

ARCTIC MONOBLOCK

CE



ARCTIC MONOBLOCK

"ALL IN ONE" SOLUTION

ARCTIC
MONOBLOCK

The Arctic Monoblock is an 'all in one' cooling system designed for cold rooms up to 20 m³. It represents an ideal solution for commercial use in various types of facilities. The Arctic Monoblock uses the refrigerant R290, achieving an **environmentally friendly solution** and ensuring **energy efficiency**.

The units are designed with a focus on **compactness** and **simplicity**. The compact design allows for easy installation, application, maintenance, and servicing.

INFORMATIONS

FEATURES	EQUIPMENT
compact design	hermetic compressor
straddle mounted installation	electrical cabinet with electronic controller with RS485 output
"all in one" solution for coldrooms up to 20 m ³	housing with anticorrosive protection
coldroom wall thickness up to 150 mm	air cooled condenser
light and cooling switch	dynamic evaporator
hot gas defrost	solenoid valve for hot gas defrost
CE ("declaration of conformity")	capillary tube/TXV
R290 natural refrigerant (except some models)	filter drier
units are precharged with refrigerant	protective pressure switch HP/LP
PREINSTALLED CABLING	condensate drain heater
supply voltage cable 3 metres	condensate collector with overflow pipe, automatic condensation water evaporation system
cable for door switch 3 metres	
cable for room light 4 metres	
cable for door heater 4 metres (LT models)	

MODELS

MT			LT		
OPERA CODE	TYPE	REFRIGERANT	OPERA CODE	TYPE	REFRIGERANT
64001	SCR012	R290	64189	SCK150	R290
64187	SCR058	R290	64191	SCL150	R452A
64188	SCR034	R290	64190	ACK210	R290
64000	ACR100	R290	64192	ACL220	R452A
			64193	ACL300	R452A

COLD ROOM VOLUME CALCULATION BASED ON THE FOLLOWING CALCULATION PARAMETERS

Insulation wall thickness: room with insulated floor, 80 mm for MT units, 100 mm for LT units

Product load density: 250 kg/m³

Product specific heat: for MT room 0,77 kcal/kg °C, for LT room 0,44 kcal/kg °C

Product process duration: 18 h

Storage process (no blast chilling, no blast freezing)

Product inlet temperature: MT +20°C, LT -5°C

Product daily turnover: 10%

TECHNICAL DATA

MT MODELS

	Technical Specifications	Unit	ACR012	ACR058	ACR034	ACR100	ACN122
Item No.			66549	66975	66976	64000	66551
Unit	Frame		1	1	1	2	2
	Power supply	(Volt/ph/Hz)	230/1/50				
	Max. power input	(W)	734	736	918	1410	1501
	Max. current	(A)	4,75	3,8	4,54	6,53	7,83
	Compressor	(cc)	12,11	14,28	16,8	21,02	25,95
	Comp. type		hermetic				
	Refrigerant		R290				
	Defrost	(el./hot gas)	hot gas				
Condenser	Fans	(nxº)	1x254			2x254	
	Airflow	(m³/h)	800			1600	
Evaporator	Fans	(nxº)	1x200			2x200	
	Airflow	(m³/h)	410			820	
	Air throw	(m)	5				

SELECTION OF ARCTIC MONOBLOCK

		Unit	ACR012	ACR058	ACR034	ACR100	ACN122
Item No.			66549	66975	66976	64000	66551
Tamb 25°C	Tc 5°C	W	1085	1293	1588	2201	2610
		m ³	7,7	9,3	14,3	21,9	26,1
	Tc 0°C	W	884	1082	1331	1855	2160
		m ³	6,6	7,7	13,2	18,4	20,5
	Tc -5°C	W	745	874	1119	1565	1751
		m ³	4,5	5,6	7,8	13	14,9
Tamb 32°C	Tc 5°C	W	1020	1150	1390	1953	2399
		m ³	7,5	8,3	10,7	17,8	22,8
	Tc 0°C	W	810	970	1150	1629	1910
		m ³	5,5	6,6	8	14,9	16,4
	Tc -5°C	W	680	790	960	1381	1595
		m ³	3,9	4,9	6,7	10,8	13,5
Tamb 43°C	Tc 5°C	W	840	930	1140	1660	2090
		m ³	4,7	5,9	7,4	13,5	18,3
	Tc 0°C	W	690	76	938	1357	1632
		m ³	3,5	4	5	9	13,5
	Tc -5°C	W	510	615	762	1173	1320
		m ³	2,8	3,2	4,4	7	10,9

*selection table for 80 mm wall thickness

LT MODELS

	Technical Specifications		Unit	ACK150	ACK210	ACB220	ACB300
Item No.				66977	64190	66553	66550
Unit	Frame			1	2	2	3
	Power supply	(Volt/ph/Hz)	230/1/50			400/3/50	
	Max. power input	(W)	928	1460	2074	2930	
	Max. current	(A)	4,71	7	4,64	5,9	
	Compressor	(cc)	21,02	27,8	54,3	68	
	Comp. type		hermetic				
	Refrigerant			R290		R455A	
	Defrost	(el./hot gas)	hot gas				
Condenser	Fans	(nxº)	1x254	2x254		1x300	
	Airflow	(m³/h)	800	1600		1700	
Evaporator	Fans	(nxº)	1x200	2x200	1x300	1x350	
	Airflow	(m³/h)	410	820	1600	2200	
	Air throw	(m)		5		7.5	

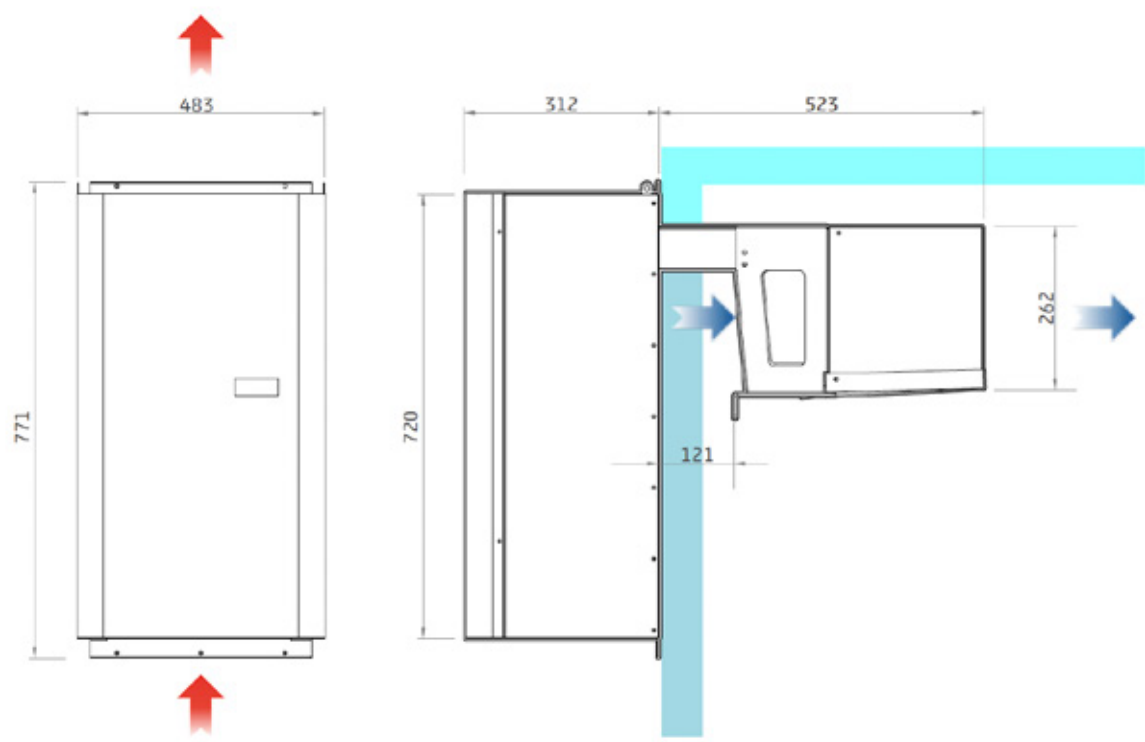
SELECTION OF ARCTIC MONOBLOCK

		Unit	ACK150	ACK210	ACB220	ACB300
Item No.			66977	64190	66553	66550
Tamb 25°C	Tc -18°C	W	898	1154	1610	2530
		m³	7,9	11,6	14,2	32,3
	Tc -22°C	W	813	1024	1470	2422
		m³	7,2	9,8	13,2	29,5
	Tc -25°C	W	607	795	1250	1910
		m³	4,2	5,9	8,7	18
Tamb 32°C	Tc -18°C	W	810	1020	1427	2393
		m³	4,9	8,4	10,7	26,6
	Tc -22°C	W	710	913	1310	2133
		m³	4,6	7,2	10	23,6
	Tc -25°C	W	560	690	1106	1768
		m³	2,5	4,7	7,4	13,8
Tamb 43°C	Tc -18°C	W	640	710	1230	1883
		m³	2,9	3,8	8,5	18,8
	Tc -22°C	W	563	637	1116	1731
		m³	2,5	3,7	7,4	14,1
	Tc -25°C	W	455	510	894	1430
		m³	1,3	2	4,5	7,9

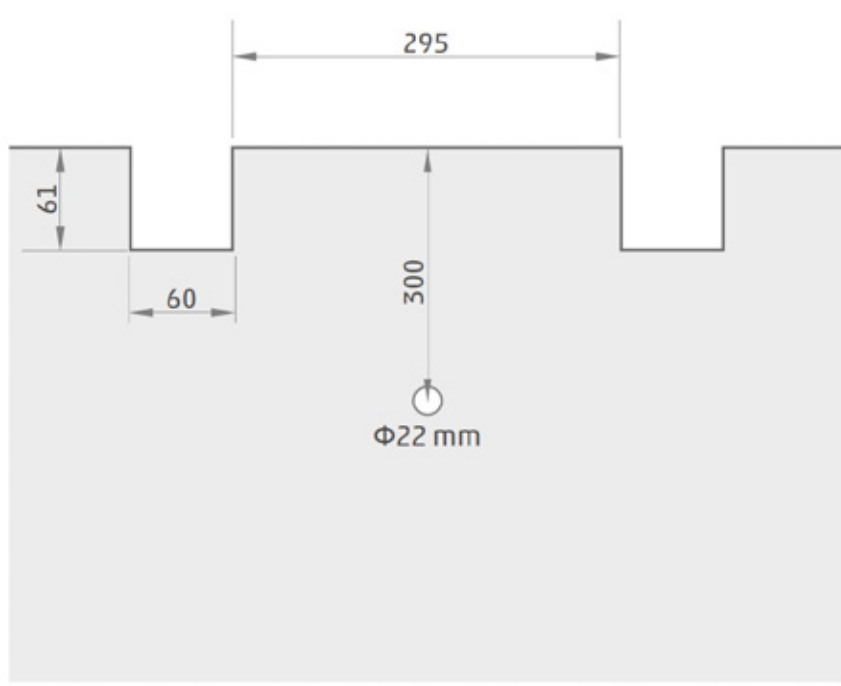
*selection table for 100 mm wall thickness

DIMENSIONS

FRAME 1

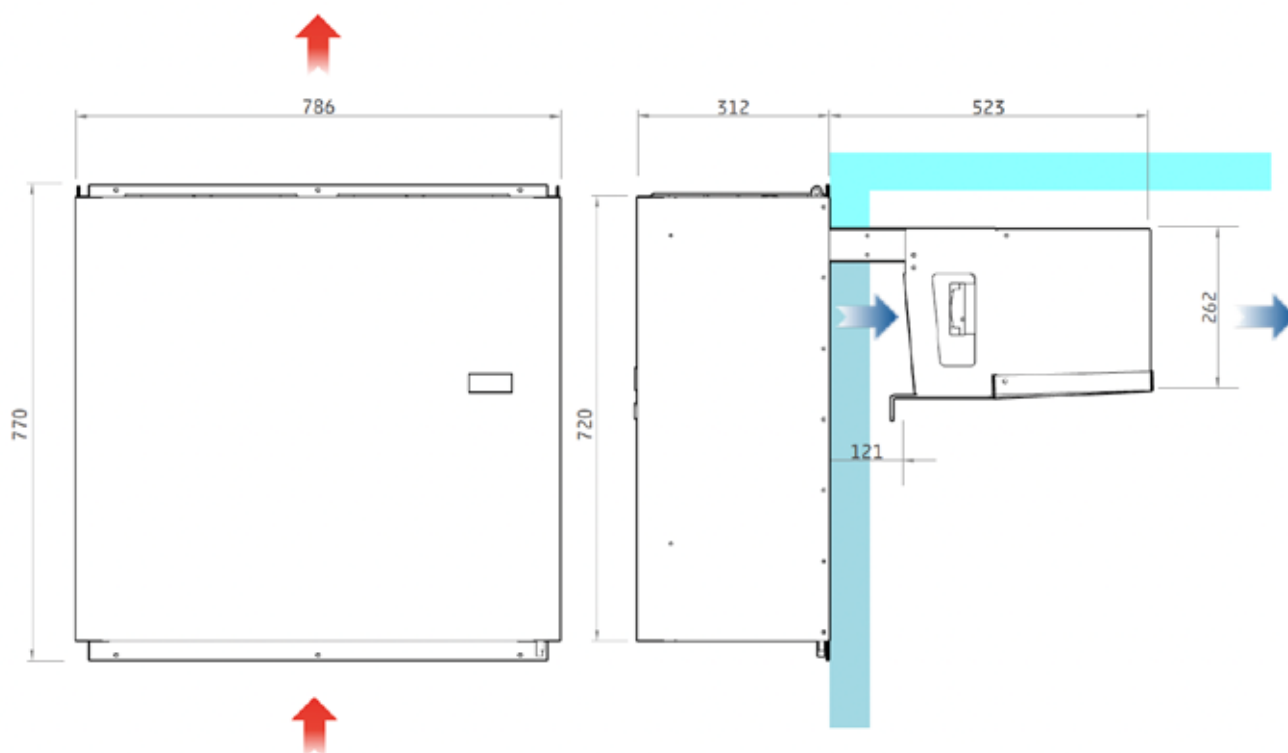


MOUNTING

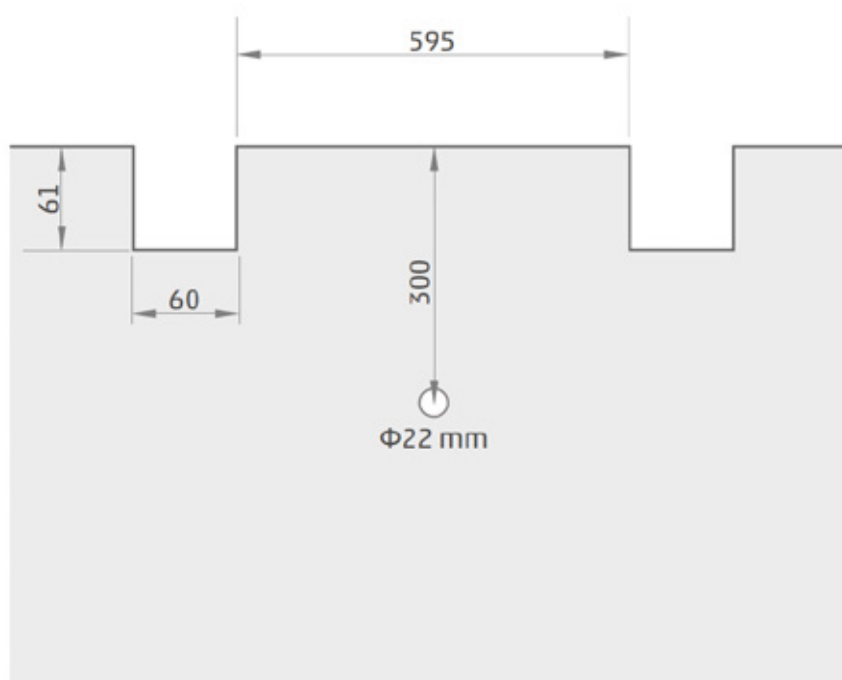


DIMENSIONS

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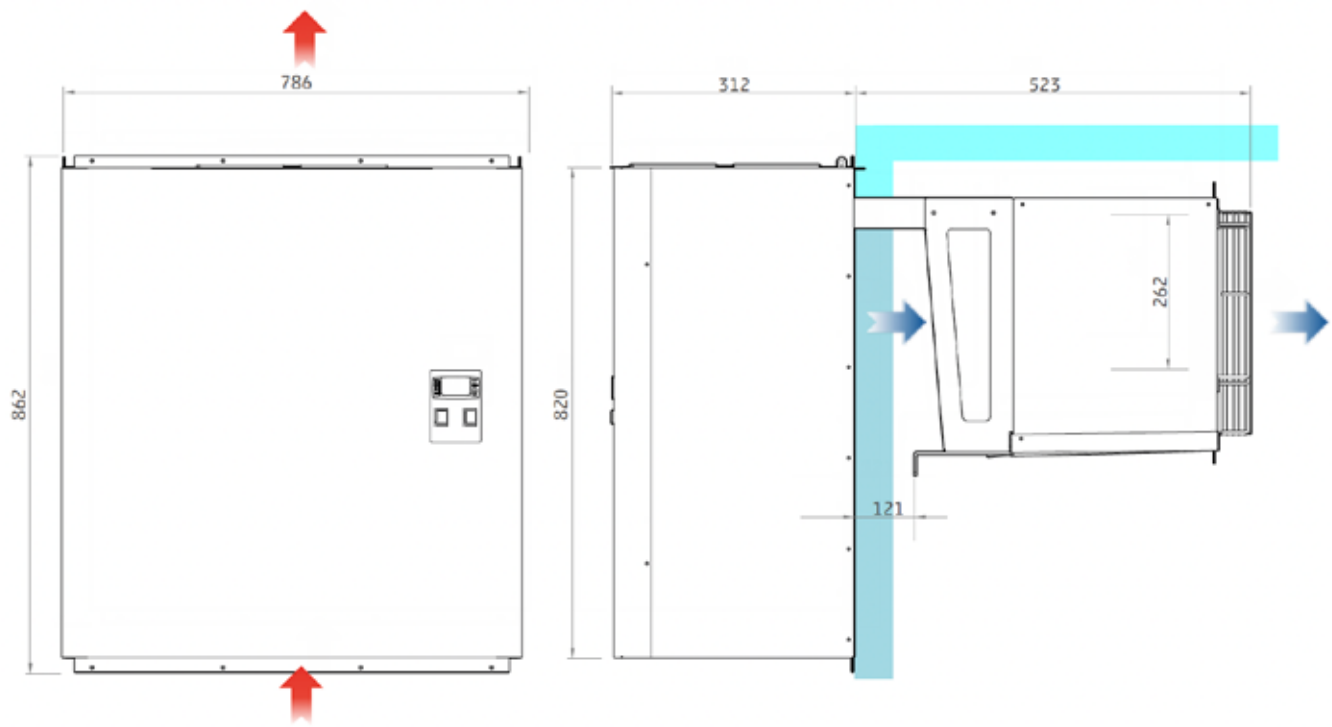


MOUNTING

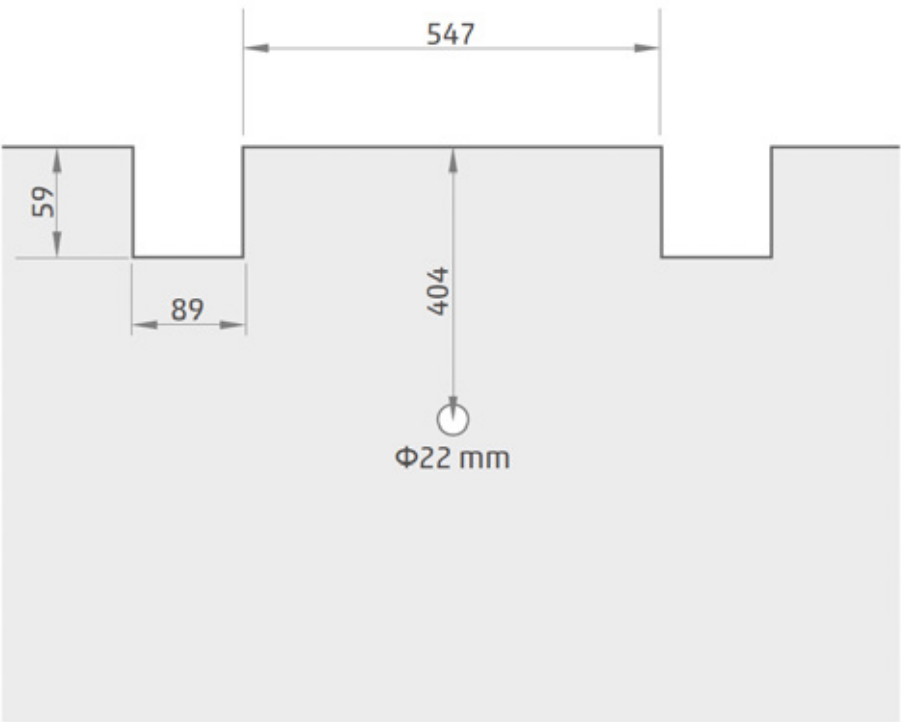


DIMENSIONS

FRAME 3



MOUNTING



MONOBLOCK PACKING

FRAME	1	2	3
packing	cardboard	cardboard	crate
L (mm)	900	900	1160
W (mm)	530	830	840
H (mm)	920	920	1030

PACKAGE WEIGHT

	ACR012	ACR058	ACR034	ACR100	ACN122	ACK150	ACK210	ACB220	ACB300
FRAME	1	1	1	2	2	1	2	2	3
net weight (kg)	48	48	48	65	73	48	73	83	93
gross weight (kg)	57	57	57	77	85	57	85	95	135