



neptronic®

SKE4-E Steam Humidifier

Remote SDU Installation Guide



Dimensions and Weight

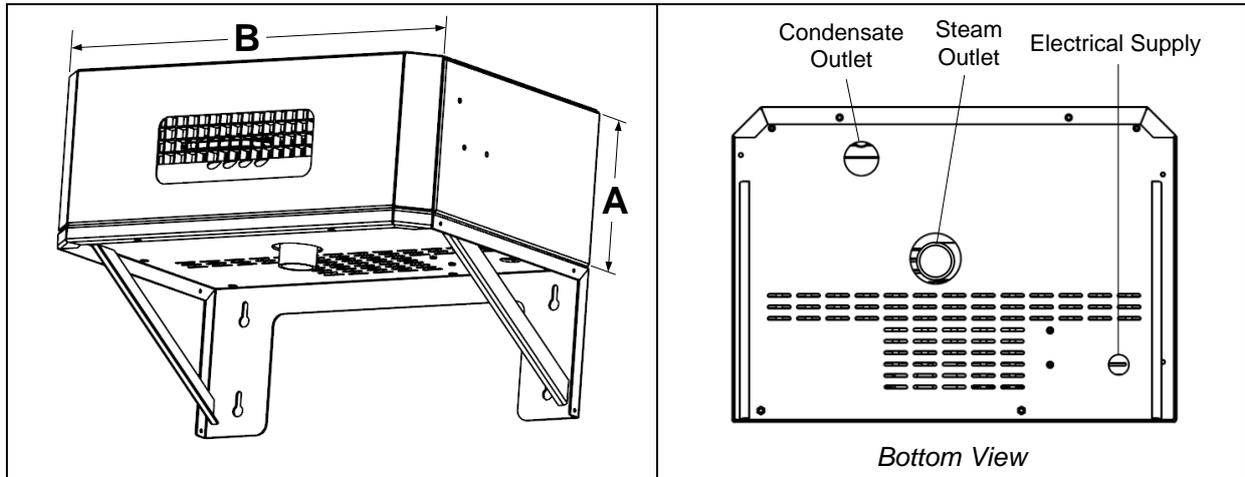


Illustration 1 - Remote SDU

Table 1 - Dimensions and Weight

Model	SDU	Dimensions (mm)		Steam Outlet		SDU Weight (kg)
		A	B	Qty	Diameter (mm)	
SKE4-E05	SDU4-1	171	492	1	35	7
SKE4-E10 SKE4-E20	SDU4-2	197	565	1	35	9
SKE4-E30 SKE4-E40	SDU4-3	289	565	1	51	14

Mechanical and Piping Installation

Positioning

- The SDU must be installed in an environment where the air is relatively clean. This will prevent the blower from getting clogged with dust.
- The SDU must be mounted such that the SDU fan section is at least 2 m above the floor.
- Allocate a minimum clearance of 0.45 m from the ceiling to avoid ceiling and wall condensation.
- If additional ventilation is not present, ensure that the fan has a clearance of at least 1.35 m from the ceiling. Proper ventilation must be observed to avoid ceiling and wall condensation.

Remote Installation

To install the remote SDU, follow the guidelines and piping recommendations outlined below.

- Mount the SDU to the wall on brackets (supplied). Do not drill mounting holes through the cabinet of the SDU.
- Connect the steam hose to the bottom inlet of the SDU and to the humidifier steam outlet located on top of the cabinet.
- Secure the steam hose with the hose clamp (supplied).
- Connect the condensate hose to the bottom of the SDU and to an open drain or to the humidifier using the knockout hole located on the top of the cabinet.
- Connect the electrical wires from the SDU to the top of the humidifier. Field wiring must conform to local codes.
- The fan of the SDU will operate for a period of five minutes after steam production has stopped to prevent condensation.
- Avoid any obstruction of the ventilation openings on top of the SDU.

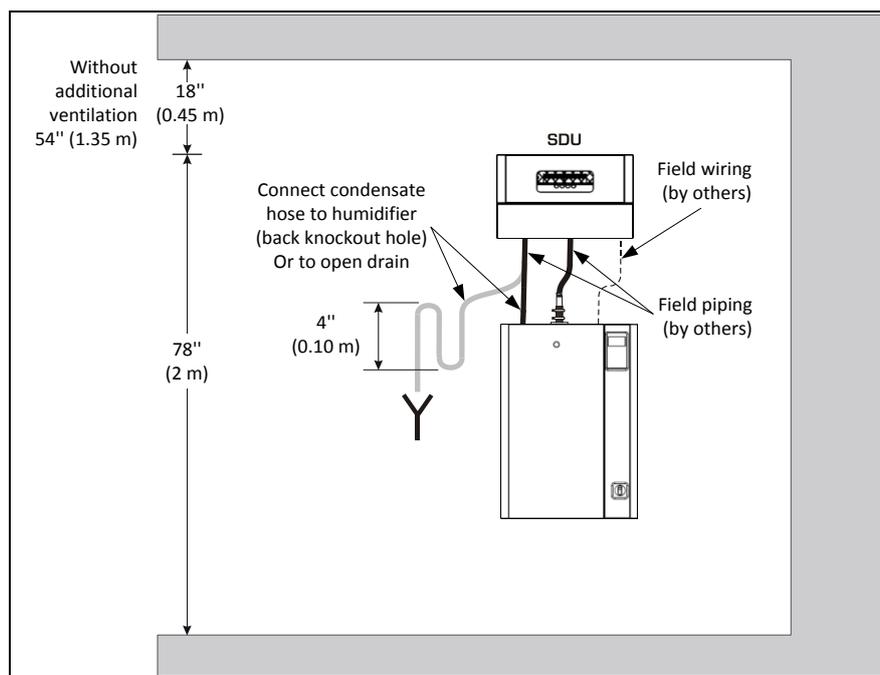


Illustration 2 - Remote SDU Installation

Connecting Condensate Hose to Humidifier

If connecting a condensate hose to the humidifier using the top knockout hole, remove the plug from the open silicone pipe near the water fill valve. Then, insert a DN15 fitting (not supplied) inside of the silicone pipe and connect the end of the DN15 condensate hose (not supplied) on the fitting. Use a hose clamp (not supplied) on each end of the hose to secure the connection.



Remove the plug



Connect the condensate hose

Illustration 3 - Condensate Hose Installation

Wall Mounting the Remote SDU

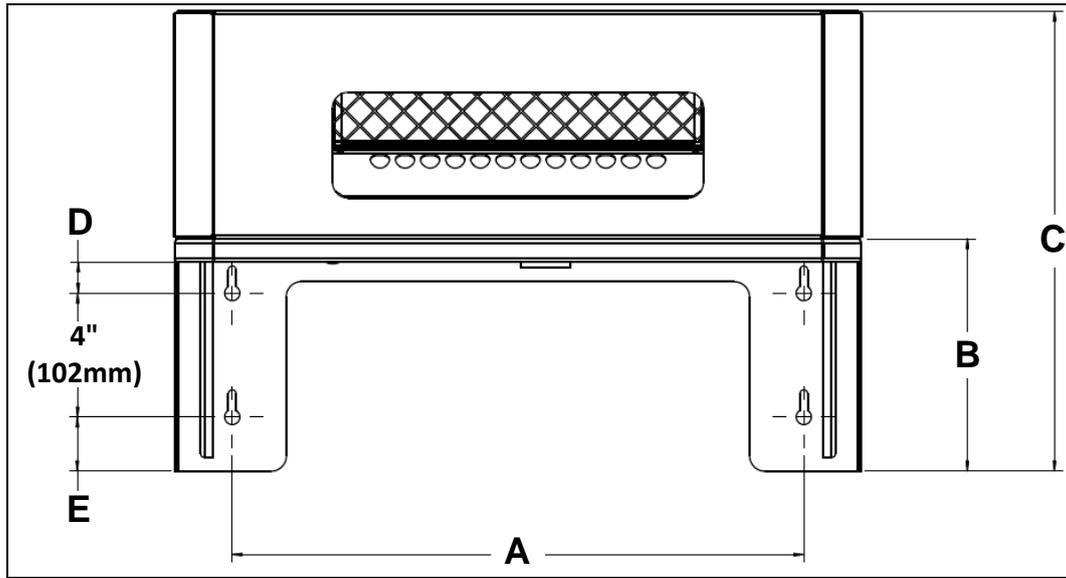


Illustration 3 - Remote SDU Mounting Bracket

Table 2 - Remote SDU Mounting Bracket Dimensions

Model	SDU	Dimensions (mm)				
		A	B	C	D	E
SKE4-E05	SDU4-1	406	171	348	19	29
SKE4-E10 SKE4-E20	SDU4-2	470	191	377	25	45
SKE4-E30 SKE4-E40	SDU4-3	470	191	480	25	45

Remote SDU Cover Installation (Option)

Perform the following steps to install the optional remote SDU cover:

- 1) Secure the two side covers onto the remote SDU mounting bracket by fastening them with 3x M3.5 x 0.6 nuts (supplied).
- 2) Secure the front cover onto the remote SDU mounting bracket by fastening it with 6x M4 x 0.7 screws (supplied).

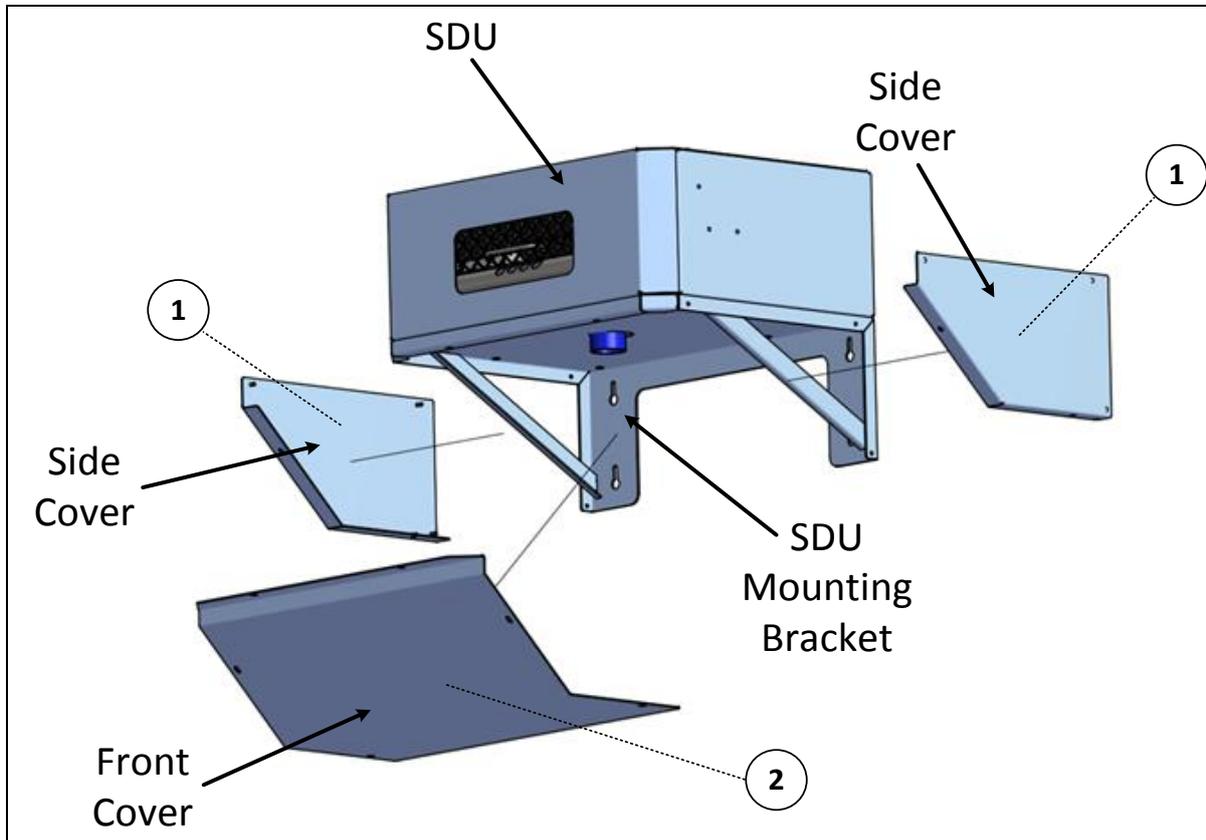


Illustration 4 - Remote SDU Cover Installation

Electrical Installation



CAUTION: Risk of electric shock. Disconnect the SDU from the electric supply before proceeding with the connection.

- The wiring to the SDU must be done by a qualified electrician and must conform to the procedure, regulation and local codes.
- Use copper conductors only.
- An external over current protection must be installed on the supply, adjacent to the SDU. It is also recommended to install a circuit breaker.
- To provide strain relief to the supply cable, install a knock-out (not supplied) at the bottom of the SDU.
- Ensure that the size of the wire conductors is appropriate for the current supplied.
- Ensure that each terminal connection is properly secured.
- Ensure that the ground conductor is equipped with a ring terminal and is connected directly to the electrical panel.

Table 3 - SDU Power Supply Specifications

Model	SDU	Amperage (A)	
		230V/1ph	400V/1ph
SKE4-E05	SDU4-1	0.2	0.1
SKE4-E10	SDU4-2	0.3	0.2
SKE4-E20		-	0.2
SKE4-E30	SDU4-3	-	0.2
SKE4-E40		-	0.2

Safety Contact Connections

Ensure that there is no wire connected to pin 2 of terminal TB3 on the humidifier PCB, as the SDU already has an internal airflow switch used to verify the operation of the fan.

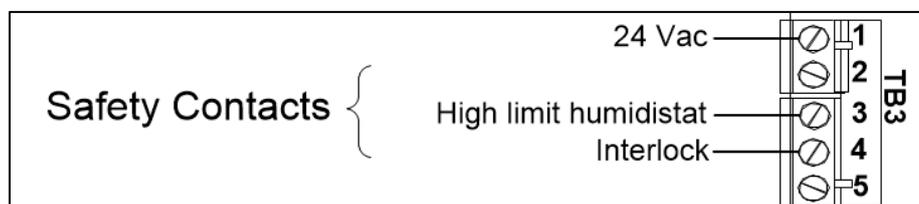


Illustration 5 - Safety Contacts

Controller Configuration

Using the control panel, access the *Installation* menu by entering the password 4433. Navigate to the *Extended Config* sub-menu, then select the *FanTrgt* setting and modify its value to *SDUFan*.

