

polarik®



THE PREMIUM QUALITY
MONOBLOCK UNIT



GOVI®
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.

ENERGY-SAVING TECHNOLOGY

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



reliable | low consumption | environmental-friendly



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.

ECO-FRIENDLY REFRIGERANTS

The low GWP (global warming potential) refrigerants used are eco-friendly. Choosing the low-GWP refrigerant R-455A over R-452A results in a global warming potential reduction of more than 93% – a significant leap toward sustainable refrigeration solutions.

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.

UNIQUE AND SMART

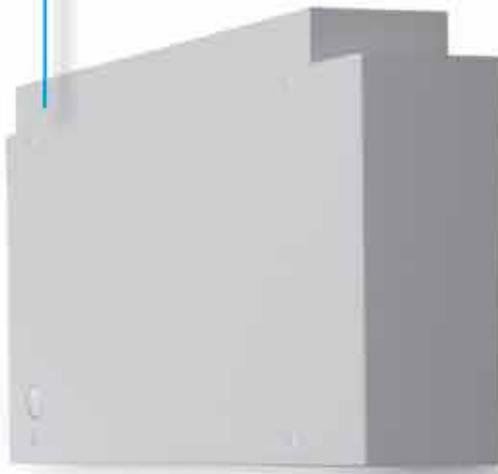


WALL MOUNTING

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 56 m³.



Through-the-wall kit for vertical wall monoblock units



CEILING MOUNTING

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

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



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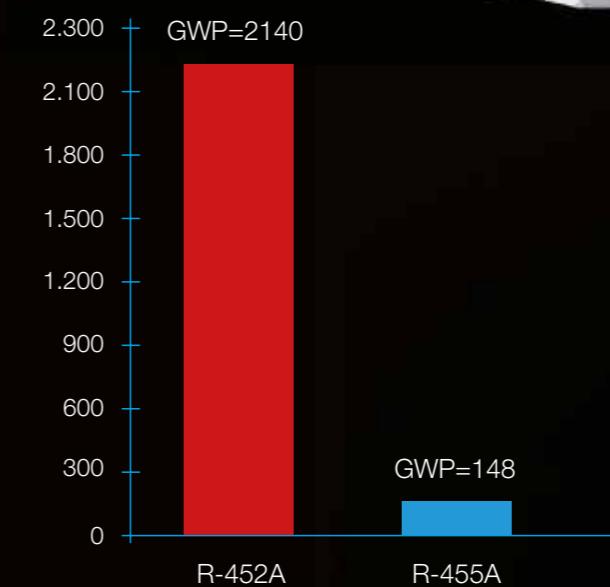
IT ADAPTS TO ANY
COLD ROOM



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 than 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

While many refrigeration units still rely on the conventional refrigerant R-452A, our monoblocks are deliberately designed to use the future-proof, low-GWP refrigerant R-455A. With a global warming potential more than 93% lower, our systems actively contribute to climate protection – without compromising on performance or reliability.

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



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Medium Temperature

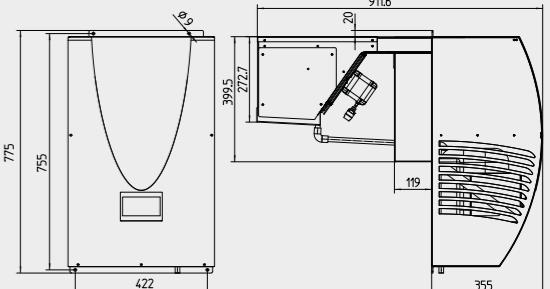
Description	Unit	Polarik 10WN1	Polarik 13WN1	Polarik 18WN2	Polarik 31WN2	Polarik 39WN3	Polarik 47WN3	Polarik 56WN3	
Temperature range of the cold room	°C	MT +10 °C / -5 °C							
Max. volume of the cold room	m³	10	13	18	31	39	47	56	
Voltage	V	1~230	1~230	1~230	1~230	3~400	3~400	3~400	
Frequency	Hz	50	50	50	50	50	50	50	
Cooling capacity	W	1162	1740	2290	2808	3591	4270	5088	
Heat output to the environment	W	1645	2729	3506	3857	4990	5565	7093	
Compressor energy consumption	W	505	827	996	1105	1470	1380	1792	
EER ₁		2,30	2,10	2,30	2,54	2,44	3,09	2,84	
Current consumption LRA	A	19	29,5	33	42,2	23	20	30	
Current consumption FLA	A	4,5	5,7	5,1	7,5	4,2	3,5	10	
Type of defrosting		E	E	HG	HG	HG	HG	HG	
Evaporator air flow	m³ / h	750	750	1100	1100	2 x 1100	2 x 1100	2 x 1100	
Condenser air flow	m³ / h	750	750	1100	1100	2 x 1100	2 x 1100	2 x 1100	
Degree of protection	IP	34							
Max. external temperature	°C	43							
Refrigerant	Typ	R-455A							
GWP ₂		148							
CO ₂ equivalent	t CO ₂	0,07	0,07	0,12	0,13	0,18	0,18	0,18	
Amount of refrigerant	g	450	450	800	850	1200	1200	1200	
Power supply cable length	m	2	2	2	2	2	2	2	
Evaporator air throw	m	3,5	3,5	6	6	8	8	8	
Dimensions drawings No.		1	1	2	2	3	3	3	
Weight	kg	60	68	104	106	126	126	136	
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)

Low Temperature

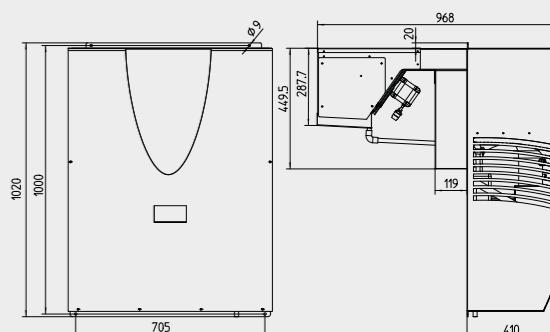
Description	Unit	Polarik 8WL1	Polarik 12WL2	Polarik 23WL2	Polarik 26WL3	Polarik 35WL3	
Temperature range of the cold room	°C	LT -15 °C / -25 °C					
Max. volume of the cold room	m³	8	12	23	26	35	
Voltage	V	1~230	1~230	3~400	3~400	3~400	
Frequency	Hz	50	50	50	50	50	
Cooling capacity	W	1099	1296	2289	2347	3297	
Heat output to the environment	W	1826	1428	3577	3689	5114	
Compressor energy consumption	W	770	1010	1346	1342	1891	
EER ₁		1,42	1,28	1,70	1,74	1,74	
Current consumption LRA	A	29,5	40	31	31	60	
Current consumption FLA	A	4	5,9	3,8	4,4	60,5	
Type of defrosting		E	HG	HG	HG	HG	
Evaporator air flow	m³ / h	750	1100	1100	2 x 1100	2 x 1100	
Condenser air flow	m³ / h	750	1100	1100	2 x 1100	2 x 1100	
Degree of protection	IP	34					
Max. external temperature	°C	35					
Refrigerant	Typ	R-455A					
GWP ₂		148					
CO ₂ equivalent	t CO ₂	0,07	0,12	0,13	0,16	0,19	
Amount of refrigerant	g	450	800	850	1100	1250	
Power supply cable length	m	2	2	2	2	2	
	m	3,5	6	6	8	8	
Dimensions drawings No.		1	2	2	3	3	
Weight	kg	69	100	112	136	136	
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)



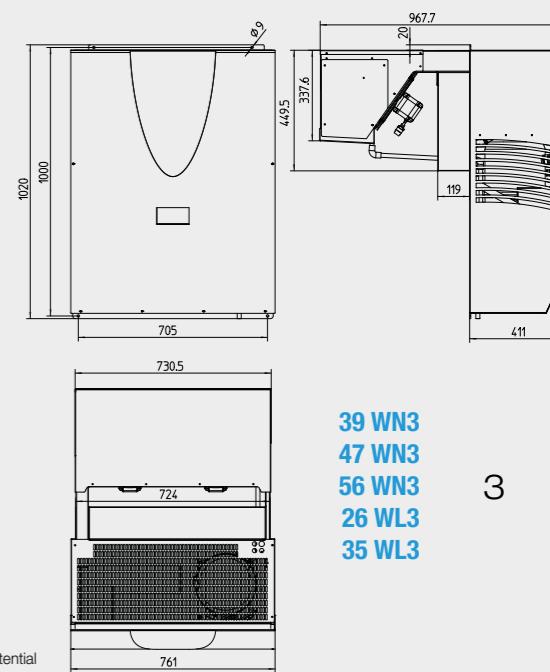
10 WN1
13 WN1
8 WL1

1
Lorem ipsum



18 WN2
31 WN2
12 WL2
23 WL2

2
39 WN3
47 WN3
56 WN3
26 WL3
35 WL3



3

TABLE FEATURES CEILING MOUNTED MONOBLOCK



Medium Temperature

Description	Unit	Polarik 10TN1	Polarik 20TN2	Polarik 25TN2
Temperature range of the cold room	°C	MT +10 °C / - 5 °C		
Max. volume of the cold room	m ³	10	20	25
Voltage	V	1~230	1~230	1~230
Frequency	Hz	50	50	50
Cooling capacity	W	1902	2510	2752
Heat output to the environment	W	2729	3506	3857
Compressor energy consumption	W	827	996	1105
EER ₁		2,29	2,52	2,49
Current consumption LRA	A	29,5	33	42,2
Current consumption FLA	A	5,7	5,1	7,5
Type of defrosting		HG	HG	HG
Evaporator air flow	m ³ / h	750	1100	1100
Condenser air flow	m ³ / h	750	1100	1100
Degree of protection	IP	34		
Max. external temperature	°C	43		
Refrigerant	Type	R-455A		
GWP ₂		148		
CO ₂ equivalent	t CO ₂	0,66	1,18	1,25
Amount of refrigerant	g	450	800	850
Power supply cable length	m	2	2	2
Evaporator air throw	m	2,5	4	4
Dimensions drawings No.		1	2	2
Weight	kg	86	112	114
Colour	RAL	9010 / 7024		

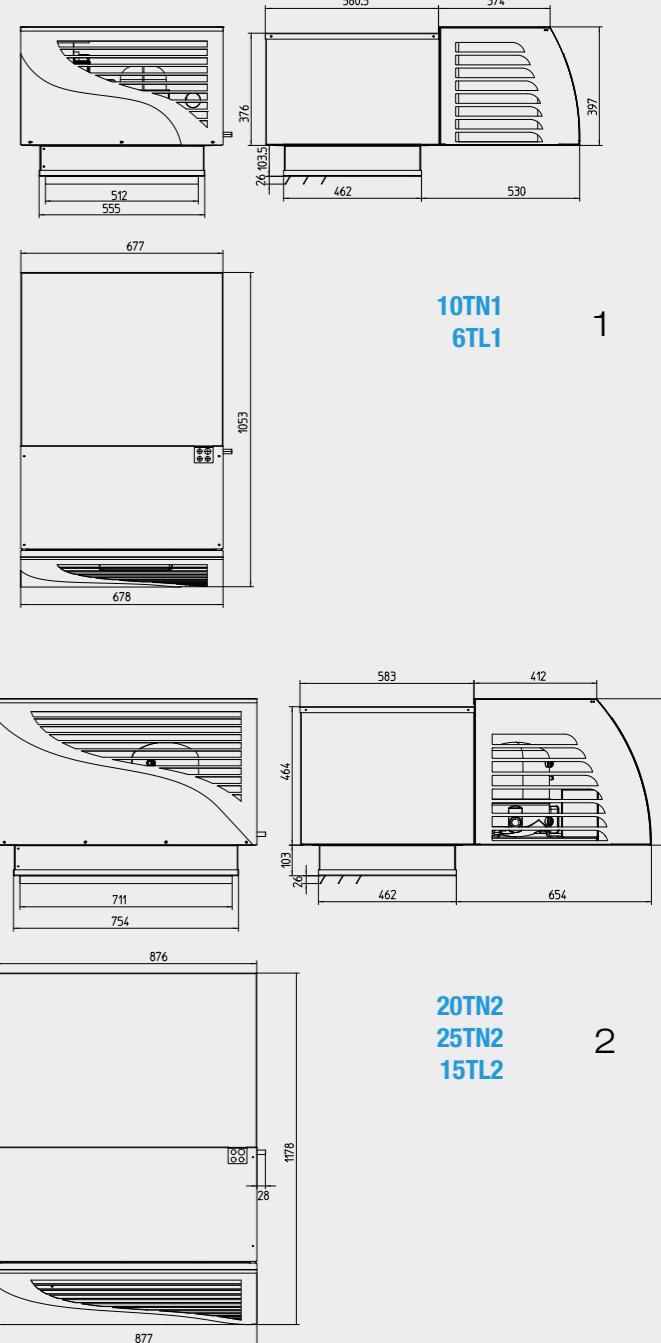
Cooling capacity at an ambient temperature of +32 °C and at an internal temperature of the cold room of +2 °C (cold room with 100-mm insulation + insulated floor)

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Low Temperature

Description	Unit	Polarik 6TL1	Polarik 15TL2
Temperature range of the cold room	°C	LT -15 °C / - 25 °C	
Max. volume of the cold room	m ³	6	15
Voltage	V	1~230	3~400
Frequency	Hz	50	50
Cooling capacity	W	1056	2231
Heat output to the environment	W	1826	3577
Compressor energy consumption	W	770	1346
EER ₁		1,37	1,65
Current consumption LRA	A	29,5	31
Current consumption FLA	A	4	3,8
Type of defrosting		HG	HG
Evaporator air flow	m ³ / h	750	1100
Condenser air flow	m ³ / h	750	1100
Degree of protection	IP	34	
Max. external temperature	°C	35	
Refrigerant	Type	R-455A	
GWP ₂		148	
CO ₂ equivalent	t CO ₂	0,66	1,25
Amount of refrigerant	g	450	850
Power supply cable length	m	2	2
Evaporator air throw	m	2,5	4
Dimensions drawings No.		1	2
Weight	kg	86	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)





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