

SEMI-HERMETIC

RECIPROCATING COMPRESSOR

ORIGINAL MANUFACTURED EQUIPMENT









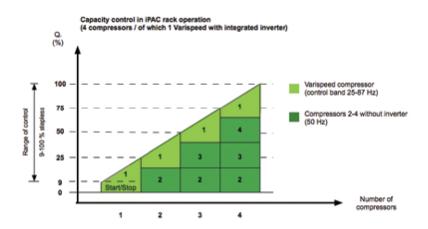


In a world where energy efficiency and sustainability are key factors for the user of any kind of refrigeration projects, adjustability becomes an additional driving force for the design of the iPac range of units.

The high adjustability is required especially to follow adequately the variation of the refrigeration load along the whole running time of the system. The integration of the inverter technology through the use of the VARISPEED compressor by BITZER, allows the required modulation and adaptation that any designer is looking for. This gives the potential to lift the evaporating temperature and stabilizes fluctuation in condensing pressure to reduce the energy consumption.

The iPac, in the 2, 3 and 4 compressors configurations, will offer a compact and plug & play solution to be fit into any refrigeration applications where otherwise a multiple condensing unit installation will be required.

The iPac range is a further identification of the basic phylosophy of the Added Value Products by BITZER. It incorporates all the high quality features of the well known and qualified MultiPacs semi-hermetic reciprocating compressor racks and at the same time it includes additional features characteristics of this new technology.



FEATURES



VARISPEED compressor by BITZER with suction gas cooled inverter, to provide maximum flexibility and efficiency also at part load.conditions



Standard electrical board with customized controller that will simplify the installation of the unit.



Extremely easy access to compressors and all replaceable parts fitted on the unit



Flexible eliminator and electronic oil level control on each compressor for maximum reliability.

iPac racks nomenclature:

iP - 103 - K - 4EEF - 4DES Identification for iPac unit

iP - 103 - K - 4EEF - 4DES Index for the frame configuration

iP - 103 - K - 4EEF - 4DES Code for the number of compressor installed on the rack

iP - 103 - K - 4EEF - 4DES Identifier for application (K for medium and Low temperature, H for High temperature)

iP - 103 - K - 4EEF - 4DES Code to identify the VARISPEED compressor model

iP - 103 - K - 4EEF - 4DES Identification of the standard compressor model





MEDIUM AND LOW TEMPERATURE PERFORMANCE TABLE

The medium and low temperature series of iPac units are available for operation on R404A. With the introduction of New Ecoline compressor the series of iPac K can cover both medium and low temperature application and the table here below reports capacity and heat rejection for different conditions. Specific conditions of a project can be calculated with the use of the BITZER selection software

Suction gas Temperature: +20°C (according to EN12900)

VARISPEED frequency: 80Hz

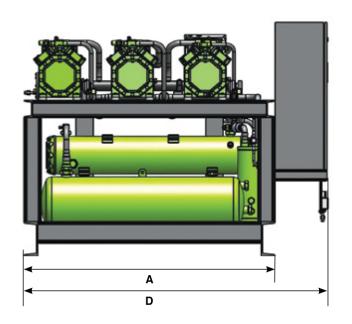
The low temperature range of iPac will be available only for operation on R404A. The cooling capacities of each unit are reported in the performance tables here below:

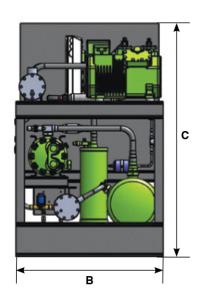
	Cond. Temp.	Cooli	ng capacity	Heat Rejection [kW]			
Model		Evaporating temperature °C					
WOUGI	°C	-10	-20	-30	- -10	-20	-30
iP-102-K-4EEF-4DES	30	41.2	26.8	16.5	54.1	37.9	25.3
	40	34.9	22.6	13.7	49.6	34.7	23.0
	50	28.4	18.2	10.9	44.4	30.9	20.2
iP-102-K-4DEF-4CES	30	49.6	32.5	20.1	65.1	45.8	30.7
	40	42.1	27.3	16.6	59.7	41.8	27.7
	50	34.5	22.1	13.2	53.7	37.4	24.5
iP-102-K-4CEF-4TES	30	61.6	40.1	24.6	80.7	56.4	37.3
	40	52.0	33.4	20.1	73.7	51.0	33.2
	50	42.5	26.8	15.7	66.0	45.2	28.8
iP-103-K-4FEF-4EES	30	48.6	31.6	19.5	69.8	48.9	32.7
	40	41.2	26.7	16.4	64.0	44.8	29.7
	50	33.5	21.6	13.0	57.3	40.0	26.2
iP-103-K-4EEF-4DES	30	59.0	38.5	23.8	83.4	58.6	39.4
	40	50.1	32.5	19.8	76.5	53.7	35.8
	50	40.9	26.2	15.7	68.8	48.1	31.7
iP-103-K-4DEF-4CES	30	71.3	46.6	28.8	101.0	70.8	47.2
	40	60.5	39.2	23.8	92.4	64.4	42.4
	50	49.6	31.7	18.9	83.2	57.6	37.4
	30	89.3	58.1	35.5	85.3	59.3	39.1
iP-103-K-4CEF-4TES	40	75.3	48.3	28.9	77.5	53.4	34.6
	50	61.3	38.6	22.4	68.8	46.8	29.6
	30	46.8	30.9	19.1	61.0	43.1	28.9
iP-104-K-2DEF-2CES	40	39.7	26.0	15.8	55.9	39.3	26.1
	50	32.1	20.7	12.2	49.7	34.7	22.5
	30	63.6	41.4	25.6	82.9	58.1	39.0
iP-104-K-4FEF-4EES	40	53.9	35.0	21.4	76.0	53.4	35.6
	50	43.9	28.3	17.0	68.1	47.8	31.5
	30	76.9	50.2	31.0	100.2	70.3	47.1
iP-104-K-4EEF-4DES	40	65.3	42.3	25.8	91.9	64.4	42.7
	50	53.3	34.2	20.5	82.5	57.6	37.8
iP-104-K-4DEF-4CES	30	92.9	60.8	37.5	121.0	84.9	56.7
	40	78.8	51.0	31.0	110.7	77.3	51.1
	50	64.7	41.3	24.6	99.5	69.2	45.2
	30	117.0	76.1	46.5	151.9	105.7	69.6
iP-104-K-4CEF-4TES	40	98.6	63.2	37.7	138.2	95.2	61.7
	50	80.2	50.4	29.1	123.3	83.9	53.1





DIMENSION DRAWINGS



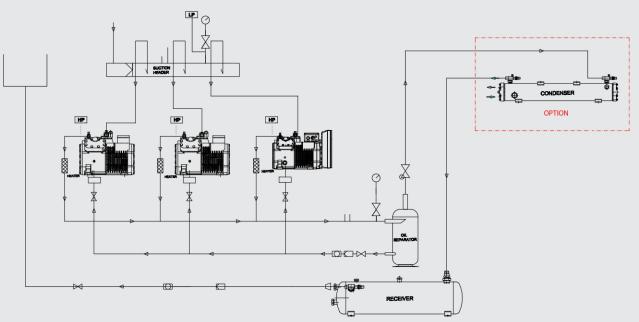


Model	Dimensions			Connections		Liquid receiver		
Model	A [mm]	nm] B [mm] C [n		D [mm]	Inlet	Outlet	Model	Pump down volume (kg)
iP-102-K-4EEF-4DES		850	1350	1530	2 1/8"	7/8"	F552T	51.9
iP-102-K-4DEF-4CES	1230						F552T	51.9
iP-102-K-4CEF-4TES							F732N	70.2
iP-103-K-4FEF-4EES				1750			F552T	51.9
iP-103-K-4EEF-4DES	1450						F732N	70.2
iP-103-K-4DEF-4CES							F732N	70.2
iP-103-K-4CEF-4TES							F1052T	100.9
iP-104-K-2DEF-2CES			1700	2260		1 1/8"	F552T	51.9
iP-104-K-4FEF-4EES							F732N	70.2
iP-104-K-4EEF-4DES	1960						F732N	70.2
iP-104-K-4DEF-4CES							F1052T	100.9
iP-104-K-4CEF-4TES							F1202N	107.7



SCHEMATIC DIAGRAM

iPac



ITEM	LEGEND
Ø	High Pressure Gauge
0	Low Pressure Gauge
LP	Low Pressure Switch Auto
HP	HP Pressure Switch Manual
	Solenoid Valve
\bowtie	Ball Valve / Valve
\Box	Sight Glass
	Filter
%	TXV
****	Vibration Eliminator
₩	Check Valve
	Oil Flow Switch
图	Oil Control Valve

