

BUB Series

Box-Type with Semi-
Hermetic Compressor





SAUVERAIN



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BUB

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Box-Type Unit with Semi-hermetic Compressor





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1. PRODUCT DESCRIPTION

- 1 Products adopt horizontal box-type structure, high wind circle design, excellent ventilation effect and appearance.
- 2 The cover of the case adopts hinge structure, which is easy to maintain and operate.
- 3 Adopted semi-hermetic piston compressors with BITZER or FRASCOLD to meet the application of medium temperature and low temperature respectively.
- 4 Adopted U-type condenser, it has large windward side, small wind resistance and good heat transfer effect.
- 5 It can meet the requirements of R22, R404A, R507A, R448A, R449A and other refrigerants.

2. MODEL DESCRIPTION

B U B 15 M B B Y - E

Electric Control for Unit (Optional)

Oil Code, Y: POE, Unmarked: Mineral
(Not for Mineral Oil)

Compressor Brand Code, B: BITZER, F: FRASCOLD

Structural Type, B: Horizontal Box-type

Applicable Temp. Code, M: MT, L: LT

Nominal Power of Compressor (HP)

Product Series



3. TECHNICAL DATA

3.1 BUB Series Units With BITZER Semi-hermetic Compressor

3.1.1 Medium Temp. Unit

1) Refrigerant R22

Model		BUB03MBB	BUB05MBB	BUB06MBB	BUB07MBB	BUB09MBB
Power Supply		3P / 380V / 50Hz				
Apply Temp.		-5°C ~ 5°C				
Compressor	Model	2EES-3	4FES-5	4EES-6	4DES-7	4CES-9
	Max. I. (A)	7.5	10.8	13.6	16.5	20.2
Fan	Voltage (V)	3P / 380V / 50Hz				
	Current (A)	0.52	1.1	1.1	1.1	1.75
	Power (W)	220	220×2	220×2	220×2	937
	Rev. (r/min)	1380	1380	1380	1380	1380
Suction Line (mm)		Φ16	Φ22	Φ28	Φ28	Φ28
Liquid Line (mm)		Φ9.5	Φ12.7	Φ12.7	Φ16	Φ16
Size	L (mm)	820	1320	1320	1320	1620
	W (mm)	655	655	655	655	805
	H (mm)	845	1095	1095	1095	1200
Install AxB (mm)		335×615	635×615	635×615	635×615	700×765
Dimension Drawing		A	B	B	B	B

Design condition, ambient 32°C.

Model		BUB12MBB	BUB15MBB	BUB20MBB	BUB25MBB	BUB30MBB
Power Supply		3P / 380V / 50Hz				
Apply Temp.		-5°C ~ 5°C				
Compressor	Model	4TES-12	4PES-15	4NES-20	4HE-25	4GE-30
	Max. I. (A)	25.2	28.2	33.2	44.0	51.2
Fan	Voltage (V)	3P / 380V / 50Hz				
	Current (A)	2.2	2.2	2.2	3.5	3.5
	Power (W)	548×2	548×2	548×2	937×2	937×2
	Rev. (r/min)	1380	1380	1380	1380	1380
Suction Line (mm)		Φ35	Φ42	Φ42	Φ54	Φ54
Liquid Line (mm)		Φ16	Φ19	Φ22	Φ22	Φ22
Size	L (mm)	1620	1620	1620	1920	2220
	W (mm)	805	805	805	905	905
	H (mm)	1200	1200	1315	1315	1315
Install AxB (mm)		700×765	700×765	700×765	1000×865	1000×865
Dimension Drawing		B	B	B	B	B

Design condition, ambient 32°C.

**BUB SERIES****TECHNICAL DATA**

REFRIGERANT R404A/R507A

BUB SERIES – REFRIGERANT R404A/R507A

MODEL		BUB03MBBY	BUB05MBBY	BUB06MBBY	BUB07MBBY	BUB09MBBY
Power Supply		3P / 380V / 50Hz				
Application Temperature		-5°C ~ 5°C				
Compressor	Model	2EES-3Y	4EES-5Y	4EES-6Y	4DES-7Y	4CES-9Y
	Max. Current (A)	7.5	10.8	13.6	16.5	20.2
Fan	Voltage (V)	3P / 380V / 50Hz				
	Current (A)	0.52	1.1	1.1	1.1	1.75
	Power (W)	220	220 × 2	220 × 2	220 × 2	937
	Speed (r/min)	1380	1380	1380	1380	1380
Suction Line (mm)		Ø16	Ø22	Ø28	Ø28	Ø28
Liquid Line (mm)		Ø9.5	Ø12.7	Ø12.7	Ø16	Ø16
Size	Length L (mm)	820	1320	1320	1320	1620
	Width W (mm)	655	655	655	655	805
	Height H (mm)	845	1095	1095	1095	1200
Install A×B (mm)		335 × 615	635 × 615	635 × 615	635 × 615	700 × 765
Dimension Drawing		A	B	B	B	B

Design condition: Ambient 32°C.

MODEL		BUB12MBBY	BUB15MBBY	BUB20MBBY	BUB25MBBY	BUB30MBBY
Power Supply		3P / 380V / 50Hz				
Application Temperature		-5°C ~ 5°C				
Compressor	Model	4TES-12Y	4PES-15Y	4NES-20Y	4HE-25Y	4GE-30Y
	Max. Current (A)	25.2	28.2	33.2	44.0	51.2
Fan	Voltage (V)	3P / 380V / 50Hz				
	Current (A)	2.2	2.2	2.2	3.5	3.5
	Power (W)	548 × 2	548 × 2	548 × 2	937 × 2	937 × 2
	Speed (r/min)	1380	1380	1380	1380	1380
Suction Line (mm)		Ø35	Ø42	Ø42	Ø54	Ø54
Liquid Line (mm)		Ø16	Ø19	Ø22	Ø22	Ø22
Size	Length L (mm)	1620	1620	1620	1920	2220
	Width W (mm)	805	805	805	905	905
	Height H (mm)	1200	1200	1315	1315	1315
Install A×B (mm)		700 × 765	700 × 765	1000 × 865	1000 × 865	1000 × 865
Dimension Drawing		B	B	B	B	B

Design condition: Ambient 32°C.



BUB Series Low Temp. Unit

Refrigerant R404A/R507A

Model	BUB03LBBY	BUB04LBBY	BUB05LBBY	BUB06LBBY	BUB09LBBY	BUB12LBBY
Power Supply	3P / 380V / 50Hz					
Apply Temp.	-15°C ~ 30°C					
Comp. Model	2CES-3Y	4EES-4Y	4DES-5Y	4CES-6Y	4TES-9Y	4PES-12Y
Max. I (A)	9.1	12.2	14.5	17.7	19.9	22.7
Voltage (V)	3P / 380V / 50Hz					
Current (A)	0.52	1.1	1.1	1.1	2.2	2.2
Power (W)	220	220×2	220×2	220×2	220×2	220×2
Rev. (r/min)	1380	1380	1380	1380	1380	1380
Suction Line (mm)	φ22	φ28	φ28	φ28	φ35	φ35
Liquid Line (mm)	φ12.7	φ12.7	φ12.7	φ12.7	φ16	φ16
Size	L (mm)	820	1320	1320	1320	1320
	W (mm)	655	655	655	655	655
	H (mm)	845	1095	1095	1095	1095
Install A×B (mm)	335×615	635×615	635×615	635×615	635×615	635×615
Dimension Drawing	A	B	B	B	B	B

Design condition, ambient 32 degree.

Model	BUB14LBBY	BUB18LBBY	BUB23LBBY	BUB28LBBY	BUB28LBBY	BUB34LBBY
Power Supply	3P / 380V / 50Hz					
Apply Temp.	-15°C ~ 30°C					
Comp. Model	4NES-14Y	4HE-18Y	4GE-23Y	4FE-28Y	6HE-28Y	6GE-34Y
Max. I (A)	26.6	36.7	43.9	52.8	53.2	65.5
Voltage (V)	3P / 380V / 50Hz					
Current (A)	1.1	2.2	2.2	2.2	3.5	3.5
Power (W)	220×2	548×2	548×2	548×2	937×2	937×2
Rev. (r/min)	1380	1380	1380	1380	1380	1380
Suction Line (mm)	φ35	φ42	φ54	φ54	φ54	φ54
Liquid Line (mm)	φ16	φ19	φ22	φ22	φ22	φ22
Size	L (mm)	1620	1620	1920	1920	1920
	W (mm)	805	805	905	905	905
	H (mm)	1200	1200	1315	1315	1315
Install A×B (mm)	700×765	700×765	700×765	1000×865	1000×865	1000×865
Dimension Drawing	B	B	B	B	B	B

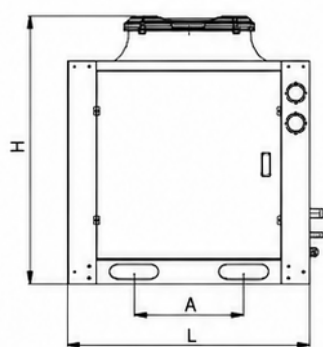
Design condition, ambient 32 degree.



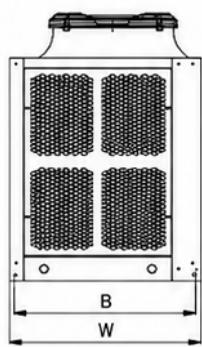
BUB SERIES

Box-Type Unit with
Semi-hermetic Compressor

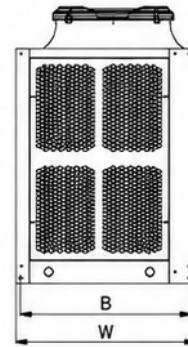
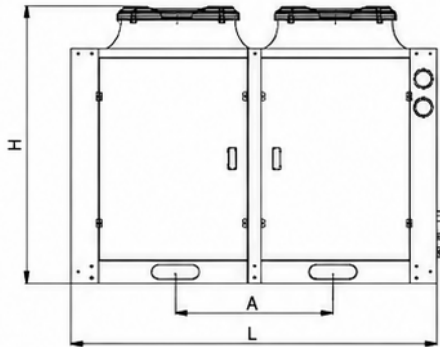
3.2 Dimension Drawing:



Drawing A



Drawing B



3.3 Cooling capacity data:

3.3.1 Medium temp. units (W):

Model	Refrigerant	Ambient (°C)	Evaporating temperature (°C)				
			0	-5	-10	-15	-20
BUB03MBB	R22	25	8620	7250	5950	4900	4000
		32	7830	6570	5370	4400	3550
		42	6800	5670	4600	3750	3000
BUB03MBBY	R404A R507A	25	8900	7560	6210	5160	4230
		32	7660	6500	5300	4400	3600
		42	5770	4900	4000	3300	2680
BUB05MBB	R22	25	13600	11400	9400	7700	6260
		32	12300	10300	8400	6900	5550
		42	10600	8800	7200	5800	4640
BUB05MBBY	R404A R507A	25	14300	12100	9900	8200	6700
		32	12300	10400	8500	7100	5800
		42	9300	7900	6450	5370	4400
BUB06MBB	R22	25	16770	14100	11810	9800	7980
		32	15530	13100	10960	8920	7220
		42	13920	11450	9450	7700	6180
BUB06MBBY	R404A R507A	25	17290	14560	12280	10250	8370
		32	15300	13060	11030	9000	7360
		42	12530	10290	8620	7130	5810
BUB07MBB	R22	25	20000	16800	14110	11730	9570
		32	18530	15660	13110	10700	8680
		42	—	13720	11350	9270	7460
BUB07MBBY	R404A R507A	25	20800	17530	14800	12370	10140
		32	18530	15800	13350	10920	8940
		42	—	12600	10530	8710	7110
BUB09MBB	R22	25	24500	20700	17400	14500	11840
		32	22800	19300	16200	13200	10800
		42	20500	17000	14100	11500	9300
BUB09MBBY	R404A R507A	25	25200	21200	17800	14900	12200
		32	22600	19150	16120	13160	10800
		42	18800	15400	12800	10500	8540
BUB12MBB	R22	25	32200	26900	22400	18500	14900
		32	30000	25200	20900	16950	13600
		42	27000	22100	18100	14650	11650
BUB12MBBY	R404A R507A	25	32100	26900	22600	18800	15340
		32	28500	24200	20300	16500	13400
		42	23600	19200	15900	13000	10500

i The cooling capacity is based on 10K superheat and 0K subcooling.



BUB SERIES

COOLING CAPACITY DATA

CONTINUATION

3.3.1 Medium temp. units (W): (CONTINUED)

Model	Refrigerant	Ambient (°C)	Evaporating temperature (°C)				
			0	-5	-10	-15	-20
BUB15MBB	R22	25	37000	30900	25700	21100	17000
		32	34400	28800	23900	19200	15400
		42	30800	25100	20500	16500	13000
BUB15MBBY	R404A R507A	25	36900	30800	25800	21400	17340
		32	32600	27500	23000	18600	15000
		42	26800	21700	17820	14500	11600
BUB20MBB	R22	25	43500	36400	30300	25000	20100
		32	40500	34000	22800	22800	18300
		42	—	29700	24300	19700	15600
BUB20MBBY	R404A R507A	25	43800	36700	30800	25700	20900
		32	38900	33000	27700	22500	18240
		42	—	26200	21700	17750	14300
BUB25MBB	R22	25	57900	48400	40400	33400	27000
		32	53900	45400	37800	30600	24600
		42	—	39800	32700	26600	21200
BUB25MBBY	R404A R507A	25	57200	48300	40800	34200	28100
		32	50900	43500	36800	30100	24700
		42	—	34700	29000	23900	19500
BUB30MBB	R22	25	67000	56100	46900	38800	31400
		32	62500	52600	43900	35700	28800
		42	—	46400	38200	31000	24800
BUB30MBBY	R404A R507A	25	65500	55400	46900	39400	32400
		32	58300	49900	42300	34700	28500
		42	—	39700	33300	27600	22600

3.3.2 Low temp. units (W):

Model	Refrigerant	Ambient (°C)	Evaporating temperature (°C)				
			-20	-25	-30	-35	-40
BUB03LBYY	R404A R507A	25	5400	4500	3600	2800	2000
		32	4600	3750	3100	2400	1700
		42	3550	2870	2300	1700	1200
BUB04LBYY	R404A R507A	25	7320	6100	4820	3800	2820
		32	6300	5100	4140	3230	2400
		42	4900	3950	3130	2420	1750
BUB05LBYY	R404A R507A	25	8740	7230	5800	4520	3400
		32	7520	6100	5000	3900	2900
		42	5900	4730	3730	2900	2100
BUB06LBYY	R404A R507A	25	10500	8700	6900	5400	4000
		32	9000	7200	5900	4600	3330
		42	7100	5650	4400	3400	2420
BUB09LBYY	R404A R507A	25	13400	10800	8500	6550	4800
		32	11500	9150	7200	5480	3900
		42	8600	6820	5300	4000	2750
BUB12LBYY	R404A R507A	25	15100	12000	9390	7180	5170
		32	12430	9810	7840	5910	4150
		42	9430	7370	5620	4140	2770
BUB14LBYY	R404A R507A	25	18240	14600	11520	8920	6550
		32	15600	12400	9730	7460	5370
		42	11600	9200	7100	5350	3710

i The cooling capacity is based on 10K superheat and 0K supercooling.

**BUB Series Technical Data**

Cooling Capacity Data | Standard & Optional Configuration

Cooling Capacity Data (Continuation)

Model		Ambient (°C)	Evaporating Temperature (°C)				
			-20	-25	-30	-35	-40
BUB18LBBY	R404A	25	25300	20500	16340	12800	9500
	R507A	32	21800	17600	14000	10870	7950
		42	16700	13400	10550	8100	5760
BUB23LBBY	R404A	25	29500	24000	19220	15130	11340
	R507A	32	25600	20800	16580	13000	9620
		42	19600	15910	12660	9840	7170
BUB28LBBY/4FE	R404A	25	35100	28600	23000	18120	13600
	R507A	32	30500	24800	19800	15540	11500
		42	23500	19100	15150	11700	8400
BUB28LBBY/6HE	R404A	25	36300	30100	24100	18900	14100
	R507A	32	31300	25300	20600	16600	11800
		42	24600	19700	15500	11900	8500
BUB34LBBY	R404A	25	43900	35900	29000	23000	17400
	R507A	32	38300	31300	25100	19800	14800
		42	29600	24100	19300	15100	11000

**Standard Configuration and Optional Configuration
Medium Temp. Unit**

Parts	BUB Series Model of Unit									
	-03M	-05M	-06M	-07M	-09M	-12M	-15M	-20M	-25M	-30M
Compressor	●	●	●	●	●	●	●	●	●	●
Oil Heater	●	●	●	●	●	●	●	●	●	●
Discharge Vibration Damper	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Oil Separator	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Condenser	●	●	●	●	●	●	●	●	●	●
AC Motor	●	●	●	●	●	●	●	●	●	●
Receiver	●	●	●	●	●	●	●	●	●	●
Liquid Filter	●	●	●	●	●	●	●	●	●	●
Sight Glass	●	●	●	●	●	●	●	●	●	●
Solenoid Valve	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
HP/LP Switch	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Oil Pressure Switch	/	▲	▲	▲	▲	▲	▲	▲	▲	▲
HP/LP Gauge	●	●	●	●	●	●	●	●	●	●
Accumulator	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Liquid Line Valve	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Electric Control for Unit	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲

Remark: ● Standard Configuration; ▲ Optional, extra cost

**3.4.2 Low temp. unit:**

Unit Parts	BUB Model of Unit										
	-03L	-04L	-05L	-06L	-09L	-12L	-14L	-18L	-23L	-28L	-34L
Compressor	●	●	●	●	●	●	●	●	●	●	●
Oil Heater	●	●	●	●	●	●	●	●	●	●	●
Oil Separator	▲	▲	▲	▲	●	●	●	●	●	●	●
Discharge Vibration Damper	▲	▲	▲	▲	●	●	●	●	●	●	●
Oil Separator	▲	▲	▲	▲	●	●	●	●	●	●	●
Condenser	●	●	●	●	●	●	●	●	●	●	●
AC Motor	●	●	●	●	●	●	●	●	●	●	●
Receiver	●	●	●	●	●	●	●	●	●	●	●
Liquid Filter	●	●	●	●	●	●	●	●	●	●	●
Sight Glass	▲	▲	▲	▲	●	●	●	●	●	●	●
Solenoid Valve	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
High / Low Pressure Switch	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Oil Pressure Switch	/	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
High / Low Pressure Gauge	●	●	●	●	●	●	●	●	●	●	●
Accumulator	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Suction Line Valve	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Liquid Line Valve	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Electric Control for Unit	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲

● Standard Configuration; ▲ Optional, need costs extra; / Not applicable

4.1 Technical Data:**4.1.1 Bitzer Semi-hermetic Series Units****4.1.1.2 Medium Temp. Unit:****1) Refrigerant R22/R404A/R507A:**

Item	Model	BUB03MBFY	BUB04MBFY	BUB05MBFY	BUB07MBFY	BUB12MBFY
Power Supply				3P / 380V / 50Hz		
Apply Temp.				-5°C ~ 5°C		
Comp.	Model	D3 - 13.1Y	D4 - 18.1Y	D5 - 24.1Y	Q7 - 33.1Y	S12 - 42Y
	Max. I. (A)	8.8	12.5	13.8	20.0	22.4
	Voltage (V)			3P / 380V / 50Hz		
Fan	Current (A)	0.52	1.1	1.1	1.75	1.75
	Power (W)	220	220×2	220×2	937	937
	Rev. (r/min)	1380	1380	1380	1380	1380
Size	Suction Line (mm)	φ28	φ28	φ28	φ35	φ35
	Liquid Line (mm)	φ12.7	φ12.7	φ12.7	φ16	φ16
	L (mm)	820	1320	1320	1620	1620
	W (mm)	655	655	655	805	805
	H (mm)	845	1095	1095	1200	1200
Install AxB (mm)		335×615	635×615	635×615	700×765	700×765
Dimension Drawing		A	B	B	B	B

Design condition: ambient 32°C, suction gas superheat 5K.

**BUB SERIES TECHNICAL DATA****4.1 Technical Data (Continued)****4.1.2 Medium Temp. Unit (Continued):**

Model		BUB15MBFY	BUB20MBFY	BUB25MBFY	BUB30MBFY
Power Supply		3P / 380V / 50Hz			
Apply Temp.		-5°C ~ 5°C			
Compressor	Model	S15-52Y	S20-56Y	V25-71Y	V30-84Y
	Max. I (A)	32.4	38.4	43.5	49.2
Fan	Voltage (V)	3P / 380V / 50Hz			
	Current (A)	2.2	2.2	3.5	3.5
	Power (W)	548×2	548×2	937×2	937×2
	Rev. (r/min)	1380	1380	1380	1380
	Suction Line (mm)	Φ42	Φ42	Φ54	Φ54
Size	Liquid Line (mm)	Φ19	Φ22	Φ22	Φ22
	L (mm)	1620	1920	1920	2220
	W (mm)	805	905	905	905
	H (mm)	1200	1315	1315	1315
Install A×B (mm)		700×765	1000×865	1000×865	1000×865
Dimension Drawing		B	B	B	B

Design condition: ambient 32 degree.

4.1.3 Low Temp. Unit:**1) Refrigerant R404A/R507A:**

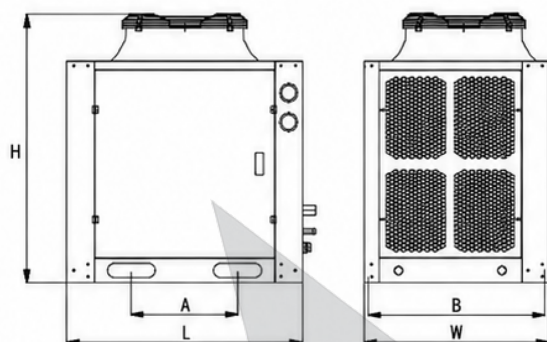
Model		BUB02LBFY	BUB03LBFY	BUB05LBFY	BUB08LBFY	BUB10LBFY
Power Supply		3P / 380V / 50Hz				
Apply Temp.		-15°C ~ -30°C				
Compressor	Model	D2-13.1Y	D3-18.1Y	Q5-33.1Y	S8-42Y	S10-52Y
	Max. I (A)	7.1	10.0	14.4	20.3	24.5
Fan	Voltage (V)	3P / 380V / 50Hz				
	Current (A)	0.52	0.52	1.1	1.1	1.1
	Power (W)	220	220	548	548	548
	Rev. (r/min)	1380	1380	1380	1380	1380
	Suction Line (mm)	Φ22	Φ28	Φ35	Φ35	Φ35
Size	Liquid Line (mm)	Φ12.7	Φ12.7	Φ16	Φ16	Φ16
	L (mm)	820	820	1320	1320	1320
	W (mm)	655	655	655	655	655
	H (mm)	845	845	1095	1095	1095
Install A×B (mm)		335×615	335×615	635×615	635×615	635×615
Dimension Drawing		A	A	B	B	B

Design condition: ambient 32 degree.

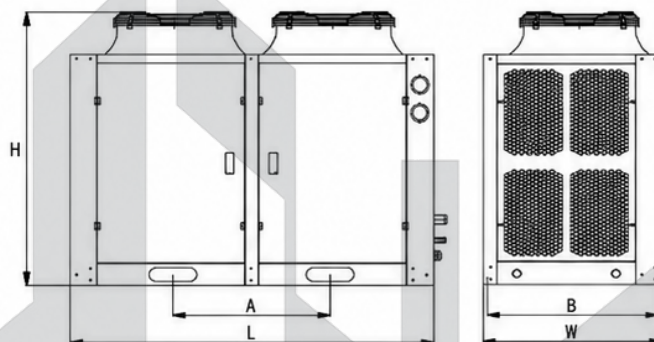
**BUB Series**

Box-Type Unit with Semi-hermetic Compressor

Parameter	Model	BUB15LBFY/S15	BUB15LBFY/Y15	BUB20LBFY	BUB25LBFY	BUB30LBFY
Power Supply		3P / 380V / 50Hz				
Ambient Temp. Range		-15°C ~ 30°C				
Compressor	Model	S15-56Y	V15-71Y	V20-84Y	V25-103Y	Z30-126Y
	Max. Current (A)	30.7	32.2	46.2	52.3	55.7
Fan	Voltage (V)	3P / 380V / 50Hz				
	Current (A)	1.75	2.2	2.2	2.2	3.5
	Power (W)	937	548×2	548×2	548×2	937×2
	Speed (r/min)	1380	1380	1380	1363	1380
Air Suction Line (mm)		Φ35	Φ42	Φ54	Φ54	Φ54
Liquid Line (mm)		Φ16	Φ19	Φ22	Φ22	Φ22
Size	L (mm)	1620	1620	1620	1920	1920
	W (mm)	805	805	805	905	905
	H (mm)	1200	1200	1200	1315	1315
Installation Size (AxB) (mm)		700×765	700×765	700×765	1000×865	1000×865
Dimension Drawing		B	B	B	B	B

5. Dimension Drawing:

Drawing A



Drawing B

6. Cooling capacity data of units:**6.1 Medium temp. unit (W):**

Model		Ambient Temp. (°C)	Evaporating Temperature (°C)				
			0	-5	-10	-15	-20
BUB03MBFY	R22	25	10000	8600	7200	6000	4900
		32	9400	7800	6500	5500	4500
		42	8200	6900	5800	4700	3800
	R404A	25	9900	8400	7200	6000	4850
		32	8700	7400	6200	5200	4300
	R507A	42	7350	5900	5000	4200	3400

Design condition: ambient 32°C.



BUB Series Cooling Capacity Data



Medium Temperature Unit Cooling Capacity Data

Model	Configuration		Evaporating temperature(°C)				
			0	-5	-10	-15	-20
BUB04MBFY	R22	25	13700	11600	9900	8200	6800
		32	12700	10700	9000	7600	6200
		42	11200	9500	8000	6600	5400
	R404A R507A	32	13400	11500	9900	8300	6850
		32	11800	10100	8600	7400	6100
		42	9950	8300	7100	6000	5000
BUB05MBFY	R22	25	18000	15120	12640	10440	8460
		32	16740	14150	11830	9640	7780
		42	14970	12370	10270	8400	6760
	R404A R507A	25	17820	15300	13100	11040	9070
		32	15760	13740	11810	9785	8050
		42	12930	10930	9377	7910	6538
BUB07MBFY	R22	25	24486	20760	17585	14800	12280
		32	22935	19584	16614	13830	11470
		42	20780	17430	14730	12340	10230
	R404A R507A	25	24580	21180	18220	15460	12830
		32	21868	19138	16538	13820	11500
		42	18130	15425	13320	11340	9490
BUB12MBFY	R22	25	32800	27600	23200	24000	15650
		32	30300	25700	21600	22100	14340
		42	-	22200	19100	19100	12320
	R404A R507A	25	30500	25800	21800	22940	14900
		32	27100	23150	19600	20230	13000
		42	-	18440	15300	16200	10200
BUB15MBFY	R22	25	41220	34630	28950	23900	24500
		32	38100	32230	26960	21900	22600
		42	33700	27850	23100	18900	19600
	R404A R507A	25	39600	33660	28700	24200	25100
		32	35500	30540	26100	21610	22500
		42	29900	24850	21050	17650	18500
BUB20MBFY	R22	25	43900	37200	31700	26800	22200
		32	40600	34600	29500	24500	20220
		42	-	30000	25400	21200	17400
	R404A R507A	25	43500	37000	31600	26700	22100
		32	39000	33600	28700	23800	19700
		42	-	27400	23200	19500	16100
BUB25MBFY	R22	25	53600	45300	38500	32600	27000
		32	50200	42700	36200	30200	25000
		42	-	37900	32000	26800	22000
	R404A R507A	25	53800	45400	38400	32100	26200
		32	47700	40700	34400	28100	22900
		42	-	32400	27000	22300	18100
BUB30MBFY	R22	25	62800	53200	45200	38300	31800
		32	58800	50000	42500	35500	29400
		42	-	44600	37600	31600	26100
	R404A R507A	25	64500	54600	46300	38800	31800
		32	57500	49200	41700	34100	27900
		42	-	39400	33000	27300	22300

i Note: The cooling capacity is based on 10K superheat and 0K supercooling.



SAUVERAIN

BUB Series Cooling Capacity Data

6.2 Low Temp. Unit (W)

Model	Refrigerant	Ambient Temp. (°C)	Evaporating Temperature (°C)				
			-20	-25	-30	-35	-40
BUB02LBFY	R404A	25	4300	3500	2800	2200	1600
		32	3700	3000	2440	1900	1400
	R507A	42	3000	2400	1940	1500	1100
BUB03LBFY	R404A	25	5900	5000	4000	3200	2400
		32	5150	4200	3500	2760	2140
	R507A	42	4200	3400	2760	2200	1680
BUB05LBFY	R404A	25	11530	9540	7755	6174	4690
		32	9980	8280	6878	5470	4130
	R507A	42	8290	6910	5640	4485	3356
BUB08LBFY	R404A	25	15210	12490	10000	7820	5730
		32	13000	10720	8800	6830	4910
	R507A	42	10460	8660	6950	5350	3710
BUB10LBFY	R404A	25	17500	14400	11700	9300	7000
		32	15400	12600	10300	8100	6000
	R507A	42	12100	9900	8000	6220	4400
BUB15LBFY/ S15	R404A	25	19450	16000	12900	10200	7600
		32	17000	14000	11200	8800	6400
	R507A	42	13300	10900	8700	6700	4600
BUB15LBFY/ V15	R404A	25	23850	19600	15900	12600	9400
		32	20880	17100	13800	10900	7930
	R507A	42	16400	13400	10700	8300	5700
BUB20LBFY	R404A	25	27630	22400	17800	13760	10000
		32	23800	19400	15500	12000	8700
	R507A	42	18000	14800	11900	9300	6770
BUB25LBFY	R404A	25	34300	27700	21850	16700	12000
		32	29700	23900	18740	14300	10100
	R507A	42	22700	18000	14050	10600	7400
BUB30LBFY	R404A	25	41200	33250	26300	20200	14700
		32	35500	28600	22600	17300	12400
	R507A	42	27100	21900	17200	13200	9300



The cooling capacity is based on 10K superheat and 0K supercooling.



7. Standard Configuration and Optional Configuration

7.1 Medium temp. unit

Parts	BUB-F Model of unit								
	-03M	-04M	-05M	-07M	-12M	-15M	-20M	-25M	-30M
Compressor	●	●	●	●	●	●	●	●	●
Oil Heater	●	●	●	●	●	●	●	●	●
Discharge Vibration Damper	▲	▲	▲	●	●	●	●	●	●
Oil Separator	▲	▲	▲	●	●	●	●	●	●
Condenser	●	●	●	●	●	●	●	●	●
AC Motor	●	●	●	●	●	●	●	●	●
Receiver	●	●	●	●	●	●	●	●	●
Liquid Filter	●	●	●	●	●	●	●	●	●
Sight Glass	●	●	●	●	●	●	●	●	●
Solenoid Valve	▲	▲	▲	▲	▲	▲	▲	▲	▲
HP/LP Switch	●	●	●	●	●	●	●	●	●
Oil Pressure Switch	/	/	▲	▲	▲	▲	▲	▲	▲
HP/LP Gauge	●	●	●	●	●	●	●	●	●
Accumulator	▲	▲	▲	▲	▲	▲	▲	▲	▲
Liquid Line Valve	▲	▲	▲	▲	▲	▲	▲	▲	▲
Electric Control for Unit	▲	▲	▲	▲	▲	▲	▲	▲	▲

● Standard Configuration; ▲ Optional, extra cost; / Not available

7.2 Low temp. unit

Parts	BUB-F Model of unit									
	-02L	-03L	-05L	-08L	-10L	-15L/S15	-15L/V15	-20L	-25L	-30L
Compressor	●	●	●	●	●	●	●	●	●	●
Oil Heater	●	●	●	●	●	●	●	●	●	●
Discharge Vibration Damper	▲	▲	●	●	●	●	●	●	●	●
Oil Separator	▲	▲	●	●	●	●	●	●	●	●
Condenser	●	●	●	●	●	●	●	●	●	●
AC Motor	●	●	●	●	●	●	●	●	●	●
Receiver	●	●	●	●	●	●	●	●	●	●
Liquid Filter	●	●	●	●	●	●	●	●	●	●
Sight Glass	●	●	●	●	●	●	●	●	●	●
Solenoid Valve	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
HP/LP Switch	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Oil Pressure Switch	/	/	▲	▲	▲	▲	▲	●	●	●
HP/LP Gauge	●	●	●	●	●	●	●	●	●	●
Accumulator	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Liquid Line Valve	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Electric Control for Unit	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲

● Standard Configuration; ▲ Optional, extra cost; / Not available