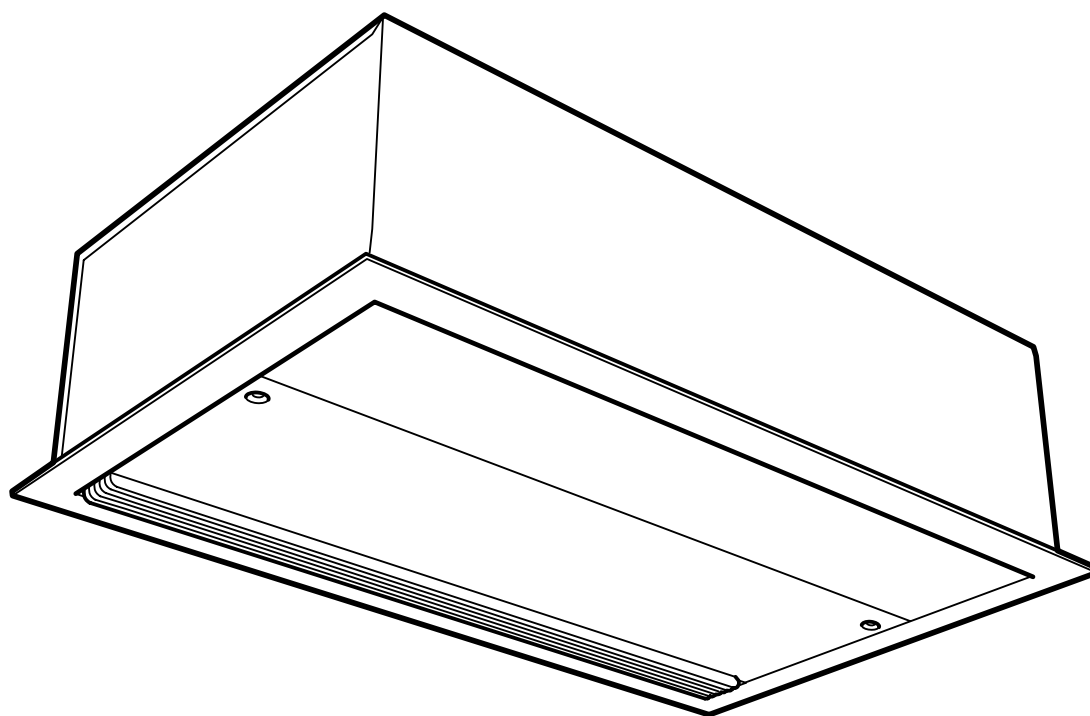


Original instructions
AREC4000



EN ... 22

FR ... 26

ES ... 32



Frico AB certifies that the AREC4000A, AREC4000E and AREC4000W air curtains shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to airflow rate, average outlet velocity, outlet velocity uniformity, velocity projection and power rating at free delivery only.

AREC4000

Metric chart

☼ Ambient, no heat - AREC4000A (IP20)

Type	Output [kW]	Airflow* ¹ [m ³ /h]	Sound power* ² [dB(A)]	Motor power [W]	Voltage motor [V]	Amperage motor [A]	Weight [kg]
AREC4010A-NA	0	2600	76	504	208V1~	3.1	45
AREC4015A-NA	0	3650	76	670	208V1~	3.9	63
AREC4020A-NA	0	5200	78	1008	208V1~	6.2	82
AREC4025A-NA	0	6200	80	1174	208V1~	7.0	106

⚡ Electrical heat - AREC4000E (IP20)

Type	Output steps [kW]	Airflow* ¹ [m ³ /h]	Sound power* ² [dB(A)]	FLA (full load amperage). ^{*3} [A]	Motor power [W]	Amperage motor [A]	Voltage [V] Amperage [A] (heat)	Weight [kg]
AREC4010E10-208VNA	4/10	2600	76	31	504	3.1	208V3~/27	53.0
AREC4015E15-208VNA	5/15	3650	76	44	670	3.9	208V3~/40	74.0
AREC4020E20-208VNA	7/20	5200	78	60	1008	6.2	208V3~/54	96.0
AREC4010E12-480VNA	4/12	2600	76	19	504	3.1	480V3~/15	56.5
AREC4015E18-480VNA	6/18	3650	76	26	670	3.9	480V3~/22	77.5
AREC4020E24-480VNA	8/24	5200	78	35	1008	6.2	480V3~/29	101.5
AREC4025E30-480VNA	9.9/30	6200	80	43	1174	7.0	480V3~/36	130.0
AREC4010E12-600VNA	4/12	2600	76	15	504	3.1	600V3~/12	56.5
AREC4015E18-600VNA	6/18	3650	76	22	670	3.9	600V3~/18	77.5
AREC4020E24-600VNA	8/24	5200	78	30	1008	6.2	600V3~/24	101.5
AREC4025E30-600VNA	9.9/30	6200	80	36	1174	7.0	600V3~/29	130.0

💧 Water heat - AREC4000W (IP20)

Type	Output* ⁴ [kW]	Airflow* ¹ [m ³ /h]	Sound power* ² [dB(A)]	Motor power [W]	Voltage motor [V]	Amperage motor [A]	Water volume [l]	Weight [kg]
AREC4010W-NA	15	2325	76	503	208V1~	3.0	1.87	52
AREC4015W-NA	23	3350	76	670	208V1~	4.0	2.96	71
AREC4020W-NA	32	4650	78	1006	208V1~	6.0	4.14	94
AREC4025W-NA	41	5700	80	1173	208V1~	7.0	5.10	121

*¹) Highest airflow of totally 5 fan steps.

*²) Values shown are for total sound power levels for Installation Type A: free inlet, free outlet. The Sound power level ratings shown are in decibels, referred to 10-12 watts, calculated per AMCA Standard 301.

*³) FLA: total amperage for motor and heat.

*⁴) Applicable at water temperature 60/40 °C, air temperature, in +18 °C.

Above table is valid for 208V/1ph/60Hz. Also approved for 230V/1ph/60Hz. Product performance for 230V/1ph/60Hz will differ from stated data.

Protection class: IP20.

CE compliant.

AREC4000

Type	Nozzle depth and width [mm]	Max velocity at nozzle [m/s]	Outlet velocity [m/s]	Outlet velocity uniformity [%]
AREC4010A/AREC4010Exx	80x970	14.95	13.61	94
AREC4015A/AREC4015Exx	80x1485	14.36	13.11	94
AREC4020A/AREC4020Exx	80x1975	14.95	13.61	94
AREC4025A/AREC4025Exx	80x2508	14.36	13.11	94
AREC4010W-NA	80x970	13.55	12.54	90
AREC4015W-NA	80x1485	12.68	12.16	96
AREC4020W-NA	80x1975	13.55	12.54	90
AREC4025W-NA	80x2508	12.68	12.16	96

Velocity projection: Model AREC4010E/A-NA

Distance from nozzle [mm]	80	500	1000
Core velocity [m/s]	13.61	8.89	7.01
Uniformity [%]	94	86	85

Velocity projection: Model AREC4010W-NA

Distance from Nozzle [mm]	80	500	1000
Core Velocity [m/s]	12.54	8.19	6.36
Uniformity [%]	90	89	86



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AREC4000

Imperial chart

☼ Ambient, no heat - AREC4000A (IP20)

Type	Output [MBH]	Airflow* ¹ [cfm]	Sound power* ² [dB(A)]	Motor power [W]	Voltage motor [V]	Amperage motor [A]	Weight [lb]
AREC4010A-NA	0	1530	76	504	208V1~	3.1	99
AREC4015A-NA	0	2150	76	670	208V1~	3.9	139
AREC4020A-NA	0	3050	78	1008	208V1~	6.2	181
AREC4025A-NA	0	3650	80	1174	208V1~	7.0	234

⚡ Electrical heat - AREC4000E (IP20)

Type	Output steps [MBH]	Airflow* ¹ [cfm]	Sound power* ² [dB(A)]	FLA (full load amperage). ³ [A]	Motor power [W]	Amperage motor [A]	Voltage [V] Amperage [A] (heat)	Weight [lb]
AREC4010E10-208VNA	14/34	1530	76	31	504	3.1	208V3~/27	117
AREC4015E15-208VNA	17/51	2150	76	44	670	3.9	208V3~/40	163
AREC4020E20-208VNA	24/68	3050	78	60	1008	6.2	208V3~/54	212
AREC4010E12-480VNA	14/41	1530	76	19	504	3.1	480V3~/15	125
AREC4015E18-480VNA	20/61	2150	76	26	670	3.9	480V3~/22	171
AREC4020E24-480VNA	27/82	3050	78	35	1008	6.2	480V3~/29	224
AREC4025E30-480VNA	34/102	3650	80	43	1174	7.0	480V3~/36	287
AREC4010E12-600VNA	14/41	1530	76	15	504	3.1	600V3~/12	125
AREC4015E18-600VNA	20/61	2150	76	22	670	3.9	600V3~/18	171
AREC4020E24-600VNA	27/82	3050	78	30	1008	6.2	600V3~/24	224
AREC4025E30-600VNA	34/102	3650	80	36	1174	7.0	600V3~/29	287

💧 Water heat - AREC4000W (IP20)

Type	Output* ⁴ [MBH]	Airflow* ¹ [cfm]	Sound power* ² [dB(A)]	Motor power [W]	Voltage motor [V]	Amperage motor [A]	Water volume [US gal]	Weight [lb]
AREC4010W-NA	51	1350	76	503	208V1~	3.0	0.49	115
AREC4015W-NA	78	1950	76	670	208V1~	4.0	0.78	157
AREC4020W-NA	109	2730	78	1006	208V1~	6.0	1.09	207
AREC4025W-NA	140	3350	80	1173	208V1~	7.0	1.12	267

*¹) Highest airflow of totally 5 fan steps.

*²) Values shown are for total sound power levels for Installation Type A: free inlet, free outlet. The Sound power level ratings shown are in decibels, referred to 10-12 watts, calculated per AMCA Standard 301.

*³) FLA: total amperage for motor and heat.

*⁴) Applicable at water temperature 140/104F, air temperature, in +64F.

Above table is valid for 208V/1ph/60Hz. Also approved for 230V/1ph/60Hz. Product performance for 230V/1ph/60Hz will differ from stated data.

Protection class: IP20.

CE compliant.

AREC4000

Type	Nozzle depth and width [in]	Max velocity at nozzle [fpm]	Outlet velocity [fpm]	Outlet velocity uniformity [%]
AREC4010A/AREC4010Exx	3.1x38.2	2943	2679	94
AREC4015A/AREC4015Exx	3.1x58.5	2827	2581	94
AREC4020A/AREC4020Exx	3.1x77.8	2943	2679	94
AREC4025A/AREC4025Exx	3.1x97.7	2827	2581	94
AREC4010W-NA	3.1x38.2	2667	2469	90
AREC4015W-NA	3.1x58.5	2469	2394	96
AREC4020W-NA	3.1x77.8	2667	2469	90
AREC4025W-NA	3.1x97.7	2469	2394	96

Velocity projection: Model AREC4010E/A-NA

Distance from Nozzle [in]	3	20	40
Core Velocity [fpm]	2679	1750	1377
Uniformity [%]	94	86	85

Velocity projection: Model AREC4010W-NA

Distance from Nozzle [in]	3	20	40
Core Velocity [fpm]	2468	1612	1251
Uniformity [%]	90	89	86



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Output charts water AREC4000W

Metric chart

			Supply water temperature: 80 °C Room temperature: +18 °C Outlet air temperature: +35 °C*1				Water temperature: 80/60 °C Room temperature: +18 °C			
Type	Fan position	Airflow [m³/h]	Output [kW]	Return water temp. [°C]	Water flow [l/s]	Pressure drop [kPa]	Output*2 [kW]	Outlet air temp. [°C]	Water flow [l/s]	Pressure drop [kPa]
AREC4010W-NA	max	2550	14.7	31	0.07	2.6	28.1	50	0.34	39.6
AREC4015W-NA	max	3300	18.9	35	0.09	1.6	39.4	53	0.48	29.5
AREC4020W-NA	max	4700	27.8	30	0.13	1.5	55.4	53	0.68	25.9
AREC4025W-NA	max	5700	32.3	27	0.15	2.2	69.3	54	0.85	46.5

			Supply water temperature: 60 °C Room temperature: +18 °C Outlet air temperature: +35 °C*1				Water temperature: 60/40 °C Room temperature: +18 °C			
Type	Fan position	Airflow [m³/h]	Output [kW]	Return water temp. [°C]	Water flow [l/s]	Pressure drop [kPa]	Output*2 [kW]	Outlet air temp. [°C]	Water flow [l/s]	Pressure drop [kPa]
AREC4010W-NA	max	2550	15.2	37	0.16	11.2	16.3	37	0.20	15.8
AREC4015W-NA	max	3300	18.8	33	0.17	5.1	22.9	38	0.28	11.8
AREC4020W-NA	max	4700	27.7	35	0.27	5.3	32.3	38	0.39	10.3
AREC4025W-NA	max	5700	32.6	35	0.28	7.2	40.1	39	0.49	19.0

*1) Recommended outlet air temperature for good comfort and optimized output.

*2) Nominal output at given supply and return water temperature.

Imperial chart

			Supply water temperature: 176 °F Room temperature: +64 °F Outlet air temperature: +95 °F*1				Water temperature: 176/140 °F Room temperature: +64 °F			
Type	Fan position	Airflow [cfm]	Output [MBH]	Return water temp. [°F]	Water flow [US gal/h]	Pressure drop [kPa]	Output *2 [MBH]	Outlet air temp. [°F]	Water flow [US gal/h]	Pressure drop [kPa]
AREC4010W-NA	max	1501	50.2	88	68.5	2.6	95.9	122	326.2	39.6
AREC4015W-NA	max	1942	64.5	95	84.6	1.6	134.5	127	456.5	29.5
AREC4020W-NA	max	2766	94.9	86	127.5	1.5	189.1	127	643.0	25.9
AREC4025W-NA	max	3355	110.2	81	142.7	2.2	236.5	129	808.5	46.5

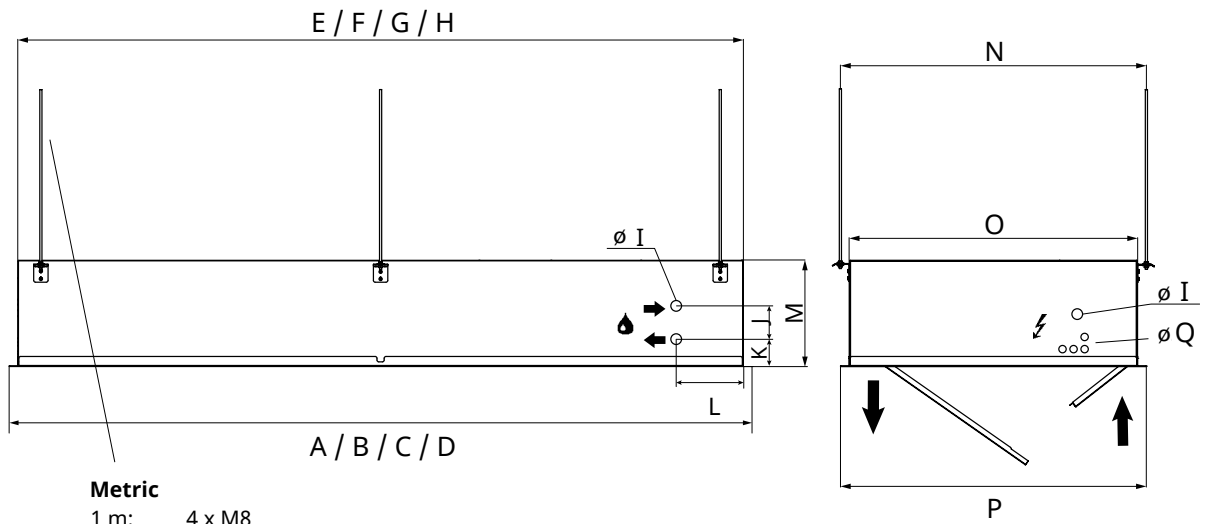
			Supply water temperature: 140 °F Room temperature: +64 °F Outlet air temperature: +95 °F*1				Water temperature: 140/104 °F Room temperature: +64 °F			
Type	Fan position	Airflow [cfm]	Output [MBH]	Return water temp. [°F]	Water flow [US gal/h]	Pressure drop [kPa]	Output *2 [MBH]	Outlet air temp. [°F]	Water flow [US gal/h]	Pressure drop [kPa]
AREC4010W-NA	max	1501	51.9	99	155.0	11.2	55.6	99	187.4	15.8
AREC4015W-NA	max	1942	64.2	91	163.6	5.1	78.2	100	264.4	11.8
AREC4020W-NA	max	2766	94.5	95	252.0	5.3	110.2	100	370.9	10.3
AREC4025W-NA	max	3355	111.3	95	266.3	7.2	136.9	102	466.1	19.0

*1) Recommended outlet air temperature for good comfort and optimized output.

*2) Nominal output at given supply and return water temperature.

- EN The introduction pages consist mainly of pictures. For translation of the English texts used, see the respective language pages.
- FR Les pages de présentation contiennent principalement des images. Pour la traduction des textes en anglais, consultez la page correspondante à la langue souhaitée.
- ES Las páginas introductorias contienen básicamente imágenes. Consulte la traducción de los textos en inglés que las acompañan en las páginas del idioma correspondiente.

AREC4000



Metric

- 1 m: 4 x M8
- 1.5 m: 4 x M8
- 2 m: 6 x M8
- 2.5 m: 6-8 x M8

Imperial

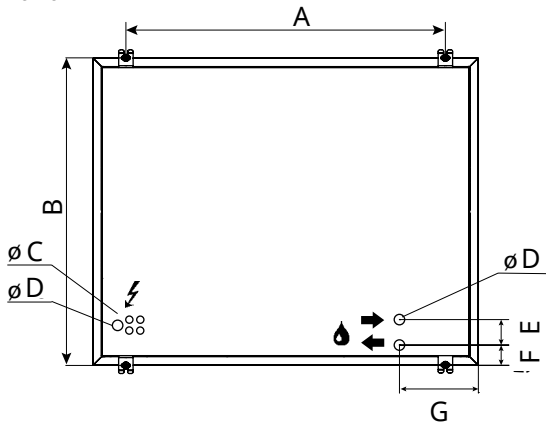
- 3.3 ft: 4 x M8
- 4.9 ft: 4 x M8
- 6.6 ft: 6 x M8
- 8.2 ft: 6-8 x M8

Ref	Metric [mm]	Imperial [in]	Product type
A	1067	42.68	AREC4010x
B	1577	63.08	AREC4015x
C	2067	82.68	AREC4020x
D	2579	103.16	AREC4025x
E	1020	40.80	AREC4010x
F	1520	60.80	AREC4015x
G	2020	80.80	AREC4020x
H	2520	100.80	AREC4025x
I	29	1.16	
J	90	3.60	
K	53	2.12	
L	218	8.72	
M	296	11.84	
N	851	34.04	
O	803	32.12	
P	851	34.04	
Q	20	0.80	

Mounting on threaded bars outside the unit

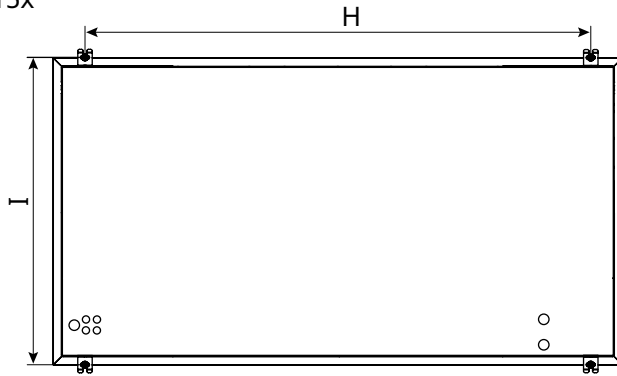
Top view

AREC4010x

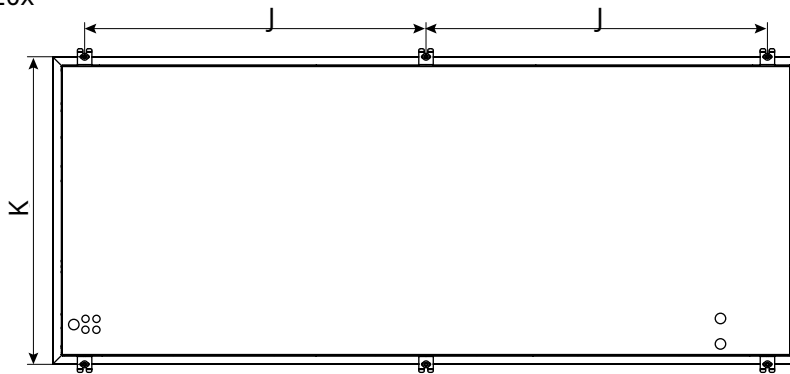


Ref	Metric [mm]	Imperial [in]	Product type
A	884	35.36	AREC4010x
B	851	34.04	AREC4010x
C	20	0.80	AREC4010x
D	29	1.16	AREC4010x
E	71	2.84	AREC4010x
F	56	2.24	AREC4010x
G	218	8.72	AREC4010x
H	1400	56.00	AREC4015x
I	851	34.04	AREC4015x
J	945	37.80	AREC4020x
K	851	34.04	AREC4020x
L	1198	47.92	AREC4025x
M	851	34.04	AREC4025x

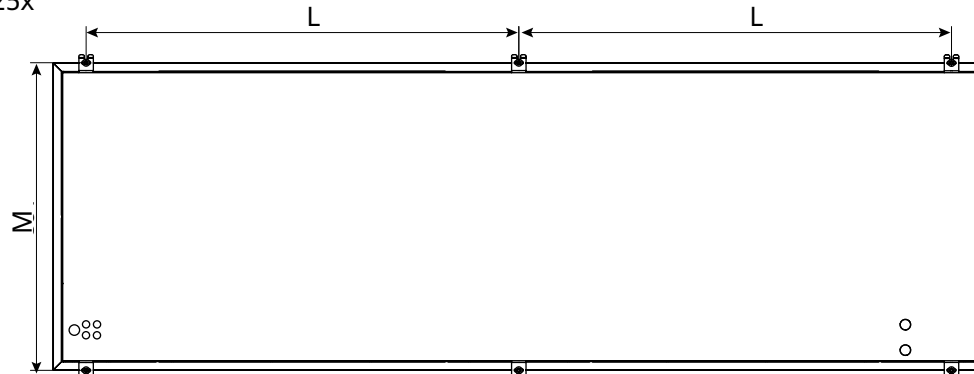
AREC4015x



AREC4020x



AREC4025x



Mounting on threaded bars outside the unit

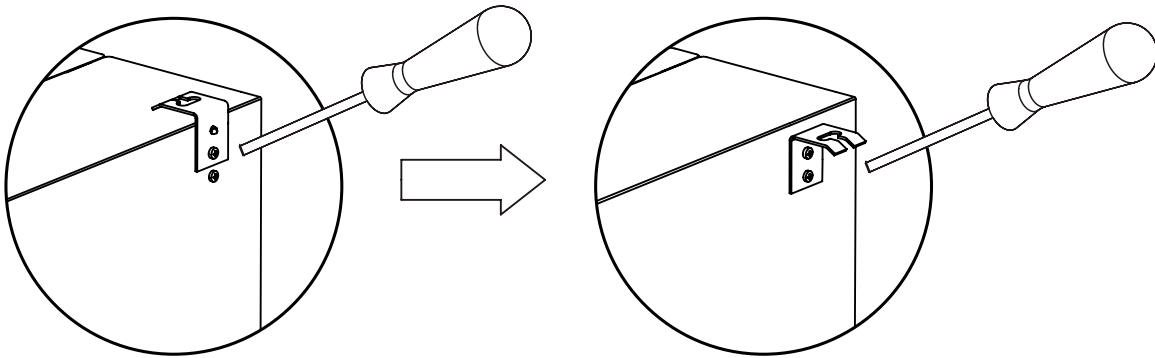


Fig. 1a: Mounting brackets on delivery.

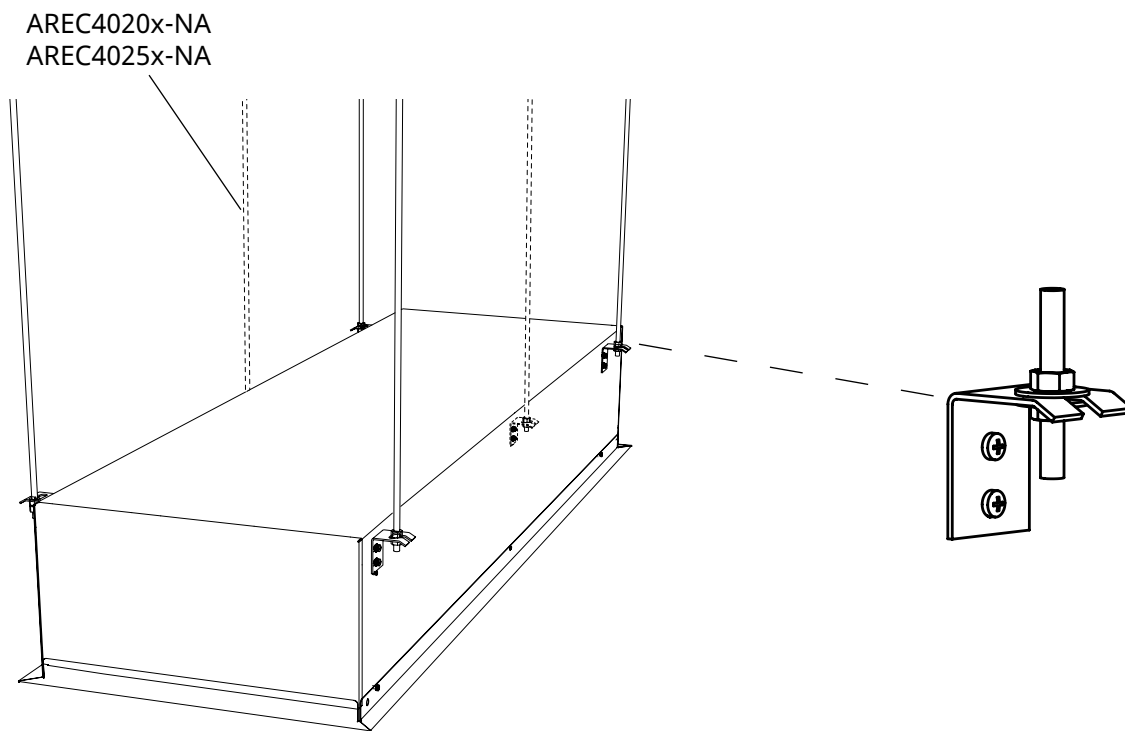
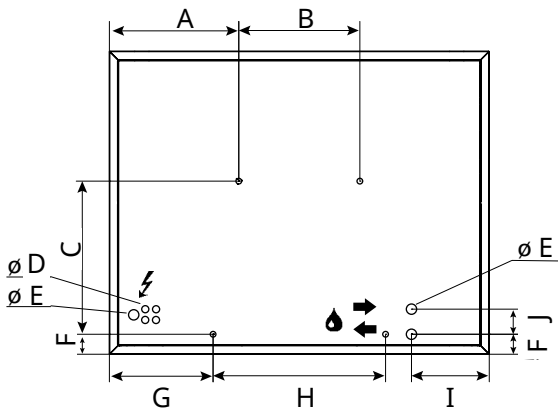


Fig. 1b. Mounting on threaded bars outside the unit.

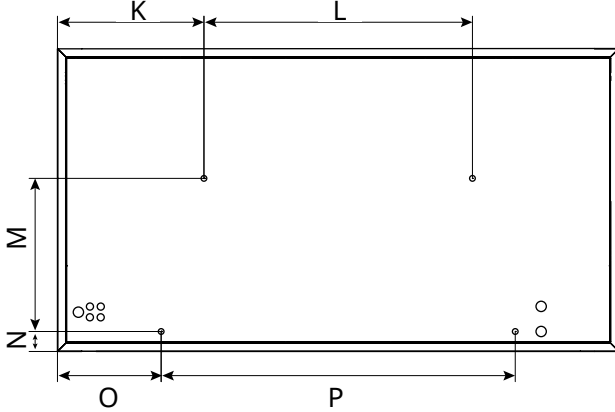
Mounting on threaded bars inside the unit

Top view

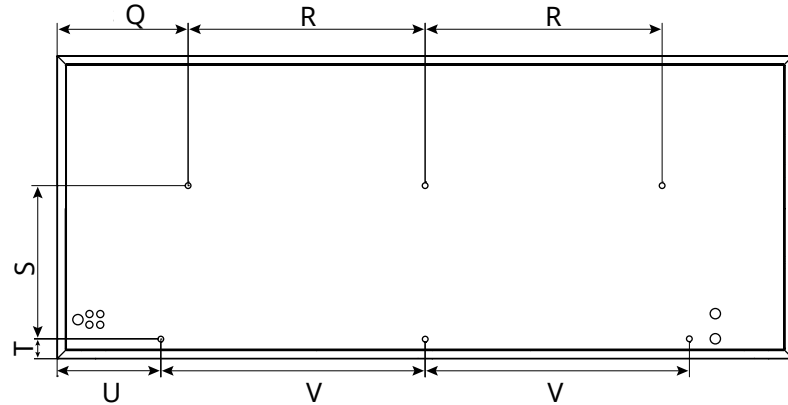
AREC4010x



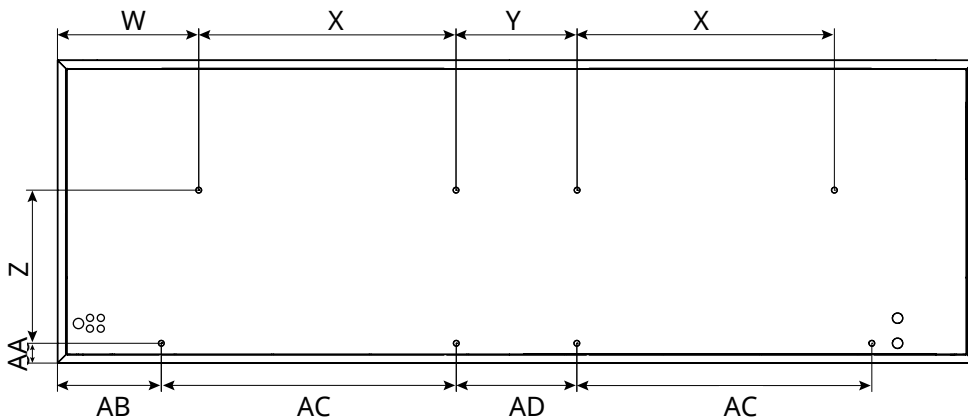
AREC4015x



AREC4020x



AREC4025x



Ref	Metric [mm]	Imperial [in]	Product type
A	363	14.52	AREC4010x
B	340	13.60	AREC4010x
C	430	17.20	AREC4010x
D	20	0.80	AREC4010x
E	29	1.16	AREC4010x
F	56	2.24	AREC4010x
G	291	11.64	AREC4010x
H	484	19.36	AREC4010x
I	218	8.72	AREC4010x
J	71	2.84	AREC4010x
K	411	16.44	AREC4015x
L	754	30.16	AREC4015x
M	430	17.20	AREC4015x
N	56	2.24	AREC4015x
O	291	11.64	AREC4015x
P	994	39.76	AREC4015x
Q	368	14.72	AREC4020x
R	666	26.64	AREC4020x
S	430	17.20	AREC4020x
T	56	2.24	AREC4020x
U	291	11.64	AREC4020x
V	742	29.68	AREC4020x
W	397	15.88	AREC4025x
X	723	28.92	AREC4025x
Y	340	13.60	AREC4025x
Z	430	17.20	AREC4025x
AA	56	2.24	AREC4025x
AB	292	11.68	AREC4025x
AC	828	33.12	AREC4025x
AD	339	13.56	AREC4025x

Mounting on threaded bars inside the unit

Metric

- 1 m: 4 x M8
- 1.5 m: 4 x M8
- 2 m: 6 x M8
- 2.5 m: 6-8 x M8

Imperial

- 3.3 ft: 4 x M8
- 4.9 ft: 4 x M8
- 6.6 ft: 6 x M8
- 8.2 ft: 6-8 x M8

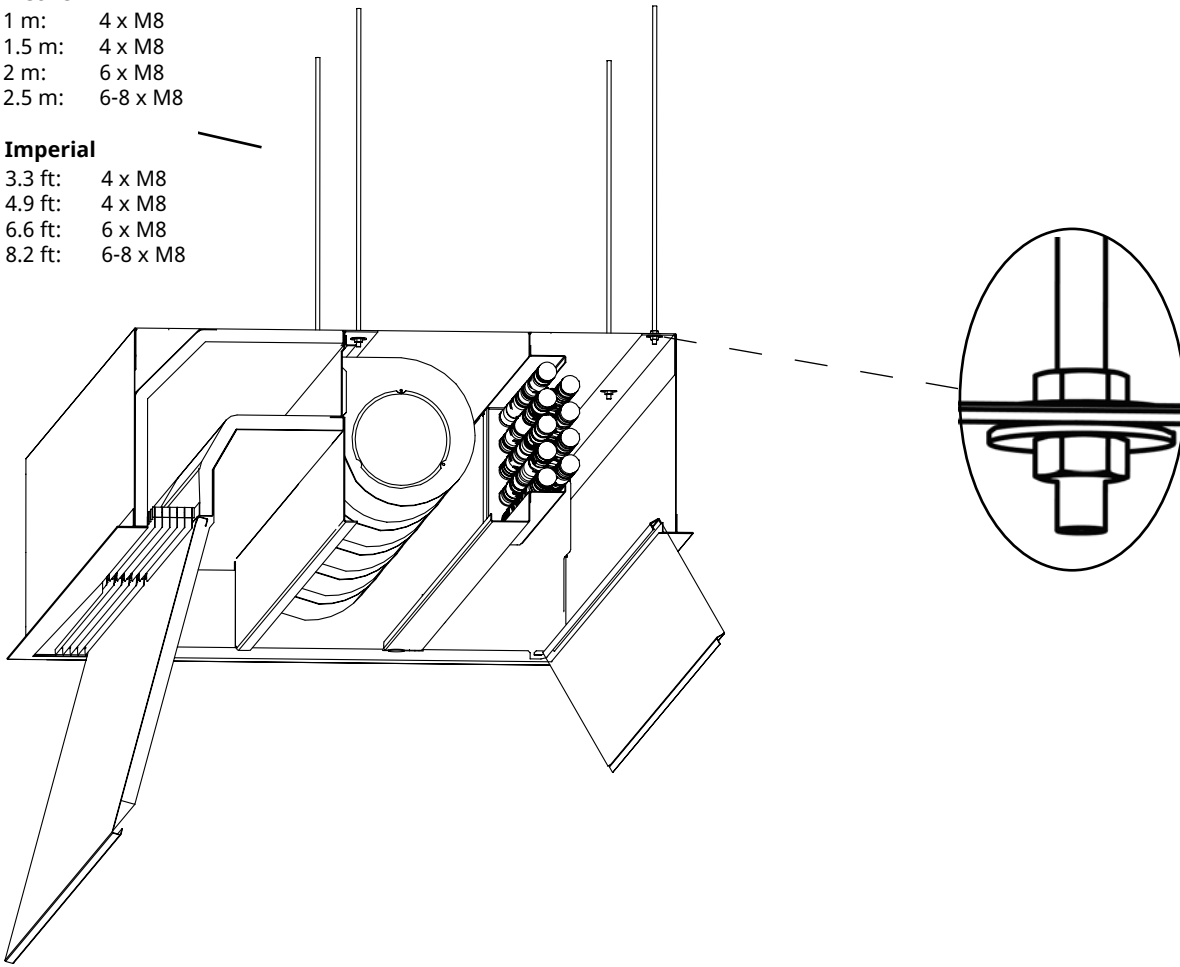


Fig. 2. Mounting on threaded bars inside the unit.

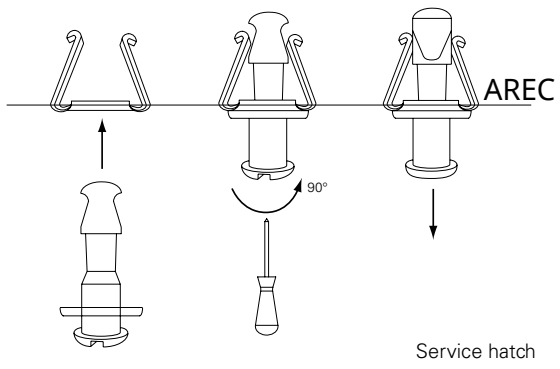


Fig. 3: Snap fixings

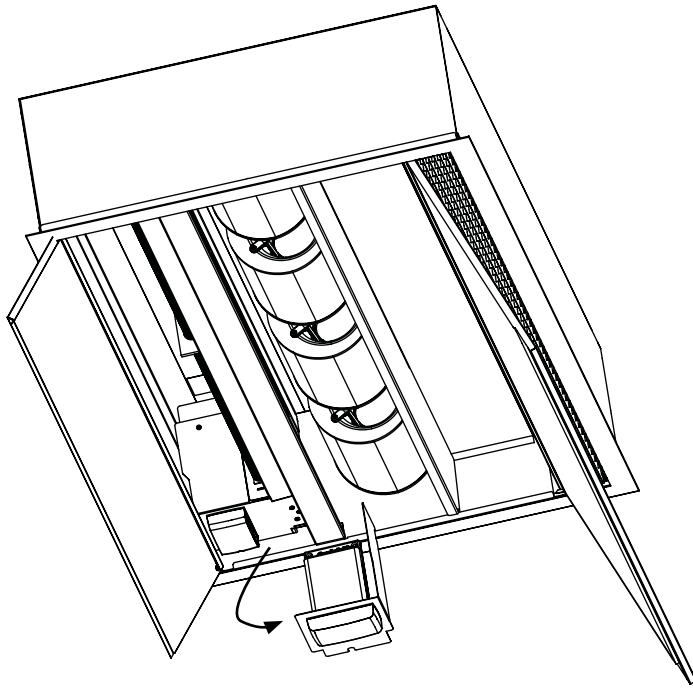


Fig. 4: SIRE inside the unit.

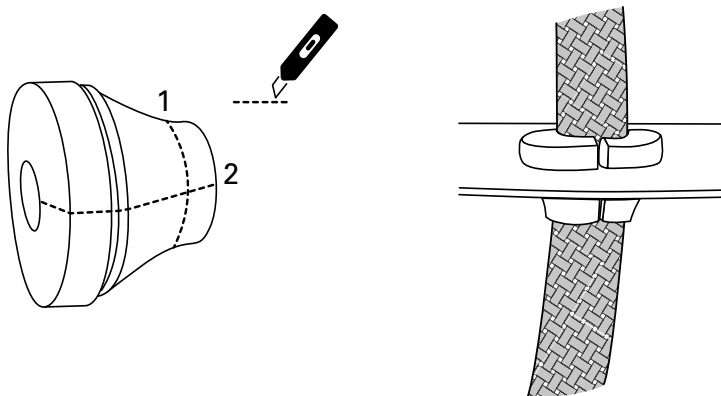


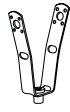
Fig. 5: Hoses are mounted via cable glands at knockouts to protect the hose and prevent air leakage.

AREC4000

Accessories



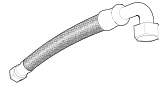
PA34TR



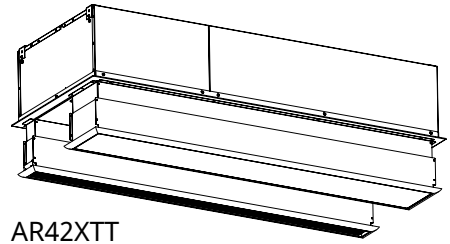
PA34CB



PA34VD



FHDN20



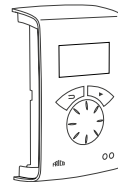
AR42XTT

See separate manual.

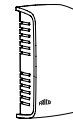
Accessory	Product type	Quantity	Metric	Imperial
PA34TR15	AREC4010/15x	4 pcs	L: 1 m	L: 3.3 ft
PA34TR20	AREC4020x	6 pcs	L: 1 m	L: 3.3 ft
PA34TR30	AREC4025x	8 pcs	L: 1 m	L: 3.3 ft
PA34CB15	AREC4010/15x	4 pcs		
PA34CB20	AREC4020x	6 pcs		
PA34CB30	AREC4025x	8 pcs		
PA34VD15	AREC4010/15x	4 pcs		
PA34VD20	AREC4020x	6 pcs		
PA34VD30	AREC4025x	8 pcs		
FHDN2010	AREC4000W	2 pcs	L: 1 m	L: 3.3 ft
AR42XTT10	AREC4010x		H: 130-210 mm	H: 5.2-8.4 in
AR42XTT15	AREC4015x		H: 130-210 mm	H: 5.2-8.4 in
AR42XTT20	AREC4020x		H: 130-210 mm	H: 5.2-8.4 in
AR42XTT25	AREC4025x		H: 130-210 mm	H: 5.2-8.4 in

SIRe

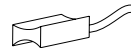
	Metric	Imperial
SIReAC		
SIReAA		
SIReRTX	70x33x23 mm	2.8x1.3x0.9 in
SIReWTA		
SIReCJ4		
SIReCJ6		
SIReCC603	3 m	9.8 ft
SIReCC605	5 m	16.4 ft
SIReCC610	10 m	32.8 ft
SIReCC615	15 m	49.2 ft
SIReCC640	40 m	131.2 ft
SIReCC403	3 m	9.8 ft
SIReCC405	5 m	16.4 ft
SIReCC410	10 m	32.8 ft
SIReCC415	15 m	49.2 ft



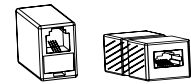
SIReAC/SIReAA



SIReRTX



SIReWTA



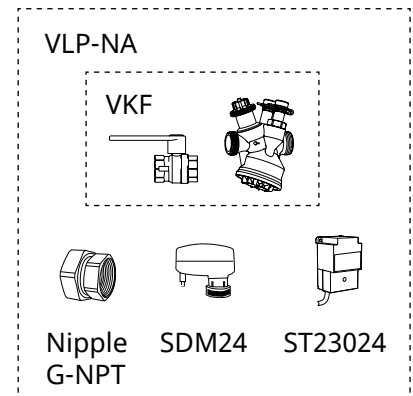
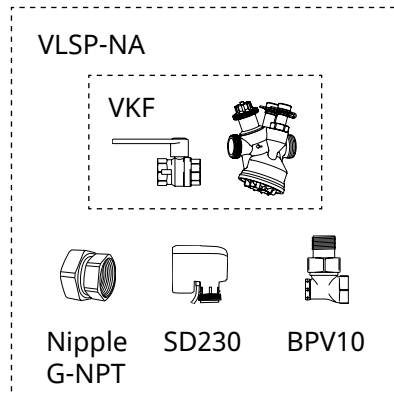
SIReCJ4/SIReCJ6



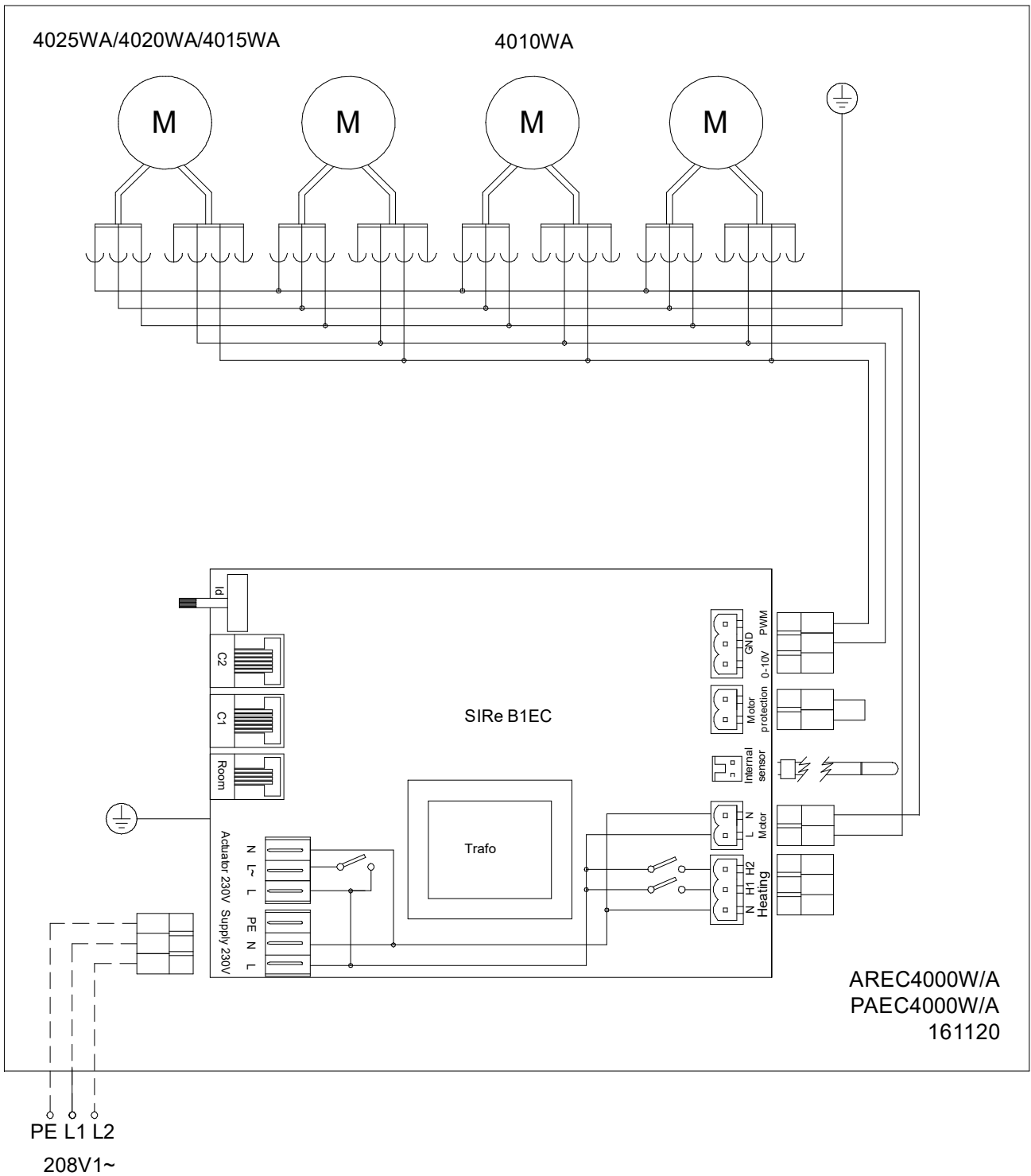
SIReCC



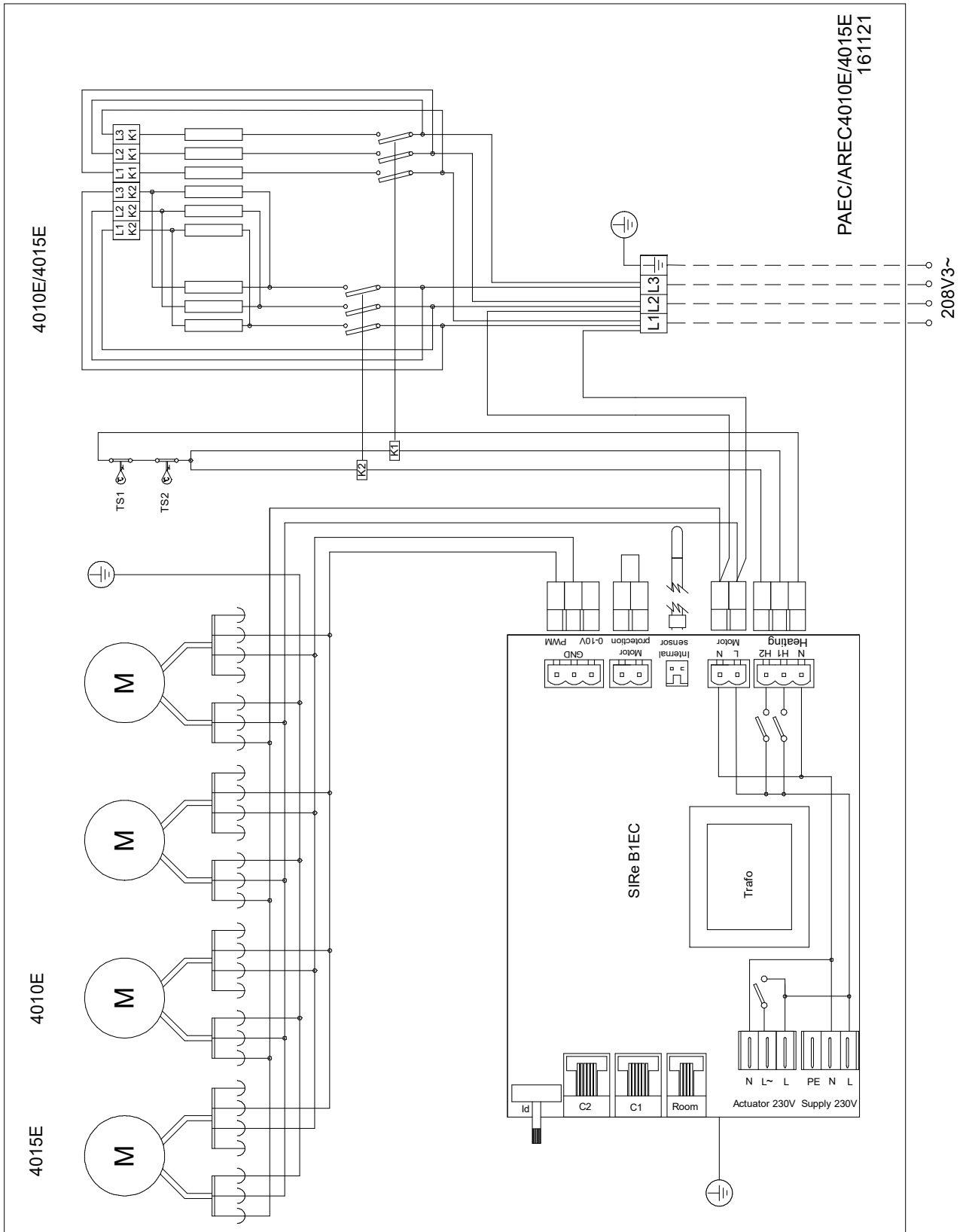
Type	Connection
VLSP15NF-NA	DN15 (1/2")
VLSP20-NA	DN20 (3/4")
VLSP25-NA	DN25 (1")
VLP15NF-NA	DN15 (1/2")
VLP20-NA	DN20 (3/4")
VLP25-NA	DN25 (1")



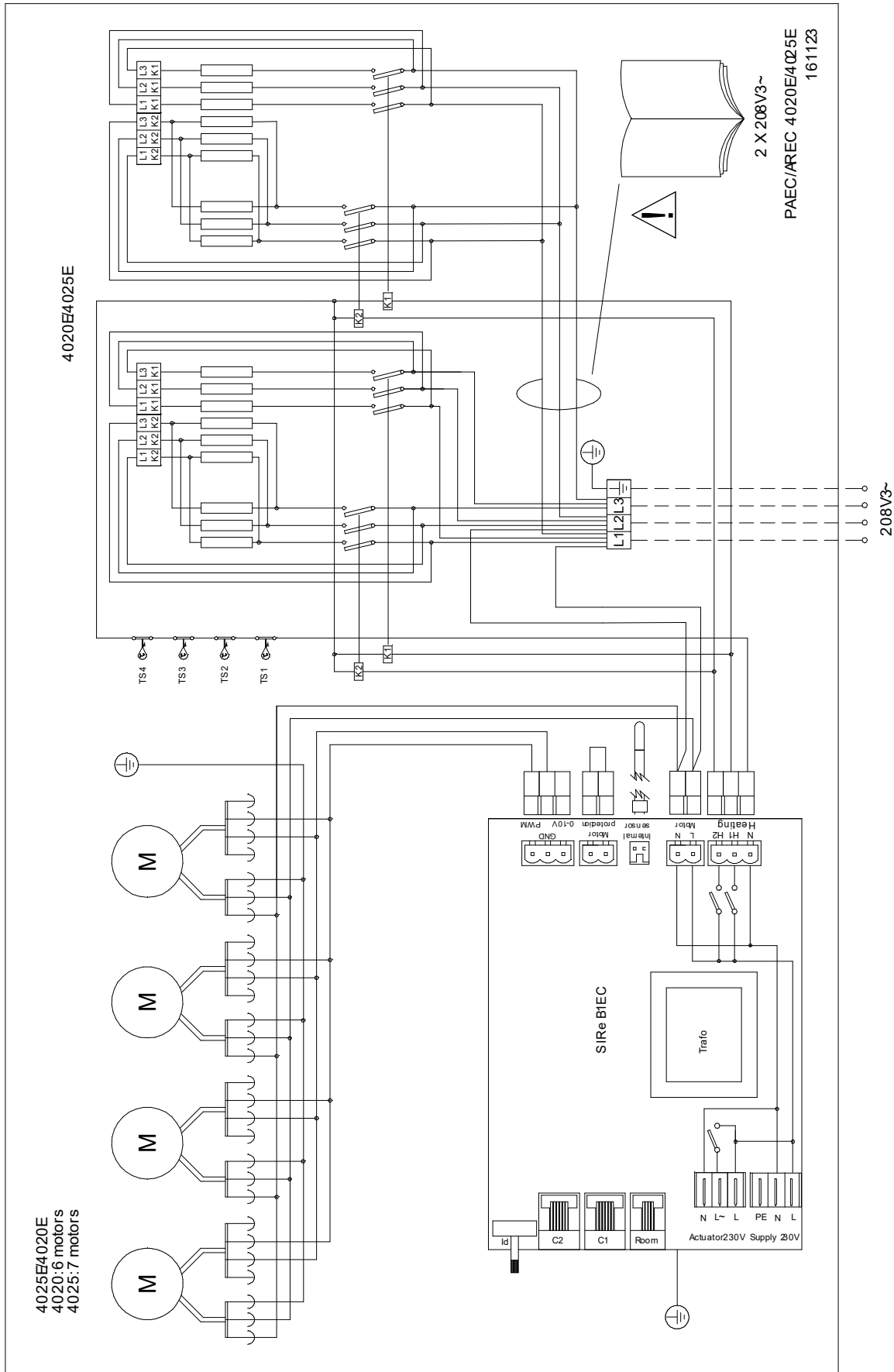
AREC4000A/W



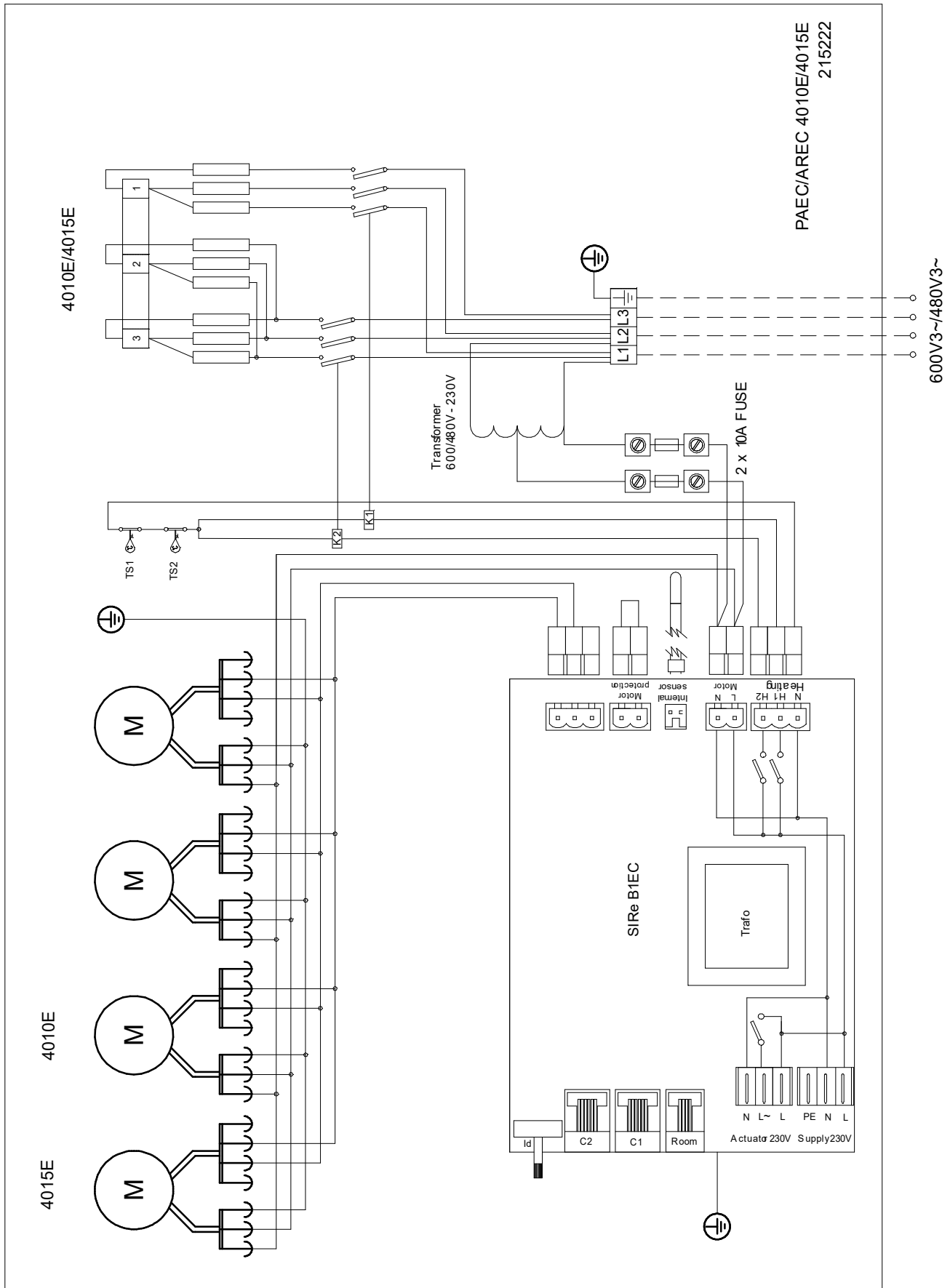
AREC4010/15E-208V



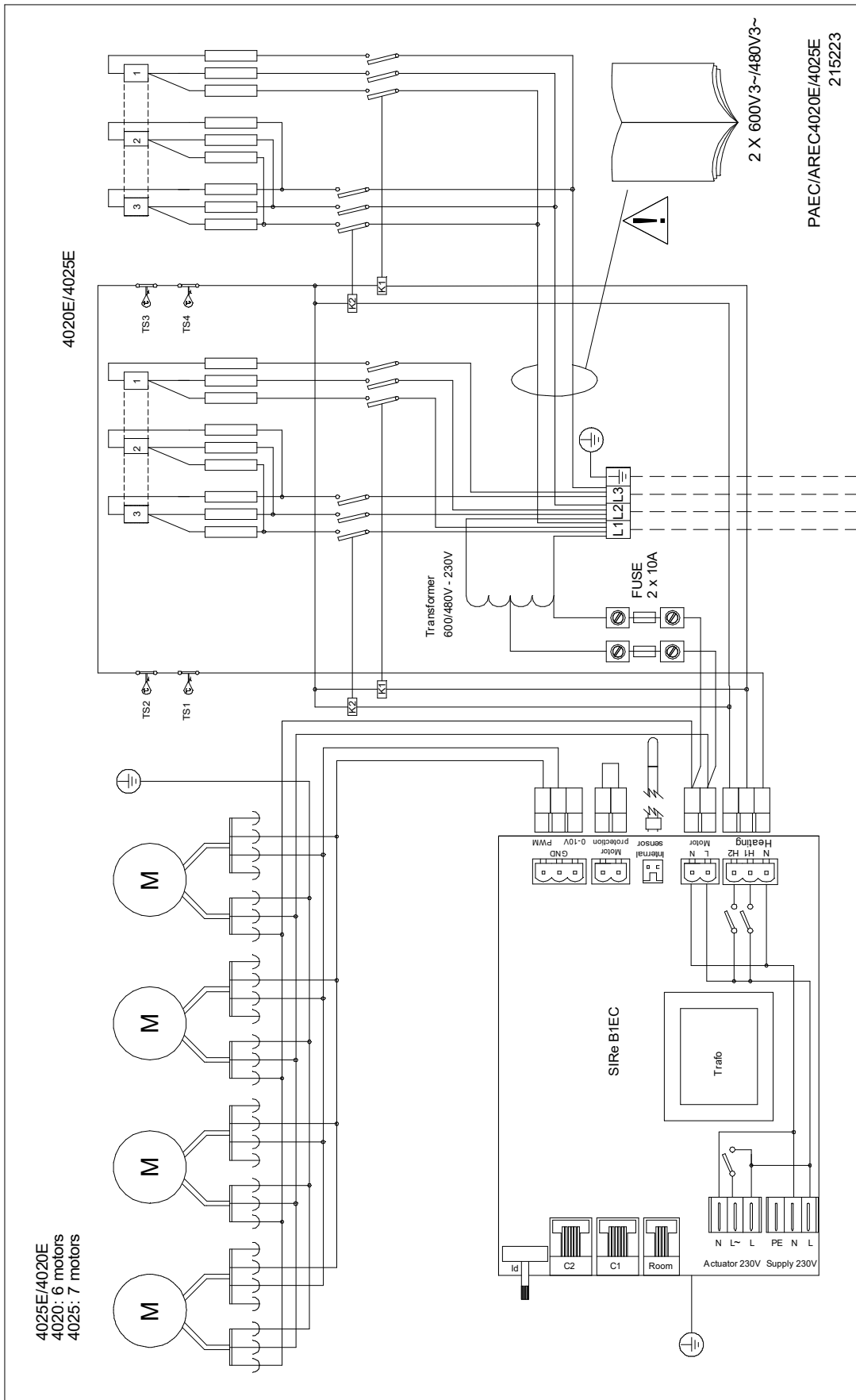
AREC4020/25E-208V



AREC4010/15E-480V/600V



AREC4020/25E-480V/600V



EN

- Read the safety instructions before performing installation and/or maintenance activities on the unit.
- Installation and/or maintenance activities on the unit may only be performed by qualified technical staff.
- The unit shall not be installed and used outdoors or in environments that are aggressive, or potentially explosive. At installation site make sure surrounding environment does not require higher IP classification of the equipment than what is stated on the data label of the unit.
- The unit must be connected in accordance with the applicable local requirements. Make sure that the unit's power supply voltage matches the local mains voltage. The unit's power supply voltage and maximum ratings are displayed on the data label placed on the unit.
- The unit shall be fused according to the table below.
- See also "Safety" on the English pages.

FR

- Veuillez lire les consignes de sécurité avant d'installer l'unité ou d'en effectuer l'entretien.
- L'installation ou l'entretien de l'unité doivent être effectués par un technicien qualifié seulement.
- L'unité ne doit pas être installée et utilisée à l'extérieur ou dans un environnement hostile ou potentiellement explosif. Au site d'installation, veuillez vous assurer que le milieu environnant n'exige pas une classification IP de l'équipement supérieure à ce qui est indiqué sur l'étiquette de données de l'unité.
- L'unité doit être branchée conformément aux exigences locales applicables. Veuillez vous assurer que la tension d'alimentation de l'unité correspond à la tension de secteur locale. La tension d'alimentation de l'unité et les calibres maximums sont indiqués sur l'étiquette de données placée sur l'unité.
- L'unité doit être protégée par un fusible conformément au tableau ci-dessous.
- Voir également la section « Sécurité » dans les pages en français.

ES

- Lea las instrucciones de seguridad antes de realizar trabajos de instalación y/o mantenimiento en la unidad.
- Los trabajos de instalación y/o mantenimiento en la unidad solo deben encomendarse a personal técnico cualificado.
- La unidad no debe instalarse ni utilizarse al aire libre ni en entornos agresivos o potencialmente explosivos. En el lugar de instalación, asegúrese de que el entorno circundante no requiera un equipo con una clasificación IP superior a la que se indica en la etiqueta identificativa de la unidad.
- La unidad debe conectarse de acuerdo a la normativa local vigente. Asegúrese que la tensión de alimentación de la unidad coincida con la tensión de la red eléctrica local. La tensión de alimentación y los valores nominales máximos de la unidad figuran en la etiqueta descriptiva de cada unidad.
- La unidad debe protegerse con fusibles según se indica en la siguiente tabla.
- Consulte también la sección «Seguridad» de la versión en español.

EN: Maximum Amperage on L1, L2 or L3 [A]	EN: Maximum fuse value [A]
FR: Intensité de courant électrique maximale pour L1, L2 ou L3 [A]	FR: Calibre maximum du fusible [A]
ES: Intensidad máxima en L1, L2 o L3 [A]	ES: Valor máximo del fusible [A]
≤ 10A	16A
≤ 15A	20A
≤ 20A	25A
≤ 25A	35A
≤ 35A	50A
≤ 50A	63A
≤ 65A	80A
≤ 80A	100A
≤ 102A	125A

Installation and operating instructions

General Instructions

Read these instructions carefully prior to installation and use. Keep this manual for future reference.

The product may only be used as set out in the assembly and operating instructions. The guarantee is only valid should the product be used in the manner intended and in accordance with the instructions.

Application area

AREC4000 is an air curtain for recessed mounting. The air curtain is available without heat, with electrical heating and with water heating. Recommended installation height up to: 4 meters/13.1 feet.

Protection class: IP20.

Operation

Air is drawn in from underneath and blown downwards shielding the door opening and minimizing heat loss. To achieve the optimum curtain effect the unit must extend the full width of the opening.

The grille for directing the outlet air is adjustable and is normally angled outwards to achieve the best protection against incoming air.

The efficiency of the air curtain depends on the air temperature, the pressure differential across the doorway and any wind load.

NOTE! Negative pressure in the building considerably reduces the efficiency of the air curtain. The ventilation should therefore be balanced.

Mounting

The air curtain is installed horizontally with the outlet air grille facing downwards as close to the door as possible, concealed in the false ceiling. The only visible part of the unit is the underside which is level with the ceiling. The service hatch must be accessible, nothing should prevent it being fully opened.

The unit is ready for suspension with threaded bars on its outside. The threaded bars can also be fixed on the inside of the unit e.g. when mounted on a solid suspended ceiling.

For the protection of wider doorways, several units can be mounted in series alongside each other. Minimum distance from outlet to floor for electrically heated units is 1800 mm/70.9 in.

Mounting on threaded bars outside the unit

1. The mounting brackets are fixed to the unit during transport. Loosen these, turn them around and screw into place on the unit according to fig. 1a.
2. Hang on threaded bars (M8) according to fig. 1b (accessory).
3. Adjust the height using the lower nut so that the frame is level with the ceiling. Lock using the upper nut.

Mounting on threaded bars inside the unit

1. Hang on threaded bars (M8) according to fig. 2 (accessory).
2. Adjust the height using the lower nut so that the frame is level with the ceiling. Lock using the upper nut.

Electrical installation

The installation, which should be preceded by an isolator switch with a contact separation of at least 3 mm/0.12 in, should only be wired by a competent electrician and in accordance with the latest edition of IEE wiring regulations. The control system is pre-installed in the air curtain with an integrated control card. SIRE is supplied pre-programmed with quick-fit connections. Modular cables are connected to the control board. Fig. 4 . See manual for SIRE.

1. The service hatch is opened by loosening the snap fixings located on the bottom of the unit (turn 90°). Fig. 3 .
2. The unit is connected via the cable gland on one side of the unit or its top.

Unit without heating or with water heating

Connected via the built-in SIRE control board with cord without plug (in the terminal box at delivery).

Unit with electrical heating

208V3~/480V3~/600V3~ power supply for heat and control (*1 *2) should be connected to a terminal block in the primary terminal box. See Fig. 4.



Note! If you want to divide the output between two connection points,

the series cabling must first be removed (AREC4020/25E, 2x480V3~/600V3~).

*1 480V3~/ 600V3~ Control supply is transformed via internal transformer to 230V~ and routed through 2x 10A fuses in the primary terminal box.

*2 208V3~ Control supply is connected internally through 2x 10A fuses in the primary terminal box.

The largest cable diameter for the terminal block is 16 mm²/0.025 in². The cable glands used must meet the protection class requirements. In the distribution board it is to be indicated that "the air curtains can be supplied from more than one connection".

See wiring diagrams.

Start-up (E)

When the unit is used for the first time or after a long period of non-use, smoke or an odour may result from dust or dirt which has collected on the element. This is completely normal and disappears after a short time.

Connecting the water coil (W)

The installation must be carried out by an authorised installer.

The water coil has copper tubes with aluminium fins and is suitable for connection to a closed water heating system. The heating coil must not be connected to a mains pressure water system or an open water system.

Note that the unit shall be preceded by a regulating valve, see Frico valve kit.

The connections to the heating coil must be equipped with shut off valves to allow trouble-free removal. Water coil is equipped with a drain and a vent valve. The water coil is connected via connections with dimensions DN20 (3/4"), inside thread, inside the unit. Knockouts are placed on the top and the side of the unit.

Hoses are mounted via cable glands at knockouts to protect the hose and prevent air leakage. Fig. 5

NOTE: Care must be taken when connecting the pipes. Use a pipe wrench or a similar tool to grip the air curtain connections to prevent straining of the pipes and subsequent water leakage during connection to the water supply pipe-work.

Adjustment of the air curtain and airflow

The direction and speed of the airflow should be adjusted considering the load on the opening. Pressure forces affect the airstream and force it inwards towards the premises (when the premises are heated and the outdoor air is cold).

The airstream should, therefore, be directed outwards to withstand the load. Generally speaking, the higher the load, the greater the angle required.

Basic setting fan speed

The fan speed when the door is open is set using the control. Note that the airflow direction and the fan speed may need fine adjustment depending on the loading of the door.

Filter (W)

The water coil is protected against dirt and blockage by an internal air filter which covers the coil face.

Service, repairs and maintenance

For all service, repair and maintenance first carry out the following:

1. Disconnect the power supply.
2. The service hatch is opened by loosening the snap fixings located on the bottom of the unit (turn 90°). See Fig. 3.
3. After service, repairs and maintenance close the service hatch and make sure that the snap fixings lock securely.

Maintenance

Since fan motors and other components are maintenance-free, no maintenance other than cleaning is necessary. The level of cleaning can vary depending on local conditions. Undertake cleaning at least twice a year. Inlet and exhaust grilles, impeller and elements can be vacuum cleaned or wiped using a damp cloth. Use a brush when vacuuming to prevent damaging sensitive parts. Avoid the use of strong alkaline or acidic cleaning agents.

Overheating

The air curtain unit with electrical heating is equipped with an overheat protection. If it is deployed due to overheating, reset as follows:

1. Disconnect the power supply with the isolator switch.
2. Determine the cause of overheating and rectify the fault.
3. Open the service hatch. Locate the red button next to the terminal box inside the air curtain. The 2 and 2.5 metre/6.6 and 8.2 feet units are equipped with two red buttons, one on the outside of each terminal box.
4. Press the red button until a click is heard.
5. Reconnect the unit.

All motors are equipped with an integral thermal safety cut-out. This will operate, stopping the air curtain should the motor temperature rise too high. The cut-out will automatically reset when the motor temperature has returned to within the motor's operating limits.

Temperature control

Temperature control of SIRE maintains the exhaust temperature. If the temperature should exceed the preset value anyway the overheating alarm goes off. For more information see the manual for SIRE.

Fan replacement

1. Determine which of the fans is not functioning.
2. Disconnect the cables from the relevant fan.
3. Remove the screws securing the fan and lift the fan out.
4. Install the new fan as above in reverse order.

Replacing heating elements/heating package (E)

1. Mark and disconnect the cables to the heating elements/package.
2. Remove the mounting screws securing the heating elements/package in the unit and lift the heating elements/package out.
3. Install the new heating elements/package in reverse order to the above.

Replacing the water coil (W)

1. Shut off the water supply to the unit.
2. Open the vent valve.
3. Open the drain valve.
4. When the water coil is empty, disconnect its connections.
5. Remove the mounting screws securing the coil in the unit and lift out.
6. Install the new coil in reverse order to the above.

Draining the water coil (W)

The drain valve is on the underside of the coil on the connector side. It can be accessed via the service hatch.

Troubleshooting

If the fans are not working or do not blow properly, check the following:

- That the intake grille/filter is not dirty.
- Functions and settings of the SIRE control system, see manual for SIRE.

If there is no heat, check the following:

- Functions and settings of the SIRE control system, see manual for SIRE.

For units with electrical heating, also check the following:

- Power supply to electric heater coil; check fuses and circuit-breaker (if any).
- That the overheat protection has not been deployed.

For units with a water coil, also check the following:

- That the water coil is air free.
- That there is sufficient water flow and pressure.
- That incoming water is heated adequately.

If the fault cannot be rectified, please contact a qualified service technician.

Residual current circuit breaker (E)

When the installation is protected by means of a residual current circuit breaker, which trips when the appliance is connected, this may be due to moisture in the heating element. When an appliance containing a heater element has not been used for a long period or stored in a damp environment, moisture can enter the element.

This should not be seen as a fault, but is simply rectified by connecting the appliance to the main supply via a socket without a safety cut-out so that the moisture can be eliminated from the element. The drying time can vary from a few hours to a few days. As a preventive measure, the unit should occasionally be run for a short time when it is not being used for extended periods of time.

Packaging

Packaging materials are chosen with consideration to the environment and are therefore recyclable.

Handling of product at end of working life

This product may contain substances necessary for the functionality of the product but potentially dangerous for the environment. The product should not be disposed of mixed with general household waste but delivered to a designated collection point for environmental recycling. Please contact the local authority for further details of your nearest designated collection point.

Safety

- *For all installations of electrically heated products a residual current circuit breaker 300 mA for fire protection should be used.*
- *Keep the areas around the air intake and exhaust grilles free from possible obstructions!*
- *The unit must not be fully or partially covered as overheating can result in a fire risk!*
- *Lifting equipment must be used to lift the unit.*
- *This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.*
- *Children of less than 3 years should be kept away unless continuously supervised.*
- *Children aged from 3 years and less than 8 years shall only switch on/off the appliance provided that it has been placed or installed in its intended normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.*
- *Children aged from 3 years and less than 8 years shall not plug in, regulate and clean the appliance or perform user maintenance.*

CAUTION — Some parts of this product can become very hot and cause burns. Particular attention has to be given where children and vulnerable people are present.



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