

Series HAA

How to Order

HAA 15 - 10 1 - [] - []

Basic size

Symbol	Applicable air compressor
7	7.5 KW
15	15 KW
22	22 KW
37	37 KW

Port size

Symbol	Size	Applicable model
06	Rp 3/4 socket	HAA7
10	1 ^B union	HAA15
14	1 1/2 ^B union	HAA22, 37

Suffix

Symbol	Description
Nil	—
T	With terminal (Provided as standard for HAA37.)

Accessory (Option)

Symbol	Description
Nil	—
D	Auto drain
F	Dust-protecting filter
S	Mounting bench

Source voltage

Symbol	Voltage	Applicable model
1	Single phase 100 VAC	HAA7, 15
2	Single phase 200 VAC	HAA7
3	Three phase 200 VAC	HAA15, 22, 37

⚠ Precautions

Be sure to read before handling. Refer to front matters 42 and 43 for Safety Instructions and pages 6 to 8 for Air Preparation Equipment Precautions.

Caution on Design

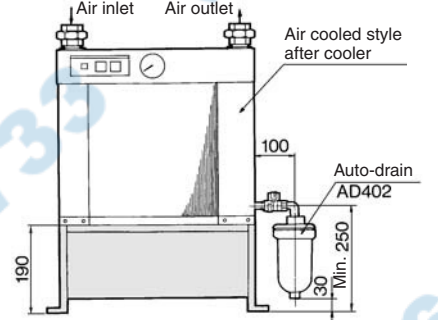
- ### ⚠ Caution
- Do not obstruct the aftercooler's vent inlet and outlet, and install the equipment more than 20 cm away from the walls or other equipment.
 - Install the aftercooler in a location that facilitates maintenance and inspection.
 - Install the aftercooler in a location with minimal vibrations.
 - Ventilate the area because the surrounding temperature increases due to the exhaust heat from the aftercooler.
 - The air cooled type aftercooler cannot be used in a location in which the temperature exceeds 50°C. In such a case, use a water cooled type aftercooler instead.
 - The maximum allowable temperature of the inlet air is 100°C. If the inlet air exceeds this temperature, select an appropriate water cooled style aftercooler.
 - Prevent fins from becoming clogged. Do not use this aftercooler in an area that has viscous dust (electrostatic paint powder, oily particles, etc.). If it must be used under such conditions due to unavoidable circumstances, please contact SMC beforehand.

Mounting

- ### ⚠ Caution
- Do not interchange the connections to the compressed air inlet and the compressed air outlet. When tightening the air inlet and outlet piping, make sure to use a pipe wrench to hold the inlet and outlet nozzles of the product.
 - Connect a drain pipe because drainage is created when the compressed air is cooled.
 - The drain pipe must have a minimum pipe bore of 10 mm, and a maximum length of 5 m (when installing an optional auto-drain).

Maintenance

- ### ⚠ Caution
- Inspect the cooler at least once a week and clean it to prevent it from becoming obstructed.
 - Discharge the drainage on a regular basis in accordance with the amount of drainage that is created. (Use of an optional auto drain is recommended for automatic discharge.)



If the aftercooler is equipped with an auto-drain, the following mounting frame is necessary. Mounting frame (Option: Refer to page 11, Accessories.)

How to Calculate Outlet Air Temperature

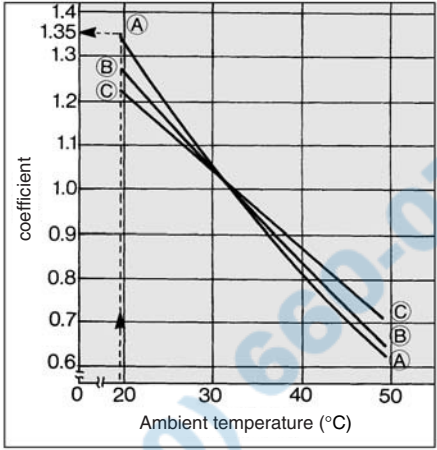
Outlet air temperature can be calculated with inlet air temperature, ambient temperature and amount of air in the following procedure.

(Example) Inlet air temperature: 100°C, Ambient temperature: 20°C, Amount of air: 2000 l/min (ANR), Air pressure: 0.7 MPa, Model: HAA22-14

Outlet Air Temperature at Above Conditions

- Use outlet air temperature of 38.5°C from outlet air temperature table. At this time correction factor line becomes A.
- To get correction factor of 1.35 use ambient temperature correction factor A at 20°C.
- To get outlet air temperature divide 38.5°C from (1) by 1.35 from (2).
Outlet temperature = 38.5 / 1.35 = 28.5°C

Correction Factor by Ambient Temperature



Outlet Air Temperature

Model	Correction factor	Air flow (l/min (ANR))	Inlet air temperature (°C)		
			50°C	70°C	100°C
HAA7	(A)	500	34.5	35	35.5
	(B)	1000	38	40	42.5
	(C)	1500	40	44	47.5
HAA15	(A)	1000	33	35.5	36
	(B)	2200	36.5	40	42.5
	(C)	3000	38	42	44
HAA22	(A)	2000	34	37	38.5
	(B)	3300	36	40	42.5
	(C)	4000	37	41.5	45
HAA37	(A)	4000	34	38	39
	(B)	5700	35	40	43
	(C)	7000	36	42	45

Conditions: • Air pressure 0.7 MPa, Ambient temperature 32°C.
• Inlet air temperature 50°C is saturated air. At 70°C or more, it is humid air with dew point 67°C.