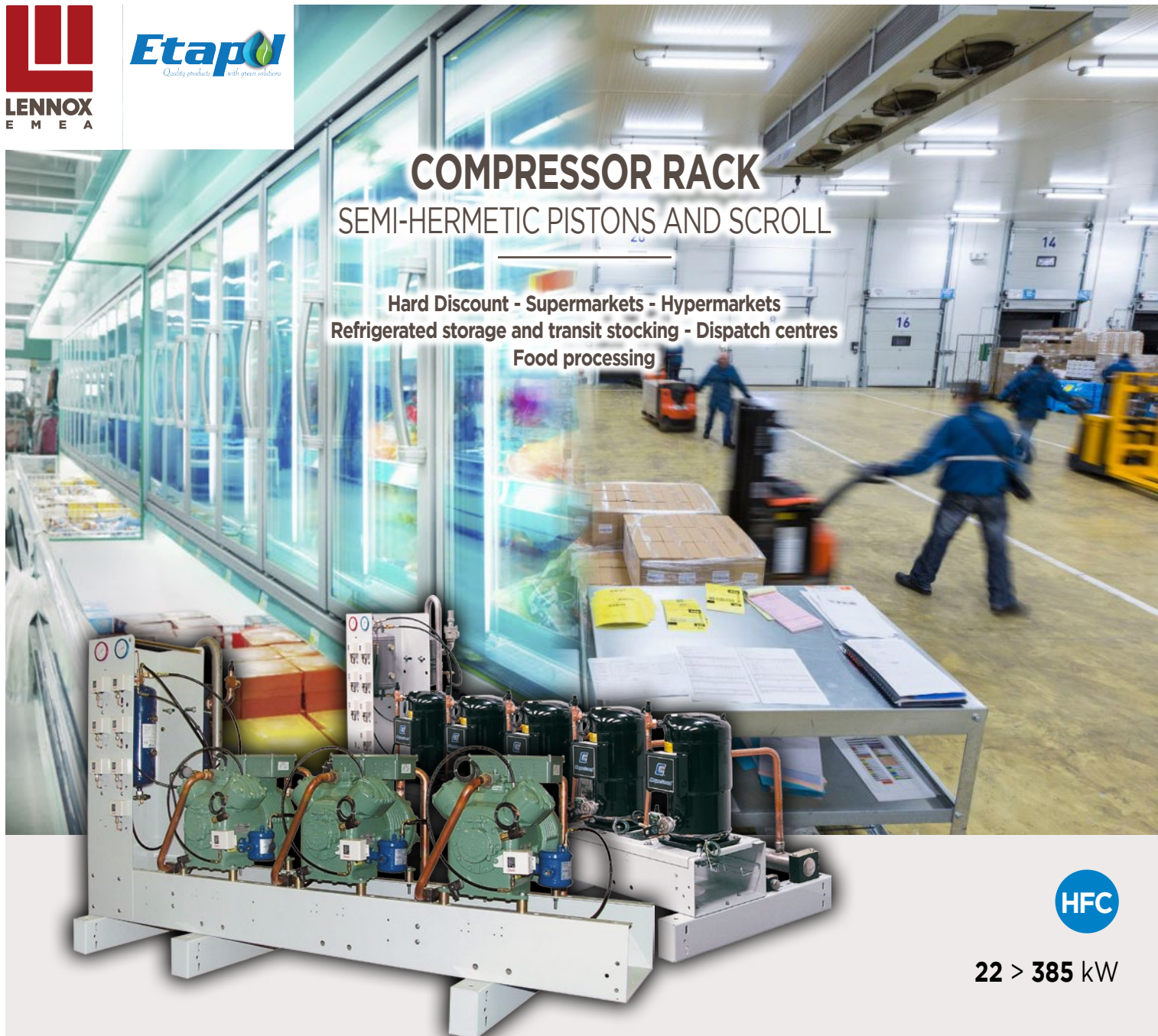


COMPRESSOR RACK SEMI-HERMETIC PISTONS AND SCROLL

Hard Discount - Supermarkets - Hypermarkets
Refrigerated storage and transit stocking - Dispatch centres
Food processing



HFC

22 > 385 kW

MOPSH / MOSC

- Racks composed in standard:
 - MOPSH model with 2 to 5 semi-hermetic compressors,
 - MOSC model with 5 and 6 Scroll compressors.
- Supplied non-wired, wired or with a complete switching enclosure.
- Rack adapted for use in sites with difficult access.
- Low width 800 to 1,000 mm.
- Liquid station delivered separately.
- Painted, U-profile, monoblock frame to eliminate vibrations.



DESCRIPTION

Frame

MOPSH - MOSC

- Monoblock, painted, 4 mm thick, U-profile, folded sheet steel.

Compressors

MOPSH

- With ROTALOCK suction and delivery valves + head fan for low temperature applications, casing heater and oil pump.

MOSC

- Equipped with ROTALOCK suctions and delivery valves, casing heater, HP safety cartridge pressure switch and rigid suspension.
- The low temperature models are also equipped with an injection system with various configurations according to the compressors used: shut-off valve, filter, solenoid valve and capillary.

Collectors

MOPSH - MOSC

- Suction and delivery pipes made of stainless steel 304 L.
- Schrader pressure tapping point with a shut-off valve per collector (connection of mano-pressure switch, etc...).
- Polypropylene fastening straps on the suction side and high-temperature resistant polyamide straps on the delivery side.

MOPSH

- A general suction filter unit with removable cartridge up to 186 kW refrigeration capacity for chill and 47 kW for low temperature. One unit per compressor for higher capacities.

MOSC

- A removable cartridge filter fitted on the suction collector.

Oil line

MOPSH - MOSC

- Removable oil separator and oil receiver with high/low level Indicator and shut-off valves.
- Oil collector with flexible end connections.
- LP oil return line with filter, indicator and shut-off valve per compressor.
- Degassing valve.

MOPSH

- Level regulator with float.

Liquid station

- Liquid station delivered separately.
- Inlet/outlet shut-off valves.
- Liquid line equipped with a removable filter dryer unit ≤ 150 l. and 2 units in parallel with shut-off valves > 150 l.
- General line indicator and shut-off valve.
- Single safety valve or double (according to PED).

Monitoring devices

MOPSH - MOSC

- 1 general safety LP pressure switch.
- 1 or 2 automatic reset HP cartridge pressure switch(s) per compressor (according to EN 378-2: 2009).
- 2 manometers (LP+HP).

MOPSH

- Oil differential pressure switch per compressor.



DESIGNATION

MOSC 5⁽¹⁾ P⁽²⁾ / ZB50⁽³⁾

(1) Number of compressor

(2) **P** = Chill range – **N** = Low temperature range

(3) Type of compressor

CERTIFICATIONS



Kit Factory

OPTIONS

Connection pack

- PR1** External connection valves (1 delivery, 1 suction, 1 liquid).
- PR2** External connection valves (1 delivery, 2 suction, 2 liquid).
- PR3** External connection valves (1 delivery, 3 suction, 3 liquid).

Safety pack

- BPS** LP safety pressure switch per compressor.
- HPG** HP general pressure switch (automatic).

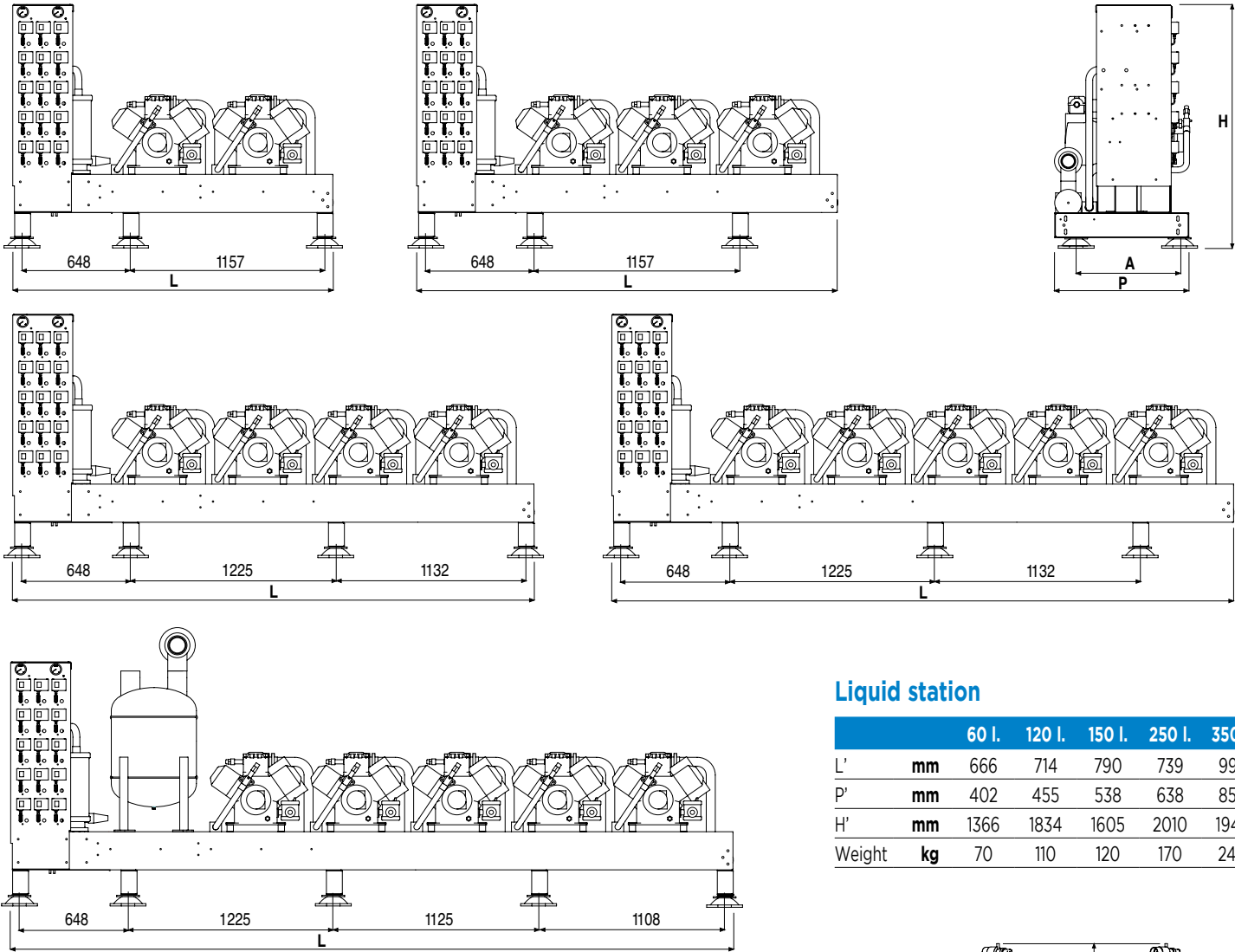
Regulator pack

- BP1** LP pressure switch (automatic) per compressor.
- HPS** Additional HP pressure switches.
- CDP** LP/HP pressure sensors, 4-20 mA signal.

Miscellaneous

- TXL** Traxoil oil regulator (**MOPSH**).
- BD1** Single liquid dryer by-pass (1 filter) during operation.
- ALF** Height-adjustable refrigerant level alarm with float.
- ALR** Opto-electronic refrigerant level alarm.
- PAV** Anti-vibration pads (supplied with the rack not fitted).
- SSD** Double safety valve with 3-way valve (for receivers < 120 litres).
- RLS** Oversized liquid receiver.
- BDR** Condensate drip tray under suction collectors.
- VFA** Suction valve and filter on each compressor (**MOPSH**).
- CAR** Casing (with incorporated switching enclosure).
- SIL** Delivery muffler (1 per compressor) (**MOPSH**).
- ANM** Rack lifting rings (supplied with the rack not fitted).
- BAC** Suction accumulator (**MOPSH**).
- EVH** Oil return solenoid valve.
- CCB** Control terminal rail wiring.
- ARM** Switching enclosure (contact us).

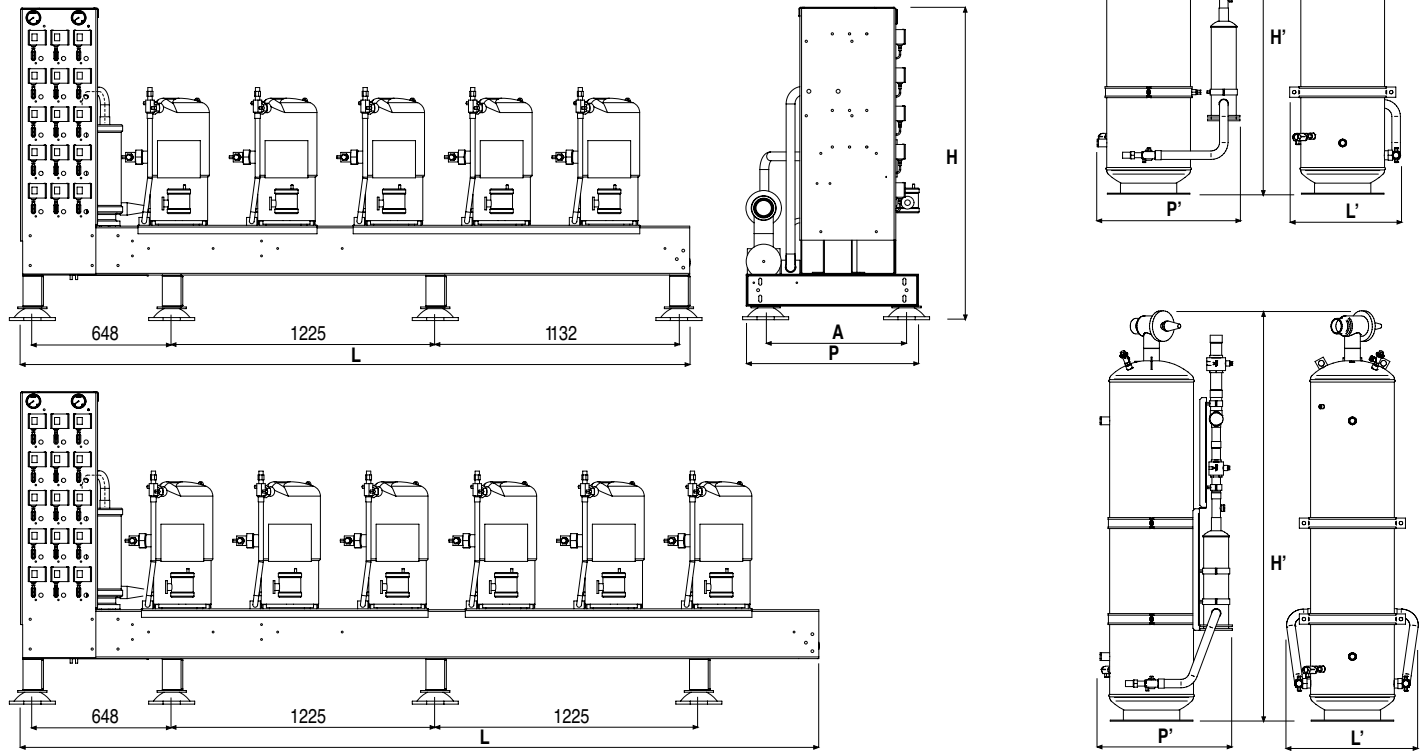
MOPSH - Semi-Hermetic



Liquid station

		60 l.	120 l.	150 l.	250 l.	350 l.
L'	mm	666	714	790	739	993
P'	mm	402	455	538	638	856
H'	mm	1366	1834	1605	2010	1942
Weight	kg	70	110	120	170	240

MOSC - Scroll



MOPSH

Chill range

-10°C/+45°C *		MOPSH ...	2P 4JE-15Y	2P 4HE-18Y	2P 4GE-23Y	3P 4JE-15Y	3P 4HE-18Y	4P 4JE-15Y	3P 4GE-23Y	4P 4HE-18Y	3P 4FE-28Y
Capacity R404A*	kW		63,5	74,4	86,2	95,3	111,6	127,0	129,4	148,8	153,2
Input power*	kW		28,2	33,8	40,3	42,3	50,7	56,5	60,4	67,6	71,7
Compressor	Nb		2	2	2	3	3	4	3	4	3
Max. input current	A		58,6	69,8	83,3	87,9	104,7	117,2	125,0	139,6	149,5
Receiver volume	l.		60	60	120	150	150	150	150	150	250
Standard connection package	Discharge	Ø	1"3/8	1"5/8	1"5/8	1"5/8	1"5/8	2"1/8	2"1/8	2"1/8	2"1/8
	Suction	Ø	2"5/8	2"5/8	3"1/8	3"1/8	3"1/8	2x2"5/8	2x2"5/8	2x2"5/8	2x2"5/8
	Liquid	Ø	1"1/8	1"1/8	1"3/8	1"3/8	1"3/8	2x1"3/8	2x1"3/8	2x1"3/8	2x1"3/8
Rack dimensions	L	mm	1915	1915	1915	2515	2515	3115	2515	3115	2515
	P	mm	800	800	800	800	1000	1000	1000	1000	1000
	H	mm	1500	1500	1500	1500	1500	1450	1450	1450	1450
	A	mm	655	655	655	755	755	755	755	755	755
Weight	kg		610	620	630	850	860	1100	900	1140	960

-10°C/+45°C *		MOPSH ...	4P 4GE-23Y	3P 6GE-34Y	4P 4FE-28Y	3P 6FE-44Y	5P 4FE-28Y	4P 6GE-34Y	4P 6FE-44Y	5P 6GE-34Y	5P 6FE-44Y
Capacity R404A*	kW		172,5	191,6	204,2	229,8	255,3	255,5	306,4	319,4	383,0
Input power*	kW		80,5	90,4	95,6	107,9	119,5	120,5	143,9	150,6	179,9
Compressor	Nb		4	3	4	3	5	4	4	5	5
Max. input current	A		166,7	186,9	199,3	222,9	249,1	249,2	297,2	311,5	371,6
Receiver volume	l.		250	250	250	250	350	250	350	350	350
Standard connection package	Discharge	Ø	2"1/8	2"5/8	2"5/8	2"5/8	3"1/8	3"1/8	3"1/8	3"1/8	3"1/8
	Suction	Ø	2x2"5/8	2x3"1/8	2x3"1/8	2x3"1/8	3x3"1/8	3x3"1/8	3x3"1/8	3x3"1/8	3x3"1/8
	Liquid	Ø	2x1"3/8	2x1"3/8	2x1"5/8	2x1"5/8	3x1"3/8	3x1"3/8	3x1"3/8	3x1"3/8	3x1"5/8
Rack dimensions	L	mm	3115	2515	3115	2515	3715	3115	3115	3715	3715
	P	mm	1000	1000	1000	1000	1000	1000	1000	1000	1000
	H	mm	1450	1450	1580	1580	1580	1580	1580	1580	1780
	A	mm	755	755	755	755	755	755	755	755	755
Weight	kg		1160	1020	1240	1080	1540	1380	1430	1650	1720

* Evaporation temp./Condensation temp. - Superheating 10K, subcooling 3K.

Refer to the software package for a more accurate rack selection.

MOPSH ...	PR1	PR2	PR3	BPS	HPG	BP1	HPS	CDP	TXL	BD1	ALF	ALR	PAV	SSD	RLS 120l.	RLS 150l.	RLS 250l.	RLS 350l.	BDR	VFA	SIL	ANM	BAC	EVH	CCB	ARM
2P/4JE-15Y	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	-	0	0	0	0	0	0
2P/4HE-18Y	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	-	0	0	0	0	0	0
2P/4GE-23Y	0	0	-	0	0	0	0	0	0	0	0	0	0	-	-	0	-	-	0	-	0	0	0	0	0	0
3P/4JE-15Y	0	0	-	0	0	0	0	0	0	0	0	0	0	-	-	-	0	-	0	-	0	0	0	0	0	0
3P/4HE-18Y	0	0	-	0	0	0	0	0	0	0	0	0	0	-	-	-	0	-	0	-	0	0	0	0	0	0
4P/4JE-15Y	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	-	0	-	0	0	0	0	0	0
3P/4GE-23Y	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	-	0	-	0	0	0	0	0	0
4P/4HE-18Y	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	-	0	-	0	0	0	0	0	0
3P/4FE-28Y	0	0	0	0	0	0	0	0	0	-	0	0	0	-	-	-	-	0	0	-	0	0	0	0	0	0
4P/4GE-23Y	0	0	0	0	0	0	0	0	0	-	0	0	0	-	-	-	-	0	0	-	0	0	0	0	0	0
3P/6GE-34Y	0	0	0	0	0	0	0	0	0	-	0	0	0	-	-	-	-	0	0	-	0	0	0	0	0	0
4P/4FE-28Y	0	0	0	0	0	0	0	0	0	-	0	0	0	-	-	-	-	0	0	0	0	0	0	0	0	0
3P/6FE-44Y	0	0	0	0	0	0	0	0	0	-	0	0	0	-	-	-	-	0	0	0	0	0	0	0	0	0
5P/4FE-28Y	-	0	0	0	0	0	0	0	0	-	0	0	0	-	-	-	-	-	0	0	0	0	0	0	0	0
4P/6GE-34Y	-	0	0	0	0	0	0	0	0	-	0	0	0	-	-	-	-	0	0	0	0	0	0	0	0	0
4P/6FE-44Y	-	0	0	0	0	0	0	0	0	-	0	0	0	-	-	-	-	-	0	0	0	0	0	0	0	0
5P/6GE-34Y	-	0	0	0	0	0	0	0	0	-	0	0	0	-	-	-	-	-	0	0	0	0	0	0	0	0
5P/6FE-44Y	-	0	0	0	0	0	0	0	0	-	0	0	0	-	-	-	-	-	0	0	0	0	0	0	0	0

MOPSH

Low temperature range

-35°C/+40°C*		MOPSH ...	2N 4HE-18Y	2N 4GE-23Y	2N 4FE-28Y	3N 4HE-18Y	3N 4GE-23Y	2N 6GE-34Y	4N 4HE-18Y	2N 6FE-44Y	3N 4FE-28Y
Capacity R404A*	kW		22,2	26,6	31,8	33,3	39,8	40,6	44,4	47,7	47,7
Input power*	kW		17,4	20,7	24,8	26,1	31,0	31,8	34,8	38,5	37,2
Compressor	Nb		2	2	2	3	3	2	4	2	3
Max. input current	A		49,1	57,7	72,8	73,6	86,5	90,4	98,2	112,4	109,2
Receiver volume	l.		60	60	120	120	150	120	150	150	150
Standard connection package	Discharge	Ø	1"3/8	1"3/8	1"3/8	1"3/8	1"3/8	1"3/8	1"3/8	1"3/8	1"5/8
	Suction	Ø	2"5/8	2"5/8	2"5/8	2"5/8	2x2"5/8	2x2"1/8	2x2"5/8	2x2"5/8	2x2"5/8
	Liquid	Ø	7/8"	1"1/8	1"3/8	1"3/8	2x7/8"	2x7/8"	2x7/8"	2x7/8"	2x7/8"
Rack dimensions	L	mm	1915	1915	1915	2515	2515	1915	3115	1915	2515
	P	mm	800	800	800	800	800	800	800	800	1000
	H	mm	1500	1500	1500	1500	1450	1450	1450	1450	1450
	A	mm	655	655	655	655	755	755	755	755	755
Weight	kg		600	610	640	820	840	690	1060	720	930

-35°C/+40°C*		MOPSH ...	3N 6GE-34Y	4N 4FE-28Y	3N 6FE-44Y	5N 4FE-28Y	4N 6GE-34Y	4N 6FE-44Y	5N 6GE-34Y	5N 6FE-44Y
Capacity R404A*	kW		60,9	63,6	71,5	79,5	81,2	95,3	101,5	119,2
Input power*	kW		47,7	49,6	57,8	62,0	63,7	77,0	79,6	96,3
Compressor	Nb		3	4	3	5	4	4	5	5
Max. input current	A		135,6	145,6	168,6	182,0	180,8	224,8	226,0	281,0
Receiver volume	l.		150	250	250	250	250	250	350	350
Standard connection package	Discharge	Ø	1"5/8	1"5/8	1"5/8	1"5/8	1"5/8	2"1/8	2"1/8	2"1/8
	Suction	Ø	2x2"5/8	2x3"1/8	2x3"1/8	3x2"5/8	2x3"1/8	3x2"5/8	3x3"1/8	3x3"1/8
	Liquid	Ø	2x1"1/8	2x1"1/8	2x1"1/8	3x1"1/8	2x1"3/8	3x1"1/8	3x1"1/8	3x1"1/8
Rack dimensions	L	mm	2515	3115	2515	3715	3115	3115	3715	3715
	P	mm	1000	1000	1000	1000	1000	1000	1000	1000
	H	mm	1580	1580	1580	1580	1580	1580	1580	1780
	A	mm	755	755	755	755	755	755	755	755
Weight	kg		1000	1200	1050	1470	1290	1370	1610	1680

* Evaporation temp./Condensation temp. - Superheating 10K, subcooling 3K.
Refer to the software package for a more accurate rack selection.

MOPSH ...	PR1	PR2	PR3	BPS	HPG	BP1	HPS	CDP	TXL	BD1	ALF	ALR	PAV	SSD	RLS	RLS	RLS	RLS	BDR	VFA	SIL	ANM	BAC	EVH	CCB	ARM
															120l.	150l.	250l.	350l.								
2N/4HE-18Y	0	0	-	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	-	0	0	0	0	0	0	0
2N/4GE-23Y	0	0	-	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	-	0	0	0	0	0	0	0
2N/4FE-28Y	0	0	-	0	0	0	0	0	0	0	0	0	0	-	-	0	-	-	0	-	0	0	0	0	0	0
3N/4HE-18Y	0	0	-	0	0	0	0	0	0	0	0	0	0	-	-	0	-	-	0	-	0	0	0	0	0	0
3N/4GE-23Y	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	-	0	-	0	0	0	0	0	0
2N/6GE-34Y	0	0	-	0	0	0	0	0	0	0	0	0	0	-	-	0	-	-	0	-	0	0	0	0	0	0
4N/4HE-18Y	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	-	0	-	0	0	0	0	0	0
2N/6FE-44Y	0	0	-	0	0	0	0	0	0	0	0	0	0	-	-	0	-	0	-	0	0	0	0	0	0	0
3N/4FE-28Y	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	-	0	-	0	0	0	0	0	0
3N/6GE-34Y	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	0	-	0	0	0	0	0	0	0	0
4N/4FE-28Y	0	0	0	0	0	0	0	0	0	-	0	0	0	-	-	-	-	0	0	0	0	0	0	0	0	0
3N/6FE-44Y	0	0	0	0	0	0	0	0	0	-	0	0	0	-	-	-	-	0	0	0	0	0	0	0	0	0
5N/4FE-28Y	-	0	0	0	0	0	0	0	0	-	0	0	0	-	-	-	-	0	0	0	0	0	0	0	0	0
4N/6GE-34Y	0	0	0	0	0	0	0	0	0	-	0	0	0	-	-	-	-	0	0	0	0	0	0	0	0	0
4N/6FE-44Y	-	0	0	0	0	0	0	0	0	-	0	0	0	-	-	-	-	0	0	0	0	0	0	0	0	0
5N/6GE-34Y	-	0	0	0	0	0	0	0	0	-	0	0	0	-	-	-	-	-	0	0	0	0	0	0	0	0
5N/6FE-44Y	-	0	0	0	0	0	0	0	0	-	0	0	0	-	-	-	-	-	0	0	0	0	0	0	0	0

MOSC

Chill range

-10°C/+45°C *		MOSC ...	5P ZB50	5P ZB76	6P ZB76	5P ZB95	5P ZB114	6P ZB95	6P ZB114
Capacity R404A*		kW	57,9	87,0	104,4	105,8	125,5	127,0	150,6
Input power*		kW	28,6	40,7	48,9	52,5	63,0	63,0	75,6
Compressor		Nb	5	5	6	5	5	6	6
Max. input current		A	73	102	122	141	167	169	200
Receiver volume		l.	60	120	120	120	150	150	150
Standard connection package	Discharge	Ø	1"5/8	1"5/8	2"1/8	2"1/8	2"1/8	2"1/8	2"5/8
	Suction	Ø	2"5/8	3"1/8	3"1/8	3"1/8	3"1/8	4"1/8	4"1/8
	Liquid	Ø	1"1/8	1"3/8	1"3/8	1"3/8	1"5/8	1"5/8	1"5/8
Rack dimensions	L	mm	3115	3115	3715	3115	3115	3715	3715
	P	mm	800	800	800	1000	1000	1000	1000
	H	mm	1500	1500	1500	1500	1500	1500	1500
	A	mm	655	655	755	755	755	755	755
Weight		kg	820	820	980	890	930	1040	1100

* Evaporation temp./Condensation temp. - Superheating 10K, subcooling 3K.

Refer to the software package for a more accurate rack selection.

MOSC ...	PR1	PR2	PR3	BPS	HPG	BP1	HPS	CDP	TXL	BD1	ALF	ALR	PAV	SSD	RLS	RLS	RLS	RLS	BDR	VFA	SIL	ANM	BAC	EVH	CCB	ARM
															120l.	150l.	250l.	350l.								
5P / ZB50	0	0	-	0	0	0	0	0	S	0	0	0	0	0	0	-	-	-	0	-	-	0	-	0	0	0
5P / ZB76	0	0	-	0	0	0	0	0	S	0	0	0	0	-	-	0	-	-	0	-	-	0	-	0	0	0
6P / ZB76	0	0	0	0	0	0	0	0	S	0	0	0	0	-	-	0	-	-	0	-	-	0	-	0	0	0
5P / ZB95	0	0	0	0	0	0	0	0	S	0	0	0	0	-	-	0	-	-	0	-	-	0	-	0	0	0
5P / ZB114	0	0	0	0	0	0	0	0	S	0	0	0	0	-	-	-	0	-	0	-	-	0	-	0	0	0
6P / ZB95	0	0	0	0	0	0	0	0	S	0	0	0	0	-	-	-	0	-	0	-	-	0	-	0	0	0
6P / ZB114	0	0	0	0	0	0	0	0	S	0	0	0	0	-	-	-	0	-	0	-	-	0	-	0	0	0

S : Standard

MOSC

Low temperature range

-35°C/+40°C *		MOSC ...	5N ZF24	5N ZF33	6N ZF33	5N ZF40	6N ZF40	5N ZF48	6N ZF48
Capacity R404A*		kW	23,2	31,8	38,2	39,4	47,3	47,5	57,0
Input power*		kW	22,6	29,2	35,0	37,0	44,5	48,5	58,2
Compressor		Nb	5	5	6	5	6	5	6
Max. input current		A	81	112	134	126	151	153	184
Receiver volume		l.	60	60	120	150	150	150	150
Standard connection package	Discharge	Ø	1"3/8	1"3/8	1"3/8	1"3/8	1"5/8	1"3/8	1"5/8
	Suction	Ø	2"5/8	2"5/8	3"1/8	3"1/8	3"1/8	3"1/8	4"1/8
	Liquid	Ø	1"1/8	1"1/8	1"3/8	1"3/8	1"3/8	1"3/8	1"5/8
Rack dimensions	L	mm	3115	3115	3715	3115	3715	3115	3715
	P	mm	800	800	800	800	800	800	1000
	H	mm	1500	1500	1500	1500	1500	1500	1500
	A	mm	655	655	755	755	755	755	755
Weight		kg	820	820	980	890	1040	930	1100

* Evaporation temp./Condensation temp. - Superheating 10K, subcooling 3K.

Refer to the software package for a more accurate rack selection.

MOSC ...	PR1	PR2	PR3	BPS	HPG	BP1	HPS	CDP	TXL	BD1	ALF	ALR	PAV	SSD	RLS	RLS	RLS	RLS	BDR	VFA	SIL	ANM	BAC	EVH	CCB	ARM
															120l.	150l.	250l.	350l.								
5N / ZF24	0	0	-	0	0	0	0	0	-	0	0	0	0	0	0	-	-	-	0	-	-	0	-	0	0	0
5N / ZF33	0	0	-	0	0	0	0	0	-	0	0	0	0	0	0	-	-	-	0	-	-	0	-	0	0	0
6N / ZF33	0	0	-	0	0	0	0	0	-	0	0	0	0	-	-	0	-	-	0	-	-	0	-	0	0	0
5N / ZF40	0	0	0	0	0	0	0	0	-	0	0	0	0	-	-	-	0	-	0	-	-	0	-	0	0	0
6N / ZF40	0	0	0	0	0	0	0	0	-	0	0	0	0	-	-	-	0	-	0	-	-	0	-	0	0	0
5N / ZF48	0	0	0	0	0	0	0	0	-	0	0	0	0	-	-	-	0	-	0	-	-	0	-	0	0	0
6N / ZF48	0	0	0	0	0	0	0	0	-	0	0	0	0	-	-	-	0	-	0	-	-	0	-	0	0	0