3	15.0	18.1	1	900
	208	60	1	14.4	69.2	4	900
	240	60	1	19.2	80.0	4	970
20	208	60	3	14.8	41.3	3	900
20	240	60	3	19.8	47.7	3	970
	277	60	1	20.0	72.2	4	870
	480	60	3	20.0	24.1	2	910

#### \*Maximum kW if all steps are wired in.

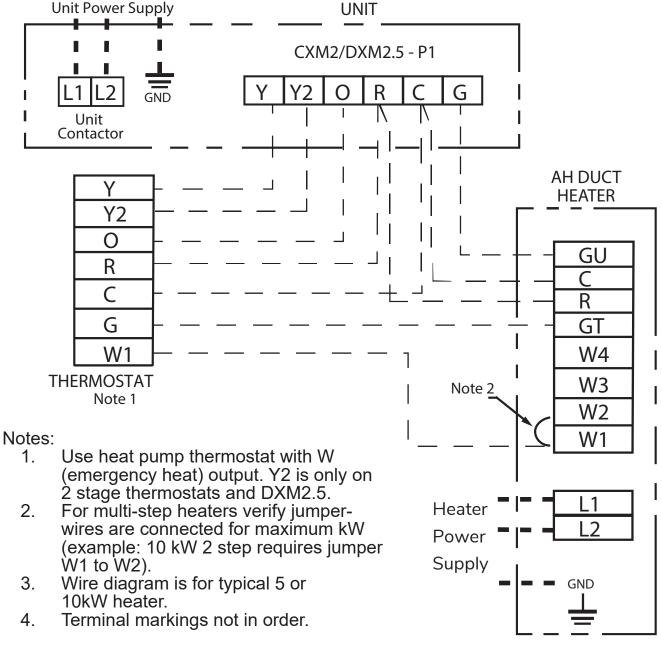
#### **Heater Dimensions**

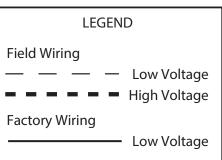
Model	Α	В	С	D	E	F	w	Н	Element Area (Sq. Ft)
AH05-S	14	10	3	4	2	1	11.5	12	1.0
AH10-M	16	14	3	4	2	1	12.5	14	1.2
AH10-L	17	10	3	4	2	1	15.5	15	1.6
AH15-M	16	16	6	4	2	1	12.5	14	1.2
AH15-L	17	15	3	4	2	1	15.5	15	1.6
AH20-L	17	15	3	4	2	1	15.5	15	1.6

All Dimensions are ± 1/4".

#### **NOTES**

- 1. For electric heat in boilerless applications, the unit must have the DXM option or an electric heat with MPC; additionally, you must order the ASKHTR Relay kit (see 97B0012N07 IOM for wiring and DIP settings).
- 2. For 3 and 4 step heaters, use pilot duty relay part number 13B0004N01 (see 97B0012N07 IOM for wiring).

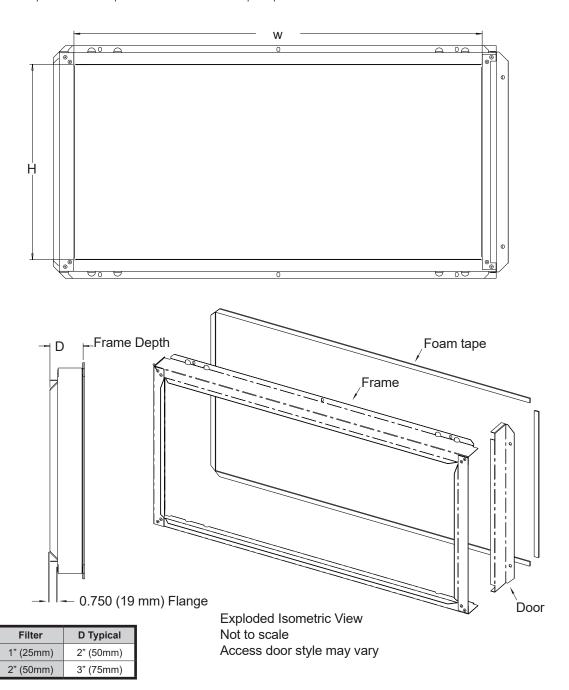




# Accessory Filter Frame for Packaged Units

#### **AFF Filter Frame Description:**

- Air filter frame with filter access door
- Integral flanges for air duct connection
- Field installed used on right or left return units
- Galvanized steel painted or unpainted to match heat pump cabinet



# **Accessory Filter Frame Dimensions**

#### **Frame Dimensions**

		Part Number	Flange Dim	ension " [cm]	Part Number	Flange Dimension " [cm]		
Unit Series	Unit Size	1-inch [25mm]	Н	w	2-inch [50mm]	Н	w	
	006 - 012	AFF10181NRSH	8.1 [21]	15.6 [40]	AFF10182NRSH	8.1 [21]	15.6 [40]	
тсн	015 - 018	AFF16251NRSH	14.1 [36]	22.7 [55]	AFF16252NRSH	14.1 [36]	22.7 [55]	
TRH TVH	024 - 030	AFF18251NRSH	15.9 [41]	22.7 [55]	AFF18252NRSH	15.9 [41]	22.7 [55]	
TYH TZH	036 - 042	AFF28201NRSH	18.1 [46]	25.8 [60]	AFF28202NRSH	18.1 [46]	25.8 [60]	
	048 - 060	AFF38201NRSH	18.1 [46]	35.8 [86]	AFF38202NRSH	18.1 [46]	35.8 [86]	
TCV	006 - 012	AFF10181NRSV	8.1 [21]	15.6 [40]	AFF10182NRSV	8.1 [21]	15.6 [40]	
TRV TYV	015 - 030,041	AFF20201NRSV	18.1 [46]	18.1 [46]	AFF20202NRSV	18.1 [46]	18.1 [46]	
TZV	036 - 042	AFF24241NRSV	22.1 [56]	22.6 [55]	AFF24242NRSV	22.1 [56]	22.6 [55]	
TRV/TZV		AFF28281NRSV	26.1 [66]	25.8 [66]	AFF28282NRSV	26.1 [66]	25.8 [66]	
TCV/TYV	048 - 060	AFF32241NRSV	22.1 [56]	29.1 [74]	AFF32242NRSV	22.1 [56]	29.1 [74]	
тсн	072-120	AFF20651NRSH	18.0 [46]	59.9 [152]	AFF20652NRSH	18.0 [46]	59.9 [152]	
	006 - 012	AFF16201BRSH	14.2 [36]	17.7 [45]	AFF16202BRSH	14.2 [36]	17.7 [45]	
	018 - 030	AFF18361BRSH	16.2 [41]	33.8 [86]	AFF18362BRSH	16.2 [41]	33.8 [86]	
TSH	036	AFF20371BRSH	18.2 [46]	34.8 [88]	AFF20372BRSH	18.2 [46]	34.8 [88]	
	042 - 048	AFF20421BRSH	18.2 [46]	39.8 [101]	AFF20422BRSH	18.2 [46]	39.8 [101]	
	060 - 070	AFF20481BRSH	18.2 [46]	44.8 [114]	AFF20482BRSH	18.2 [46]	44.8 [114]	
	006 - 012	AFF16201BRSV	14.2 [36]	17.7 [45]	AFF16202BRSV	14.2 [36]	17.7 [45]	
	018	AFF24241BRSV	22.2 [56]	22.2 [56]	AFF24242BRSV	22.2 [56]	22.2 [56]	
T01/	024-030	AFF28241BRSV	26.2 [67]	22.2 [57]	AFF28242BRSV	26.2 [67]	22.2 [57]	
TSV	036	AFF28301BRSV	26.2 [67]	27.2 [69]	AFF28302BRSV	26.2 [67]	27.2 [69]	
	042 - 048	AFF32301BRSV	30.2 [77]	27.2 [69]	AFF32302BRSV	30.2 [77]	27.2 [69]	
	060 - 070	AFF36301BRSV	34.2 [87]	27.2 [69]	AFF36302BRSV	34.2 [87]	27.2 [69]	
	026	AFF18361BRSH	16.2 [41]	33.8 [86]	AFF18362BRSH	16.2 [41]	33.8 [86]	
	038	AFF20371BRSH	18.2 [46]	34.8 [88]	AFF20372BRSH	18.2 [46]	34.8 [88]	
TTH/TEH	049	AFF20421BRSH	18.2 [46]	39.8 [101]	AFF20422BRSH	18.2 [46]	39.8 [101]	
	064	AFF20481BRSH	18.2 [46]	44.8 [114]	AFF20482BRSH	18.2 [46]	44.8 [114]	
	072	AFF20481BRSH	18.2 [46]	44.8 [114]	AFF20482BRSH	18.2 [46]	44.8 [114]	
	026	AFF28241BRSV	26.2 [67]	22.2 [56]	AFF28242BRSV	26.2 [67]	22.2 [56]	
	038	AFF28301BRSV	26.2 [67]	27.2 [69]	AFF28302BRSV	26.2 [67]	27.2 [69]	
TTV/TEV	049	AFF32301BRSV	30.2 [77]	27.2 [69]	AFF32302BRSV	30.2 [77]	27.2 [69]	
	064	AFF36301BRSV	34.2 [87]	27.2 [69]	AFF36302BRSV	34.2 [87]	27.2 [69]	
	072	AFF36301BRSV	34.2 [87]	27.2 [69]	AFF36302BRSV	34.2 [87]	27.2 [69]	

All Dimensions ± .2 inch [5 mm]

ClimateMaster units (except TE) are shipped with disposable woven fiberglass filters. If there is sufficient external static pressure available, the filter can be upgraded to MERV 8 or higher rated filters for improved room air filtration and possible LEED points.

#### **Filter Testing Standard**

ASHRAE 52.2 is a testing procedure and rating standard that filter manufacturers use. The table below shows the typical characteristics of the MERV ratings for filters. The higher the MERV rating the smaller the particles are that will be removed from the air stream, thus improving air quality.

ASHRAE Standard 52.2 Minimum Efficiency Reporting Value (MERV)	Dust Spot Efficiency	Arrestance	Particle Size (microns)	Typical Media Type
13	89-90%	> 98%	0.3 to 1.0	Synthetic
11	60-65%	> 95%	1.0 to 3.0	Synthetic
8	30-35%	>90%	3.0 to 10	Pleated cotton-polyester
1-4	<20%	<65-80%	>10	Fiberglass

Information taken from internet and may vary for different manufacturers. Most MERV 1-4 filters are not certified due to cost associated with testing.

#### **General Information**

- ASHRAE recommends MERV 6 or higher.
- Not all installations or units can upgrade to MERV 8 or higher filters.
- MERV tables below are for ClimateMaster filters only. For customer-supplied filters, obtain manufacturers specification sheets and use those in determining acceptability. Media resistance and square footage in same frame thickness does vary sufficiently.

#### **Determining the Maximum Filtration Allowable for Your Unit**

**First step** - Check the unit submittal blower table to obtain the static pressure (SP) at the lowest CFM for PSC motor or highest CFM for the ECM motor that unit will operate. Obtain from engineer supply and return duct SP and supply air grille SP; add together to get system SP. Filter SP is unit SP minus system SP.

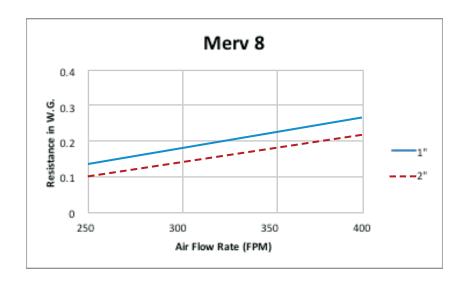
**Second step** - Convert your unit air flow from CFM to Initial Velocity in FPM. (Use blower table and air coil face area in physical data information both in product submittal). For PSC- Use final filter velocity to represent a loaded filter, for calculations use 50% loaded which doubles the velocity. (PSC motors will lose some CFM as filter clogs, disregard this in calculations) For ECM motors, final velocity is equal to Initial velocity. ECM holds the CFM setting up to its maximum static as filter loads.

Third step - Select MERV filter desired and use the tables to get filter resistance at your unit velocity.

**Last step** - Check that your total external static pressure and CFM are both within the blower table in your product submittal. If static pressure is too high, select a lower MERV-rated filter and recalculate.

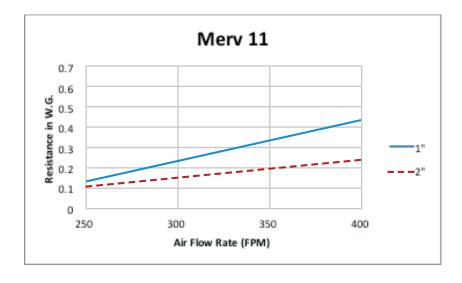
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# **MERV Filter Information**



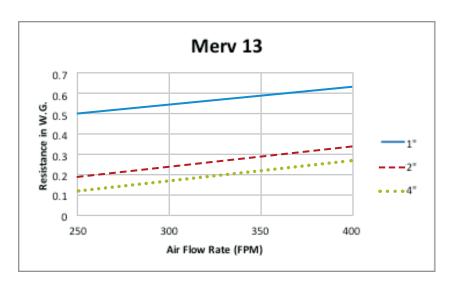
#### 24" x 24" MERV 8 filter:

- 1-inch has 6.9 square feet of media
- 2-inch has 11.5 square feet of media



#### 24" x 24" MERV 11 filter:

- 1-inch has 7.9 square feet of media
- 2-inch has 17.6 square feet of media



#### 24" x 24" MERV 13 filter:

- 1-inch has 7.9 square feet of media
- 2-inch has 17.6 square feet of media
- 4-inch has 27.2 square feet of media

#### Maintenance

Schedule routine filter cleaning or replacement for proper unit operation. Filters with higher square feet of media and lower MERV rating clog slower and require less maintenance.

#### Example 1

Which MERV rated filters are acceptable for TSV036 with PSC motor? The unit submittal shows the minimum unit CFM is 825 at maximum ESP of .6 and in physical data table the air coil is 28-inches by 25-inches or 4.8 square feet. Engineering plans show system ESP is 0.30.

The initial filter resistance is 825 CFM divided by 4.8 = 172 FPM. The final filter resistance is 344 FPM

From .6 ESP subtract .3 leaves .3 for the filter.

Referencing tables at 344 FPM, all filters up to 2-inches MERV 13 are acceptable.

#### Example 2

Which MERV rated filters are acceptable for TSM24 with ECM motor? The unit submittal shows the maximum unit CFM is 950 at maximum ESP of .3 and in physical data table the air coil is 30-inches by 18-inches or 3.8 square feet. Engineering plans show the system ESP is 0.1.

The initial filter resistance is 950 CFM divided by 3.8 = 250 FPM. Final filter resistance is 250 FPM

From .3 ESP subtract .1 leaves .2 for the filter.

Referencing tables at 250 FPM, all filters up to 2-inches MERV 13 are acceptable.

## **Replacement Air Filters - Part Numbers**

Product Line Fiberglass			Pleated			
Product	Line	1-inch [25 mm]	2-inch [50 mm]	1-inch [25 mm]	2-inch [50 mm]	2-inch [50 mm]
Unit Size	Qty & Size	Part Number	Part Number	Part Number	Part Number	Part Number
	TCH / TRH	/ TYH / TZH - Horizontal	Units	MERV 8	MERV 8	MERV 13
006 - 012	1 - 10 x 18	76B0001N22	76B0002N22	76B0015N25	76B0003N22	76B0013N22
015 - 018	1 - 16 x 25	68544448	68544434	76B0015N24	76B0003N21	76B0013N21
024 - 030	1 - 18 x 25	76B0001N27	76B0002N25	76B0015N04	76B0012N01	76B0013N26
036 - 042	2 - 14 x 20	68544445	68544446	76B0015N05	76B0003N18	76B0013N18
048 - 060	1 - 14 x 20	68544445	68544446	76B0015N05	76B0003N18	76B0013N18
048 - 000	1 - 20 x 24	76B0001N07	76B0002N07	76B0015N06	76B0003N07	76B0013N07
072 - 120	3 - 16 x 20, 1 - 20 x 20	3 - 76B0001N03 1 - 68544402	3 - 76B002N03 1 - 76B002N19	3 - 76B0015N10 1 - 76B0015N01	3 - 76B0003N03 1 - 76B0003N17	3 - 76B0013N03 1 - 76B0013N17
	TCV / TR\	/ / TYV / TZV - Vertical U	nits	MERV 8	MERV 8	MERV 13
006 - 012	1 - 10 x 18	76B0001N22	76B0002N22	76B0015N25	76B0003N22	76B0013N22
015 - 030	1 - 20 x 20	68544402	76B0002N19	76B0015N01	76B0003N17	76B0013N17
036, 042	1 - 24 x 24	76B0001N08	76B0002N08	76B0015N02	76B0003N08	76B0013N08
TCV / TYV	1 - 14 x 24	76B0001N05	76B0002N05	76B0015N12	76B0003N05	76B0013N05
048 - 060	1 - 18 x 24	76B0001N06	76B0002N06	76B0015N07	76B0003N06	76B0013N06
TRV / TZV 048 - 060	1 - 28 x 28	76B0001N28	76B0002N26	76B0015N03		76B0013N27
072 - 120	4 - 20 x 20	68544402	76B0002N19	76B0015N01	76B0003N17	76B0013N17
160 - 300	4 - 20 x 25	76B0001N09	76B0002N09	76B0015N13	76B0003N09	76B0013N09
100 - 300	2 - 20 x 30	76B0001N24	76B0002N24	76B0015N26	76B0003N24	76B0013N24
	TS	SH - Horizontal Units		MERV 8	MERV 11	MERV 13
006 - 012	1 - 16 x 20	76B0001N03	76B0002N03	76B0015N10	76B0005N03	76B0013N03
018 - 030	2 - 18 x 18	76B0001N01	76B0002N01	76B0015N08	76B0005N01	76B0013N01
036	1 - 12 x 20	76B0001N02	76B0002N02	76B0015N09	76B0005N02	76B0013N02
000	1 - 20 x 25	76B0001N09	76B0002N09	76B0015N13	76B0005N09	76B0013N09
042 - 048	1 - 18 x 20	76B0001N04	76B0002N04	76B0015N11	76B0005N04	76B0013N04
042 - 040	1 - 20 x 24	76B0001N07	76B0002N07	76B0015N06	76B0005N07	76B0013N07
060 - 070	2 - 20 x 24	76B0001N07	76B0002N07	76B0015N06	76B0005N07	76B0013N07
	Ţ	SV - Vertical Units		MERV 8	MERV 11	MERV 13
006 - 012	1 - 16 x 20	76B0001N03	76B0002N03	76B0015N10	76B0005N03	76B0013N03
018	1 - 24 x 24	76B0001N08	76B0002N08	76B0015N02	76B0005N08	76B0013N08
024 - 030	1 - 24 x 28	76B0001N14	76B0002N14	76B0015N18	76B0005N14	76B0013N14
036	1 - 28 x 30	76B0001N15	76B0002N15	76B0015N19	76B0005N15	76B0013N15
042 - 048	2 - 16 x 30	76B0001N23	76B0002N23	76B0015N27		76B0013N23
042 - 048	1 - 30 x 32				76B0005N19	76B0013N19
060 - 070	1 - 16 x 30	76B0001N23	76B0002N23	76B0015N27		76B0013N23
060 - 070	1 - 20 x 30 1 - 30 x 36	76B0001N24	76B0002N24	76B0015N26	76B0005N20	76B0013N24 76B0013N20

## Replacement Air Filters - Part Numbers

Broduc	t Line	Fiber	glass	Pleated			
Product Line		1-inch [25 mm]	2-inch [50 mm]	1-inch [25 mm]	2-inch [50 mm]	2-inch [50 mm]	
	TEH	/ TEH - Horizontal Units		MERV 8	MERV 11	MERV 13	
026	2 - 18 x 18	76B0001N01	76B0002N01	76B0015N08	76B0005N01	76B0013N01	
038	1 - 12 x 20	76B0001N02	76B0002N02	76B0015N09	76B0005N02	76B0013N02	
036	1 - 20 x 25	76B0001N09	76B0002N09	76B0015N13	76B0005N09	76B0013N09	
040	1 - 18 x 20	76B0001N04	76B0002N04	76B0015N11	76B0005N04	76B0013N04	
049	1 - 20 x 24	76B0001N07	76B0002N07	76B0015N06	76B0005N07	76B0013N07	
064 - 072	2 - 20 x 24	76B0001N07	76B0002N23	76B0015N27	76B0005N07	76B0013N07	
	TE\	/ / TEV - Vertical Units		MERV 8	MERV 11	MERV 13	
026	1 - 24 x 28	76B0001N14	76B0002N14	76B0015N18	76B0005N14	76B0013N14	
038	1 - 28 x 30	76B0001N15	76B0002N15	76B0015N19	76B0005N15	76B0013N15	
049	2 - 16 x 30	76B0001N23	76B0002N23	76B0015N27		76B0013N23	
049	1 - 30 x 32				76B0005N19	76B0013N19	
064 - 072	1 - 16 x 30	76B0001N23	76B0002N23	76B0015N27		76B0013N23	
064 - 072	1 - 20 x 30	76B0001N24	76B0002N24	76B0015N26		76B0013N24	
064 - 072	1 - 30 x 36				76B0005N20	76B0013N20	

### **Replacement Air Filters - Part Numbers**

Unit Size	Size	Part Number	Part Number	Part Number	Part Number			
TSM/TSL Vertical Stack Units ("D" Revison Cabinets/"C" Revision Chassis)								
		1-inch [25 mm] Fiberglass	1-inch [25 mm] MERV 8	1-inch [25 mm] MERV 11	2-inch [50 mm] MERV 13			
09 - 12	14 x 30	76B0001N12	76B0015N16	76B0007N12				
15 - 18	16 x 30	76B0001N23	76B0015N27	76B0007N23				
24 - 36	20 x 32	76B0001N25	76B0015N29	76B0007N25				
		2-inch [50 mm] Fiberglass	2-inch [50 mm] MERV 8	2-inch [50 mm] MERV 11	2-inch [50 mm] MERV 13			
09 - 12	14 x 30	76B0002N12	76B0003N12	76B0005N12	76B0013N12			
15 - 18	16 x 30	76B0002N23	76B0003N23	76B0005N23	76B0013N23			
24 - 36	20 x 32	76B0002N29	76B0003N28	76B0005N25	76B0013N03 (2x)			
		TSM/TSL Vertical Stack	Units ("C" Revison Cabinets/	"B" Revision Chassis)				
		1-inch [25 mm] Fiberglass	1-inch [25 mm] MERV 8	1-inch [25 mm] MERV 11	2-inch [50 mm] MERV 13			
09 - 18	16 x 30	76B0001N23	76B0015N27	76B0007N23				
24 - 36	20 x 32	76B0001N25	76B0015N29	76B0007N25				
		2-inch [50 mm] Fiberglass	2-inch [50 mm] MERV 8	2-inch [50 mm] MERV 11	2-inch [50 mm] MERV 13			
09 - 18	16 x 30	76B0002N23	76B0003N23	76B0005N23	76B0013N23			
24 - 36	20 x 32	76B0002N29	76B0003N28	76B0005N25	76B0013N03 (2x)			
			TRM Vertical Stack Units					
		1-inch [25 mm] Fiberglass	2-inch [50 mm] Fiberglass	1-inch [25 mm] MERV 8 Pleated	1-inch [25 mm] MERV 11 Pleated			
09 - 12	14 x 24	76B0001N05		76B0015N12	76B0007N05			
15 - 18	16 x 30	76B0001N23		76B0015N27	76B0007N23			
24 - 36	20 x 32	76B0001N25		76B0015N29	76B0007N25			

## **Replacement Air Filters - Part Numbers**

Unit Size	e Qty & Size Part Numb		Part Number	Part Number	Part Number
TSM/TSL Vertical Stack Units					
1-inch [25 mm] Fiberglass			1-inch [25 mm] MERV 8	2-inch [50 mm] Fiberglass	2-inch [50 mm] MERV 8
09 - 12	1 - 16 x 30	AFR80	AFR86	AFR83	AFR89
15 - 18	1 - 20 x 32	AFR81	AFR87	AFR84	AFR90
24 - 36	1 - 14 x 30	AFR82	AFR88	AFR85	AFR91

### **Replacement Air Filters - Part Numbers**

Unit Size	Qty & Size	Part Number	Part Number	Part Number		
TLV - Large Vertical Units						
		1-inch [25 mm] Fiberglass	2-inch [50 mm] Fiberglass			
084 - 150	4 - 18 x 25	76B0001N27	76B0002N25			
168 - 300	8 - 18 x 25	76B0001N27	76B0002N25			
		1-inch [25 mm] MERV 8	2-inch [50 mm] MERV 8	4-inch [100 mm] MERV 8		
084 - 150	4 - 18 x 25	76B0015N04	76B0009N01	76B0010N01		
168 - 300	8 - 18 x 25	76B0015N04	76B0009N01	76B0010N01		
		1-inch [25 mm] MERV 11	2-inch [50 mm] MERV 11			
084 - 150	4 - 18 x 25	76B0011N01	76B0012N01			
168 - 300	8 - 18 x 25	76B0011N01	76B0012N01			
			2-inch [50 mm] MERV 13	4-inch [100 mm] MERV 13		
084 - 150	4 - 18 x 25		76B0013N26	76B0014N01		
168 - 300	8 - 18 x 25		76B0013N26	76B0014N01		
	TRE - Rooftop Units					
		2-inch [50 mm] MERV 8	4-inch [100 mm] MERV 8	4-inch [100 mm] MERV 13		
036 - 072	4 - 16 x 20	76B0003N03	76B0008N03	76B0014N03		
096 - 144	6 - 16 x 20	76B0003N03	76B0008N03	76B0014N03		
400 040	8 - 16 x 20	76B0003N03	76B0008N03	76B0014N03		
168 - 240	2 - 20 x 20	76B0003N17	76B0008N05	76B0014N05		

## **Replacement Air Filters - Part Numbers**

TRC - Console Units					
	Box of 12				
Unit Size		Bottom Return	Front Return		
	Fiberglass	MERV 8	MERV 11	Electrostatic	
09 - 15	76B0001N10	76B0015N14	76B0007N10	24189610	
18	76B0001N26	76B0015N28	76B0007N26	24189615	

Box of 12 must be ordered, except TRC front return.

## Field-Mounted 2-inch Filter Rails - One Top and One Bottom Rail Included Per Kit \*

Horizontal		Vertical					
Model Size	Part Number	Model Size	Part Number				
TE Units							
H026	AFR28	V026	AFR26				
H038	AFR29	V038 - 072	AFR27				
H049	AFR30						
H064 - 072	AFR31						
	TS Units						
H006 - 012	AFR32	V006 - 012	AFR32				
H018 - 030	AFR28	V018 - 030	AFR26				
H036	AFR29	V036 - 070	AFR27				
H042 - 048	AFR30						
H060 - 070	AFR31						
TC / TR / TY / TZ Units							
H006 - 012	AFR10182NNSH	V006 - 012	AFR10182NNSV				
H015 - 018	AFR16252NNSH	V015 - 030	AFR20202NNSV				
H024 - 030	AFR18252NNSH	V036 - 042	AFR24242NNSV				
H036 - 042	AFR20282NNSH	TR/TZV048 - 060	AFR28282NNSV				
H048 - 060	AFR20382NNSH	TC/TYV048 - 060	AFR24322NNSV				

#### **Field-Mounted Filter Frame**

Horizontal				Vertical		
	1-inch Filter Frame	2-inch Filter Frame		1-inch Filter Frame	2-inch Filter Frame	
Model Size	Part Number	Part Number	Model Size	Part Number	Part Number	
	TE Units					
H026	AFF18361BRSH	AFF18362BRSH	V026	AFF28241BRSV	AFF28242BRSV	
H038	AFF20371BRSH	AFF20372BRSH	V038	AFF28301BRSV	AFF28302BRSV	
H049	AFF20421BRSH	AFF20422BRSH	V049	AFF32301BRSV	AFF32302BRSV	
H064 - 072	AFF20481BRSH	AFF20482BRSH	V064 - 072	AFF36301BRSV	AFF36302BRSV	
TS Units						
H006 - 012	AFF16201BRSH	AFF16202BRSH	V006 - 012	AFF16201BRSV	AFF16202BRSV	
H018 - 030	AFF18361BRSH	AFF18362BRSH	V018	AFF24241BRSV	AFF24242BRSV	
H036	AFF20371BRSH	AFF20372BRSH	V024 - 030	AFF28241BRSV	AFF28242BRSV	
H042 - 048	AFF20421BRSH	AFF20422BRSH	V036	AFF28301BRSV	AFF28302BRSV	
H060 - 070	AFF20481BRSH	AFF20482BRSH	V042 - 048	AFF32301BRSV	AFF32302BRSV	
			V060 - 070	AFF36301BRSV	AFF36302BRSV	
		TC / TR / T	Y / TZ Units			
H006 - 012	AFF10181NRSH	AFF10182NRSH	V006 - 012	AFF10181NRSV	AFF10182NRSV	
H015 - 018	AFF16251NRSH	AFF16252NRSH	V015 - 030	AFF20201NRSV	AFF20202NRSV	
H024 - 030	AFF18251NRSH	AFF18252NRSH	V036 - 042	AFF24241NRSV	AFF24242NRSV	
H036 - 042	AFF28201NRSH	AFF28202NRSH	TR/TZV048 - 060	AFF28281NRSV	AFF28282NRSV	
H048 - 060	AFF38201NRSH	AFF38202NRSH	TC/TYV048 - 060	AFF32241NRSV	AFF32242NRSV	
TCH072 - 120	AFF20651NRSH	AFF20652NRSH				

<sup>\*</sup> Not suitable for duct connection.

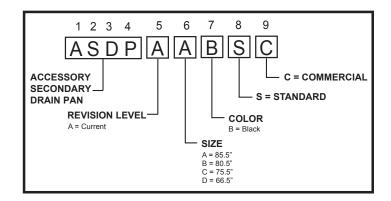
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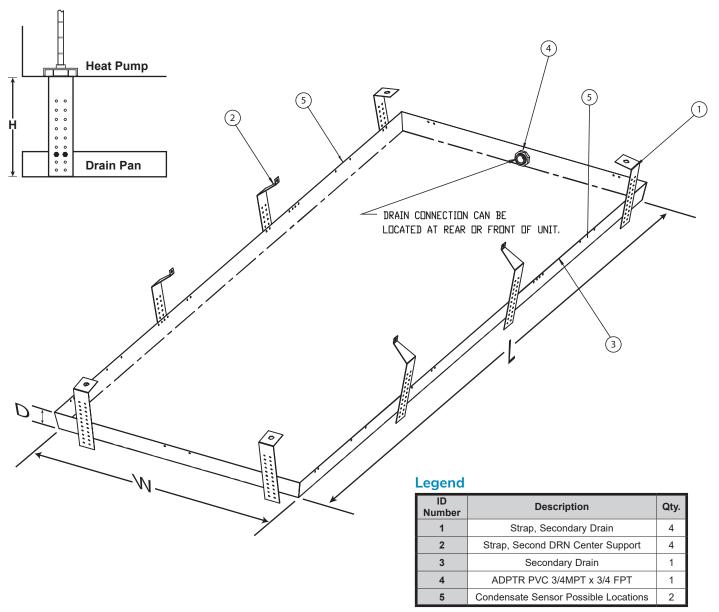
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# **Accessory Secondary Drain Pans**

#### **TE & TS Secondary Drain Pan**

Model	Part Number (Carton of 10)	Width	Length	Depth	Overall Height H	
	(Carton of 10)	VV	L	D	Min.	Max.
018 - 030	ASDPADBSC	27.1	66.5"	1.9"	4.125"	6.5"
036 - 038	ASDPACBSC	30.0"	75.5"	1.9"	4.125"	6.5"
042 - 049	ASDPABBSC	30.0"	80.5"	1.9"	4.125"	6.5"
060 - 072	ASDPAABSC	30.0"	85.5"	1.9"	4.125"	6.5"





# **Revision History**

Date:	Item:	Action:
05/31/23	Pages 27, 28, 29, 30	Updated filter tables
02/20/23	Page 3	Added hose kit torque specifications
01/05/22	Page 27	Updated TSM/TSL filter part# tables
09/10/21	Page 14, 15	Added decoder, updated part # table
03/22/21	Page 15, 22	Added AHU page, Updated Frame Dimensions Table
02/05/21	Page 24	Example data values updated
11/8/19	pg 10, 11, and 12	Updated Text and images
12/4/17	Page 17	Removed Flow Switch optionP
2/7/17	Page 22	Updated part numbers
11/15/16	Document Design Updated	Updated
5/4/16	Pages 5,6,16,21	Edited AHK Hose Kit physical data ; ABV Ball Valve table data and drawing
03/12/16	Pages 15, 23-27	Add TSL/TSM, MERV filter information, replacement air filter part numbers
02/18/16	Page 21	Updated AMV Part Numbers
08/03/15	Page 21	Updated AMV Data
06/17/15	Table - Page 26	Updated
11/12/14	Table - Page 27	Added
06/17/14	Page 26	Updated
09/24/13	Unit Water Connection Sizes	Changes TY/TZ 041, 042 to 0.75
11/26/12	Accessory Secondary Drain Pan	Added
08/31/12	Accessory Electric Heater	Updated
04/30/12	Pages 4, 25	Added TZ/TY Updated TRV/TCV filter frames
01/23/12	Pages 4, 25	Added TCV041 to tables
10/03/11	Accessory Filter Frame Table	Updated
06/22/11	R-22 Products AH Heaters	Removed Updated Dimensions
01/03/11	Format - All Pages	Updated
06/11/10	Format - All Pages	Updated
07/22/09	Accessory Electric Heater	Electrical Data Table Updated
07/01/09	Filter Frame Table	TSH006-012 Added, Flange Dimensions Corrected
06/16/09	AMV050FHS Water Valve	Information and Drawing Updated
06/10/09	Stand-Alone and Big Book Submittals	Consolidated
06/04/09	Air Filter Frame Table	TCH and TCV Added
04/23/09	Unit Water Connection Sizes Table	Updated
08/21/08	AHB, AHC	Verbiage Updated
08/21/08	Flow Rate Tables	Added Operating Differential Information



7300 S.W. 44th Street Oklahoma City, OK 73179 Phone: 405-745-6000 climatemaster.com