

FRIGA-BOHN®

COMPACT

Octagon and Scroll
compressor rack

HFC



|||| MT **16 - 110 kW**
|||| LT **6 - 38 kW**



- # **Modular rack** to best meet the needs of your application, available with Scroll or Semi-Hermetic Octagon compressors.
- # **Compact** to save space.

CONTROL DEVICES

- # 1 LP general safety pressure switch
- # 1 or 2 HP cartridge pressure switch(es) with automatic reset per compressor (according to standard EN 378-2: 2009).
- # 2 pressure gages (LP+HP)
- # 1 oil differential pressure switch per compressor for semi-hermetic reciprocating models of compressor 4TC to 4NC.

OPTIONS

BPS

Safety pack

LP safety pressure switch per compressor.

HPG

HP general safety pressure switch.

Regulation pack

BP1

LP pressure switch (automatic reset).

HPS

Additional HP pressure switches.

CDP

HP/LP pressure sensors signal 4-20 mA.

ALF

Height-adjustable float coolant level alarm.

ALR

Optoelectronic refrigerant level alarm.

FRAME

- # One-piece frame designed to avoid vibration problems.

OPTIONS

PAV

Anti-vibration pads.

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ARM

Electrical cabinet.

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CONNECTION PACK

- # 1 connecting valve on the suction, the delivery and the liquid outlet.



COMPRESSORS

- # Scroll technology (Copeland) or Octagon semi-hermetic reciprocating technology (Bitzer).
- # Equipped with suction and delivery shut-off valves, crankcase heater and rigid suspension elements.
- # Cylinder head fan for semi-hermetic reciprocating models in negative application.

MANIFOLDS

- # Copper suction and delivery.
- # Polypropylene collar on the suction side and high temperature resistant polyamide on the delivery side.
- # A general filter unit on the suction side.

OPTIONS

BDR

Condensate drain pan under suction manifolds.



OIL LINE

- # Oil separator and receiver with high and low indicator.
- # Oil manifold with flexible connection at the ends.
- # LP oil return line with filter and indicator.
- # Float oil level regulator with shut-off valve per compressor for SH and electronic for Scroll.
- # Degassing valve.

OPTIONS

TXL

Electronic oil level controllers (Compact Octagon).

LIQUID STATION

- # Liquid station delivered separately.
- # 2 inlet/outlet shut-off valves.
- # Liquid outlet equipped with a removable filter dryer box and an indicator.
- # Single or double safety valve (according to PED).

OPTIONS

BAC

Liquid separator (only for semi-hermetic compressor).

RLS

Oversized liquid receiver.

SSD

Double safety valve with 3-way valve (for receivers < 120 litres).

COM 2^(A) P^(B) 4EES-4Y^(C)

(A) Number of compressors

(B) **P** = Positive range - **N** = Negative range

(C) Compressor type

The COMPACT is available with HFCs.
For more information, please consult
our software.

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Positive range

COM ...			2P 4EES-4Y	2P 4DES-5Y	2P 4CES-6Y	3P 4EES-4Y	3P 4DES-5Y	2P 4TES-9Y	4P 4EES-4Y	2P 4PES-12Y	3P 4CES-6Y
Power (1)	R449A	kW	21,6	25,4	31,4	32,4	38,0	39,3	43,2	44,4	47,1
Power consumption (1)		kW	9,5	11,1	13,6	14,3	16,7	16,6	19,1	18,4	20,5
Power (1)	R404A	kW	22,2	26,5	32,0	33,3	39,7	40,2	44,4	45,7	48,1
Power consumption (1)		kW	10,7	12,6	15,0	16,0	18,9	18,6	21,3	20,5	22,5
Compressor		Nb	2	2	2	3	3	2	4	2	3
Max. current drawn		A	20	25	32	31	38	39	41	43	48
Receiver volume		l.	45	45	60	60	60	60	60	60	60
Connection pack standard option	Delivery	Ø	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8
	Suction	Ø	1"5/8	1"5/8	1"5/8	1"5/8	2"1/8	2"1/8	2"1/8	2"1/8	2"1/8
	Liquid	Ø	7/8"	7/8"	7/8"	7/8"	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8
Rack weight		kg	374	383	390	472	482	481	573	491	498
Receiver size	L	mm	666	666	666	666	666	666	666	666	666
	D	mm	402	402	402	402	402	402	402	402	402
	H	mm	1137	1137	1338	1338	1338	1338	1338	1338	1338
Receiver weight		kg	60	60	80	80	80	80	80	80	80

COM ...			4P 4DES-5Y	2P 4NES-14Y	3P 4TES-9Y	4P 4CES-6Y	3P 4PES-12Y	4P 4TES-9Y	3P 4NES-14Y	4P 4PES-12Y	4P 4NES-14Y
Power (1)	R449A	kW	50,7	53,4	58,9	62,8	66,7	78,6	80,2	88,9	106,9
Power consumption (1)		kW	22,2	22,3	24,9	27,3	27,5	33,2	33,4	36,7	44,5
Power (1)	R404A	kW	53,0	54,8	60,4	64,1	68,6	80,5	82,1	91,4	109,5
Power consumption (1)		kW	25,2	25,0	27,8	30,0	30,8	37,1	37,4	41,1	49,9
Compressor		Nb	4	2	3	4	3	4	3	4	4
Max. current drawn		A	50	52	59	64	65	78	77	86	103
Receiver volume		l.	60	60	60	60	120	120	120	120	120
Connection pack standard option	Delivery	Ø	1"3/8	1"3/8	1"3/8	1"3/8	1"3/8	1"5/8	1"5/8	1"5/8	1"5/8
	Suction	Ø	2"1/8	2"1/8	2"1/8	2"1/8	2"5/8	2"5/8	2"5/8	2"5/8	2"5/8
	Liquid	Ø	1"1/8	1"1/8	1"1/8	1"1/8	1"3/8	1"3/8	1"3/8	1"3/8	1"3/8
Rack weight		kg	589	504	637	608	656	794	670	815	823
Receiver size	L	mm	666	666	666	666	714	714	714	714	714
	D	mm	402	402	402	402	455	455	455	455	455
	H	mm	1338	1338	1338	1338	1834	1834	1834	1834	1834
Receiver weight		kg	80	80	80	80	120	120	120	120	120

(1) Evaporating temperature **-10 °C** / Ambient temperature **+45 °C** - Superheat: 10K - Subcool: 3K.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

COM 2^(A) P^(B) 4EES-4Y^(C)

(A) Number of compressors

(B) **P** = Positive range - **N** = Negative range

(C) Compressor type

The COMPACT is available with HFCs.
For more information, please consult
our software.

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Negative range

COM ...			2N 4EES-4Y	2N 4DES-5Y	2N 4CES-6Y	3N 4EES-4Y	2N 4TES-9Y	3N 4DES-5Y	2N 4PES-12Y	4N 4EES-4Y	3N 4CES-6Y
Power (1)	R449A	kW	5,6	6,5	8,4	8,4	9,9	9,8	10,5	11,2	12,6
Power consumption (1)		kW	4,3	5,0	6,5	6,4	7,2	7,5	7,5	8,5	9,7
Power (1)	R404A	kW	6,6	7,9	9,3	9,9	11,2	11,8	12,0	13,2	13,9
Power consumption (1)		kW	5,5	6,6	7,7	8,3	8,9	9,9	9,5	11,1	11,6
Compressor		Nb	2	2	2	3	2	3	2	4	3
Max. current drawn		A	15	19	25	23	27	29	29	30	38
Receiver volume		l.	45	45	45	45	45	45	45	45	45
Connection pack standard option	Delivery	Ø	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8
	Suction	Ø	1"3/8	1"3/8	1"5/8	1"5/8	1"5/8	1"5/8	1"5/8	1"5/8	1"5/8
	Liquid	Ø	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
Rack weight		kg	371	376	388	470	474	476	484	566	492
Receiver dimensions	L	mm	666	666	666	666	666	666	666	666	666
	D	mm	402	402	402	402	402	402	402	402	402
	H	mm	1137	1137	1137	1137	1137	1137	1137	1137	1137
Receiver weight		kg	60	60	60	60	60	60	60	60	60

COM ...			2N 4NES-14Y	4N 4DES-5Y	3N 4TES-9Y	3N 4PES-12Y	4N 4CES-6Y	4N 4TES-9Y	3N 4NES-14Y	4N 4PES-12Y	4N 4NES-14Y
Power (1)	R449A	kW	13,6	13,1	14,9	15,8	16,9	19,9	20,3	21,0	27,1
Power consumption (1)		kW	9,4	10,1	10,8	11,2	13,0	14,4	14,2	14,9	18,9
Power (1)	R404A	kW	15,2	15,8	16,7	18,0	18,6	22,3	22,8	24,0	30,4
Power consumption (1)		kW	12,1	13,2	13,3	14,2	15,4	17,7	18,1	18,9	24,1
Compressor		Nb	2	4	3	3	4	4	3	4	4
Max. current drawn		A	35	39	40	44	51	54	52	58	70
Receiver volume		l.	60	60	60	60	60	60	60	60	60
Connection pack standard option	Delivery	Ø	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8
	Suction	Ø	2"1/8	2"1/8	2"1/8	2"1/8	2"1/8	2"1/8	2"1/8	2"5/8	2"5/8
	Liquid	Ø	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	1"1/8	1"1/8
Rack weight		kg	490	577	624	634	597	769	646	796	805
Receiver size	L	mm	666	666	666	666	666	666	666	666	666
	D	mm	402	402	402	402	402	402	402	402	402
	H	mm	1338	1338	1338	1338	1338	1338	1338	1338	1338
Receiver weight		kg	80	80	80	80	80	80	80	80	80

(1) Evaporating temperature **-35 °C** / Ambient temperature **+40 °C** - Superheat: 10K - Subcool: 3K.

R404A is a refrigerant only available for non-EU markets (not compatible with F-Gas).

COM 2_(A) P_(B) ZB38_(C)

(A) Number of compressors

(B) **P** = Positive range - **N** = Negative range

(C) Compressor type

The COMPACT is available with HFCs.
For more information, please consult
our software.

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Positive range

COM ...			2P ZB38	2P ZB45	2P ZB50	3P ZB38	2P ZB66	3P ZB45	3P ZB50	2P ZB76	2P ZB95	3P ZB66
Power (1)	R449A	kW	16,7	19,6	23,0	25,1	28,7	29,4	34,5	34,0	41,4	43,0
Power consumption (1)		kW	7,7	8,8	10,5	11,6	13,2	13,1	15,7	15,1	19,7	19,7
Power (1)	R404A	kW	16,6	19,6	23,2	24,9	29,4	29,4	34,7	34,8	42,3	44,1
Power consumption (1)		kW	8,4	9,6	11,4	12,6	14,2	14,4	17,2	16,3	21,0	21,2
Compressor		Nb	2	2	2	3	2	3	3	2	2	3
Max. current drawn		A	22	22	25	33	31	34	38	36	46	47
Receiver volume		l.	45	45	45	45	45	45	60	60	60	60
Connection pack standard option	Delivery	Ø	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8
	Suction	Ø	1"5/8	1"5/8	1"5/8	1"5/8	1"5/8	1"5/8	2"1/8	2"1/8	2"1/8	2"1/8
	Liquid	Ø	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"	1"1/8	7/8"	1"1/8	1"1/8
Rack weight		kg	287	292	328	340	334	346	403	338	348	408
Receiver size	L	mm	666	666	666	666	666	666	666	666	666	666
	D	mm	402	402	402	402	402	402	402	402	402	402
	H	mm	1137	1137	1137	1137	1137	1137	1338	1338	1338	1338
Receiver weight		kg	60	60	60	60	60	60	80	80	80	80

COM ...			4P ZB50	2P ZB114	3P ZB76	4P ZB66	3P ZB95	4P ZB76	3P ZB114	4P ZB95	4P ZB114
Power (1)	R449A	kW	46,0	49,0	50,9	57,4	62,1	67,9	73,4	82,8	97,9
Power consumption (1)		kW	21,0	23,4	22,7	26,3	29,6	30,3	35,1	39,5	46,9
Power (1)	R404A	kW	46,3	50,2	52,2	58,8	63,5	69,6	75,3	84,7	100,4
Power consumption (1)		kW	22,9	25,2	24,4	28,3	31,5	32,6	37,8	42,0	50,4
Compressor		Nb	4	2	3	4	3	4	3	4	4
Max. current drawn		A	50	58	53	62	70	71	87	93	115
Receiver volume		l.	60	60	60	60	60	60	120	120	120
Connection pack standard option	Delivery	Ø	1"1/8	1"3/8	1"3/8	1"3/8	1"3/8	1"3/8	1"3/8	1"5/8	1"5/8
	Suction	Ø	2"1/8	2"1/8	2"1/8	2"1/8	2"5/8	2"5/8	2"5/8	2"5/8	2"5/8
	Liquid	Ø	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"3/8	1"3/8	1"3/8
Rack weight		kg	474	361	425	491	438	506	448	526	533
Receiver size	L	mm	666	666	666	666	666	666	714	714	714
	D	mm	402	402	402	402	402	402	455	455	455
	H	mm	1338	1338	1338	1338	1338	1338	1834	1834	1834
Receiver weight		kg	80	80	80	80	80	80	120	120	120

(1) Evaporating temperature **-10 °C** / Ambient temperature **+45 °C** - Superheat: 10K - Subcool: 3K.

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COM 2^(A) N^(B) ZF15^(C)

(A) Number of compressors

(B) **P** = Positive range - **N** = Negative range

(C) Compressor type

The COMPACT is available with HFCs.
For more information, please consult
our software.

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Negative range

COM ...			2N ZF15	3N ZF15	2N ZF25	2N ZF34	3N ZF25	2N ZF41	4N ZF25
Power (l)	R449A	kW	5,5	8,2	9,0	11,7	13,4	14,3	17,9
Power consumption (l)		kW	5,5	8,3	7,5	10,2	11,3	11,6	15,1
Power (l)	R404A	kW	6,1	9,2	9,2	12,1	13,8	15,4	18,4
Power consumption (l)		kW	6,0	9,1	7,6	10,3	11,3	12,7	15,1
Compressor		Nb	2	3	2	2	3	2	4
Max. current drawn		A	16	24	25	32	38	38	50
Receiver volume		l.	45	45	45	45	45	60	60
Connection pack standard option	Delivery	Ø	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8
	Suction	Ø	1"3/8	1"5/8	1"5/8	2"1/8	2"1/8	2"1/8	2"1/8
	Liquid	Ø	5/8"	5/8"	5/8"	5/8"	5/8"	7/8"	7/8"
Rack weight		kg	289	344	414	402	530	424	641
Receiver size	L	mm	666	666	666	666	666	666	666
	D	mm	402	402	402	402	402	402	402
	H	mm	1137	1137	1137	1137	1137	1338	1338
Receiver weight		kg	60	60	60	60	60	80	80

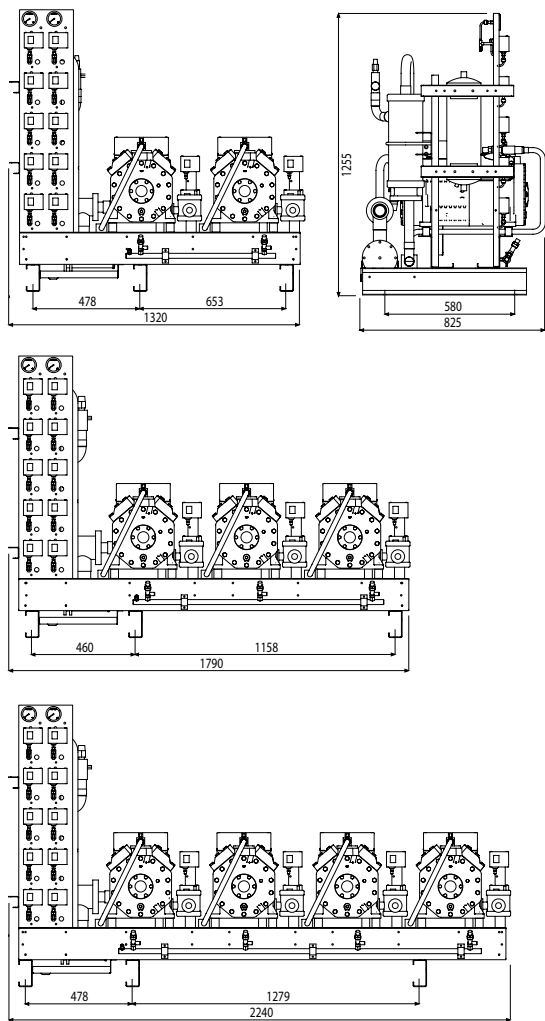
COM ...			2N ZF49	3N ZF34	3N ZF41	4N ZF34	3N ZF49	4N ZF41	4N ZF49
Power (l)	R449A	kW	17,6	17,6	21,5	23,5	26,5	28,6	35,3
Power consumption (l)		kW	15,3	15,4	17,4	20,5	23,0	23,2	30,6
Power (l)	R404A	kW	18,2	18,1	23,1	24,2	27,2	30,8	36,3
Power consumption (l)		kW	15,3	15,4	19,0	20,6	23,0	25,3	30,7
Compressor		Nb	2	3	3	4	3	4	4
Max. current drawn		A	49	48	57	64	73	76	98
Receiver volume		l.	60	60	60	60	60	60	120
Connection pack standard option	Delivery	Ø	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"1/8	1"3/8
	Suction	Ø	2"1/8	2"1/8	2"5/8	2"5/8	2"5/8	2"5/8	2"5/8
	Liquid	Ø	7/8"	7/8"	7/8"	7/8"	7/8"	1"1/8	1"1/8
Rack weight		kg	443	510	542	617	575	661	702
Receiver size	L	mm	666	666	666	666	666	666	714
	D	mm	402	402	402	402	402	402	455
	H	mm	1338	1338	1338	1338	1338	1338	1834
Receiver weight		kg	80	80	80	80	80	80	120

(l) Evaporating temperature **-35 °C** / Ambient temperature **+40 °C** - Superheat: 10K - Subcool: 3K.

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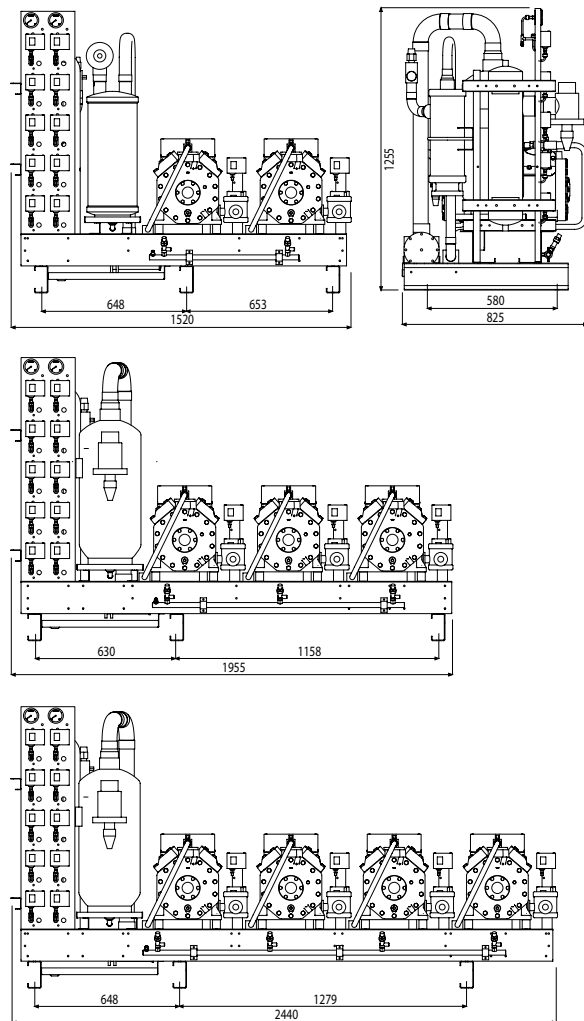
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without BAC option

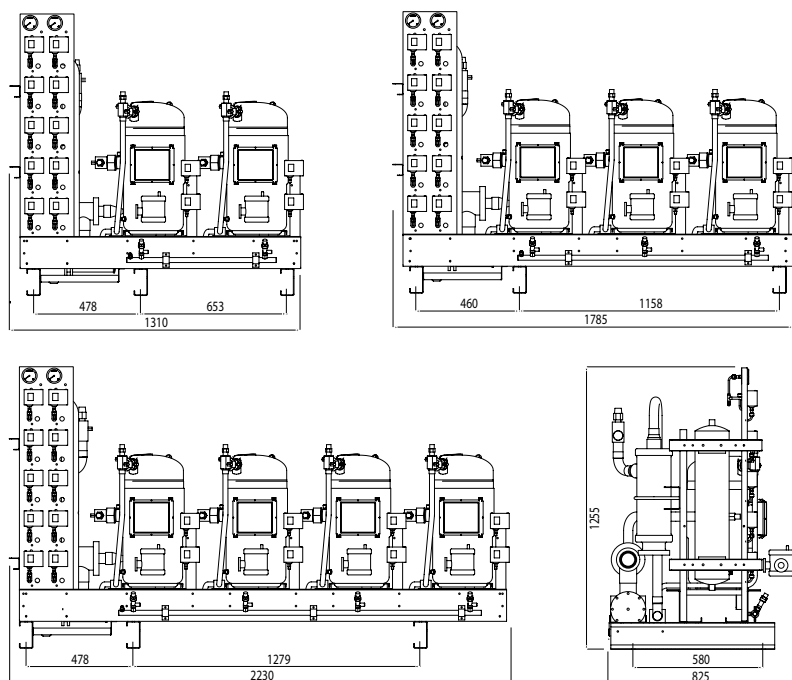


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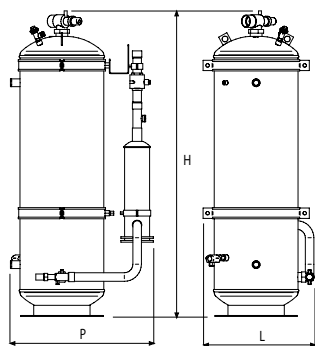
with BAC option



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Liquid station



		45 l.	60 l.	120 l.
L	mm	666	666	714
D	mm	402	402	455
H	mm	1137	1338	1834
Weight	kg	60	80	120