

Холодильные комнаты MCR, BCR, MCV, BCV, MSH, BSH, ASH, MSF, BSF, ASF, HSF, VSF, VSH

Технические характеристики

По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(727)345-47-04

Беларусь +(375)257-127-884

Узбекистан +998(71)205-18-59

Киргизия +996(312)96-26-47

эл.почта: ccf@nt-rt.ru || сайт: <https://coreco.nt-rt.ru/>



Tropicalized design for temperature atmosphere of 45 °C.

Valve of expansion thermostatic.

Defrost by gas hot with temperature control.

Compact equipment with reduced refrigerant charge, less than 2.5 kg.

Electronic controller

Intartop units come standard with the advanced XWING electronic controller.



AN Multifunction digital remote control.

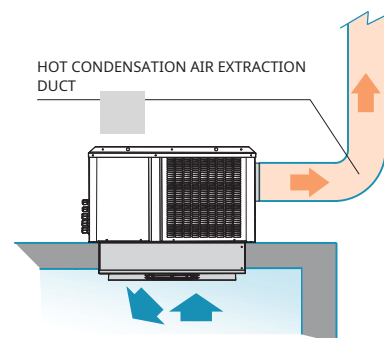
AND Temperature control with recording of maximum and minimum temperatures.

AN "Jet Cool" rapid cooling function.

AN Night operating mode.

Centrifugal version

The Intartop centrifugal series equipment incorporates a centrifugal turbine to allow the hot discharge air to be directed to the outside through ducts.



Description

Compact monoblock units for small-sized refrigeration and freezing cold chambers, for ceiling mounting.

Characteristics

- Power supply 230 V-I-50 Hz or 400 V-III-50 Hz.
- Hermetic reciprocating compressor.
- High and low pressure switches.
- Expansion by thermostatic valve (except in MCR models less than 1.5 HP in R449A and 1 HP in R134a, with capillary expansion).
- Magnetothermal protection.
- Defrost by hot gas injection.
- Stainless steel condensate tray.
- Automatic evaporation of condensates.
- Camera light and door switch cable.
- Door resistor cable (BCR models only).
- Evaporation box made of 50 mm polyurethane foam sandwich panel, lined internally with pre-painted steel sheet.
- Multifunction electronic regulation.

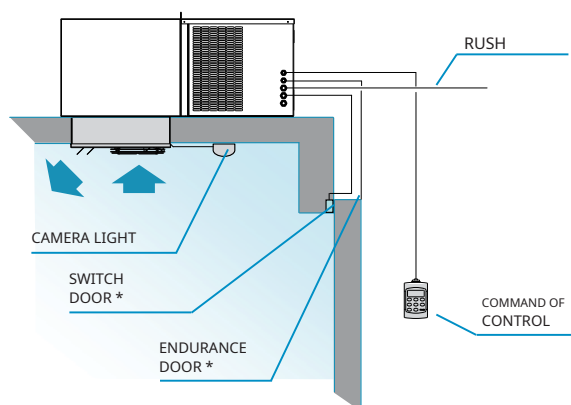
CR-N Series

Monoblock units prepared for ceiling mounting.

CR-C Series

Centrifugal version with condenser equipped with centrifugal turbine for conveying hot condensation air to the outside.

Scheme of facility



* Door heater only on low temperature models. * Door switch not supplied.

axial and centrifugal roof compacts

11

230 VI-50 Hz* | Medium temperature | R134a

AXIAL VERSION		COMPRESSOR		REFRIGERATING POWER/CHAMBER VOLUME, ACCORDING TO CHAMBER TEMPERATURE ⁽¹⁾						POWER ABSORB. NOMINAL (kW)	INTENS. MAXIMUM ABSORB. (TO)	CAUDAL EVAP. (m³/h)	BURDEN REFRIG. (kg)	WEIGHT (kg)	LEVEL PRESSURE SONORA dB(A) _{1m}	
SERIES/MODEL AXIALS	CV	STRAIN	0°C		5°C		10°C									
			W	m³	W	m³	W	m³								
R134a	MCR-NY-0 010	3/8	230 VI	605	4.0	751	7.0	902	12	0.43	4.5	300	< 1.0	62	30	
	MCR-NY-0 015	1/2	230 VI	788	6.1	956	10	1 134	18	0.53	5.5	300	< 1.0	65	30	
	MCR-NY-1 015	1/2	230 VI	999	8.2	1 231	12	1 490	23	0.58	5.6	600	< 1.0	73	28	
	MCR-NY-1 026	3/4	230 VI	1 265	12	1 549	19	1 853	30	0.93	9.3	600	< 1.0	82	34	
	MCR-NY-1 033	1	230 VI	1 502	16	1 817	26	2 153	41	1.05	9.5	600	< 1.0	83	34	
	MCR-NY-2 033	1	230 VI	1 911	24	2 363	37	2 846	61	1.21	10.3	1 150	< 1.5	98	35	
	MCR-NY-2 053	1 1/2	230 VI *	2 352	33	2 882	50	3 455	75	1.67	12.9	1 150	< 1.5	99	39	
	MCR-NY-2 074	2	230 VI *	2 940	40	3 560	60	4 211	90	1.83	16.9	1 150	< 1.5	110	41	

MCR / BCR series

CENTRIFUGAL VERSION			
SERIES/MODEL CENTRIFUGAL	CAUDAL COND. (m³/h)	PED ⁽³⁾ (mmca)	
MCR-CY-0 010	375	12	
MCR-CY-0 015	375	12	
MCR-CY-1 015	575	12	
MCR-CY-1 026	575	12	
MCR-CY-1 033	575	12	
MCR-CY-2 033	1 000	6.5	
MCR-CY-2 053	1 000	6.5	
MCR-CY-2 074	1 000	6.5	

230 VI-50 Hz* | Low temperature | R449A

AXIAL VERSION			COMPRESSOR		REFRIGERATING POWER/CHAMBER VOLUME, ACCORDING TO CHAMBER TEMPERATURE ⁽¹⁾						POWER ABSORB. NOMINAL (kW)	INTENS. MAXIMUM ABSORB. (TO)	CAUDAL EVAP. (m³/h)	BURDEN REFRIG. (kg)	WEIGHT (kg)	LEVEL PRESSURE SONORA dB(A) _{1m}	
BE 1E /MODEL AXIALS	CV	STRAIN	- 25°C		- 20°C		- 15°C										
			W	m³	W	m³	W	m³									
R449A	BCR-NG-0 018	5/8	230 VI	418	0.6	525	1.5	638	2.8	0.59	4.7	300	< 1.0	65	33		
	BCR-NG-1 026	3/4	230 VI	562	2.0	736	4.1	907	7.7	0.84	8.5	600	< 1.0	84	38		
	BCR-NG-1 034	1 1/4	230 VI	703	3.2	892	5.8	1 060	10	1.05	11.0	600	< 1.0	84	40		
	BCR-NG-2 034	1 1/4	230 VI	775	3.8	1 102	7.8	1 406	14	1.11	11.5	1 150	< 1.5	135	41		
	BCR-NG-2 054	1 3/4	230 VI *	1 137	6.9	1 463	13	1 803	22	1.56	17.5	1 150	< 1.5	145	42		
	BCR-NG-2 074	2 1/2	230 VI *	1 377	11	1 689	17	2 098	30	1.83	25.5	1 150	< 1.5	145	43		

CENTRIFUGAL VERSION			
SERIES/MODEL CENTRIFUGAL	CAUDAL COND. (m³/h)	PED ⁽³⁾ (mmca)	
BCR-CG-0 018	375	12	
BCR-CG-1 026	575	12	
BCR-CG-1 034	575	12	
BCR-CG-2 034	1 000	6.5	
BCR-CG-2 054	1 000	6.5	
BCR-CG-2 074	1 000	6.5	

Optional •Switch to 400 V-III-50 Hz power supply. *

- Expansion valve (medium temp. models less than 1.5 HP in R449A, and less than 1 HP in R134a).
- Door microswitch.
- Non-return gate (centrifugal equipment).
- R452A refrigerant in BT.
- Other refrigerants.

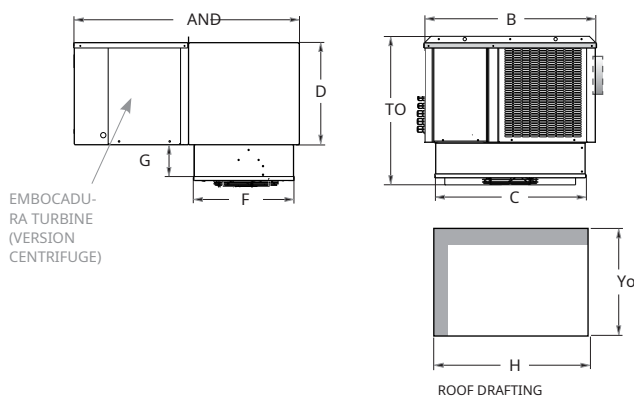
⁽¹⁾Nominal performance is based on operation with a chamber temperature of 0°C (MT) and -20°C (BT), and an outside temperature of 35°C. Chamber volume estimated according to calculation base conditions (page VI).

⁽²⁾Sound level referred to sound pressure level in dB(A), measured in an open field at 10 m distance from the source.

⁽³⁾Static pressure available in exhaust ducts.

* Units available in 400 V-III-50 Hz voltage.

Dimensions



Air extraction ducts

Recommended dimensions for discharge ducts made of sheet metal, PVC, or glass wool panel, 20 m long (each 90° elbow is equivalent to 5 m in length). For flexible or semi-rigid ducts, it is recommended to use a larger dimension.

AND Series 0:	200 x 150 mm.
AND Series 1:	200 x 200 mm.
AND Series 2:	200 x 150 mm.

Dimensiones (mm)	TO	B	C	D	AND	F	G	H	Yo	Mouthpiece turbine
series 0	480	600	430	330	790	375	100	435	380	185 x 115
series 1	574	665	582	385	850	379	135	588	385	185 x 115
series 2	677	835	756	469	850	379	135	762	385	230 x 130



Tropicalized design for ambient temperature of 45 °C.

Valve of expansion thermostatic.

Defrost by gas hot with temperature control.

Compact equipment with reduced refrigerant charge, less than 2.5 kg.

Description Compact monoblock units for wall mounting in small refrigeration and freezing cold chambers.

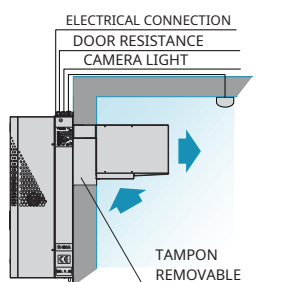
- Characteristics**
- Power supply 230 VI-50 Hz or 400 V-III-50 Hz.
 - Hermetic reciprocating compressor.
 - High and low pressure switches.
 - Expansion by thermostatic valve, (except in MCV models less than 1.5 HP in R449A and 1 HP in R134a, with capillary expansion).
 - Magnetothermal protection.
 - Defrost by hot gas injection.
 - Stainless steel condensate tray.
 - Automatic evaporation of condensates.
 - Camera light and door switch cable.
 - Door resistance cable (BCV models only).
 - Removable buffer included.
 - Multifunction electronic regulation.

CV-N Series Compact units prepared for window mounting and equipped with removable insulating pad for straddle mounting.

CV-C Series Centrifugal version with condenser equipped with centrifugal turbine for conveying hot condensation air to the outside.

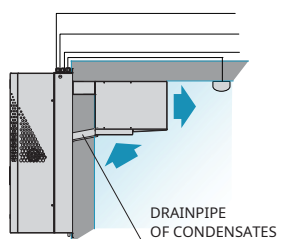
CV-I Series Compact, weather-proof equipment for outdoor installation in small cold rooms at positive or negative temperatures.

Schemes of facility



Buffer assembly

A removable buffer is supplied as standard for direct mounting on the window in the cold room.



Saddle mounting (except series 0)

A ridged assembly can be easily carried out by simply preparing a frame for installation and then placing the chamber roof.

Electronic controller

Intarblock units come standard with the advanced XWING electronic controller.



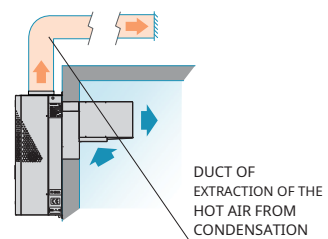
AN Temperature control with recording of maximum and minimum temperatures.

AN "Jet Cool" rapid cooling function. Night

AN operating mode.

Centrifugal version

The centrifugal intarblock series equipment incorporates a centrifugal turbine to allow the hot discharge air to be directed to the outside through ducts.



Air extraction ducts

Recommended dimensions for discharge ducts made of sheet metal, PVC, or glass wool panel, 20 m long (each 90° elbow is equivalent to 5 m in length). For flexible or semi-rigid ducts, it is recommended to use a larger dimension.

AN Series 0:	200 x 150 mm.
AN Series 1:	200 x 200 mm.
AN Series 2:	Ø 200 or 250 x 150 mm. Ø
AN Series 3:	250 or 300 x 200 mm.

230 VI-50 Hz* / 400 V-III-50 Hz | Medium temperature | R134a

AXIAL VERSION		COMPRESSOR		REFRIGERATING POWER/CHAMBER VOLUME, ACCORDING TO CHAMBER TEMPERATURE...						POWER ABSORB. NOMINAL (kW)	INTENS. MAXIMUM ABSORB. (TO)	CAUDAL EVAP. (m³/h)	BURDEN REFRIG. (kg)	WEIGHT (kg)	LEVEL PRESSURE SONORA dB(A) ₂₀		
SERIES/MODEL AXIALS	CV	STRAIN	0°C		5°C		10°C										
			W	m³	W	m³	W	m³									
R134a	MCV-NY-0 010	3/8	230 VI	758		7.0	907	12	0.43	4.5	300	< 1.0	36	28			
	MCV-NY-0 015	1/2	230 VI		6.0	961	10	1 139	18	0.53	5.5	300	< 1.0	38	29		
	MCV-NY-1 015	1/2	230 VI	1 199		14	1 453	23	0.57	5.6	500	< 1.0	60	29			
	MCV-NY-1 026	3/4	230 VI			1 565	19	1 859	30	0.81	9.3	500	< 1.0	69	34		
	MCV-NY-1 033	1	230 VI	1 743		25	2 037	41	0.92	9.5	500	< 1.0	70	34			
	MCV-NY-2 033	1	230 VI			2 163	36	2 573	57	1.09	10.3	950	< 1.5	88	35		
	MCV-NY-2 053	1 1/2	230 VI *	2 609		41	3 103	72	1.46	12.9	950	< 1.5	89	39			
	MCV-NY-3 053	1 1/2	230 VI *			3 103	53	3 743	83	1.51	13.1	1 300	< 2.0	117	38		
	MCV-NY-3 074	2	230 VI *	36		3 938	70	4 667	97	1.89	17.1	1 300	< 2.0	114	41		
	MCV-NY-3 108	5	400 V-III			4 725	110	5 539	130	2.48	18.6	1 300	< 2.0	116	43		

MCV/BCV series

CENTRIFUGAL VERSION		
SERIES/MODEL CENTRIFUGAL	CAUDAL COND. (m³/h)	PED ⁽³⁾ (mmca)
MCV-CY-0 010	375	12
MCV-CY-0 015	375	12
MCV-CY-1 015	575	12
MCV-CY-1 026	575	12
MCV-CY-1 033	575	12
MCV-CY-2 033	950	12
MCV-CY-2 053	950	12
MCV-CY-3 053	1150	12
MCV-CY-3 074	1150	12
MCV-CY-3 108	1150	12

230 VI-50 Hz* / 400 V-III-50 Hz | Low temperature | R449A

AXIAL VERSION		COMPRESSOR		REFRIGERATING POWER/CHAMBER VOLUME, ACCORDING TO CHAMBER TEMPERATURE...						POWER ABSORB. NOMINAL (kW)	INTENS. MAXIMUM ABSORB. (TO)	CAUDAL EVAP. (m³/h)	BURDEN REFRIG. (kg)	WEIGHT (kg)	LEVEL PRESSURE SONORA dB(A) ₂₀
SERIES/MODEL AXIALS	CV	STRAIN	- 25°C		- 20°C		- 15°C								
			W	m³	W	m³	W	m³							
R449A	BCV-NG-0 018	5/8	230 VI	382	0.6	1.5	596	2.8	0.50	4.7	300	< 1.0	38	33	
	BCV-NG-1 026	3/4	230 VI	550	2.1	4.3	888	7.6	0.84	8.5	550	< 1.0	60	38	
	BCV-NG-1 034	1 1/4	230 VI	697	3.2	6.1	1 047	10	1.05	11.0	550	< 1.0	60	40	
	BCV-NG-2 034	1 1/4	230 VI	1 053	3.8	7.7	1 341	14	1.11	11.9	950	< 1.5	89	41	
	BCV-NG-2 054	1 3/4	230 VI *	1 339	5.6	12	1 690	21	1.56	17.9	950	< 1.5	102	42	
	BCV-NG-2 074	2 1/2	230 VI *	1 053	10	17	2 026	28	1.84	25.9	950	< 1.5	102	43	
	BCV-NG-3 074	2 1/2	230 VI *	1 339	11	21	2 423	35	2.17	26.0	1 300	< 2.0	131	43	
	BCV-NG-3 086	3	400 V-III	1 875	14	28	2 737	48	2.13	10.4	1 300	< 2.0	117	40	
	BCV-NG-3 096	3 1/2	400 V-III	2 022	18	32	2 942	54	2.39	12.1	1 300	< 1.5	129	50	

CENTRIFUGAL VERSION		
SERIES/MODEL CENTRIFUGAL	CAUDAL COND. (m³/h)	PED ⁽³⁾ (mmca)
BCV-CG-0 018	375	12
BCV-CG-1 026	575	12
BCV-CG-1 034	575	12
BCV-CG-2 034	950	12
BCV-CG-2 054	950	12
BCV-CG-2 074	950	12
BCV-CG-3 074	1 150	12
BCV-CG-3 086	1 150	12
BCV-CG-3 096	1 150	12

Optional

- Switch to 400 V-III-50 Hz power supply. *
- Expansion valve (medium temp. models less than 1.5 HP in R449A, and less than 1 HP in R134a).
- Door microswitch.
- Non-return gate (centrifugal equipment).
- R452A refrigerant in BT
- Other refrigerants.

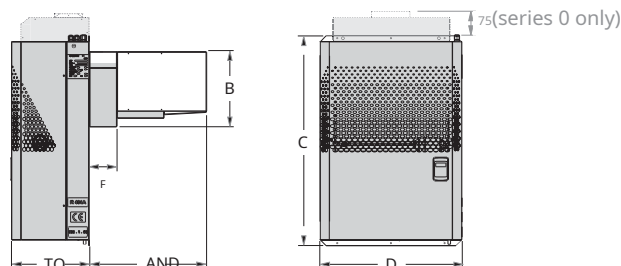
⁽¹⁾Nominal performance is based on operation with a chamber temperature of 0°C (MT) and -20°C (BT), and an outside temperature of 35°C. Chamber volume estimated according to calculation base conditions (page VI).

⁽²⁾Sound pressure in dB(A) in open field at 10 m from the source.

⁽³⁾Static pressure available in exhaust ducts.

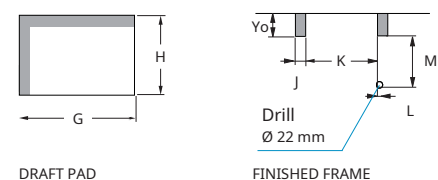
* Units available in 400 V-III-50 Hz voltage.

Dimensions



Dimensions (mm)	TO	B	C	D	AND	F	Mouthpiece turbine
series 0	306	510	683	420	250	50	185 x 115
series 1	340	330	880	400	514	122	185 x 115
series 2	340	330	920	620	514	122	230 x 130
series 3	365	470	940	735	514	122	2x 185 x 115

Mounting frames



Dimensiones	G	H	Yo	J	K	L	M
series 0	405	515					n/a
series 1	380	335	75	41	295	13	233
series 2	600	335	75	36	523	13	233
series 3	710	475	75	41	611	22	356

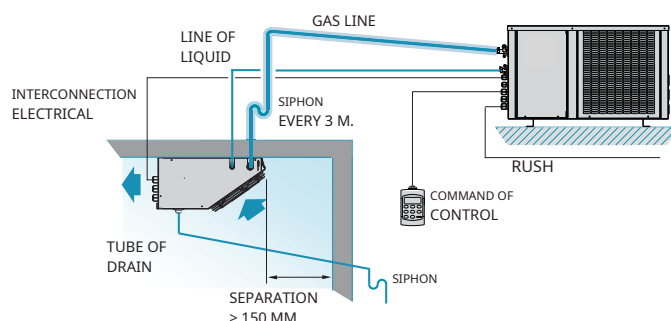


Description Semi-compact equipment for small and medium-sized cold rooms, consisting of a horizontal condensing unit and a low-profile, double-flow or cubic-type evaporator unit.

- Characteristics**
- Power supply 230 V-I-50 Hz or 400 V-III-50 Hz.
 - Hermetic reciprocating compressor (with acoustic insulation in three-phase models).
 - High and low pressure switches.
 - Liquid container.
 - Refrigerant pre-charge up to 10 meters of pipe.
 - Expansion by thermostatic valve.
 - Defrost by electric resistance (except ASH series).
 - Stainless steel condensate tray.
 - Flare type connections with service valves up to 3/8"-3/4".
 - 10 meter electrical interconnection included (except series 4 and 40 to 54).
 - Magnetothermal protection of motors.
 - Multifunction electronic regulation with remote control and digital condensation control.
 - Liquid injection into low temperature equipment with R449A.

- SH-N Series** Axial condensing unit and low profile evaporator unit.
- SH-Q Series** Axial condensing unit and cubic type evaporator unit.
- SH-C Series** Centrifugal condensing unit and low profile evaporator unit.
- SH-CQ Series** Centrifugal condensing unit and cubic type evaporator unit.
- SH-D Series** Axial condensing unit and double flow evaporator unit.
- SH-CD Series** Centrifugal condenser unit and double flow evaporator unit.

Scheme of facility



Maximum vertical distance between units of 15 m if the condensing unit is located higher than the evaporating unit, and 6 m otherwise.

* Minimum drain pipe slope of 20% for low temperature models.

Teams certificates in factory without need of essays in situ. (Refrigeration Facilities Safety Regulations)

Tropicalized design for ambient temperature of 45°C.

Valve of expansion thermostatic.

Preload of refrigerant included.

Electronic controller

Intarsplit units come standard with the advanced XWING electronic controller.



- AND Multifunction digital control knob distance.
- AND Temperature control with recording of maximum and minimum temperatures.
- AND Quick cooling function and night mode.

Digital condensation control

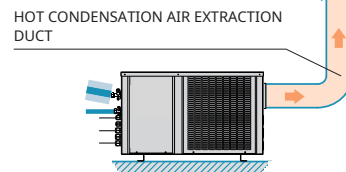
Standard on the entire intarsplit range, it protects the unit against occasional low outside temperatures. For prolonged operation with low outside temperatures, it is recommended to install proportional condensation control (optional on series 3 and 33 onwards).

Crankcase heater (optional)

The inclusion of the optional crankcase heater is recommended in all equipment installed outdoors.

Centrifugal version

The centrifugal intarsplit series equipment incorporates a centrifugal turbine that allows the hot condensation air to be directed to the outside through air ducts.



Electrical interconnections

Intarsplit equipment includes 10 m long electrical interconnections as standard (except series 4 and 40 to 54).

Strain	230 V-I-50 Hz	400 V-III-50 Hz
Probes	4 x 1 mm ²	
Maneuver	2 x 1 mm ²	3 x 1 mm ²
Defrost	2 x 1.5 mm ² + T	4 x 1.5 mm ² + T
Thermostat	2 x 1 mm ²	
Interr. door*	2 x 1 mm ² (+ 2 x 1 mm ² in BT)	
Camera light *	2 x 1 mm ² + T	

* optional not included

semi-compact axial and centrifugal

11

230 VI-50 Hz* / 400 V-III-50 Hz | Medium temperature | R134a/R449A

AXIAL VERSION		COMPRESSOR		REFRIGERATING POWER/CHAMBER VOLUME, ACCORDING TO CHAMBER TEMPERATURE.						POWER ABSORB. NOMINAL (kW)	INTENS. MAXIMUM ABSORB. (TO)	CAUDAL EVAP. (m³/h)	CONNECTION REFRIGERATOR LIQUID GAS	BURDEN REFRIG. (kg)	WEIGHT (kg)	LEVEL PRESSURE SONORA dB(A) _{1m}
				0°C		5°C		10°C								
SERIES/MODEL AXIALS	CV	STRAIN	W	m³	W	m³	W	m³								
R134a	MSH-NY-00 010	3/8	230 VI			788	8.5	945	13	0.46	4.6	300	1/4"-3/8"	< 2.5	37+12	31
	MSH-NY-00 015	1/2	230 VI			1 010	10	1 193	19	0.56	5.6	300	1/4"-3/8"	< 2.5	40+12	29
	MSH-NY-11 015	1/2	230 VI			1 220	12	1 474	23	0.58	5.6	550	1/4"-1/2"	< 2.5	41+16	30
	MSH-NY-11 026	3/4	230 VI			1 533	18	1 827	30	0.82	9.3	550	1/4"-1/2"	< 2.5	48+16	34
	MSH-NY-11 033	1	230 VI			1 790	24	2 116	41	0.93	9.5	550	1/4"-1/2"	< 2.5	50+16	34
	MSH-NY-22 033	1	230 VI			2 368	36	2 846	60	1.06	10.0	1 050	1/4"-5/8"	< 2.5	53+24	35
	MSH-NY-22 053	1 1/2	230 VI *			2 882	48	3 455	73	1.45	12.6	1 050	1/4"-5/8"	< 2.5	63+24	39
	MSH-NY-33 053	1 1/2	230 VI *			3 318	63	4 069	100	1.55	13.2	1 725	1/4"-3/4"	< 10.0	82+45	39
	MSH-NY-33 074	2	230 VI *			4 347	71	5 198	110	1.93	17.2	1 725	1/4"-3/4"	< 10.0	84+45	39
	MSH-NY-43 086	4	400 V-III		66	5 366	100	6 421	165	2.39	14.9	1 725	3/8"-7/8"	< 10.0	107+55	49
	MSH-NY-44 108	5	400 V-III			6 888	140	8 274	220	3.05	19.2	3 100	3/8"-7/8"	< 10.0	109+55	50
	MSH-NY-44 136	6 1/2	400 V-III			8 311	170	9 881	260	3.77	23.2	3 100	3/8"-1 1/8"	< 10.0	112+55	50
R449A	MSH-NG-0 008	1/3	230 VI		5.1	900	8.5	1071	13	0.47	5.1	300	1/4"-3/8"	< 2.5	38+12	32
	MSH-NG-0 010	3/8	230 VI		6.1	1 042	10	1 223	15	0.58	4.8	300	1/4"-3/8"	< 2.5	40+12	30
	MSH-NG-0 012	1/2	230 VI		7.2	1 135	12	1 324	19	0.65	5.6	300	1/4"-3/8"	< 2.5	41+12	32
	MSH-NG-1 014	1/2	230 VI		10	1 313	16	1 564	26	0.79	6.7	550	1/4"-1/2"	< 2.5	44+16	32
	MSH-NG-1 016	5/8	230 VI		12	1 451	18	1 734	30	0.85	7.6	550	1/4"-1/2"	< 2.5	53+16	34
	MSH-NG-1 018	3/4	230 VI		14	1 653	22	1 954	35	1.00	8.9	550	1/4"-1/2"	< 2.5	54+16	35
	MSH-NG-1 024	1	230 VI		16	1 811	24	2 140	41	1.01	11.1	550	1/4"-1/2"	< 2.5	54+16	35
	MSH-NG-2 024	1	230 VI		23	2 424	36	2 896	60	1.27	11.6	1 050	3/8"-5/8"	< 2.5	65+24	36
	MSH-NG-2 026	1 1/4	230 VI *		26	2 640	41	3 131	64	1.36	12.0	1 050	3/8"-5/8"	< 2.5	66+24	38
	MSH-NG-2 034	1 1/2	230 VI *		31	2 985	48	3 516	73	1.80	16.6	1 050	3/8"-5/8"	< 2.5	66+24	40
	MSH-NG-3 034	1 1/2	230 VI *		40	3 674	63	4 364	100	1.67	17.0	1 725	3/8"-5/8"	< 10.0	74+45	39
	MSH-NG-3 038	1 3/4	400 V-III		47	4 060	71	4 786	110	1.53	7.8	1 725	3/8"-5/8"	< 10.0	71+45	40
	MSH-NG-4 048	2	400 V-III		66	5 350	98	6 358	155	2.61	10.5	1 725	3/8"-3/4"	< 10.0	95+45	41
	MSH-NG-4 054	2 1/4	400 V-III		74	5 847	110	6 916	170	2.80	11.0	1 725	3/8"-3/4"	< 10.0	96+45	41

MSH / BSH series

CENTRIFUGAL VERSION			
SERIES/MODEL CENTRIFUGAL	CAUDAL COND. (m ³ /h)	PED ₁₀ (mmca)	CENTRIF.
MSH-CY-00 010	375	12	
MSH-CY-00 015	375	12	
MSH-CY-11 015	575	12	
MSH-CY-11 026	575	12	
MSH-CY-11 033	575	12	
MSH-CY-22 033	1 000	6.5	
MSH-CY-22 053	1 000	6.5	
MSH-CY-33 053	1 500	14	
MSH-CY-33 074	1 500	14	
MSH-CY-43 086	3 500	10	
MSH-CY-44 108	3 500	10	
MSH-CY-44 136	3 500	10	
MSH-CG-0 008	375	12	
MSH-CG-0 010	375	12	
MSH-CG-0 012	375	12	
MSH-CG-1 014	575	12	
MSH-CG-1 016	575	12	
MSH-CG-1 018	575	12	
MSH-CG-1 024	575	12	
MSH-CG-2 024	1 000	6.5	
MSH-CG-2 026	1 000	6.5	
MSH-CG-2 034	1 000	6.5	
MSH-CG-3 034	1 500	14	
MSH-CG-3 038	1 500	14	
MSH-CG-4 048	3 500	10	
MSH-CG-4 054	3 500	10	

230 VI-50 Hz* / 400 V-III-50 Hz | Low temperature | R449A

AXIAL VERSION		COMPRESSOR		REFRIGERATING POWER/CHAMBER VOLUME, ACCORDING TO CHAMBER TEMPERATURE..						POWER ABSORB. NOMINAL (kW)	INTENS. MAXIMUM ABSORB. (TO)	CAUDAL EVAP. (m³/h)	CONNECTION REFRIGERATOR LIQUID GAS	BURDEN REFRIG. (kg)	WEIGHT (kg)	LEVEL PRESSURE SONORA dB(A) _{1m}
SERIES/MODEL AXIALS	CV	STRAIN	- 25°C		- 20°C		- 15°C									
			W	m³	W	m³	W	m³								
R449A	BSH-NG-0 018	5/8	230 VI	422	0.9	1.8	658	3.9	0.60	4.8	300	1/4"-1/2"	< 2.5	41+12	33	
	BSH-NG-1 026	3/4	230 VI	559	2.1	4.2	900	7.3	0.84	8.7	550	1/4"-1/2"	< 2.5	55+16	38	
	BSH-NG-1 034	1 1/4	230 VI	622	3.0	5.9	1 038	10	1.05	11.2	550	1/4"-1/2"	< 2.5	56+16	40	
	BSH-NG-2 034	1 1/4	230 VI	815	4.0	8.0	1 377	14	1.18	11.5	1 050	3/8"-5/8"	< 2.5	66+24	41	
	BSH-NG-2 054	1 3/4	230 VI *	1 074	6.4	13	1 749	22	1.63	17.5	1 050	3/8"-5/8"	< 2.5	79+24	42	
	BSH-NG-2 074	2 1/2	230 VI *	1 300	10	17	2 070	29	1.94	25.5	1 050	3/8"-5/8"	< 2.5	79+24	43	
	BSH-NG-3 074	2 1/2	230 VI *	1 649	15	25	2 699	41	1.94	26.3	1 725	3/8"-5/8"	< 10.0	87+45	43	
	BSH-NG-3 086	3	400 V-III	2 081	19	32	3 037	52	1.88	9.4	1 725	3/8"-5/8"	< 10.0	87+45	40	
	BSH-NG-3 096	3 1/2	400 V-III	2 046	23	37	3 435	62	2.18	12.4	1 725	3/8"-3/4"	< 10.0	85+45	50	
	BSH-NG-4 108	4 1/4	400 V-III	2 851	34	55	4 378	94	3.18	15.5	1 725	3/8"-7/8"	< 10.0	107+45	51	
BSH-NG-4 136	5	400 V-III	3 289	42	67	4 895	110	4.37	17.4	1 725	3/8"-7/8"	< 10.0	107+45	46		

CENTRIFUGAL VERSION			
SERIES/MODEL CENTRIFUGAL	CAUDAL COND. (m ³ /h)	PED ₁₀ (mmca)	
BSH-CG-0 018	375	12	
BSH-CG-1 026	575	12	
BSH-CG-1 034	575	12	
BSH-CG-2 034	1 000	6.5	
BSH-CG-2 054	1 000	6.5	
BSH-CG-2 074	1 000	6.5	
BSH-CG-3 074	1 500	14	
BSH-CG-3 086	1 500	14	
BSH-CG-3 096	1 500	14	
BSH-CG-4 108	3 500	10	
BSH-CG-4 136	3 500	10	

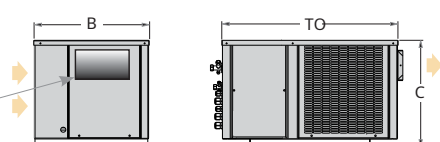
Optional

- Switch to 400 V-III-50 Hz power supply. *
- Crankcase resistance.
- Proportional condensation control:
axial version (N): series 3/33 and 4/43/44
centrifugal version (C): series 4/43/44
- Electronic fans in the evaporator.
- Vertical propulsion (centrifugal equipment).
- R452A refrigerant.
- Other refrigerants.

Dimensions Evaporator



Dimensions Condenser



TUR- MOUTH
BINA (CENTRAL VERSION)
TRIFUGE)

(1) Nominal performance is based on operation with a chamber temperature of 0°C (MT) and -20°C (BT), and an outside temperature of 35°C. Chamber volume estimated according to calculation base conditions (page VI).

(2) Sound level referred to sound pressure level in dB(A), measured in an open field at 10 m distance from the source.

(3) Static pressure available in exhaust ducts.

* Units available in 400 V-III-50 Hz voltage.

Dimensions (mm)	TO	B	C	D	AND	F	Fans evaporator	Mouthpiece turbine
series 0 and 00	600	395	355	407	520	150	1x Ø 172	185 x 115
series 1 and 11	665	435	416	418	600	200	1x Ø 200	185 x 115
series 2 and 22	835	435	500	418	950	200	2x Ø 200	230 x 130
series 3 and 33	925	580	515	510	1 650	200	3x Ø 254	236 x 266
series 4 and 43	1 000	615	585	510	1 650	200	3x Ø 254	305 x 266
series 44	1 000	615	585	550	2 020	260	4x Ø 300	305 x 266

230 VI-50 Hz* / 400 V-III-50 Hz | Medium temperature | R134a/R449A

MSH / BSH series

AXIAL VERSION		COMPRESSOR		REFRIGERATING POWER/CHAMBER VOLUME, ACCORDING TO CHAMBER TEMPERATURE..						POWER ABSORB. NOMINAL (kW)	INTENS. MAXIMUM ABSORB. (TO)	CAUDAL EVAP. (m³/h)	CONNECTION REFRIGERATOR LIQUID GAS	BURDEN REFRIG. (kg)	WEIGHT (kg)	LEVEL PRESSURE SONORA dB(A) ₁₀		
SERIES/MODEL AXIALS	CV	STRAIN	0°C		5°C		10°C											
			W	m³	W	m³	W	m³										
R134a	MSH-QY-30 068	3 1/2	400 V-III		4 646	59	5 513	84	2.00	12.0	2 100	1/4"-3/4"	< 10.0	74+43	48			
	MSH-QY-40 086	4	400 V-III	63	5 418	68	6 500	100	2.35	14.3	2 100	3/8"-7/8"	< 10.0	107+43	49			
	MSH-QY-41 108	5	400 V-III		6 500	80	7 775	110	2.77	17.3	2 700	3/8"-7/8"	< 10.0	109+56	50			
	MSH-QY-42 136	6 1/2	400 V-III		8 773	180	10 474	280	3.85	22.0	4 150	3/8"-1 1/8"	< 10.0	112+72	50			
	MSH-QY-53 171	8	400 V-III		9 535	185	11 520	300	4.25	24.1	5 200	3/8"-1 1/8"	< 10.0	162+89	50			
	MSH-QY-53 215	10	400 V-III		11 435	230	13 740	350	5.01	30.5	6 200	3/8"-1 1/8"	< 10.0	166+94	49			
	MSH-QY-54 271	13	400 V-III		14 760	320	17 420	400	7,13	40.2	8 300	1/2"-1 3/8"	< 10.0	171+118	48			
R449A	MSH-QG-30 034	1 1/2	230 VI *		39	4 054	62	4 797	99	1.61	16.3	2 100	3/8"-5/8"	< 10.0	74+43	39		
	MSH-QG-30 038	1 3/4	400 V-III		46	4 301	70	5 063	110	1.79	7.1	2 100	3/8"-5/8"	< 10.0	71+43	40		
	MSH-QG-40 048	2	400 V-III		67	5 559	99	6 554	159	2.42	9.8	2 100	3/8"-3/4"	< 10.0	95+43	41		
	MSH-QG-40 054	2 1/4	400 V-III		76	6 060	113	7 106	178	2.61	10.3	2 100	3/8"-3/4"	< 10.0	96+43	41		
	MSH-QG-41 060	3	400 V-III		86	7 038	128	8 260	198	3.07	11.3	2 700	1/2"-3/4"	< 10.0	97+56	38		
	MSH-QG-41 068	3 1/2	400 V-III		113	7 581	163	8 866	253	3.44	12.3	2 700	1/2"-3/4"	< 10.0	98+56	39		
	MSH-QG-52 086	4	400 V-III		125	9 542	185	11 320	315	3.87	15.0	4 150	1/2"-7/8"	< 10.0	135+72	49		
	MSH-QG-52 108	5	400 V-III		160	11 011	220	12 991	375	4.90	18.0	4 150	1/2"-7/8"	< 10.0	157+72	47		
	MSH-QG-53 136	6 1/2	400 V-III		190	13 856	260	16 173	430	6.67	21.0	6 200	1/2"-1 1/8"	< 10.0	140+94	46		

VERSION CENTRIFUGE			
SERIES/MODEL CENTRIFUGAL	CAUDAL COND. (m ³ /h)	PED ₍₃₎ (mmca)	
MSH-CQY-30 068	1 500	14	
MSH-CQY-40 086	3 500	10	
MSH-CQY-41 108	3 500	10	
MSH-CQY-42 136	3 500	10	
MSH-CQY-53 171	3 600	10	
MSH-CQY-53 215	3 600	10	
MSH-CQY-54 271	3 600	10	
MSH-CQG-30 034	1 500	14	
MSH-CQG-30 038	1 500	14	
MSH-CQG-40 048	3 500	10	
MSH-CQG-40 054	3 500	10	
MSH-CQG-41 060	3 500	10	
MSH-CQG-41 068	3 500	10	
MSH-CQG-52 086	3 600	10	
MSH-CQG-52 108	3 600	10	
MSH-CQG-53 136	3 600	10	

230 VI-50 Hz* / 400 V-III-50 Hz | Low temperature | R449A

AXIAL VERSION		COMPRESSOR		REFRIGERATING POWER/CHAMBER VOLUME, ACCORDING TO CHAMBER TEMPERATURE„						POWER ABSORB. NOMINAL (kW)	INTENS. MAXIMUM ABSORB. (TO)	CAUDAL EVAP. (m³/h)	CONNECTION REFRIGERATOR LIQUID GAS	BURDEN REFRIG. (kg)	WEIGHT (kg)	LEVEL PRESSURE SONORA dB(A) ₁₀	
SERIES/MODEL AXIALS	CV	STRAIN	-25°C		-20°C		-15°C										
			W	m ₃	W	m ₃	W	m ₃									
R449A	BSH-QG-30 074	2 1/2	230 VI *	2 023	15		25	3 121	41	2.14	25.1	2 100	3/8"-5/8"	< 10.0	87+43	43	
	BSH-QG-30 086	3	400 V-III	2 201	19		32	3 226	52	2.05	9.5	2 100	3/8"-5/8"	< 10.0	73+43	40	
	BSH-QG-30 096	3 1/2	400 V-III	2 354	22		36	3 533	61	2.34	11.2	2 100	3/8"-3/4"	< 10.0	85+43	50	
	BSH-QG-41 108	4 1/4	400 V-III	2 988	34		58	4 656	99	2.94	14.4	2 700	3/8"-7/8"	< 10.0	107+56	51	
	BSH-QG-42 136	5	400 V-III	4 205	51		85	6 092	144	4.16	17.3	4 150	3/8"-7/8"	< 10.0	107+72	46	
	BSH-QG-53 215	7 1/2	400 V-III	5 692	80	7 300	120	8 976	200	6.08	25.0	5 200	1/2"- 1 1/8"	< 10.0	166+89	49	
	BSH-QG-53 271	10	400 V-III	7 329	110		150	10 877	220	7.71	30.0	6 200	1/2"- 1 1/8"	< 10.0	166+94	49	

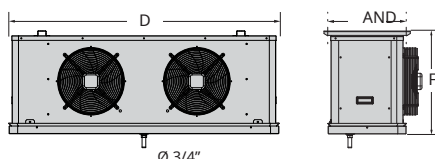
CENTRIFUGAL VERSION			
SERIES/MODEL CENTRIFUGAL	CAUDAL COND. (m ³ /h)	PED ₍₃₎ (mmca)	
BSH-CQG-30 074	1 500	14	
BSH-CQG-30 086	1 500	14	
BSH-CQG-30 096	1 500	14	
BSH-CQG-41 108	3 500	10	
BSH-CQG-42 136	3 500	10	
BSH-CQG-53 215	3 600	10	
BSH-CQG-53 271	3 600	10	

Optional

- Switch to 400 V-III-50 Hz power supply. *
- Crankcase resistance.
- Proportional condensation control:
axial version (Q):
Centrifugal (CQ): 40/41/42/52/53/54 series
- Electronic fans in the evaporator.
- Vertical propulsion (centrifugal equipment).
- Adaptation of air supply to circular duct.
- R452A refrigerant.
- Other refrigerants.

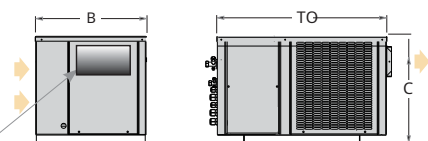
version

Dimensions Evaporator



Dimensions Condenser

MOUTHPIECE
TURBINE
SQUARE
(CEN-VERSION)
TRIFUGE)



Dimensions (mm)	TO	B	C	D	AND	F	Fans evaporator	Mouthpiece turbine
series 30	925	580	515	882	465	576	1x Ø 350	236 x 266
series 40	1 000	615	585	882	465	576	1x Ø 350	305 x 266
series 41	1 000	615	585	1 232	465	576	1x Ø 350	305 x 266
series 42	1 000	615	585	1 534	465	576	2x Ø 350	305 x 266
series 52	1 290	755	656	1 534	465	576	2x Ø 350	305 x 266
series 53	1 290	755	656	1 933	465	576	3x Ø 350	305 x 266
series 54	1 290	755	656	2 432	465	576	4x Ø 350	305 x 266

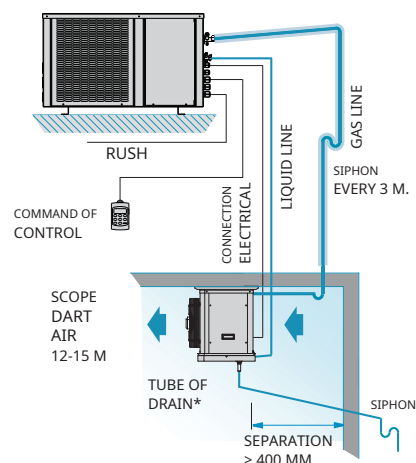
(1) Nominal performance is based on operation with a chamber temperature of 0°C (MT) and -20°C (BT), and an outside temperature of 35°C. Chamber volume estimated according to calculation base conditions (page VI).

(2) Sound level referred to sound pressure level in dB(A), measured in an open field at 10 m distance from the source.

(3) Static pressure available in exhaust ducts.

* Units available in 400 V-III-50 Hz voltage.

Installation detail



* Minimum drain pipe slope of 20% on low temperature models.

230 V-50 Hz* / 400 V-III-50 Hz | High temperature | R134a/R449A

ASH series

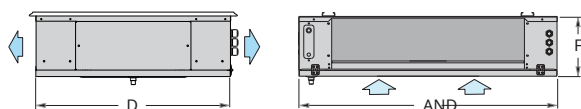
AXIAL VERSION		COMPRESSOR		REFRIGERATING POWER/CHAMBER VOLUME, ACCORDING TO CHAMBER TEMPERATURE..						POWER ABSORB. NOMINAL (kW)	INTENS. MAXIMUM ABSORB. (TO)	CAUDAL EVAP. (m³/h)	CONNECTION REFRIGERATOR LIQUID GAS	BURDEN REFRIG. (kg)	WEIGHT (kg)	LEVEL PRESSURE SONORA dB(A) ₁₀	
SERIES/MODEL AXIALS	CV	STRAIN	9°C		12°C		15°C										
			W	m	W	m	W	m									
R134a	ASH-DY-11 015	1/2	230 VI	1 555	14			1 928	26	0.75	5.9	1 100	1/4"-1/2"	< 2.5	48+32	27	
	ASH-DY-11 026	3/4	230 VI	1 985	18			2 462	33	0.99	9.6	1 100	1/4"-1/2"	< 2.5	51+32	33	
	ASH-DY-11 033	1	230 VI	2 378	22			2 903	40	1.37	9.8	1 100	1/4"-5/8"	< 2.5	51+32	34	
	ASH-DY-22 033	1	230 VI	2 961	28			3 717	51	1.30	10.7	1 800	1/4"-5/8"	< 2.5	54+45	34	
	ASH-DY-22 053	1 1/2	230 VI *	3 738	35			4 625	63	2.04	13.3	1 800	3/8"-3/4"	< 10.0	55+45	39	
	ASH-DY-33 053	1 1/2	230 VI *	4 211	42			5 234	76	2.05	13.6	3 150	3/8"-3/4"	< 10.0	74+65	39	
	ASH-DY-33 074	2	230 VI *	5 502	58			6 830	104	2.74	17.6	3 150	3/8"-3/4"	< 10.0	71+65	39	
	ASH-DY-43 086	4	400 V-III	7 124	74			8 915	131	3.16	15.4	3 150	3/8"-7/8"	< 10.0	107+65	41	
	ASH-DY-43 108	5	400 V-III	8 216	85			10 206	148	3.76	18.4	3 150	3/8"-7/8"	< 10.0	109+65	43	
	ASH-DY-44 108	5	400 V-III	8 873	92			11 062	160	4.08	18.4	5 700	3/8"-7/8"	< 10.0	112+70	43	
ASH-DY-44 136	6 1/2	400 V-III	10 988	114			13 498	195	4.57	22.4	5 700	1/2"-1 1/8"	< 10.0	112+70	45		
R449A	ASH-DG-1 010	3/8	230 VI	1 237	10			1 455	19	0.77	5.2	1 100	1/4"-3/8"	< 2.5	42+32	32	
	ASH-DG-1 012	1/2	230 VI	1 419	12			1 664	22	0.82	6.2	1 100	1/4"-3/8"	< 2.5	43+32	28	
	ASH-DG-2 014	1/2	230 VI	1 829	16			2 109	29	0.95	7.4	1 100	1/4"-1/2"	< 2.5	35+32	32	
	ASH-DG-2 016	5/8	230 VI	2 014	18			2 338	33	1.03	8.3	1 100	1/4"-1/2"	< 2.5	54+32	34	
	ASH-DG-2 018	3/4	230 VI	2 309	22			2 675	38	1.23	9.6	1 100	1/4"-1/2"	< 2.5	55+32	35	
	ASH-DG-2 024	1	230 VI	2 988	27			3 480	47	1.61	11.8	1 800	3/8"-5/8"	< 10.0	55+45	36	
	ASH-DG-3 026	1 1/4	230 VI *	3 434	33			3 996	57	1.76	11.7	1 800	3/8"-5/8"	< 10.0	74+45	38	
	ASH-DG-3 034	1 1/2	230 VI *	4 376	41			5 048	72	2.26	16.5	1 800	3/8"-5/8"	< 10.0	74+45	41	
	ASH-DG-3 038	1 3/4	400 V-III	5 011	47			5 733	85	2.15	7.3	1 800	3/8"-5/8"	< 10.0	71+45	40	
	ASH-DG-4 048	2	400 V-III	6 667	66			7 673	115	2.98	10.2	3 150	1/2"-3/4"	< 10.0	95+65	41	
	ASH-DG-4 054	2 1/4	400 V-III	7 362	73			8 446	125	3.23	10.7	3 150	1/2"-3/4"	< 10.0	96+65	41	
	ASH-DG-4 060	3	400 V-III	8 369	82			9 614	140	3.96	12.2	3 800	1/2"-7/8"	< 10.0	97+65	35	
	ASH-DG-4 068	3 1/2	400 V-III	9 113	89			10 442	150	4.47	13.2	3 800	1/2"-7/8"	< 10.0	98+65	39	

CENTRIFUGAL VERSION			
SERIES/MODEL CENTRIFUGAL	CAUDAL COND. (m³/h)	PED ⁽³⁾ (mmca)	
ASH-CDY-11 015	575	12	
ASH-CDY-11 026	575	12	
ASH-CDY-11 033	575	12	
ASH-CDY-22 033	1 000	6.5	
ASH-CDY-22 053	1 000	6.5	
ASH-CDY-33 053	1 500	14	
ASH-CDY-33 074	1 500	14	
ASH-CDY-43 086	3 500	10	
ASH-CDY-43 108	3 500	10	
ASH-CDY-44 108	3 500	10	
ASH-CDY-44 136	3 500	10	
ASH-CDG-1 010	575	12	
ASH-CDG-1 012	575	12	
ASH-CDG-2 014	1 000	6.5	
ASH-CDG-2 016	1 000	6.5	
ASH-CDG-2 018	1 000	6.5	
ASH-CDG-2 024	1 000	6.5	
ASH-CDG-3 026	1 500	14	
ASH-CDG-3 034	1 850	14	
ASH-CDG-3 038	1 850	14	
ASH-CDG-4 048	3 500	10	
ASH-CDG-4 054	3 500	10	
ASH-CDG-4 060	3 500	10	
ASH-CDG-4 068	3 500	10	

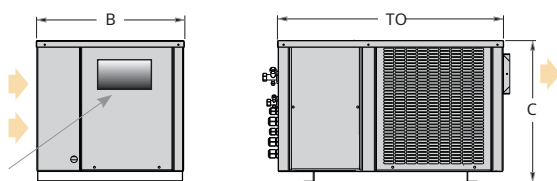
Optional

- Proportional condensation control:
axial version (D): series 3/33 and 4/43/44
centrifugal version (CD): series 4/43/44
- Switch to 400 V-III-50 Hz power supply. *
- Crankcase resistance.
- Vertical propulsion (centrifugal equipment).
- R452A refrigerant.
- Other refrigerants.

Dimensions Evaporator



Dimensions Condenser



TURBINE MOUTH
(CENTRIFUGAL VERSION)

	Dimensions (mm)	TO	B	C	D	AND	F	Fans evaporator	Mouthpiece turbine
R134a	series 11	665	435	416	765	706	250	1x Ø 360	185 x 115
	series 22	835	435	500	765	1 056	250	2x Ø 360	230 x 130
	series 33	925	580	515	765	1 756	250	3x Ø 360	236 x 266
	series 43	1 000	615	585	765	1 756	250	3x Ø 360	305 x 266
	series 44	1 000	615	585	852	2 156	300	3x Ø 450	305 x 266
R449A	series 1	665	435	416	765	706	250	1x Ø 360	185 x 115
	ASH-DG 2014 to 2018	835	435	500	765	706	250	1x Ø 360	230 x 130
	ASH-DG 2024	835	435	500	765	1 056	250	2x Ø 360	230 x 130
	series 3	925	580	515	765	1 056	250	2x Ø 360	236 x 266
	series 4	1 000	615	585	765	1 756	250	3x Ø 360	305 x 266

(1) Nominal performance is based on operation with a chamber temperature of 12°C (AT) and an outside temperature of 35°C. Estimated room volume according to calculation base conditions (page VI).

(2) Sound level referred to sound pressure level in dB(A), measured in an open field at 10 m distance from the source.

(3) Static pressure available in exhaust ducts.

* Units available in 400 V-III-50 Hz voltage.

Air extraction ducts

Recommended dimensions for discharge ducts made of sheet metal, PVC, or glass wool panel, 20 m long (each 90° elbow is equivalent to 5 m in length). For flexible or semi-rigid ducts, it is recommended to use a larger dimension.

AN Series 0: Ø 150 mm.
AN Series 1: Ø 150 mm.
AN Series 2: Ø 200 mm.
AN Series 3: Ø 250 or 200 x 300 mm. Ø
AN Series 4 and 5: 400 or 300 x 400 mm.

For flexible or semi-rigid ducts it is recommended to use a larger dimension.



Factory certified equipment without the need for on-site testing.

(Safety Regulations for Refrigeration Facilities) Silent condensing unit. Tropicalized design for ambient temperature of 50 °C. Expansion valve thermostatic. Proportional condensation control (optional on low profile versions). Refrigerant pre-charge included.

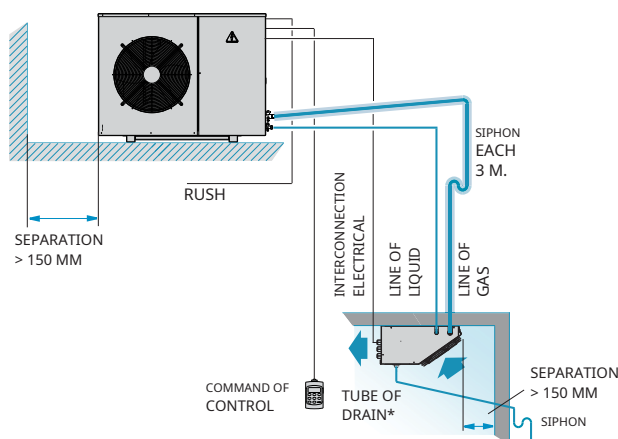
Description

Semi-compact equipment for small and medium-sized cold rooms, consisting of a silent condensing unit and a low-profile evaporator unit, double-flow ceiling or cubic type.

Characteristics

- Power supply 230 VI-50 Hz or 400 V-III-50 Hz.
- Hermetic reciprocating compressor.
- Double acoustic insulation of the compressor.
- Large L-shaped condensation surface (straight in series 0 and 1).
- Low speed condensation fans.
- Proportional condensation control (optional on -N versions).
- High and low pressure switches.
- Exhaust silencer (from 1 HP) and crankcase heater.
- Liquid container.
- Refrigerant pre-charge up to 10 meters of pipe.
- Evaporator: low profile (version -N) or cubic type (version -Q).
- Integrated thermostatic valve and solenoid valve.
- Defrost by electric resistance (except ASF series).
- Stainless steel condensate tray.
- Flare type connections (up to 1/2"-3/4") and service valves.
- Magnetothermal protection.
- Multifunction electronic regulation with remote control and digital condensation control.
- Liquid injection in low temperature models with R449A.

Scheme of facility



Maximum vertical distance between units of 15 m if the condensing unit is located higher than the evaporating unit, and 6 m otherwise.

* Minimum drain pipe slope of 20% for low temperature models.

Electronic controller

Sigilus units come standard with the advanced XWING electronic controller.



AND Multifunction digital remote control.

AND Temperature control with recording of maximum and minimum temperatures.

AND Fast cooling mode and mode night.

Triple acoustic soundproofing

The Sigilus series condensing units incorporate triple acoustic insulation: **AND** Soundproofed compressor compartment separated from the air flow.

AND Hermetic compressor in acoustic jacket and discharge silencer.

AND Low speed silent fans on anti-vibration structure.

Proportional condensation control In the Sigilus series (optional for units with low profile evaporator) we incorporate a proportional condensation control by speed variation for prolonged operations with low outside temperature.

Electrical interconnections to be planned on site

For the interconnection of the condensing and evaporating units, the following cable sections must be provided (hoses not included):

Strain	230 VI-50 Hz	400 V-III-50 Hz
Probes	4 x 1 mm ²	
Maneuver	2 x 1 mm ²	3 x 1 mm ²
Defrost	2 x 1.5 mm ² + T	4 x 1.5 mm ² + T
Thermostat	2 x 1 mm ²	
Interr. door*	2 x 1 mm ² (+ 2 x 1 mm ² in BT)	
Camera light *	2 x 1 mm ² + T	

* optional not included

230 VI-50 Hz* / 400 V-III-50 Hz | Medium temperature | R134a/R449A

MSF/BSF series

SERIES/MODEL		COMPRESSOR		REFRIGERATING POWER/CHAMBER VOLUME, ACCORDING TO CHAMBER TEMPERATURE _{ev}								POWER ABSORB. NOMINAL (kW)	INTENS. MAXIMUM ABSORB. (TO)	VENT. EVAP.	CAUDAL EVAP. (m³/h)	CAUDAL COND. (m³/h)	CONNECTION REFRIGERATOR LIQUID GAS	BURDEN REFRIG. (kg)	WEIGHT (kg)	LEVEL PRESSURE SONORA dB(A) ₁₀
				- 5°C		0°C		5°C		10°C										
		CV	STRAIN	W	m ₃	W	m ₃	W	m ₃	W	m ₃									
R134a	MSF-NY-00 010	3/8	230 VI	497	2.9	637	5.0	788	8.8	945	13	0.41	4.2	1x Ø172	300	350	1/4"-3/8"	< 2.5	46+12	20
	MSF-NY-00 015	1/2	230 VI	653	3.6	832	7.4	1 004	11	1 188	16	0.51	5.2	1x Ø172	300	350	1/4"-3/8"	< 2.5	49+12	19
	MSF-NY-11 015	1/2	230 VI	805	4.7	1 031	10	1 296	14	1 582	28	0.56	5.6	1x Ø200	550	1 700	1/4"-1/2"	< 2.5	57+16	19
	MSF-NY-11 026	3/4	230 VI	1 076	9.0	1 412	16	1 738	25	2 084	40	0.80	9.2	1x Ø200	550	1 700	1/4"-1/2"	< 2.5	65+16	22
	MSF-NY-12 033	1	230 VI	1 475	13	1 859	20	2 289	35	2 741	57	1.02	9.7	2x Ø200	1 050	1 700	1/4"-5/8"	< 2.5	67+24	22
	MSF-NY-12 053	1 1/2	230 VI *	1 811	22	2 347	33	2 872	50	3 439	79	1.42	12.3	2x Ø200	1 050	1 700	1/4"-5/8"	< 2.5	77+24	27
	MSF-NY-13 074	2	230 VI *	2 772	30	3 528	50	4 363	76	5 229	125	1.94	17.2	3x Ø254	1 725	1 700	1/4"-3/4"	< 10.0	79+45	28
	MSF-NY-23 086	4	400 V-III	3 355	39	4 384	65	5 376	108	6 437	160	2.18	14.1	3x Ø254	1 725	3 700	3/8"-7/8"	< 10.0	96+45	39
	MSF-NY-24 108	5	400 V-III	4 347	58	5 649	90	6 920	138	8 316	220	2.83	18.2	4x Ø300	3 100	3 700	3/8"-7/8"	< 10.0	98+45	37
	MSF-NY-24 136	6 1/2	400 V-III	5 486	75	6 899	110	8 363	150	9 949	280	3.55	22.2	4x Ø300	3 100	3 700	3/8"-1 1/8"	< 10.0	101+55	36
MSF-NY-34 171	8	400 V-III	6 080	88	7 613	130	9 240	200	10 978	350	4.16	25.2	4x Ø300	3 100	4 000	3/8"-1 1/8"	< 10.0	140+55	36	
R449A	MSF-NG-0 008	1/3	230 VI	611	2.9	759	5.0	915	8.8	1 103	13	0.43	5.1	1x Ø172	300	350	1/4"-3/8"	< 2.5	47+12	20
	MSF-NG-0 010	3/8	230 VI	739	3.6	894	6.1	1 056	10	1 254	15	0.53	4.8	1x Ø172	300	350	1/4"-3/8"	< 2.5	49+12	21
	MSF-NG-0 012	1/2	230 VI	818	4.7	981	7.4	1 153	12	1 358	21	0.63	5.6	1x Ø172	300	350	1/4"-3/8"	< 2.5	50+12	20
	MSF-NG-1 014	1/2	230 VI	882	8.0	1 095	12	1 322	20	1 585	34	0.77	6.5	1x Ø200	550	1 700	1/4"-1/2"	< 2.5	59+16	20
	MSF-NG-1 016	5/8	230 VI	972	10	1 210	15	1 462	24	1 759	40	0.81	7.4	1x Ø200	550	1 700	1/4"-1/2"	< 2.5	67+16	23
	MSF-NG-1 018	3/4	230 VI	1 397	12	1 649	19	1 915	28	2 245	45	0.94	8.7	1x Ø200	550	1 700	1/4"-1/2"	< 2.5	68+16	24
	MSG-NG-2 024	1	230 VI	1 513	14	1 958	22	2 420	35	2 958	57	1.26	11.1	2x Ø200	1 050	1 700	3/8"-5/8"	< 2.5	82+24	24
	MSF-NG-2 026	1 1/4	230 VI *	1 712	16	2 147	25	2 611	39	3 157	64	1.44	11.5	2x Ø200	1 050	1 700	3/8"-5/8"	< 2.5	83+24	27
	MSF-NG-2 034	1 1/2	230 VI *	2 120	21	2 606	33	3 117	50	3 730	79	1.83	16.1	2x Ø200	1 050	1 700	3/8"-5/8"	< 2.5	83+24	29
	MSF-NG-3 038	1 3/4	400 V-III	2 770	29	3 394	46	4 078	71	4 894	112	1.89	8.1	3x Ø254	1 725	3 200	3/8"-5/8"	< 10.0	82+45	30
	MSF-NG-4 048	2	400 V-III	3 368	39	4 231	62	5 158	92	6 225	145	2.34	9.6	3x Ø254	1 725	3 700	3/8"-3/4"	< 10.0	84+45	30
	MSF-NG-4 054	2 1/4	400 V-III	3 792	47	4 671	70	5 640	105	6 780	160	2.54	10.1	3x Ø254	1 725	3 700	3/8"-3/4"	< 10.0	85+45	30

230 VI-50 Hz* / 400 V-III-50 Hz | Low temperature | R449A

SERIES/MODEL		COMPRESSOR		REFRIGERATING POWER/CHAMBER VOLUME, ACCORDING TO CHAMBER TEMPERATURE _{ev}						POWER ABSORB. NOMINAL (kW)	INTENS. MAXIMUM ABSORB. (TO)	VENT. EVAP.	CAUDAL EVAP. (m³/h)	CAUDAL COND. (m³/h)	CONNECTION REFRIGERATOR LIQUID GAS	BURDEN REFRIG. (kg)	WEIGHT (kg)	LEVEL PRESSURE SONORA dB(A) ₁₀	
				- 25°C		- 20°C		- 15°C											
		CV	STRAIN	W	m ₃	W	m ₃	W	m ₃										
R449A	BSF-NG-0 018	5/8	230 VI	486	1.1	613	23	749	4.1	0.50	4.7	1x Ø172	300	350	1/4"-1/2"	< 2.5	50+12	25	
	BSF-NG-1 026	3/4	230 VI	763	3.2	952	7.0	1 155	13	0.82	8.5	1x Ø200	550	1 700	1/4"-1/2"	< 2.5	67+16	27	
	BSF-NG-2 034	1 1/4	230 VI	930	3.9	1 107	8.1	1 437	15	1.18	11.3	2x Ø200	1 050	1 700	3/8"-5/8"	< 2.5	83+16	30	
	BSF-NG-2 054	1 3/4	230 VI *	1 186	6.8	1 385	13	1 779	23	1.58	17.3	2x Ø200	1 050	1 700	3/8"-5/8"	< 2.5	93+24	32	
	BSF-NG-2 074	2 1/2	230 VI *	1 412	12	1 786	20	2 200	32	1.83	25.3	2x Ø200	1 050	1 700	3/8"-5/8"	< 2.5	93+24	33	
	BSF-NG-3 074	2 1/2	230 VI *	1 676	15	2 168	25	2 680	41	1.94	26.2	3x Ø254	1 725	1 700	3/8"-5/8"	< 10.0	93+45	33	
	BSF-NG-3 086	3	400 V-III	1 995	16	2 490	32	3 014	52	2.21	10.9	3x Ø254	1 725	3 200	3/8"-5/8"	< 10.0	84+45	27	
	BSF-NG-4 096	3 1/2	400 V-III	2 139	19	2 670	39	3 523	68	2.48	12.0	3x Ø254	1 725	3 700	3/8"-3/4"	< 10.0	97+45	40	
	BSF-NG-4 108	4 1/4	400 V-III	2 463	29	3 276	50	4 118	78	2.82	14.6	3x Ø254	1 725	3 700	3/8"-7/8"	< 10.0	97+45	38	
	BSF-NG-4 136	5	400 V-III	2 949	37	3 775	61	4 648	100	3.64	16.8	3x Ø254	1 725	3 700	3/8"-7/8"	< 10.0	100+45	34	

Optional

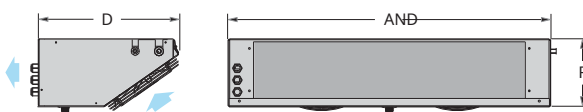
- Proportional condensation control by speed variation (except series 0).
- Switch to 400 V-III-50 Hz power supply. *
- External battery protection grille.
- Electronic fans in the evaporator.
- R452A refrigerant.
- Other refrigerants.

(1) Nominal performance is based on operation with a chamber temperature of 0°C (MT) and -20°C (BT), and an outside temperature of 35°C. Chamber volume estimated according to calculation base conditions (page VI).

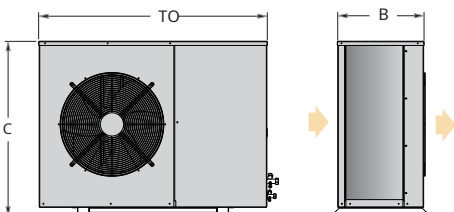
(2) Sound level referred to sound pressure level in dB(A), measured in an open field at 10 m distance from the source.

* Units available in 400 V-III -50 Hz voltage.

Dimensions Evaporator



Dimensions Condenser



Dimensions (mm)	TO	B	C	D	AND	F	Fans evaporator
series 0 and 00	670	305	440	407	520	150	1x Ø 172
series 1 and 11	1 030	373	577	418	600	200	1x Ø 200
series 2 and 12	1 030	373	577	418	950	200	2x Ø 200
series 3 and 13	1 030	373	577	510	1 650	200	3x Ø 254
series 4 and 23	1 080	410	827	510	1 650	200	3x Ø 254
series 24	1 080	410	827	550	2 020	260	4x Ø 300
series 34	1 150	481	1 097	550	2 020	260	4x Ø 300

MSF/BSF series

230 VI-50 Hz* / 400 V-III-50 Hz | Medium temperature | R134a/R449A

SERIES/MODEL		COMPRESSOR		REFRIGERATING POWER/CHAMBER VOLUME, ACCORDING TO CHAMBER TEMPERATURE _{ev}								POWER ABSORB. NOMINAL (kW)	INTENS. MAXIMUM ABSORB. (TO)	VENT. EVAP.	CAUDAL EVAP. (m³/h)	CAUDAL COND. (m³/h)	CONNECTION REFRIGERATOR LIQUID GAS	BURDEN REFRIG. (kg)	WEIGHT (kg)	LEVEL PRESSURE SONORA dB(A) ₁₀	
				- 5°C		0°C		5°C		10°C											
		CV	STRAIN	W	m³	W	m³	W	m³	W	m³										
R134a	MSF-QY-10 068	3 1/2	400 V-III	3 281	42	4 106	60	4 998	69	5 985	110	1.98	12.8	1x Ø350	2 100	3 200	1/4"-3/4"	< 10.0	82+43	36	
	MSF-QY-20 086	4	400 V-III	3 523	45	4 442	65	5 429	75	6 515	120	2.19	14.8	1x Ø350	2 100	3 700	3/8"-7/8"	< 10.0	96+43	39	
	MSF-QY-21 108	5	400 V-III	4 226	58	5 334	81	6 521	130	7 807	210	2.56	16.3	1x Ø350	2 700	3 700	3/8"-7/8"	< 10.0	98+56	37	
	MSF-QY-22 136	6 1/2	400 V-III	5 749	80	7 277	120	8 831	186	10 553	290	3.63	21.1	2x Ø350	4 150	3 700	3/8"-1 1/8"	< 10.0	101+72	36	
	MSF-QY-33 171	8	400 V-III	6 746	100	8 484	172	10 295	197	12 306	354	4.42	24.1	2x Ø350	5 200	4 000	3/8"-1 1/8"	< 10.0	140+89	39	
	MSF-QY-33 215	10	400 V-III	8 426	130	10 563	241	12 857	268	15 419	440	5.24	30.5	3x Ø350	6 200	6 500	3/8"-1 1/8"	< 10.0	147+94	35	
	MSF-QY-34 271	13	400 V-III	11 099	165	13 776	256	16 622	346	19 777	550	7.19	40.2	4x Ø350	8 300	6 500	1/2"-1 3/8"	< 10.0	152+118	35	
R449A	MSF-QG-10 038	1 3/4	400 V-III	3 280	31	3 919	48	4 625	75	5 472	120	1.77	7.4	1x Ø350	2 100	3 200	3/8"-5/8"	< 10.0	82+43	30	
	MSF-QG-20 048	2	400 V-III	3 964	43	4 736	63	5 572	95	6 605	150	2.21	8.8	1x Ø350	2 100	3 700	3/8"-3/4"	< 10.0	84+43	30	
	MSF-QG-20 054	2 1/4	400 V-III	4 395	48	5 197	72	6 078	110	7 158	170	2.38	9.4	1x Ø350	2 100	3 700	3/8"-3/4"	< 10.0	85+43	30	
	MSF-QG-21 060	3	400 V-III	5 081	61	6 032	89	7 055	130	8 328	200	2.84	10.4	1x Ø350	2 700	3 700	3/8"-3/4"	< 10.0	88+56	29	
	MSF-QG-21 068	3 1/2	400 V-III	5 519	78	6 528	110	7 601	160	8 942	250	3.21	11.4	1x Ø350	2 700	3 700	1/2"-3/4"	< 10.0	88+56	29	
	MSF-QG-32 086	4	400 V-III	6 787	91	8 180	130	9 707	190	11 545	300	4.13	13.6	2x Ø350	4 150	4 000	1/2"-7/8"	< 10.0	115+72	39	
	MSF-QG-32 108	5	400 V-III	8 623	125	10 181	175	11 880	255	13 969	400	5.05	16.7	2x Ø350	4 150	6 500	1/2"-7/8"	< 10.0	120+72	37	
	MSF-QG-43 136	6 1/2	400 V-III	11 105	160	13 146	220	15 399	320	18 145	500	6.63	21.5	3x Ø350	6 200	7 000	1/2"-1 1/8"	< 10.0	135+72	36	
	MSF-QG-44 160	8	400 V-III	11 597	170	14 009	230	16 660	340	19 806	530	7.59	26.0	4x Ø350	8 300	7 000	5/8"-1 1/8"	< 10.0	157+72	45	

230 VI-50 Hz* / 400 V-III-50 Hz | Low temperature | R449A

SERIES/MODEL		COMPRESSOR		REFRIGERATING POWER/CHAMBER VOLUME, ACCORDING TO CHAMBER TEMPERATURE ₁								POWER ABSORB. NOMINAL (kW)	INTENS. MAXIMUM ABSORB. (TO)	VENT. EVAP.	CAUDAL EVAP. (m³/h)	CAUDAL COND. (m³/h)	CONNECTION REFRIGERATOR LIQUID GAS	BURDEN REFRIG. (kg)	WEIGHT (kg)	LEVEL PRESSURE SONORA dB(A) ₁₀	
				- 25°C		- 20°C		- 15°C													
		CV	STRAIN	W	m ₃	W	m ₃	W	m ₃												
R449A	BSF-QG-10 074	2 1/2	230 VI *	2 052	15	2 562	25	3 015	44	2.13	25.1	1x Ø350	2 100	1 700	3/8"-5/8"	< 10.0	93+43	33			
	BSF-QG-10 086	3	400 V-III	2 302	17	2 837	32	3 410	56	2.06	9.8	1x Ø350	2 100	3 200	3/8"-5/8"	< 10.0	84+43	27			
	BSF-QG-20 096	3 1/2	400 V-III	2 456	20	3 135	43	3 881	74	2.39	11.5	1x Ø350	2 100	3 700	3/8"-3/4"	< 10.0	97+43	40			
	BSF-QG-21 108	4 1/4	400 V-III	3 023	28	3 883	50	4 772	86	2.76	13.5	1x Ø350	2 700	3 700	3/8"-7/8"	< 10.0	97+56	38			
	BSF-QG-22 136	5	400 V-III	4 159	53	5 116	83	6 146	130	4.02	16.4	2x Ø350	5 200	3 700	1/2"-1 1/8"	< 10.0	97+72	34			
	BSF-QG-33 215	7 1/2	400 V-III	5 970	80	7 605	130	9 334	200	5.63	25.8	3x Ø350	6 200	6 500	1/2"-1 1/8"	< 10.0	147+94	40			
	BSF-QG-34 271	10	400 V-III	8 005	120	9 839	185	11 798	230	7.15	28.2	4x Ø350	8 300	6 500	1/2"-1 3/8"	< 10.0	147+118	40			

Optional

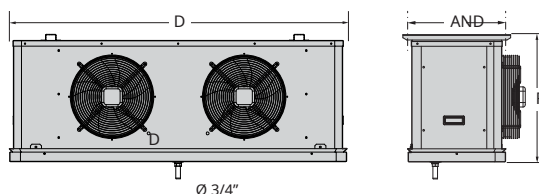
- Switch to 400 V-III-50 Hz power supply. *
- External battery protection grille.
- Electronic fans in the evaporator.
- R452A refrigerant.
- Other refrigerants.

(1) The nominal performances refer to operation with a chamber temperature of 0°C (MT) and -20°C (BT), and outside temperature of 35°C. Estimated chamber volume according to calculation base conditions (page VI).

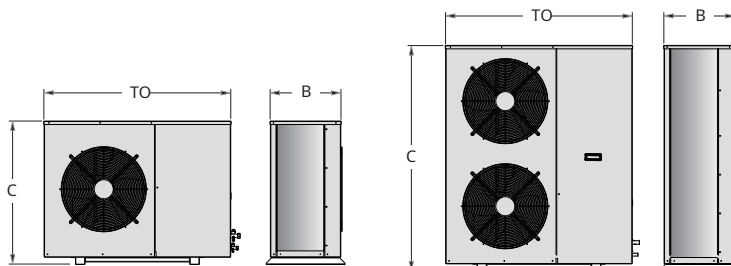
(2) Sound level referred to sound pressure level in dB(A), measured in an open field at 10 m distance from the source.

* Units available in 400 V-III-50 Hz voltage.

Dimensions Evaporator



Dimensions Condenser



Dimensions (mm)	TO	B	C	D	AND	F
series 10	1 030	373	577	882	465	576
series 20	1 080	410	827	882	465	576
series 21	1 080	410	827	1 232	465	576
series 22	1 080	410	827	1 534	465	576
series 32	1 150	481	1 097	1 534	465	576
series 33	1 150	481	1 097	1 933	465	576
series 34	1 150	481	1 097	2 432	465	576
series 43	1 150	481	1 347	1 933	465	576
series 44	1 150	481	1 347	2 432	465	576

ASF series

230 VI-50 Hz* / 400 V-III-50 Hz | High temperature | R134a/R449A

SERIES/MODEL		COMPRESSOR		REFRIGERATING POWER/CHAMBER VOLUME, ACCORDING TO CHAMBER TEMPERATURE...						POWER ABSORB. NOMINAL (kW)	INTENS. MAXIMUM ABSORB. (TO)	CAUDAL EVAP. (m³/h)	CAUDAL COND. (m³/h)	FRIDGE CONNECTION- RIFIC LIQUID GAS	BURDEN REFRIG. (kg)	WEIGHT (kg)	LEVEL PRESSURE SONORA dB(A) ₂₀	
				+ 9°C		+ 12°C		+ 15°C										
		CV	STRAIN	W	m ₃	W	m ₃	W	m ₃									
R134a	ASF-DY-11 015	1/2	230 VI	1 687	16	1 922	21	2 160	29	0.69	4.7	1 100	1 700	1/4"-1/2"	< 2.5	57+32	20	
	ASF-DY-11 026	3/4	230 VI	2 342	23	2 678	30	2 977	41	1.05	8.4	1 100	1 700	1/4"-1/2"	< 2.5	65+32	22	
	ASF-DY-12 033	1	230 VI	2 840	27	3 176	36	3 533	48	1.33	10.4	1 800	1 700	1/4"-5/8"	< 10.0	67+45	22	
	ASF-DY-13 053	1 1/2	230 VI *	4 226	42	4 730	56	5 271	72	2.04	13.6	3 150	1 700	3/8"-3/4"	< 10.0	77+65	27	
	ASF-DY-13 074	2	230 VI *	6 053	62	6 825	83	7 634	112	2.61	17.6	3 150	3 200	3/8"-3/4"	< 10.0	79+65	28	
	ASF-DY-23 086	4	400 V-III	7 151	75	8 033	99	8 957	131	2.90	14.4	3 150	3 700	3/8"-7/8"	< 10.0	96+65	39	
	ASF-DY-24 108	5	400 V-III	8 936	99	10 028	122	11 146	165	3.80	17.5	5 700	3 700	3/8"-7/8"	< 10.0	98+70	37	
	ASF-DY-24 136	6 1/2	400 V-III	11 093	128	12 332	168	13 645	224	5.00	21.2	5 700	3 700	1/2"-1 1/8"	< 10.0	98+70	36	
	ASF-DY-34 171	8	400 V-III	13 424	146	14 989	186	16 669	251	5.88	25.2	5 700	6 500	1/2"-1 1/8"	< 10.0	120+70	40	
	ASF-DY-44 215	10	400 V-III	15 771	171	17 593	218	19 546	294	6.61	30.2	5 700	7 000	1/2"-1 3/8"	< 10.0	120+70	40	
R449A	ASF-DG-1 016	5/8	230 VI	2 161	19	2 387	25	2 635	35	0.99	7.5	1 100	1 700	1/4"-1/2"	< 2.5	67+32	23	
	ASF-DG-1 018	3/4	230 VI	2 462	23	2 709	30	2 961	42	1.18	8.8	1 100	1 700	1/4"-1/2"	< 2.5	68+32	24	
	ASF-DG-1 024	1	230 VI	3 225	29	3 539	39	3 879	51	1.53	11.3	1 800	1 700	3/8"-5/8"	< 10.0	82+45	24	
	ASF-DG-1 026	1 1/4	230 VI *	3 709	35	4 078	46	4 466	63	1.75	12.0	1 800	3 200	3/8"-5/8"	< 10.0	83+45	27	
	ASF-DG-1 034	1 1/2	230 VI *	4 607	43	5 046	58	5 494	77	2.24	16.6	1 800	3 200	3/8"-5/8"	< 10.0	83+45	29	
	ASF-DG-1 038	1 3/4	400 V-III	5 393	52	5 885	68	6 410	91	2.20	7.8	3 150	3 200	3/8"-5/8"	< 10.0	82+65	30	
	ASF-DG-2 048	2	400 V-III	6 722	67	7 343	87	7 962	115	2.76	9.3	3 150	3 700	1/2"-3/4"	< 10.0	84+65	30	
	ASF-DG-2 054	2 1/4	400 V-III	7 447	75	8 113	97	8 793	130	3.00	9.8	3 150	3 700	1/2"-3/4"	< 10.0	85+65	30	
	ASF-DG-3 060	3	400 V-III	8 824	94	9 673	115	10 551	155	3.60	11.9	3 150	6 500	1/2"-7/8"	< 10.0	88+65	29	
	ASF-DG-3 068	3 1/2	400 V-III	9 662	98	10 578	125	11 512	165	4.19	12.9	3 150	6 500	1/2"-7/8"	< 10.0	88+65	29	
	ASF-DG-4 086	4	400 V-III	11 687	120	12 829	155	14 001	205	4.90	15.2	5 700	7 000	5/8"-1 1/8"	< 10.0	115+70	39	
	ASF-DG-4 108	5	400 V-III	14 416	150	15 702	190	17 068	255	6.40	18.2	5 700	7 000	5/8"-1 1/8"	< 10.0	120+70	37	

Optional

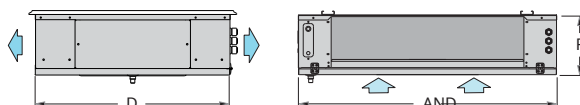
- Proportional condensation control by speed variation (already included in series 2/23 and higher).
- Switch to 400 V-III-50 Hz power supply. *
- External battery protection grille.
- R452A refrigerant.
- Other refrigerants.

(1) Nominal performance is based on operation with a chamber temperature of 12°C (AT) and an outside temperature of 35°C. Estimated room volume according to calculation base conditions (page VI).

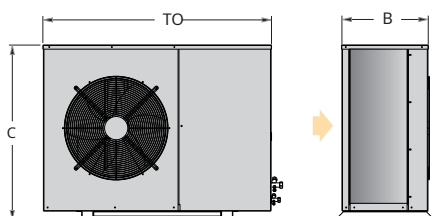
(2) Sound level referred to sound pressure level in dB(A), measured in an open field at 10 m distance from the source.

* Units available in 400 V-III-50 Hz voltage.

Dimensions Evaporator



Dimensions Condenser



	Dimensions (mm)	TO	B	C	D	AND	F	Fans evaporator
R134a	series 11	1030	373	577	762	706	250	1x Ø 360
	series 12	1030	373	577	762	1056	250	2x Ø 360
	series 13	1030	373	577	762	1756	250	3x Ø 360
	series 23	1080	410	827	762	1756	250	3x Ø 360
	series 24	1080	410	827	852	2156	300	3x Ø 450
	series 34	1150	481	1097	852	2156	300	3x Ø 450
R449A	series 44	1150	481	1347	852	2156	300	3x Ø 450
	ASF-DG-1016 and 1018	1030	373	577	762	706	250	1x Ø 360
	ASF-DG-1024 to 1034	1030	373	577	762	1056	250	2x Ø 360
	ASF-DG-1038	1030	373	577	762	1756	250	3x Ø 360
	series 2	1080	410	827	762	1756	250	3x Ø 360
	series 3	1150	481	1097	762	1756	250	3x Ø 360
	series 4	1150	481	1347	852	2156	300	3x Ø 450



Quasi-static evaporator with very low speed double flow, specially designed for meat preservation.
Factory certified equipment without the need for on-site testing. (Safety Regulations for Refrigeration Installations)
Refrigerant pre-charge included.

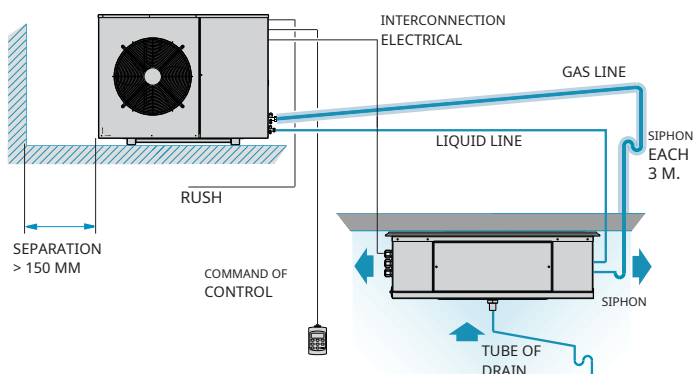
Description Semi-compact medium-temperature refrigeration units consisting of a silent, horizontal or centrifugal motor-condensing unit and a quasi-static ceiling-type evaporator unit.

- Characteristics**
- Power supply 230 V-50 Hz or 400 V-III-50 Hz.
 - Hermetic reciprocating compressor.
 - Quasi-static double air flow ceiling evaporator with axial fans regulated at very low speed.
 - High and low pressure switches.
 - Solenoid valve.
 - Expansion by thermostatic valve.
 - Defrost by electric resistors.
 - Stainless steel condensate tray.
 - Flare type connections (up to 1/2"-3/4") and service valves.
 - Magnetothermal protection.
 - Liquid container.
 - Refrigerant pre-charge for up to 10 meters of pipe.
 - Multifunction electronic regulation with remote control and digital condensation control.
 - Liquid injection into low temperature equipment with R449A.

MSF-U version Equipment composed of a silent motor-condensing unit and a quasi-static ceiling-type evaporator unit.

MSH-CU version Equipment composed of a centrifugal motor-condensing unit and a quasi-static ceiling-type evaporator unit.

Scheme of facility



Maximum vertical distance between units of 15 m if the condensing unit is located higher than the evaporating unit, and 6 m otherwise.

Meat preservation

Quasi-static equipment, thanks to the configuration of its evaporator units, is especially suitable for meat preservation chambers at around 0 °C.

Dual air flow evaporators incorporate fans adjusted to a minimum rotation speed to simulate air circulation by natural convection just like a static type evaporator.

In this way, a minimum air speed is obtained to avoid the loss of moisture in the product, while maintaining adequate relative humidity inside the chamber to prevent bacterial proliferation on the surface of the product.



Electronic controller

Sigilus units come standard with the advanced XWING electronic controller.

AN Multifunction digital remote control.

AN Temperature control with recording of maximum and minimum temperatures.

AN Quick cooling function and night mode.

Crankcase resistance

Standard on all Sigilus MSF units and optional on MSH series. Recommended for outdoor installations.

Electrical interconnections

The following interconnection cable sections must be provided on site, included in the factory in MSH-CU series with 10 m length (except series 4/43/44).

Strain	230 V-50 Hz	400 V-III-50 Hz
Probes	4 x 1 mm ²	
Maneuver	3 x 1 mm ²	
Descartat	2 x 1.5 mm ² + T	4 x 1.5 mm ² + T
Thermostat	2 x 1 mm ²	
Interr. door*	2 x 1 mm ²	
Camera light *	2 x 1 mm ² + T	

* optional not included

230 VI-50 Hz* / 400 V-III-50 Hz | Medium temperature - Quasi-static | R134a/R449A

MSF-U / MSH-CU series

SERIES/MODEL		COMPRESSOR		REFRIGERATING POWER/CHAMBER VOLUME, ACCORDING TO CHAMBER TEMPERATURE...								POWER ABSORB. NOMINAL (kW)	INTENS. MAXIMUM ABSORB. (TO)	CAUDAL EVAP. (m³/h)	CAUDAL COND. (m³/h)	FRIDGE CONNECTION- RIFIC LIQUID GAS	BURDEN REFRIG. (kg)	WEIGHT (kg)	LEVEL PRESSURE SONORA dB(A) ₁₀	
				- 5°C		+ 0°C		+ 5°C		+ 10°C										
		CV	STRAIN	W	m³	W	m³	W	m³	W	m³									
R134a	MSF-UY-11 015	1/2	230 VI	842	5.1	1 075	11	1 328	17	1 615	30	0.59	5.7	600	1 700	1/4"-1/2"	< 2.5	57+32	20	
	MSF-UY-11 026	3/4	230 VI	1 145	7.6	1 449	15	1 785	24	2 153	41	0.83	9.4	600	1 700	1/4"-1/2"	< 2.5	65+32	22	
	MSF-UY-12 033	1	230 VI	1 428	12	1 764	20	2 147	34	2 562	53	0.96	10.0	700	1 700	1/4"-5/8"	< 2.5	67+45	22	
	MSF-UY-13 053	1 1/2	230 VI *	2 100	22	2 657	40	3 255	56	3 938	86	1.50	12.6	1325	1 700	1/4"-3/4"	< 10.0	77+65	27	
	MSF-UY-13 074	2	230 VI *	2 741	30	3 434	48	4 190	74	5 009	120	1.86	16.9	1325	1 700	1/4"-3/4"	< 10.0	79+65	28	
	MSF-UY-23 086	4	400 V-III	3 308	40	4 158	62	5 114	99	6 132	154	2.08	13.4	1325	3 700	3/8"-7/8"	< 10.0	96+65	39	
	MSF-UY-24 108	5	400 V-III	4 431	54	5 576	87	6 825	134	8 243	209	2.74	16.9	2600	3 700	3/8"-7/8"	< 10.0	98+65	37	
	MSF-UY-24 136	6 1/2	400 V-III	5 444	72	6 815	108	8 306	162	10 038	268	3.44	20.9	2600	3 700	3/8"-1 1/8"	< 10.0	101+65	36	
MSF-UY-34 171	8	400 V-III	11 151	153	7 539	123	9 293	181	11 146	299	4.06	23.9	2600	4 000	3/8"-1 1/8"	< 10.0	140+65	40		
R449A	MSF-UG-1 014	1/2	230 VI	1 082	7.9	1 339	13	1 597	21	1 906	35	0.81	6.6	600	1 700	1/4"-1/2"	< 2.5	59+32	20	
	MSF-UG-1 016	5/8	230 VI	1 215	9.5	1 483	15	1 772	25	2 101	40	0.89	7.5	600	1 700	1/4"-1/2"	< 2.5	67+32	23	
	MSF-UG-1 018	3/4	230 VI	1 421	12	1 720	19	2 050	30	2 410	48	1.03	8.8	600	1 700	1/4"-1/2"	< 2.5	68+32	24	
	MSF-UG-1 024	1	230 VI	1 648	15	1 998	24	2 390	37	2 812	59	1.19	11.0	700	1 700	3/8"-5/8"	< 10.0	82+43	24	
	MSF-UG-1 026	1 1/4	230 VI *	1 833	18	2 225	27	2 637	42	3 090	66	1.31	11.4	700	1 700	3/8"-5/8"	< 10.0	83+43	27	
	MSF-UG-1 034	1 1/2	230 VI *	2 235	23	2 699	35	3 193	54	3 739	84	1.84	16.0	700	1 700	3/8"-5/8"	< 10.0	83+43	29	
	MSF-UG-1 038	1 3/4	400 V-III	2 833	31	3 451	47	4 130	72	4 882	115	1.85	7.4	1325	3 200	3/8"-5/8"	< 10.0	82+63	30	
	MSF-UG-2 048	2	400 V-III	3 437	41	4 192	62	4 988	92	5 885	145	2.27	8.9	1325	3 700	3/8"-3/4"	< 10.0	84+63	30	
	MSF-UG-2 054	2 1/4	400 V-III	3 784	47	4 600	70	5 447	105	6 426	160	2.38	9.4	1325	3 700	3/8"-3/4"	< 10.0	85+63	30	
	MSF-UG-2 060	3	400 V-III	4 447	58	5 355	84	6 334	125	7 446	190	2.90	10.4	1325	3 700	3/8"-3/4"	< 10.0	88+63	29	
	MSF-UG-2 068	3 1/2	400 V-III	4 825	64	5 794	93	6 834	135	8 017	205	3.35	11.4	1325	3 700	1/2"-3/4"	< 10.0	88+63	29	
	MSF-UG-3 086	4	400 V-III	6 027	83	7 257	120	8 579	175	10 060	270	4.23	13.9	2600	4 000	1/2"-7/8"	< 10.0	115+66	39	

(1) Nominal performance is based on operation with a chamber temperature of 0°C and an outside temperature of 35°C. Chamber volume estimated according to calculation base conditions (page VI).

(2) Sound level referred to sound pressure level in dB(A), measured in an open field at 10 m distance from the source.

* Units available in 400 V-III-50 Hz voltage.

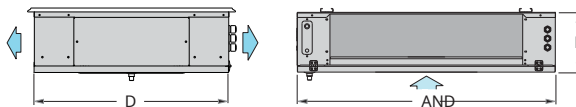
Optional

- Proportional condensation control by speed variation (included in MSF 2/23 series and higher).
- Switch to 400 V-III-50 Hz power supply. *
- External battery protection grille.
- R452A refrigerant.
- Other refrigerants.

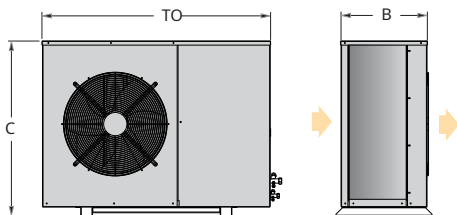
Centrifugal version, MSH-CU series

Quasi-static equipment is also available in a version with centrifugal condenser.

Dimensions Evaporator



Dimensions Condenser



	Dimensions (mm)	TO	B	C	D	AND	F	Fans evaporator
R134a	series 11	1030	373	577	762	706	250	1x Ø 360
	series 12	1030	373	577	762	1056	250	1x Ø 360
	series 13	1030	373	577	762	1756	250	2x Ø 360
	series 23	1080	410	827	762	1756	250	2x Ø 360
	series 24	1080	410	827	852	2156	300	2x Ø 450
	series 34	1150	481	1097	852	2156	300	2x Ø 450
R449A	MSF-UG-1014 to 1018	1030	373	577	762	706	250	1x Ø 360
	MSF-UG-1024 to 1034	1030	373	577	762	1056	250	1x Ø 360
	MSF-UG-1038	1030	373	577	762	1756	250	2x Ø 360
	MSF-UG-2048 to 2068	1080	410	827	762	1756	250	2x Ø 360
	MSF-UG-3086	1150	481	1097	852	2156	300	2x Ø 450

SERIES/MODEL		CV	P.REFRIGERATOR		
			0°C/ 35°C		
			W	m ₃	
R134a	MSH-CUY-11015	1/2	1026	10	
	MSH-CUY-11026	3/4	1281	12	
	MSH-CUY-11033	1	1517	15	
	MSH-CUY-22033	1	1811	22	
	MSH-CUY-22053	1 1/2	2174	28	
	MSH-CUY-33053	1 1/2	2657	35	
	MSH-CUY-33074	2	3402	47	
	MSH-CUY-43086	4	4153	70	
	MSH-CUY-43108	5	5219	84	
	MSH-CUY-44108	5	5555	89	
	MSH-CUY-44136	6 1/2	6773	108	
R449A	MSH-CUG-1014	1/2	1226	12	
	MSH-CUG-1016	5/8	1349	13	
	MSH-CUG-1018	3/4	1545	16	
	MSH-CUG-2024	1	1978	23	
	MSH-CUG-2026	1 1/4	2184	27	
	MSH-CUG-2034	1 1/2	2627	34	
	MSH-CUG-3038	13/4	3265	44	
	MSH-CUG-4048	2	4182	62	
	MSH-CUG-4054	4/21	4590	69	
	MSH-CUG-4060	3	5345	84	
	MSH-CUG-4068	3 1/2	5783	93	



Double flow ceiling type evaporator, sized for high relative humidity applications.

Passive control of humidity
(regulation between 60% and 95%)*.

Factory certified equipment without the need for on-site testing.
(Regulation Security of Refrigeration Facilities)

Refrigerant pre-charge included.

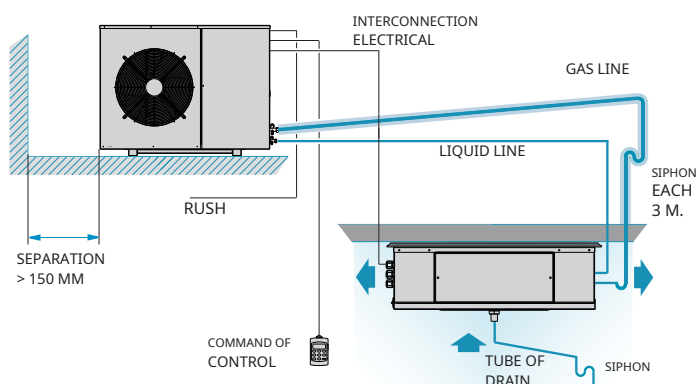
Description Semi-compact refrigeration equipment with humidity control, consisting of a silent or centrifugal motor-condensing unit and a ceiling-type evaporator unit with double air flow, sized for applications with high relative humidity.

- Characteristics**
- Power supply 230 VI-50 Hz or 400 V-III-50 Hz.
 - Hermetic reciprocating compressor.
 - High and low pressure switches.
 - Ceiling evaporator with double air flow sized for relative humidity regulation from 60% to 95%*.
 - Solenoid valve and thermostatic expansion valve integrated in the evaporator.
 - Air defrost.
 - Stainless steel condensate tray.
 - Flare type connections (up to 1/2"-3/4") and service valves.
 - Magnetothermal protection.
 - Liquid container.
 - Refrigerant pre-charge for up to 10 meters of pipe.
 - Multifunction electronic regulation with temperature and humidity control and remote control.
 - Liquid injection into low temperature equipment with R449A.

HSF-D version Equipment composed of a silent motor-condensing unit and a high relative humidity double-flow evaporator unit.

HSH-CD version Equipment composed of a centrifugal motor-condensing unit and a high relative humidity double flow evaporator unit

Scheme of facility



Maximum vertical distance between units of 15 m if the condensing unit is located higher than the evaporating unit, and 6 m otherwise.

Conservation at controlled relative humidity

The preservation of certain products, such as fruits, vegetables or cut flowers, requires control of the relative humidity in the chamber within a certain range.

These units, adjusted for high relative humidity, are especially suitable for fruit and vegetable conservation chambers.

The evaporators have a double air supply through oversized coils to achieve a high level of relative humidity inside the chamber of around 95%, thus avoiding the loss of moisture and weight of the product.

Electronic temperature and humidity control

The equipment incorporates advanced electronic regulation for controlling the temperature and humidity inside the chamber.

ANMultifunction digital remote control with temperature and relative humidity display.

ANRelative humidity control in the regulation range of 60% to 95%*.

ANActive humidification with steam larkets and dehumidification and stove kits are optionally integrated.

* Humidity regulation in the chamber is carried out passively, acting on the evaporator ventilation flow, without adding water vapour. The actual humidity regulation range depends largely on the conditions of the chamber, external absolute humidity and type of product.

Electrical interconnections

The following interconnection cable sections must be provided on site (included from the factory in HSH series with 10 m length).

Strain	230 VI-50 Hz	400 V-III-50 Hz
Probes	2 x 1 mm ² + 2 x 1 mm ²	
Maneuver *	3 x 1 mm ² + T	6 x 1 mm ² + T*
Thermostat	2 x 1 mm ²	

* Electrical interconnections for maneuvering models HSF-DY-14 074 to 24 136, and HSF-DG-3 086.

230 VI-50 Hz* / 400 V-III-50 Hz | Medium temperature - Humidity control | R134a/R449A

HSF-D / HSH-CD series

SERIES/MODEL		COMPRESSOR		REFRIGERATING POWER/CHAMBER VOLUME, ACCORDING TO CHAMBER TEMPERATURE ₁₀						POWER ABSORB. NOMINAL (kW)	INTENS. MAXIMUM ABSORB. (TO)	CAUDAL EVAP. (m³/h)	CAUDAL COND. (m³/h)	FRIDGE CONNECTION- RIFIC LIQUID GAS	BURDEN REFRIG. (kg)	WEIGHT (kg)	LEVEL PRESSURE SONORA dB(A) ₁₀	
				0°C HR95%		5°C HR95%		10°C HR95%										
		CV	STRAIN	W	m ₃	W	m ₃	W	m ₃									
R134a	HSF-DY-12 015	1/2	230 VI	1 220	13	1 544	22	1 906	38	0.74	6.5	1 800	1 700	1/4"-1/2"	< 2.5	57+32	20	
	HSF-DY-12 026	3/4	230 VI	1 701	19	2 116	32	2 594	53	1.06	10.2	1 800	1 700	1/4"-1/2"	< 2.5	65+32	22	
	HSF-DY-13 033	1	230 VI	2 105	25	2 620	43	3 192	73	1.30	11.0	3 150	1 700	1/4"-1/2"	< 10.0	67+45	22	
	HSF-DY-13 053	1 1/2	230 VI *	2 814	37	3 486	64	4 237	103	1.90	13.6	3 150	1 700	1/4"-5/8"	< 10.0	77+65	27	
	HSF-DY-14 074	2	230 VI *	3 980	57	4 977	91	6 090	148	2.57	17.7	5 700	1 700	1/4"-3/4"	< 10.0	79+65	28	
	HSF-DY-24 086	4	400 V-III	5 465	56	6 773	134	8 311	217	2.87	14.5	5 700	3 700	3/8"-7/8"	< 10.0	96+65	39	
	HSF-DY-24 108	5	400 V-III	6 389	102	7 865	158	9 713	263	3.40	17.5	5 700	3 700	3/8"-7/8"	< 10.0	98+65	37	
HSF-DY-24 136	6 1/2	400 V-III	7 985	136	9 870	202	11 960	331	4.44	21.5	5 700	3 700	3/8"-1 1/8"	< 10.0	101+70	36		
R449A	HSF-DG-1 014	1/2	230 VI	1 530	15	1 801	25	2 112	41	0.85	6.6	1 100	1 700	1/4"-1/2"	< 2.5	59+32	20	
	HSF-DG-1 016	5/8	230 VI	1 708	18	2 015	29	2 378	47	0.93	7.5	1 100	1 700	1/4"-1/2"	< 2.5	67+32	23	
	HSF-DG-1 018	3/4	230 VI	2 162	24	2 582	38	3 036	62	1.22	9.1	1 800	1 700	1/4"-1/2"	< 2.5	68+45	24	
	HSF-DG-1 024	1	230 VI	2 461	30	2 945	46	3 478	75	1.40	11.3	1 800	1 700	3/8"-5/8"	< 10.0	82+45	24	
	HSF-DG-1 026	1 1/4	230 VI *	2 798	35	3 289	54	3 849	86	1.53	16.3	1 800	1 700	3/8"-5/8"	< 10.0	83+45	27	
	HSF-DG-1 034	1 1/2	230 VI *	3 188	43	3 734	64	4 361	100	2.09	5.9	1 800	1 700	3/8"-5/8"	< 10.0	83+45	29	
	HSF-DG-1 038	1 3/4	400 V-III	4 130	55	4 905	85	5 760	135	2.02	7.8	3 150	3 200	3/8"-5/8"	< 10.0	82+65	30	
	HSF-DG-2 048	2	400 V-III	5 250	76	6 170	115	7 244	175	2.53	7.9	3 150	3 700	3/8"-3/4"	< 10.0	84+65	30	
	HSF-DG-2 054	2 1/4	400 V-III	5 881	87	6 852	130	7 997	200	2.77	9.8	3 150	3 700	3/8"-3/4"	< 10.0	85+65	30	
	HSF-DG-2 060	3	400 V-III	6 728	100	7 844	150	9 122	230	3.28	11.3	3 800	3 700	3/8"-3/4"	< 10.0	88+65	29	
	HSF-DG-2 068	3 1/2	400 V-III	7 399	115	8 576	165	9 934	260	3.77	12.3	3 800	3 700	1/2"-3/4"	< 10.0	88+65	29	
	HSF-DG-3 086	4	400 V-III	8 722	140	10 308	200	12 124	320	4.74	14.5	5 700	4 000	1/2"-7/8"	< 10.0	115+70	39	

Optional

- Proportional condensation control by speed variation (included in HSF series 2/22 and higher).
- Switch to 400 V-III-50 Hz power supply. *
- External battery protection grille.
- Integrated active humidification kit.
- Dehumidification and stove kit.
- R452A refrigerant.
- Other refrigerants.

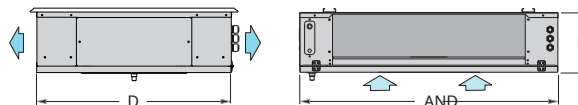
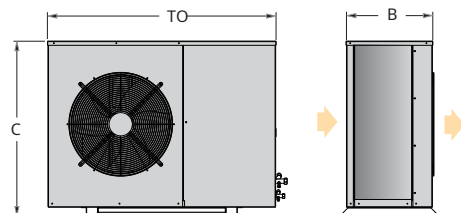
(1) Nominal performance is based on operation with a chamber temperature of 5°C, relative humidity of 95% and outside temperature of 35°C. Chamber volume estimated according to calculation base conditions (page VI).

(2) Sound level referred to sound pressure level in dB(A), measured in an open field at 10 m distance from the source.

* Units available in 400 V-III-50 Hz voltage.

Centrifugal version, HSH-CD series

Equipment with relative humidity control is also available in a version with centrifugal condenser.

Dimensions
EvaporatorDimensions
Condenser

	Dimensions (mm)	TO	B	C	D	AND	F	Fans evaporator
R134a	series 12	1030	373	577	762	1056	250	2x Ø 360
	series 13	1030	373	577	762	1756	250	3x Ø 360
	series 14	1030	373	577	852	2156	250	3x Ø 450
	series 24	1080	410	827	852	2156	300	3x Ø 450
R449A	HSF-DG-1014 and 1016	1030	373	577	762	706	250	1x Ø 360
	HSF-DG-1018 to 1034	1030	373	577	762	1056	250	2x Ø 360
	HSF-DG-1038	1030	373	577	762	1756	250	3x Ø 360
	HSF-DG-2048 to 2068	1080	410	827	762	1756	250	3x Ø 360
	HSF-DG-3086	1150	481	1097	852	2156	300	3x Ø 450

SERIES/MODEL		CV	P.REFRIGERATOR		
			5°CCHR95		
			W	m ₃	
R134a	HSH-CDY-12015	1/2	1415	21	
	HSH-CDY-12026	3/4	1859	28	
	HSH-CDY-12033	1	2242	32	
	HSH-CDY-23033	1	2746	45	
	HSH-CDY-23053	11/2	3507	64	
	HSH-CDY-23074	2	4526	82	
	HSH-CDY-34074	2	5140	93	
	HSH-CDY-44086	4	6741	134	
	HSH-CDY-44108	5	7817	158	
HSH-CDY-44136	61/2	9791	200		
R449A	HSH-CDG-1014	1/2	1399	20	
	HSH-CDG-1016	5/8	1608	22	
	HSH-CDG-2018	3/4	2510	38	
	HSH-CDG-2024	1	2902	46	
	HSH-CDG-2026	11/4	3242	54	
	HSH-CDG-2034	11/2	4056	71	
	HSH-CDG-3038	13/4	4360	77	
	HSH-CDG-3048	2	6160	116	
	HSH-CDG-4054	4/21	6833	132	
	HSH-CDG-4060	3	7652	149	
HSH-CDG-4068	31/2	8371	164		



Equipment specially designed for wine conservation in wineries and cellars.

Active humidity control. Active heating system.

Factory-certified equipment without the need for on-site testing. (Refrigeration Installation Safety Regulations)
Refrigerant pre-charge included.

Description

Equipment for conditioning wine cellars, in semi-compact construction with silent or centrifugal motor-condensing unit and ceiling-type evaporator unit with double air flow, equipped with heating resistors, humidification/dehumidification system and condensate pump, and in compact ceiling construction, with axial or centrifugal condensation.

Applications

- Conservation of bottled wine.
- Tobacco preservation.
- Cooling of high temperature enclosures with controlled humidity.
- Conservation of wine in barrels.

VSF-G Series

Semi-compact equipment for wineries with silent axial condenser. Semi-

VSH-CG Series

compact equipment for wineries with centrifugal condenser. Compact

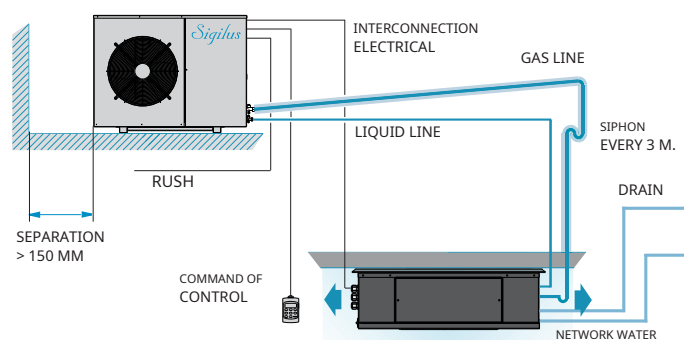
VCR-N Series

equipment for wineries with axial condenser.

VCR-C Series

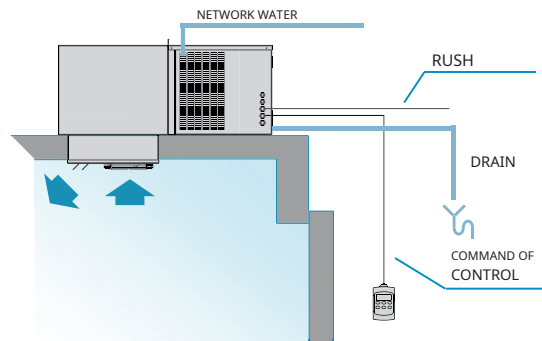
Compact equipment for wineries with centrifugal condenser.

Scheme of facility semi-compact



Maximum vertical distance between units of 15 m if the condensing unit is located higher than the evaporating unit, and 6 m otherwise.

Scheme of facility compact



Preservation of bottled wine

Bottled wine requires controlled conditions of both temperature and humidity to optimally preserve the product while preventing both the cork from drying out and the labels from becoming mouldy.

Wine treatment equipment guarantees optimal conditions for the preservation of bottled wine.



Wine preservation in barrels

When preserving wine in barrels, the relative humidity inside the cellar is of great importance. It must be adjusted so that there is no transfer of water vapour between the environment of the cellar and the inside of the barrel, thus avoiding wine loss or water absorption by the contents.



Electrical interconnections (eq. semi-compact)

The following interconnection cable sections must be provided on site (included from the factory in VSH series with 10 m length).

Strain	230 VI-50 Hz	400 V-III-50 Hz
Probes	2 x 1 mm ² + 2 x 1 mm ²	
Maneuver	10 x 1 mm ²	10 x 1 mm ²
Resistances	2 x 2.5 mm ² + T	4 x 1.5 mm ² + T
Thermostat	2 x 1 mm ²	

Characteristics

- Power supply 230 V-I-50 Hz or 400 V-III-50 Hz.
- Reduced R449A / R134a refrigerant charge.
- Hermetic reciprocating compressor.
- High and low pressure switches.
- Double airflow ceiling evaporator with heating resistors and humidification/dehumidification system.
- Evaporative coolers with anti-corrosion coating.
- Air defrost.
- Solenoid valve and thermostatic expansion valve integrated in the evaporator.
- Stainless steel condensate tray and condensate pump.
- Flare type connections (up to 1/2"-3/4") and service valves.
- Magnetothermal protection.
- Liquid container with refrigerant pre-charge for up to 10 meters of pipe.
- Proportional condensation control (VSF 1/2/3 and VSH 4/43 series) and on/off condensation control (VSF 0 and VSH 2/22 and 3/33 series).
- Multifunction electronic regulation with temperature and humidity control, and remote control.
- Air filter.

VSF-G / VSH-CG series

VSF-G Series



VSH-CG Series

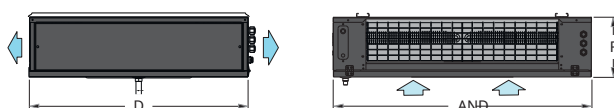
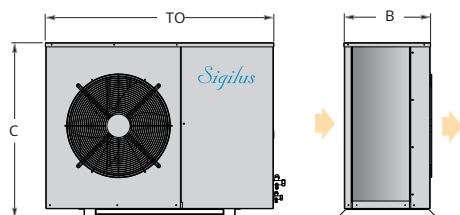


Wineries

SERIES/MODEL	COMPRESSOR		VOLUME WAREHOUSE (m ³)		COOLING POWER A15°C/70%RH (W) ⁽¹⁾	POWER CALORIFIC (W)	POWER ABSORB. NOMINAL (kW) ⁽²⁾	POWER ABSORBED NOMINAL (kW) ⁽²⁾	INTENS. MAXIMUM ABSORB. (TO)	CAUDAL EVAP. (m ³ /h)	CAUDAL COND. (m ³ /h)	CONNECTION REFRIGERATOR LIQUID GAS	BURDEN REFRIG. (kg)	WEIGHT (kg)	LEVEL PRESSURE SONORA dB(A) ⁽³⁾
	CV	STRAIN	UNISLAMED	ISOLATED											
R134a	VSF-GY-00 010	3/8 230 VI	11	37	1 242	1 000	1.52	0.52	8.8	500	350	1/4"-3/8"	< 2.5	46+30	20
	VSF-GY-10 015	1/2 230 VI	20	53	1 820	1 000	1.67	0.67	10.1	500	1 700	1/4"-1/2"	< 2.5	57+30	21
	VSF-GY-11 033	1 230 VI	47	100	3 281	1 500	2.76	1.26	16.3	1 100	1 700	1/4"-5/8"	< 10.0	67+42	22
	VSF-GY-12 053	1 1/2 230 VI *	74	168	4 683	3 000	4.93	1.93	26.1	1 800	3 200	3/8"-3/4"	< 10.0	77+52	27
	VSF-GY-23 074	2 230 VI *	149	297	7 497	6 000	8.60	2.60	43.7	3 150	3 700	3/8"-3/4"	< 10.0	79+75	28
	VSF-GY-33 108	5 400 V-III	224	444	9 944	6 000	9.50	3.50	26.1	3 150	4 000	3/8"-7/8"	< 10.0	98+75	30
R449A	VSF-GG-0 008	1/3 230 VI	10	35	1 227	1 000	1.16	0.12	8.4	500	350	1/4"-3/8"	< 2.5	48+30	20
	VSF-GG-1 014	1/2 230 VI	24	60	2 134	1 500	2.55	0.99	13.5	1 100	1 700	1/4"-1/2"	< 2.5	59+42	20
	VSF-GG-1 024	1 230 VI	47	100	3 388	3 000	4.81	1.71	24.9	1 800	1 700	3/8"-5/8"	< 10.0	82+52	24
	VSF-GG-1 034	1 1/2 230 VI *	75	170	4 944	3 000	5.55	2.44	29.9	1 800	3 200	3/8"-5/8"	< 10.0	83+52	29
	VSF-GG-2 048	2 400 V-III	151	300	7 830	6 000	9.19	2.98	17.9	3 150	3 700	1/2"-3/4"	< 10.0	84+75	30
	VSF-GG-3 060	3 400 V-III	221	450	10 490	6 000	10.87	4.66	19.5	5 200	6 500	1/2"-7/8"	< 10.0	88+75	29

Optional

- Switch to 400 V-III-50 Hz power supply. *
- R452A refrigerant.
- Other refrigerants.

Dimensions
evaporatorDimensions
condenser

Dimensions (mm)	TO	B	C	D	AND	F	Fans evaporator
series 0 and 00	670	305	440	738	627	203	1x Ø 254
series 10	1 030	373	577	738	627	203	1x Ø 254
series 11 and VSF-GG-1014	1 030	373	577	860	706	253	1x Ø 360
series 12 and VSF-GG-1024 and 1034	1 030	373	577	860	1 056	253	2x Ø 360
series 2 and 23	1 080	410	827	860	1 756	253	3x Ø 360
series 3 and 33	1 150	481	1 097	860	1 756	253	3x Ø 360

⁽¹⁾ Nominal performance is based on operation with a chamber temperature of 15°C, relative humidity of 70% and outside temperature of 35°C. Estimated volume of the chamber for the hospitality industry without insulation and estimated volume of the wine cellar with insulation of 30 mm.

⁽²⁾ Nominal absorbed power in dehumidification mode.

⁽³⁾ Nominal power consumption in cooling mode.

⁽⁴⁾ Sound level referred to sound pressure level in dB(A), measured in an open field at 10 m distance from the source.

* Units available in 400 V-III-50 Hz voltage.

Centrifugal version, VSH-CG series

The wine cellar equipment is also available in a version with centrifugal condenser.

SERIES/MODEL	CV	CAUDAL COND. (m ³ /h)	PED ⁽⁵⁾ (mmca)	
R134a	VSH-CGY-10010	3/8	575	12
	VSH-CGY-21015	1/2	1 000	6.5
	VSH-CGY-22033	1	1 000	6.5
	VSH-CGY-33053	1 1/2	1 500	14
	VSH-CGY-43074	2	3 500	10
R449A	VSH-CGG-2014	1/2	1 000	6.5
	VSH-CGG-2024	1	1 000	6.5
	VSH-CGG-3034	1 1/2	1 500	14
	VSH-CGG-4048	2	3 500	10
	VSH-CGG-4060	3	3 500	10

⁽⁵⁾ Static pressure available in exhaust ducts.



Equipment specially designed for wine conservation in wineries and cellars.

Active humidity control. Active heating system.

Factory-certified equipment without the need for on-site testing. (Refrigeration Installation Safety Regulations)
Refrigerant pre-charge included.

Description

Equipment for conditioning wine cellars, in semi-compact construction with silent or centrifugal motor-condensing unit and ceiling-type evaporator unit with double air flow, equipped with heating resistors, humidification/dehumidification system and condensate pump, and in compact ceiling construction, with axial or centrifugal condensation.

Applications

- Conservation of bottled wine.
- Tobacco preservation.
- Cooling of high temperature enclosures with controlled humidity.
- Conservation of wine in barrels.

VSF-G Series

Semi-compact equipment for wineries with silent axial condenser. Semi-

VSH-CG Series

compact equipment for wineries with centrifugal condenser. Compact

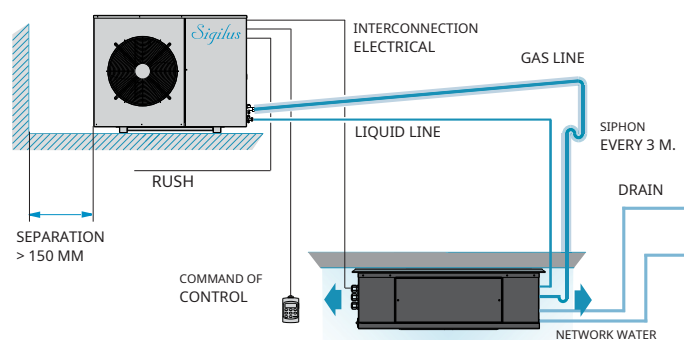
VCR-N Series

equipment for wineries with axial condenser.

VCR-C Series

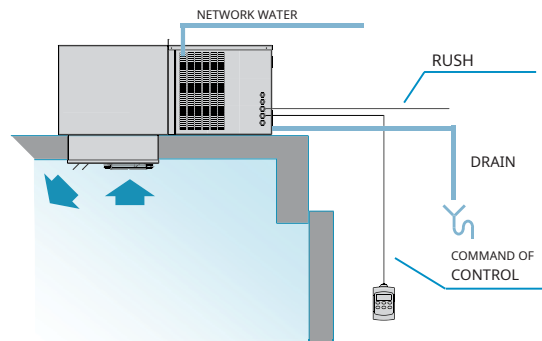
Compact equipment for wineries with centrifugal condenser.

Scheme of facility semi-compact



Maximum vertical distance between units of 15 m if the condensing unit is located higher than the evaporating unit, and 6 m otherwise.

Scheme of facility compact



Preservation of bottled wine

Bottled wine requires controlled conditions of both temperature and humidity to optimally preserve the product while preventing both the cork from drying out and the labels from becoming mouldy.

Wine treatment equipment guarantees optimal conditions for the preservation of bottled wine.



Wine preservation in barrels

When preserving wine in barrels, the relative humidity inside the cellar is of great importance. It must be adjusted so that there is no transfer of water vapour between the environment of the cellar and the inside of the barrel, thus avoiding wine loss or water absorption by the contents.



Electrical interconnections (eq. semi-compact)

The following interconnection cable sections must be provided on site (included from the factory in VSH series with 10 m length).

Strain	230 VI-50 Hz	400 V-III-50 Hz
Probes	2 x 1 mm ² + 2 x 1 mm ²	
Maneuver	10 x 1 mm ²	10 x 1 mm ²
Resistances	2 x 2.5 mm ² + T	4 x 1.5 mm ² + T
Thermostat	2 x 1 mm ²	

Characteristics

- Power supply 230 V-I-50 Hz or 400 V-III-50 Hz.
- Reduced R449A / R134a refrigerant charge.
- Hermetic reciprocating compressor.
- High and low pressure switches.
- Double airflow ceiling evaporator with heating resistors and humidification/dehumidification system.
- Evaporative coolers with anti-corrosion coating.
- Air defrost.
- Solenoid valve and thermostatic expansion valve integrated in the evaporator.
- Stainless steel condensate tray and condensate pump.
- Flare type connections (up to 1/2"-3/4") and service valves.
- Magnetothermal protection.
- Liquid container with refrigerant pre-charge for up to 10 meters of pipe.
- Proportional condensation control (VSF 1/2/3 and VSH 4/43 series) and on/off condensation control (VSF 0 and VSH 2/22 and 3/33 series).
- Multifunction electronic regulation with temperature and humidity control, and remote control.
- Air filter.

VSF-G / VSH-CG series

VSF-G Series



VSH-CG Series

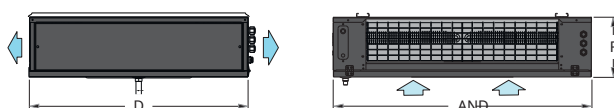
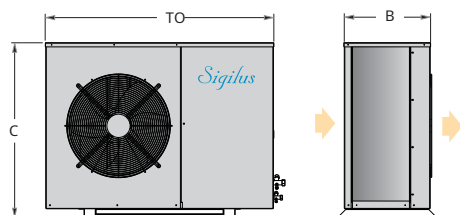


Wineries

SERIES/MODEL	COMPRESSOR		VOLUME WAREHOUSE (m ³)		COOLING POWER A15°C/70%RH (W) ⁽¹⁾	POWER CALORIFIC (W)	POWER ABSORB. NOMINAL (kW) ⁽²⁾	POWER ABSORBED NOMINAL (kW) ⁽²⁾	INTENS. MAXIMUM ABSORB. (TO)	CAUDAL EVAP. (m ³ /h)	CAUDAL COND. (m ³ /h)	CONNECTION REFRIGERATOR LIQUID GAS	BURDEN REFRIG. (kg)	WEIGHT (kg)	LEVEL PRESSURE SONORA dB(A) ⁽³⁾
	CV	STRAIN	UNISLAMED	ISOLATED											
R134a	VSF-GY-00 010	3/8 230 VI	11	37	1 242	1 000	1.52	0.52	8.8	500	350	1/4"-3/8"	< 2.5	46+30	20
	VSF-GY-10 015	1/2 230 VI	20	53	1 820	1 000	1.67	0.67	10.1	500	1 700	1/4"-1/2"	< 2.5	57+30	21
	VSF-GY-11 033	1 230 VI	47	100	3 281	1 500	2.76	1.26	16.3	1 100	1 700	1/4"-5/8"	< 10.0	67+42	22
	VSF-GY-12 053	1 1/2 230 VI *	74	168	4 683	3 000	4.93	1.93	26.1	1 800	3 200	3/8"-3/4"	< 10.0	77+52	27
	VSF-GY-23 074	2 230 VI *	149	297	7 497	6 000	8.60	2.60	43.7	3 150	3 700	3/8"-3/4"	< 10.0	79+75	28
	VSF-GY-33 108	5 400 V-III	224	444	9 944	6 000	9.50	3.50	26.1	3 150	4 000	3/8"-7/8"	< 10.0	98+75	30
R449A	VSF-GG-0 008	1/3 230 VI	10	35	1 227	1 000	1.16	0.12	8.4	500	350	1/4"-3/8"	< 2.5	48+30	20
	VSF-GG-1 014	1/2 230 VI	24	60	2 134	1 500	2.55	0.99	13.5	1 100	1 700	1/4"-1/2"	< 2.5	59+42	20
	VSF-GG-1 024	1 230 VI	47	100	3 388	3 000	4.81	1.71	24.9	1 800	1 700	3/8"-5/8"	< 10.0	82+52	24
	VSF-GG-1 034	1 1/2 230 VI *	75	170	4 944	3 000	5.55	2.44	29.9	1 800	3 200	3/8"-5/8"	< 10.0	83+52	29
	VSF-GG-2 048	2 400 V-III	151	300	7 830	6 000	9.19	2.98	17.9	3 150	3 700	1/2"-3/4"	< 10.0	84+75	30
	VSF-GG-3 060	3 400 V-III	221	450	10 490	6 000	10.87	4.66	19.5	5 200	6 500	1/2"-7/8"	< 10.0	88+75	29

Optional

- Switch to 400 V-III-50 Hz power supply. *
- R452A refrigerant.
- Other refrigerants.

Dimensions
evaporatorDimensions
condenser

Dimensions (mm)	TO	B	C	D	AND	F	Fans evaporator
series 0 and 00	670	305	440	738	627	203	1x Ø 254
series 10	1 030	373	577	738	627	203	1x Ø 254
series 11 and VSF-GG-1014	1 030	373	577	860	706	253	1x Ø 360
series 12 and VSF-GG-1024 and 1034	1 030	373	577	860	1 056	253	2x Ø 360
series 2 and 23	1 080	410	827	860	1 756	253	3x Ø 360
series 3 and 33	1 150	481	1 097	860	1 756	253	3x Ø 360

⁽¹⁾ Nominal performance is based on operation with a chamber temperature of 15°C, relative humidity of 70% and outside temperature of 35°C. Estimated volume of the chamber for the hospitality industry without insulation and estimated volume of the wine cellar with insulation of 30 mm.

⁽²⁾ Nominal absorbed power in dehumidification mode.

⁽³⁾ Nominal power consumption in cooling mode.

⁽⁴⁾ Sound level referred to sound pressure level in dB(A), measured in an open field at 10 m distance from the source.

* Units available in 400 V-III-50 Hz voltage.

Centrifugal version, VSH-CG series

The wine cellar equipment is also available in a version with centrifugal condenser.

SERIES/MODEL	CV	CAUDAL COND. (m ³ /h)	PED ⁽⁵⁾ (mmca)	
R134a	VSH-CGY-10010	3/8	575	12
	VSH-CGY-21015	1/2	1 000	6,5
	VSH-CGY-22033	1	1 000	6,5
	VSH-CGY-33053	1 1/2	1 500	14
	VSH-CGY-43074	2	3 500	10
R449A	VSH-CGG-2014	1/2	1 000	6,5
	VSH-CGG-2024	1	1 000	6,5
	VSH-CGG-3034	1 1/2	1 500	14
	VSH-CGG-4048	2	3 500	10
	VSH-CGG-4060	3	3 500	10

⁽⁵⁾ Static pressure available in exhaust ducts.

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(727)345-47-04

Беларусь +(375)257-127-884

Узбекистан +998(71)205-18-59

Киргизия +996(312)96-26-47

По вопросам продаж и поддержки обращайтесь:

эл.почта: ccf@nt-rt.ru || сайт: <https://coreco.nt-rt.ru/>