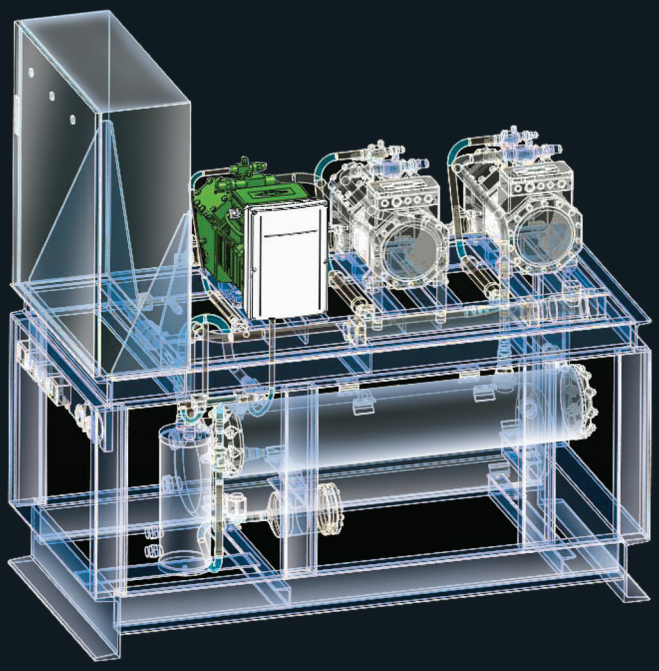
SEMI-HERMETIC

RECIPROCATING COMPRESSOR

MULTIPLE COMPRESSORS UNIT WITH LEADING INVERTER COMPRESSOR

ORIGINAL MANUFACTURED EQUIPMENT

iPac
Varispeed by BITZER



Watch BITZER video

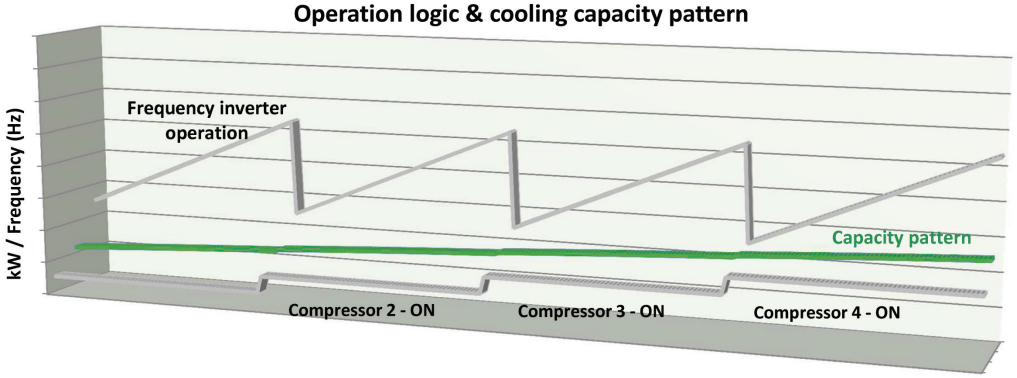
PRODUCTS SPECIFICATIONS

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.

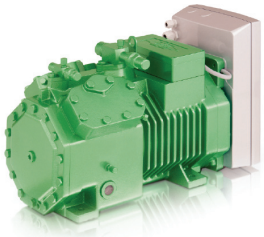
The high adjustability is required especially to follow adequately the variation of the refrigeration load along the whole running time of the system. The integration of the inverter technology through the use of the VARISPEED compressor by BITZER, allows the required modulation and adaptation that any 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.



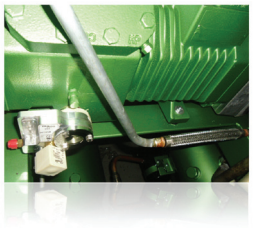
FEATURES



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 is reported here below, with clear similarities to MultiPac designation:

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

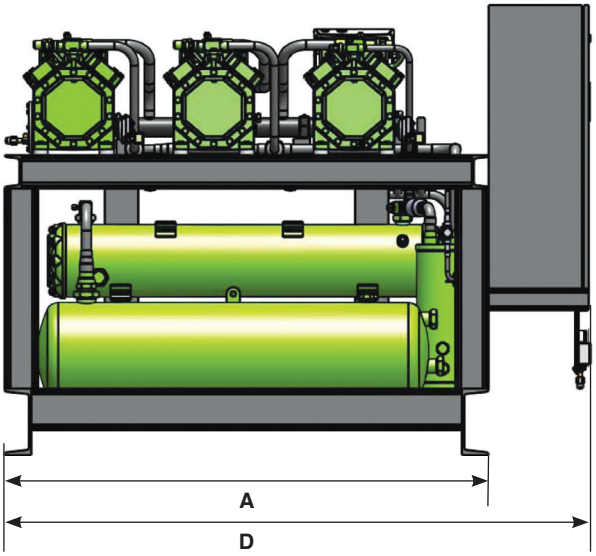
The medium and low temperature series of iPac units are available for operation on R404A*. With the introduction of Ecoline compressor the series of iPac K can cover both medium and low temperature application and the table here below reports capacity and heat rejection for different conditions. Specific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

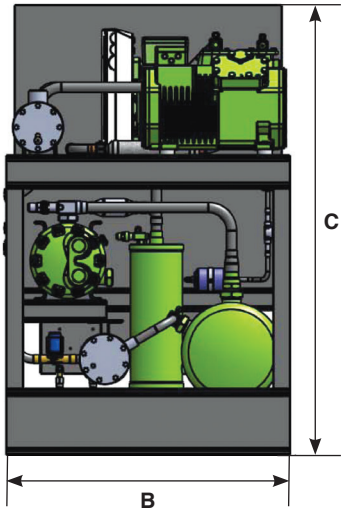
Suction gas Temperature: +20°C (according to EN12900)
VARISPEED frequency: 80Hz

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:

Model	Cond. Temp. °C	Cooling capacity [kW]			Heat Rejection [kW]		
		Evaporating temperature °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
iP-103-K-4CEF-4TES	30	89.3	58.1	35.5	85.3	59.3	39.1
	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
iP-104-K-2DEF-2CES	30	46.8	30.9	19.1	61.0	43.1	28.9
	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
iP-104-K-4FEF-4EES	30	63.6	41.4	25.6	82.9	58.1	39.0
	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
iP-104-K-4EEF-4DES	30	76.9	50.2	31.0	100.2	70.3	47.1
	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
iP-104-K-4CEF-4TES	30	117.0	76.1	46.5	151.9	105.7	69.6
	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

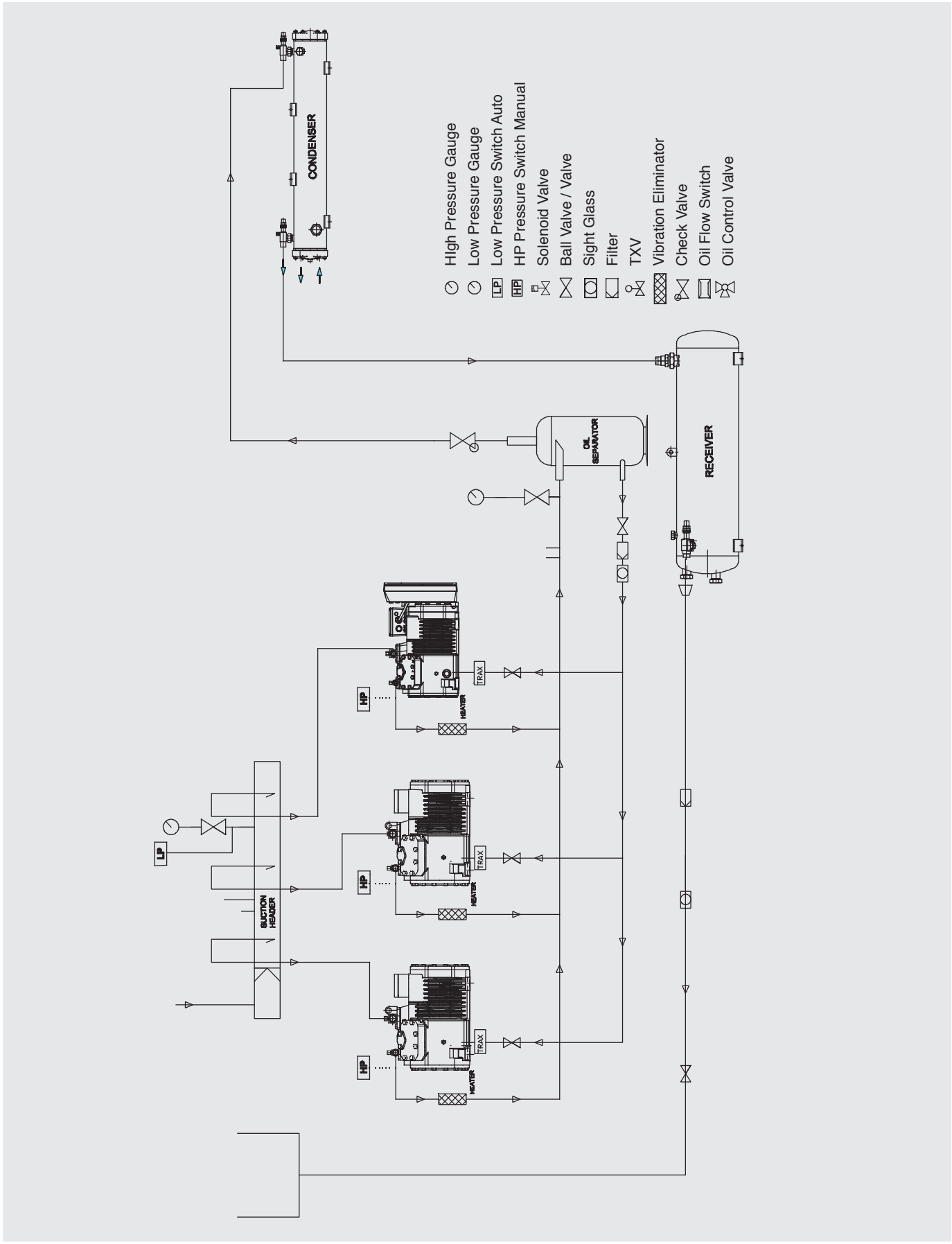
DIMENSION DRAWINGS





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

SCHEMATIC DIAGRAM



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