THE PREMIUM QUALITY MONOBLOCK UNIT

made in GERMANY

GÖVI® GmbH

PREMIUM MONOBLOCK UNIT

EASY AND RELIABLE REFRIGERATION

Our decade long experience as Europe's leading manufacturer of refrigeration units for small refrigerated trailers and our know-how in the field of commercial refrigeration technology have led us to develop the *polarik*® monoblock units.

The latter is available in two mounting variants: wall and ceiling mounting. These two variants are offered in three different sizes and both for medium and low temperature.

polarik® is an energy-saving, eco-friendly monoblock unit that offers a state-of-the-art solution in terms of refrigeration and reliability.

ENHANCED REFRIGERATION PERFORMANCE AT HIGH AMBIENT TEMPERATURES

Even at high ambient temperatures of up to +43 °C, *polarik*® can offer reliable and accurate refrigeration by using optimised refrigeration components.

SMART DEFROSTING

In addition to active cyclic defrosting with pre-set time intervals *polarik*® monoblock units have a smart and energy saving defrosting function.

RELIABLE AND SAFE

The selection of reliable components and the smart control system ensure high reliability and smooth operation.

ENERGY-SAVING TECHNOLOGY

The power consumption of our energy-saving motors is about 40% lower than the often used shaded-pole motors.

ECO-FRIENDLY REFRIGERANTS

The low GWP (global warming potential) refrigerants used are eco-friendly.
This sustainability is ensured by a reduction in GWP of approximately 56% compared to the R-134a refrigerant.

reliable | low consumption | environmental-friendly

made in GERMANY

SAFE REFRIGERATION SOLUTION
CONSISTENTLY RELIABLE

In sectors where food and pharmaceutical refrigeration is important, absolute reliability and operational safety are essential. The optimised selection of the components installed in the polarik® monoblock unit guarantees sufficient reserves of cooling capacity. This translates into greater reliability for example in the case of high ambient temperatures of up to +43 °C.

At the end of the assembly phase, each of our monoblock units undergoes a strict quality control and is thoroughly tested. This includes electrical tests and checks to detect any refrigerant leaks.

Thanks to the different sizes and predefined settings, there is a suitable monoblock unit for every use. This means constant and reliable refrigeration for drinks at +2 °C to food at -18 °C.

43 °C

High ambient temperatures is not a problem either.

OPTIMISED FOR EACH IMPLEMENTATION

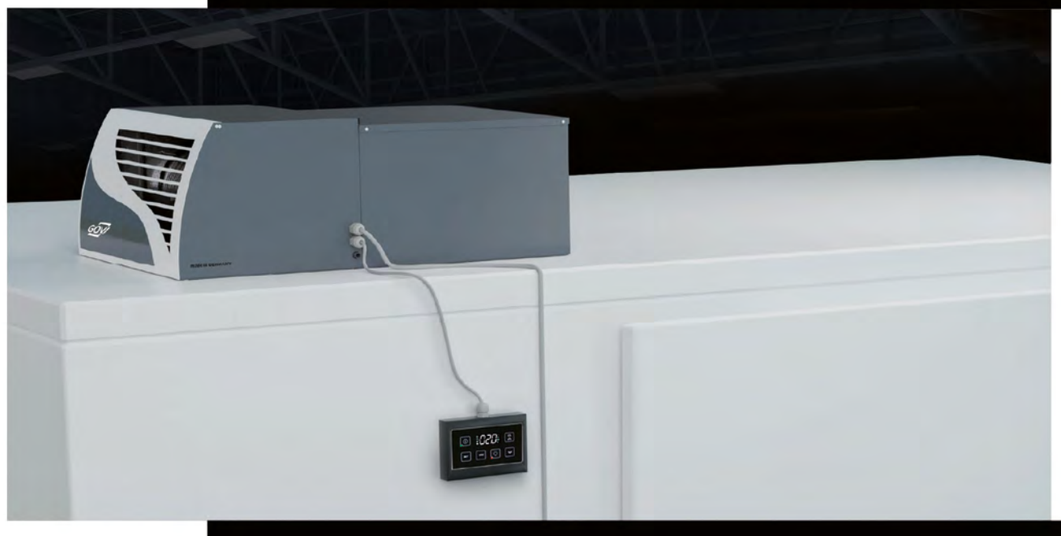
Our units have been designed with different sizes and cooling capacities for each use case and varied conditions.

Whether it is a wall mounted straddle type or with the optional through-the-wall kit or ceiling mounting **polarik®** perfectly adapts to any need.

Through-the-wall kit for vertical wall monoblock units

polarik®

IT ADAPTS TO ANY COLD ROOM



UNIQUE AND SMART

WALL MOUNTING

The wall mounted monoblock unit is equipped with an easy-to-use display and is ideal for cold rooms from 5 m³ to up to 40 m³.

CEILING MOUNTING

Ceiling mounting is the ideal installation solution whenever space is limited.

Additionally the monoblock unit is operated by a remote control panel.

TREND-SETTING LOW CONSUMPTION AND ENVIRONMENT PROTECTION

ENERGY-SAVING AND SILENT MOTOR TECHNOLOGY

Our monoblock units work mostly uninterrupted and therefore reliance on particularly efficient and energy saving motors is more essential then ever. The energy consumption of polarik® 's motors is approximately 40% lower than commercially available shaded-pole motors. Furthermore these energy saving motors stand out for their extreme efficiency and very quiet operation.

ECO-FRIENDLY REFRIGERANT

All A1 refrigerants used in polarik® are environmentally-friendly.

Our WN1-3 and TN1-3 units use the low-GWP R-513A refrigerant, offering a significant 56% GWP reduction compared to R-134a refrigerant.

SIMPLE BUT RELIABLE
SMART CONTROL
EASY TO USE

The control system is very intuitive and easy to use. Apart from the individual settings eight user profiles are available for different uses.

As an option temperatures can be logged for several months for temperature control and HACCP (Hazard Analysis Critical Control Points) purposes.

- Plug & Play
- Quick and easy change of user profiles
- Optional remote monitoring via ModBus interface

EXTENDED CONTROL OF DEFROSTING TIMES

For the defrosting routine polarik® allows an active cyclic defrosting following a fixed time pattern.

- Defrosts can be set up to 6 times per day during opening hours and 6 times during downtime.
- Specific temperature and timeout parameters for each scheduled defrost (e.g. complete defrost during downtime).

Alternatively “smart defrosting” automatically defrosts the heat exchanger after a constant check of the values between the defrosting sensor and the sensor detecting the temperature inside the cold room.

TABLE FEATURES
WALL MOUNTED MONOBLOCK

Medium Temperature

Description	Unit	Polarik 6WN1	Polarik 10WN1	Polarik 15WN2	Polarik 20WN2	Polarik 40WN3
Temperature range of the cold room	° C	MT + 10 ° C / - 5 ° C				
Max. volume of the cold room	m³	6	10	15	20	40
Voltage	V	1 ~ 230	1 ~ 230	1 ~ 230	3 ~ 400	3 ~ 400
Frequency	Hz	50	50	50	50	50
Cooling capacity	W	1026	1590	2079	2560	4370
Heat output to the environment	W	1459	2291	2904	3690	6120
Compressor energy consumption	W	433	701	825	1130	1750
EER[1]		2,36	2,27	2,52	2,27	2,5
Current consumption LRA	A	20,7	28	30	23	38
Current consumption FLA	A	3	5,7	5,1	7,5	10
Type of defrosting		E	E	HG	HG	HG
Evaporator air flow	m³ / h	750	750	1100	1100	2 x 1100
Condenser air flow	m³ / h	750	750	1100	1100	2 x 1100
Degree of protection	IP	34				
Max. external temperature	° C	43				
Refrigerant	Type	R-513A				
GWP[2]		631,4				
CO_2 equivalent	t CO_2	0,189	0,253	0,474	0,505	1,01
Amount of refrigerant	g	300	400	750	800	1600
Power supply cable length	m	2	2	2	2	2
Evaporator air throw	m	3,5	3,5	6	6	8
Dimensions drawings No.		1	1	2	2	3
Weight	kg	60	68	104	106	105
Colour	RAL	9010 / 7024				

Cooling capacity at an ambient temperature of +32 °C and at an internal temperature of the cold room of +2 °C
(cold room with 100-mm insulation + insulated floor)

1 - EER - Efficiency value obtained from the ratio between energy consumption and cooling capacity 2 - GWP - Global warming potential

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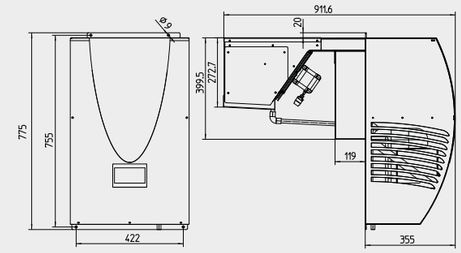
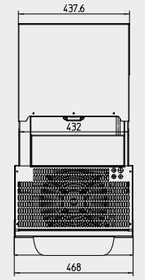
Low Temperature

Description	Unit	Polarik 5WL1	Polarik 7WL1	Polarik 10WL2	Polarik 15WL2	Polarik 20WL3
Temperature range of the cold room	° C	LT -15 ° C / - 25 ° C				
Max. volume of the cold room	m³	5	7	10	15	20
Voltage	V	1 ~ 230	1 ~ 230	1 ~ 230	3 ~ 400	3 ~ 400
Frequency	Hz	50	50	50	50	50
Cooling capacity	W	738	859	1133	2111	2670
Heat output to the environment	W	1298	1566	1943	3693	4720
Compressor energy consumption	W	560	707	810	1582	2050
EER[1]		1,32	1,21	1,4	1,33	1,3
Current consumption LRA	A	21	30	30	23	38
Current consumption FLA	A	2,4	4	4	2,8	10
Type of defrosting		E	E	HG	HG	HG
Evaporator air flow	m³ / h	750	750	1100	1100	2 x 1100
Condenser air flow	m³ /h	750	750	1100	1100	2 x 1100
Degree of protection	IP	34				
Max. external temperature	° C	35				
Refrigerant	Type	R-452A				
GWP[2]		2140				
CO_2 equivalent	t CO_2	0,642	0,856	1,605	1,712	3,745
Amount of refrigerant	g	300	400	750	800	1750
Power supply cable length	m	2	2	2	2	2
Evaporator air throw	m	3,5	3,5	6	6	8
Dimensions drawings No.		1	1	2	2	3
Weight	kg	68	69	100	112	106
Colour	RAL	9010 / 7024				

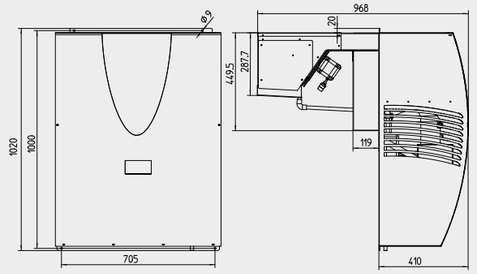
Cooling capacity at an ambient temperature of +32 °C and at an internal temperature of the cold room of -18 °C
(cold room with 100-mm insulation + insulated floor)

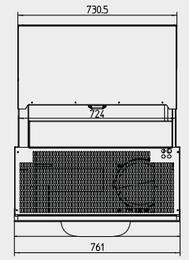




6 WN1
10 WN1
5 WL1
7 WL1

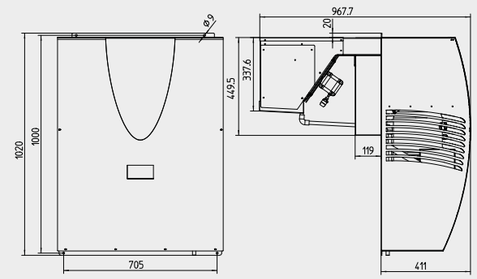
1

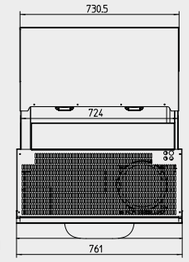




15 WN2
20 WN2
10 WL2
15 WL2

2





40 WN3
20 WL3

3

1 - EER - Efficiency value obtained from the ratio between energy consumption and cooling capacity 2 - GWP - Global warming potential

TABLE FEATURES
CEILING MOUNTED MONOBLOCK

Medium Temperature

Description	Unit	Polarik 7TN1	Polarik 15TN2	Polarik 20TN2	Polarik 40TN3
Temperature range of the cold room	° C	MT + 10 ° C / - 5 ° C			
Max. volume of the cold room	m³	7	15	20	40
Voltage	V	1~230	1~230	3~400	3~400
Frequency	Hz	50	50	50	50
Cooling capacity	W	1590	2079	2560	4370
Heat output to the environment	W	2291	2904	3690	6120
Compressor energy consumption	W	701	825	1130	1750
EER_1		2,27	2,52	2,27	2,5
Current consumption LRA	A	28	30	23	38
Current consumption FLA	A	5,7	5,1	7,5	10
Type of defrosting		HG	HG	HG	HG
Evaporator air flow	m³ / h	750	1100	1100	2 x 1100
Condenser air flow	m³ / h	750	1100	1100	2400
Degree of protection	IP	34			
Max. external temperature	° C	43			
Refrigerant	Type	R-513A			
GWP_2		631,4			
CO_2 equivalent	CO_2	0,253	0,379	0,410	0,884
Amount of refrigerant	g	400	600	650	1400
Power supply cable length	m	2	2	2	2
Evaporator air throw	m	2,5	4	4	5
Dimensions drawings No.		1	2	2	3
Weight	kg	86	112	114	122
Colour	RAL	9010 / 7024			

Cooling capacity at an ambient temperature of +32 °C and at an internal temperature of the cold room of +2 °C (cold room with 100-mm insulation + insulated floor)

1 - EER - Efficiency value obtained from the ratio between energy consumption and cooling capacity 2 - GWP - Global warming potential

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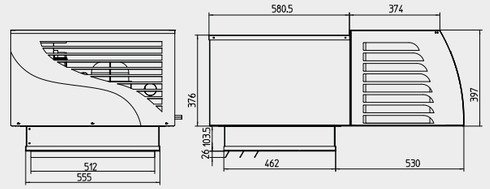
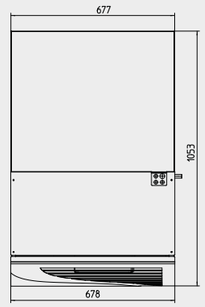
Low Temperature

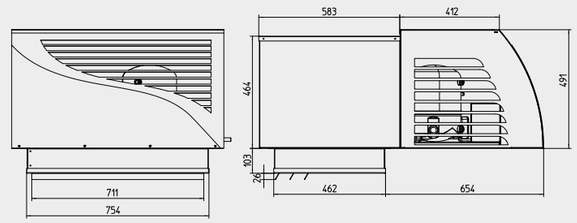
Description	Unit	Polarik 5TL1	Polarik 10TL2	Polarik 15TL3
Temperature range of the cold room	° C	LT -15 ° C / - 25 ° C		
Max. volume of the cold room	m³	5	10	15
Voltage	V	1~230	3~400	3~400
Frequency	Hz	50	50	50
Cooling capacity	W	738	1622	1968
Heat output to the environment	W	1298	3205	4018
Compressor energy consumption	W	560	1583	2050
EER_1		1,32	1,21	0,96
Current consumption LRA	A	21	23	30
Current consumption FLA	A	2,4	2,8	4
Type of defrosting		HG	HG	HG
Evaporator air flow	m³ / h	750	1100	2 x 1100
Condenser air flow	m³ / h	750	1100	2400
Degree of protection	IP	34		
Max. external temperature	° C	35		
Refrigerant	Type	R-452A		
GWP_2		2140		
CO_2 equivalent	t CO_2	0,642	1,498	2,568
Amount of refrigerant	g	300	700	1200
Power supply cable length	m	2	2	2
Evaporator air throw	m	2,5	4	5
Dimensions drawings No.		1	2	3
Weight	kg	86	124	124
Colour	RAL	9010 / 7024		

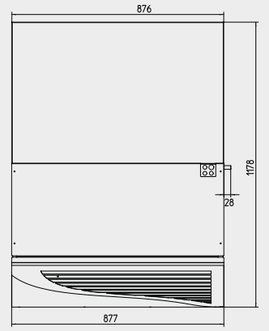
Cooling capacity at an ambient temperature of +32 °C and at an internal temperature of the cold room of -18 °C (cold room with 100-mm insulation + insulated floor)



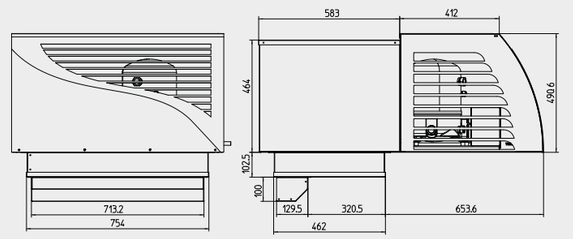


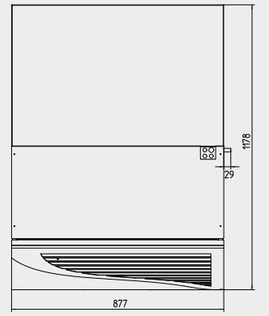
7 TN1
5 TL1
1





15 TN2
20 TN2
10 TL2
2





40 TN3
15 TL3
3

1 - EER - Efficiency value obtained from the ratio between energy consumption and cooling capacity 2 - GWP - Global warming potential

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