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- 1 Morsetteria del quadro elettrico predisposta per il collegamento di un comando esterno (es. termostato).
- 2 Manometri per alta e bassa pressione e pressione olio (solo forma 6).
- 3 Tutti i compressori sono dotati di resistenza di preriscaldamento del carter.
- 4 I compressori semiermetici sono protetti mediante termistore; i modelli dotati di pompa dell'olio vengono ulteriormente protetti mediante un pressostato differenziale per l'olio.
- 5 Nelle unità per la bassa temperatura con R22, i compressori semiermetici sono dotati di dispositivo elettronico per il controllo della temperatura del gas compresso.
- 6 I compressori con volume spostato fino a 52 m<sup>3</sup>/h sono ad avviamento diretto, per potenze superiori l'avviamento è di tipo part-winding.
- 7 Tutte le unità sono dotate di pressostato di minima regolabile. Le unità che montano compressori con volume spostato inferiore a 90m<sup>3</sup>/h sono dotate di pressostato di massima regolabile a riarmo automatico. Le unità che montano compressori con volume spostato uguale o superiore a 90m<sup>3</sup>/h sono dotate di doppio pressostato regolabile a riarmo manuale. Le soluzioni adottate sono conformi alle prescrizioni previste dalla Direttiva 97/23/CE "Attrezzature in pressione".
- 8 Indicatore di liquido.
- 9 Tutte le unità sono dotate di ricevitore di liquido conforme alle prescrizioni previste dalla Direttiva 97/23/CE "Attrezzature in pressione".
- 10 Separatore di liquido sulla linea di aspirazione completo di scambiatore di calore.
- 11 Pressostato di comando dei ventilatori per il controllo della condensazione presente su tutte le unità. Su richiesta, il controllo della condensazione può essere effettuato mediante variatore elettronico della velocità dei ventilatori.
- 12 Interruttori di sicurezza sui portelli anteriori.
- 13 Installazione a pavimento.
- 14 Raccordi di collegamento delle tubazioni realizzati mediante bocchettoni o flange a saldare.

⊗ **Optionals:**

- a **Tensione diversa.**
- b **Condensazione ad acqua;** le unità provviste di questa dotazione sono munite di valvola barostatica per il controllo della condensazione e, nelle unità in bassa temperatura, di ventole per il raffreddamento del compressore.
- c **Monitor di tensione.**
- d **Variatore di velocità ventole condensatore.**
- e **Quadro elettrico riscaldato.**

- 1 Terminal board inside the switchboard pre-arranged for the connection to a remote control device, e.g. thermostat.
- 2 High pressure, low pressure and oil pressure gauges (form 6 units only).
- 3 All compressors provided with crankcase heater.
- 4 Semi-hermetic compressors are protected by thermistors; models equipped with oil pump are further protected by a differential oil pressure switch.
- 5 On low temperature units on R22, semi-hermetic compressors are equipped with an electronic device controlling the discharge temperature of the refrigerant.
- 6 Compressors with a displacement up to 52 m<sup>3</sup>/h are provided with direct start, those with higher capacity are equipped with part-winding start.
- 7 All units are equipped with an adjustable low pressure switch. Units equipped with compressors whose displacement is smaller than 90 m<sup>3</sup>/h are provided with an adjustable high pressure switch with automatic reset. Units equipped with compressors whose displacement is equal to or larger than 90 m<sup>3</sup>/h are provided with an adjustable double pressure switch with manual reset. This outfit complies with the provisions of the "Pressure Equipment Directive" 97/23/EC.
- 8 Sight glass.
- 9 All units are equipped with a liquid receiver complying with the provisions of the "Pressure Equipment Directive" 97/23/EC.
- 10 Suction accumulator with heat exchanger.
- 11 Condenser fan pressure switch on all units. On request, condenser fan control by means of an electronic fan speed regulator.
- 12 Safety switches on the front doors of the unit.
- 13 Floor-mounted unit.
- 14 Pipe couplings are either unions or solder flanges.

⊗ **Optionals:**

- a **Special voltage.**
- b **Water-cooled condenser:** units equipped with water-cooled are also provided with a pressure controlled water valve controlling the condensation; low temperature units are also provided with a compressor cooling fan.
- c **Voltage monitor.**
- d **Condenser fan speed regulator.**
- e **Switchboard heater.**

## R404A

T<sub>o</sub>

0 ÷ -20°C	UIN 120	UIN 150	UIN 170	UIN 200	UIN 220	UIN 201	UIN 221	UIN 300	UIN 320	UIN 301	UIN 321	UIN 400	UIN 420
	1	1	1	1	1	2	2	2	2	3	3	3	3
V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
kW	1,54	2,09	2,08	2,53	2,75	3,11	3,31	4,01	4,15	4,9	4,83	6,11	5,39
50 Hz	E	E	S	E	S	E	S	E	S	E	S	E	S
60 Hz	E	E	S	E	S	E	S	E	S	E	S	E	S
m <sup>3</sup> /h	4,51	6,63	6,75	8,36	8,47	9,37	9,88	11,81	12,17	14,9	14,74	18,74	16,76
60 Hz	5,05	6,31	6,36	7,96	8,1	10,03	10,16	11,83	11,86	14,17	14,6	17,88	17,69
kW	-	-	-	-	-	-	-	-	-	-	-	-	-
R22 R404A	kg	-	-	-	-	-	-	-	-	-	-	-	-

CONDENSATORE CONDENSER VERFLÜSSIGER CONDENSADOR CONDENSEUR КОНДЕНСАТОР

mm	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2
n°xØ mm	1x350	1x350	1x350	1x350	1x350	2x350	2x350	2x350	2x350	1x500	1x500	1x500	1x500
n°xW	1x140	1x140	1x140	1x140	1x140	2x140	2x140	2x140	2x140	1x540	1x540	1x540	1x540
m <sup>3</sup> /h	2450	2450	2450	2450	2450	4800	4800	4800	4800	6450	6450	6450	6450

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1 0 3 4 9 7

TABELLA DI SELEZIONE • SELECTION TABLE • AUSWAHLTABELLE  
 TABLA DE SELECCION • TABLEAU DE SÉLECTION • ТАБЛИЦА ВЫБОРА

T <sub>o</sub>	T <sub>a</sub>	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)
0°C	20°C	3665	5250	5515	6510	6400	7495	7450	9795	9370	12080	11065	14990	13715
	32°C	2880	4095	4300	5025	5140	5885	5965	7750	7500	9555	8915	11770	11015
	43°C	2125	3000	3150	3640	3900	4345	4505	5780	5670	7125	6795	8695	8360
-10°C	20°C	2375	3375	3545	4135	4260	4855	4940	6405	6210	7900	7395	9710	9130
	32°C	1800	2525	2655	3045	3340	3675	3850	4905	4845	6050	5830	7350	7160
	43°C	1265	1750	1840	2065	2455	2585	2810	3505	3535	4320	4310	5165	5260
-20°C	20°C	1435	2005	2110	2405	2690	2930	3100	3925	3895	4845	4705	5860	5770
	32°C	1020	1405	1475	1630	2035	2085	2325	2860	2920	3525	3590	4175	4365
	43°C	655	880	920	965	1425	1345	1605	1900	2020	2345	2540	2690	3055

**R404A**

T <sub>o</sub> 0 ÷ -20°C		UIN 500	UIN 520	UIN 750	UIN 770	UIN 1000	UIN 1020	UIN 1500	UIN 1520	UIN 2000	UIN 2501	UIN 3000	UIN 3500
		4	4	4	4	5	5	5	5	5	5M	6	6
	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
	kW	7,98	7,78	8,99	8,88	11,47	10,44	14,63	15,68	17,78	23,58	28,4	35,89
		E	S	E	S	E	S	E	S	S	S	S	S
	50 Hz	23,63	23,37	29,8	26,5	37,49	38,64	47,25	48,8	56,95	73,2	83,9	110,6
	60 Hz	22,49	23,16	28,36	28,04	35,76	39,05	44,99	46,37	58,56	68,34	87,84	100,68
		-	-	-	-	-	-	-	-	-	-	-	-
	kW	-	-	-	-	-	-	-	-	-	-	-	-
	kg	-	-	-	-	-	-	-	-	-	-	-	-

## CONDENSATORE CONDENSER VERFLÜSSIGER CONDENSADOR CONDENSEUR КОНДЕНСАТОР

	mm	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2
	n°xØ mm	2x450	2x450	2x450	2x450	2x500	2x500	2x500	2x500	2x500	2x630	2x630	2x630
	n°xW	2x390	2x390	2x390	2x390	2x540	2x540	2x540	2x540	2x540	2x1900	2x1900	2x1900
	m³/h	9800	9800	9800	9800	12900	12900	12900	12900	12900	27000	30000	30000

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T <sub>o</sub>	T <sub>a</sub>	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)
0°C	20°C	17035	16090	19290	21105	24435	30920	34025	40230	46245	54130	68130	87690
	32°C	13430	12970	15200	16885	19185	24835	26495	32070	36870	44260	54320	69910
	43°C	9965	9885	11285	12765	14170	18850	19380	24135	27745	33295	40875	52610
-10°C	20°C	11090	10760	12555	13990	15830	20585	21830	26545	30520	37520	44965	57865
	32°C	8445	8480	9560	10905	11980	16140	16305	20580	23660	30440	34855	44865
	43°C	5985	6270	6775	7960	8420	11855	11265	14915	17145	22060	25260	32515
-20°C	20°C	6745	6845	7635	8775	9550	13005	12940	16530	19005	23100	28000	36035
	32°C	4860	5225	5500	6580	6800	9840	8995	12280	14120	19910	20800	26770
	43°C	3180	3695	3605	4550	4380	6885	5585	8390	9645	13600	14210	18290

## R404A

T <sub>o</sub>	-25÷-35°C	UIK 203	UIK 223	UIK 300	UIK 320	UIK 400	UIK 420	UIK 401	UIK 500
		1	1	1	1	1	1	2	2
	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
	kW	2,52	2,9	2,39	3,01	3,71	3,27	3,94	5,16
		E	S	E	S	E	S	S	S
	50 Hz	11,81	12,17	12,92	14,74	16,73	15,94	17,53	23,37
	60 Hz	11,11	11,86	14,17	14,6	15,5	-	17,69	23,44
		-	-	-	-	-	-	-	-
	kW	-	-	-	-	-	-	-	-
	kg	-	-	-	-	-	-	-	-

CONDENSATORE CONDENSER VERFLÜSSIGER CONDENSADOR CONDENSEUR КОНДЕНСАТОР

	mm	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2
	n°xØ mm	1x350	1x350	1x350	1x350	1x350	1x350	2x350	2x350
	n°xW	1x140	1x140	1x140	1x140	1x140	1x140	2x140	2x140
	m³/h	2450	2450	2450	2450	2450	2450	4800	4800

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1 0 3 4 9 7

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T <sub>o</sub>	T <sub>a</sub>	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)
-25°C	20°C	3220	2845	3390	3820	4525	4845	5540	7935
	32°C	2380	2215	2500	2945	3345	3820	4580	5980
	43°C	1570	1575	1640	2095	2205	2910	3415	4515
-30°C	20°C	2385	2185	2505	2905	3350	3840	4320	6240
	32°C	1685	1655	1765	2205	2365	3020	3540	4705
	43°C	1030	1135	1070	1510	1450	2190	2570	3380
-35°C	20°C	1695	1635	1780	2175	2385	2945	3375	4950
	32°C	1115	1200	1165	1600	1570	2310	2710	3585
	43°C	600	785	620	1040	845	1620	1900	2480

**R404A**

T <sub>o</sub> -25÷-35°C	UIK 750	UIK 1000	UIK 1250	UIK 1500	UIK 2000	UIK 2500	UIK 3000	UIK 4001	UIK 4500	UIK 5000
	3	3	4	4	5	5	5	5M	6	6
V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
kW	8,11	10,73	12,88	16,83	18,63	27,17	31,28	33,35	34,81	41,34
50 Hz	S	S	S	S	S	S	S	S	S	S
60 Hz	38,64	48,8	56,95	73,2	83,9	110,6	126,7	138,3	153,7	184,4
m³/h	39,05	46,37	58,56	68,34	87,84	100,68	132,72	-	152,04	184,44
	-	-	-	-	-	-	-	-	-	-
kW	-	-	-	-	-	-	-	-	-	-
kg	-	-	-	-	-	-	-	-	-	-

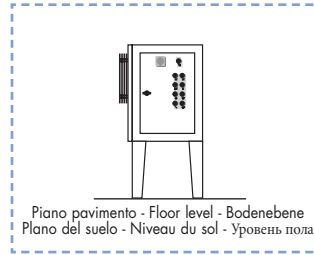
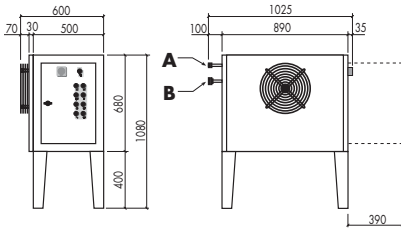
## CONDENSATORE CONDENSER VERFLÜSSIGER CONDENSADOR CONDENSEUR КОНДЕНСАТОР

mm	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2
n°xØ mm	1x500	1x500	2x450	2x450	2x500	2x500	2x500	2x630	2x630	2x630
n°xW	1x540	1x540	2x390	2x390	2x540	2x540	2x750	2x1900	2x1900	2x1900
m²/h	6450	6450	9800	9800	12900	12900	16600	27000	30000	30000

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 1 0 3 4 9 7

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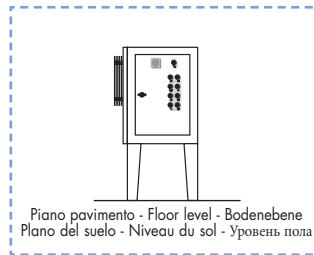
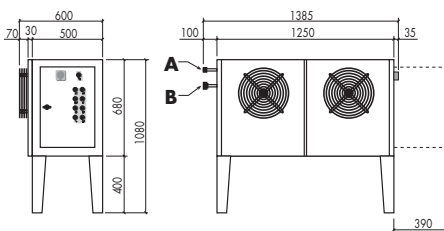
T <sub>o</sub>	T <sub>a</sub>	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)	Q <sub>o</sub> (W)
-25°C	20°C	12140	14120	17375	21910	25455	31880	36925	40310	44795	60615
	32°C	9605	11815	14045	16465	20035	25515	30000	32745	36395	48720
	43°C	7330	9080	10795	12685	16090	20895	23950	26145	29055	40160
-30°C	20°C	9505	11420	13825	17455	19640	25120	29385	32075	35650	47205
	32°C	7485	9150	10605	12640	15595	19860	23220	25345	28170	37700
	43°C	5395	6645	7900	9315	11895	15370	17620	19235	21375	30025
-35°C	20°C	7405	8750	10900	13365	16225	19790	22670	24745	27500	36600
	32°C	5785	6815	7835	9465	11665	15075	17970	19615	21800	28680
	43°C	3855	4715	5610	6575	8570	10990	12600	13755	15285	22180



**A=** Tubo linea liquido / Liquid line pipe / Flüssigkeitsleitung  
 Tubo linea liquido / Tuyau ligne liquide / Жидкостная труба

**B=** Aspirazione / Suction pipe / Saugleitung  
 Tubo de aspiración / Tuyau aspiration / Всасывающая трубка

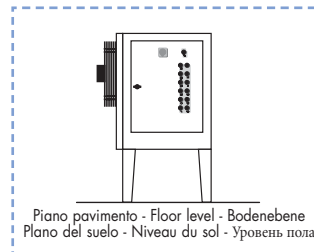
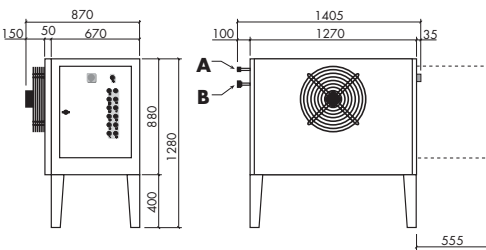
<b>UIM/N</b>	<b>øA=10</b>	<b>øB=16</b>	
<b>UIB/K</b>	<b>øA=10</b>	<b>øB=18</b>	(UIB222-320)
<b>UIB/K</b>	<b>øA=10</b>	<b>øB=22</b>	(UIK203-223-300-320)
<b>UIB/K</b>	<b>øA=10</b>	<b>øB=22</b>	(UIB420/UIK400-420)



**A=** Tubo linea liquido / Liquid line pipe / Flüssigkeitsleitung  
 Tubo linea liquido / Tuyau ligne liquide / Жидкостная труба

**B=** Aspirazione / Suction pipe / Saugleitung  
 Tubo de aspiración / Tuyau aspiration / Всасывающая трубка

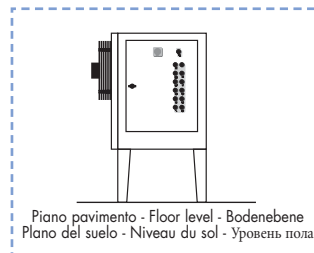
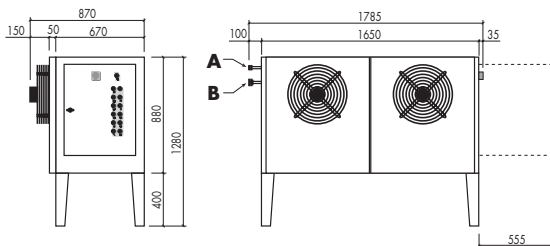
<b>UIM/N</b>	<b>øA=10</b>	<b>øB=16</b>	(UIM/N201-221)
<b>UIM/N</b>	<b>øA=12</b>	<b>øB=18</b>	(UIM/N300-320)
<b>UIB/K</b>	<b>øA=10</b>	<b>øB=22</b>	(UIB/K401)
<b>UIB/K</b>	<b>øA=10</b>	<b>øB=28</b>	(UIB/K500)



**A=** Tubo linea liquido / Liquid line pipe / Flüssigkeitsleitung  
 Tubo linea liquido / Tuyau ligne liquide / Жидкостная труба

**B=** Aspirazione / Suction pipe / Saugleitung  
 Tubo de aspiración / Tuyau aspiration / Всасывающая трубка

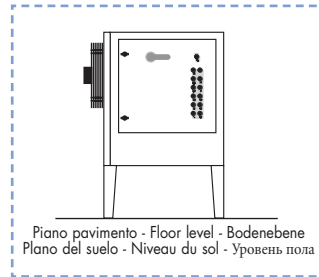
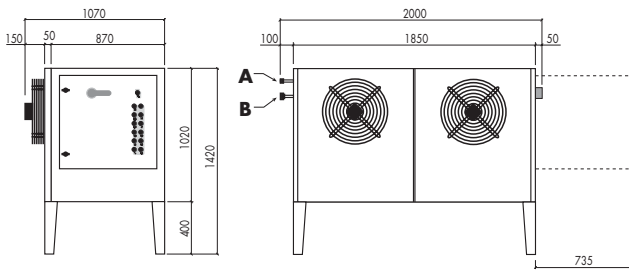
<b>UIM/N</b>	<b>øA=12</b>	<b>øB=22</b>	
<b>UIB/K</b>	<b>øA=12</b>	<b>øB=35</b>	(UIB/K750)
<b>UIB/K</b>	<b>øA=16</b>	<b>øB=35</b>	(UIB/K1000)



**A=** Tubo linea liquido / Liquid line pipe / Flüssigkeitsleitung  
 Tubo linea liquido / Tuyau ligne liquide / Жидкостная труба

**B=** Aspirazione / Suction pipe / Saugleitung  
 Tubo de aspiración / Tuyau aspiration / Всасывающая трубка

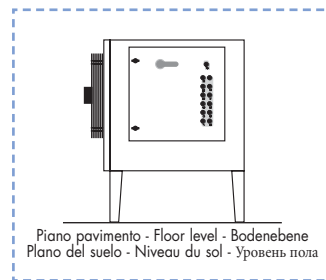
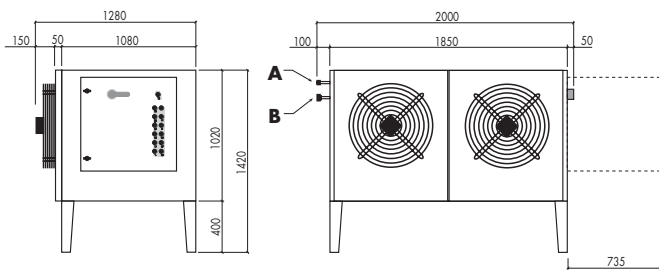
<b>UIM/N</b>	<b>øA=16</b>	<b>øB=22</b>	(UIM/N500-520)
<b>UIM/N</b>	<b>øA=16</b>	<b>øB=28</b>	(UIM/N750-770)
<b>UIB/K</b>	<b>øA=16</b>	<b>øB=42</b>	



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**A**= Tubo linea liquido / Liquid line pipe / Flüssigkeitsleitung  
 Tubo línea líquido / Tuyau ligne liquide / Жидкостная труба  
**B**= Aspirazione / Suction pipe / Saugleitung  
 Tubo de aspiración / Tuyau aspiration / Всасывающая трубка

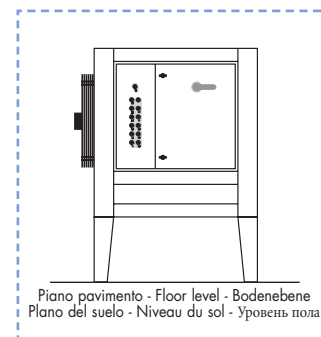
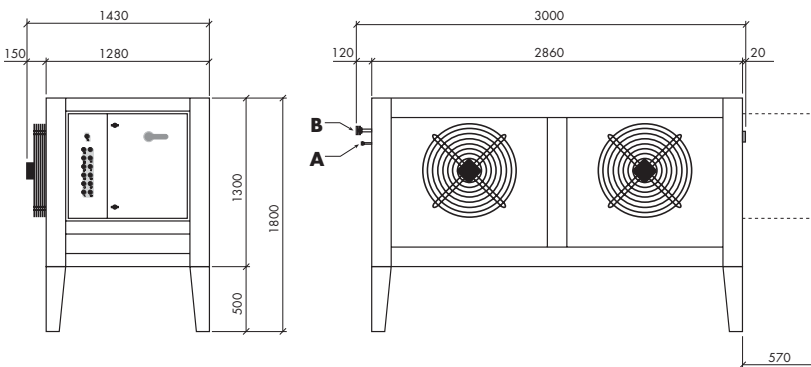
UIM/N	øA=16	øB=28	(UIM/N1000-1020)
UIM/N	øA=18	øB=28	(UIM/N1500-1520)
UIM/N	øA=18	øB=35	(UIM/N2000)
UIB/K	øA=16	øB=42	(UIB/K2000)
UIB/K	øA=18	øB=54	(UIB/K2500-3000)



5M

**A**= Tubo linea liquido / Liquid line pipe / Flüssigkeitsleitung  
 Tubo línea líquido / Tuyau ligne liquide / Жидкостная труба  
**B**= Aspirazione / Suction pipe / Saugleitung  
 Tubo de aspiración / Tuyau aspiration / Всасывающая трубка

UIM/N	øA=22	øB=54
UIK	øA=28	øB=64



6

**A**= Tubo linea liquido / Liquid line pipe / Flüssigkeitsleitung  
 Tubo línea líquido / Tuyau ligne liquide / Жидкостная труба  
**B**= Aspirazione / Suction pipe / Saugleitung  
 Tubo de aspiración / Tuyau aspiration / Всасывающая трубка

UIM/N	øA=28	øB=64
UIK	øA=28	øB=64
UIK	øA=28	øB=76