

BUW-A Series

Compact Box-Type with
Scroll Compressor





BUW-A SERIES

COMPACT BOX-TYPE UNIT
WITH SCROLL COMPRESSOR





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Compact Box-Type Unit with Scroll Compressor



1. PRODUCT DESCRIPTION

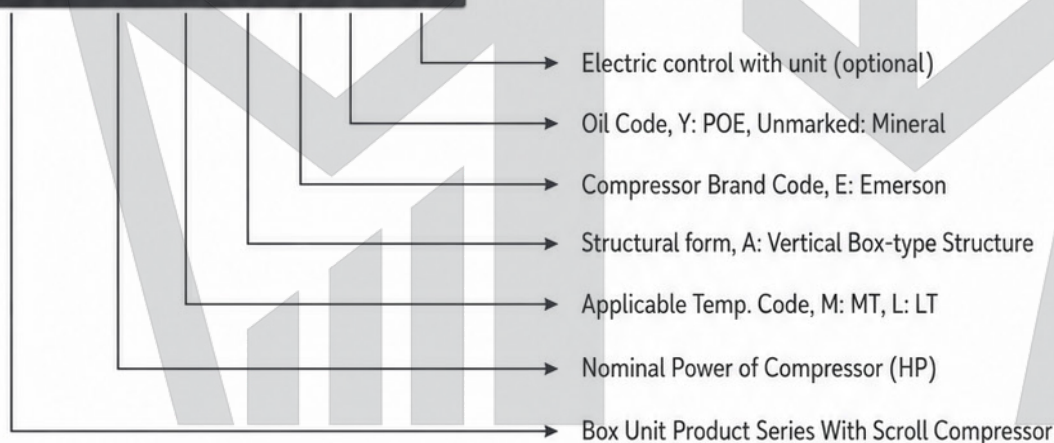
BUW-A series box-type condensing units have the following characteristics:

- 1 Products adopt vertical box-type structure, compact structure design, excellent appearance;
- 2 The cover of the case adopts hinge structure, which is easy to maintain and operate;
- 3 Compressor uses Emerson ZB series scroll compressor and ZSI series scroll compressor with DTC spray to meet the application of medium temperature and low temperature respectively;
- 4 Adopt L-type condenser, it has large windward side, small wind resistance and good heat transfer effect;
- 5 Adopt 6-pole external rotor motor with low speed and low noise;
- 6 It can meet the requirements of R22, R404A, R507A, R448A, R449A and other refrigerants.



2. MODEL DESCRIPTION

BUW 02 M A E Y - E



**BUW-A SERIES**

Compact Box-Type Unit with Scroll Compressor

3. TECHNICAL DATA**3.1 Medium Temp. Unit****3.1.1 Refrigerant R22**

Item	Model						
	02MAE	03MAE	04MAE	05MAE	06MAE	08MAE	10MAE
Power Supply	3P / 380V / 50Hz	3P / 380V / 50Hz	3P / 380V / 50Hz	3P / 380V / 50Hz	3P / 380V / 50Hz	3P / 380V / 50Hz	3P / 380V / 50Hz
Apply Temp.	-5°C ~ 5°C	-5°C ~ 5°C	-5°C ~ 5°C	-5°C ~ 5°C	-5°C ~ 5°C	-5°C ~ 5°C	-5°C ~ 5°C
Comp. Model	ZB15KQ	ZB21KQ	ZB29KQ	ZB38KQ	ZB45KQ	ZB58KQ	ZB76KQ
Max. I (A)	6.0	8.0	11.0	13.5	16.1	23.0	26.9
Fan Voltage (V)	3P / 380V / 50Hz	3P / 380V / 50Hz	3P / 380V / 50Hz	3P / 380V / 50Hz	3P / 380V / 50Hz	3P / 380V / 50Hz	3P / 380V / 50Hz
Current (A)	0.5	0.5	1.0	1.0	1.0	1.4	1.4
Power (W)	166	166	166×2	166×2	166×2	257×2	257×2
Speed Rev. (r/min)	910	910	910	910	910	930	930
Suction Line (mm)	φ16	φ16	φ19	φ19	φ19	φ28	φ28
Liquid Line (mm)	φ9.5	φ9.5	φ12.7	φ12.7	φ12.7	φ16	φ16
L (mm)	1040	1040	1040	1040	1040	1180	1180
W (mm)	520	520	520	520	520	540	540
H (mm)	700	700	1100	1100	1100	1300	1300
Install A×B (mm)	550×440	550×440	550×440	550×440	550×440	700×460	700×460
Outline Drawing	A	A	B	B	B	B	B

Remark: 1P / 220V / 50Hz power supply is available for 2HP and 3HP models. Please specify when ordering.

3.1.2 Refrigerant R404A / R507A

Item	Model						
	02MAEY	03MAEY	04MAEY	05MAEY	06MAEY	08MAEY	10MAEY
Power Supply	3P / 380V / 50Hz	3P / 380V / 50Hz	3P / 380V / 50Hz	3P / 380V / 50Hz	3P / 380V / 50Hz	3P / 380V / 50Hz	3P / 380V / 50Hz
Apply Temp.	-15°C ~ 5°C	-15°C ~ 5°C	-15°C ~ 5°C	-15°C ~ 5°C	-15°C ~ 5°C	-15°C ~ 5°C	-15°C ~ 5°C
Comp. Model	ZB15KQE	ZB21KQE	ZB29KQE	ZB38KQE	ZB45KQE	ZB58KQE	ZB76KQE
Max. I (A)	6.0	8.0	11.0	13.5	16.1	23.0	26.9
Fan Voltage (V)	3P / 380V / 50Hz	3P / 380V / 50Hz	3P / 380V / 50Hz	3P / 380V / 50Hz	3P / 380V / 50Hz	3P / 380V / 50Hz	3P / 380V / 50Hz
Current (A)	0.5	0.5	1.0	1.0	1.0	1.4	1.4
Power (W)	166	166	166×2	166×2	166×2	257×2	257×2
Speed Rev. (r/min)	910	910	910	910	910	930	930
Suction Line (mm)	φ19	φ19	φ19	φ19	φ19	φ28	φ28
Liquid Line (mm)	φ9.5	φ9.5	φ12.7	φ12.7	φ12.7	φ16	φ16
L (mm)	1040	1040	1040	1040	1040	1180	1180
W (mm)	520	520	520	520	520	540	540
H (mm)	700	700	1100	1100	1100	1300	1300
Install A×B (mm)	550×440	550×440	550×440	550×440	550×440	700×460	700×460
Outline Drawing	A	A	B	B	B	B	B

Remark: 1P / 220V / 50Hz power supply is available for 2HP and 3HP models. Please specify when ordering.

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Compact Box-Type Unit with Scroll Compressor

3.2 Low Temp. Unit With DTC Spray**3.2.1 Refrigerant R22**

Model	BUW02LAE	BUW03LAE	BUW05LAE	BUW06LAE	BUW07LAE
Power Supply	3P / 380V / 50Hz				
Apply Temp.	-15°C ~ -23°C				
Comp. Model	ZSI06KQ	ZSI09KQ	ZSI15KQ	ZSI18KQ	ZSI21KQ
Max. I (A)	5.2	6.2	10.1	11.2	13.6
Voltage (V)	3P / 380V / 50Hz				
Current (A)	0.5	0.5	1.0	1.0	1.0
Power (W)	166	166	166×2	166×2	166×2
Rev. (r/min)	910	910	910	910	910
Suction Line (mm)	φ16	φ16	φ19	φ19	φ19
Liquid Line (mm)	φ9.5	φ9.5	φ12.7	φ12.7	φ12.7
L (mm)	1040	1040	1040	1040	1040
W (mm)	520	520	520	520	520
H (mm)	700	700	1100	1100	1100
Install A × B (mm)	550 × 440	550 × 440	550 × 440	550 × 440	550 × 440
Outline Drawing	A	A	B	B	B

Remarks: 1P / 220V / 50Hz power supply is available for 2HP and 3HP models. Please specify when ordering.

3.2.2 Refrigerant R404A / R507A

Model	BUW02LAEY	BUW03LAEY	BUW05LAEY	BUW06LAEY	BUW07LAEY
Power Supply	3P / 380V / 50Hz				
Apply Temp.	-15°C ~ -23°C				
Comp. Model	ZSI06KQE	ZSI09KQE	ZSI15KQE	ZSI18KQE	ZSI21KQE
Max. I (A)	5.2	6.2	10.1	13.2	14.6
Voltage (V)	3P / 380V / 50Hz				
Current (A)	0.5	0.5	1.0	1.0	1.0
Power (W)	166	166	166×2	166×2	166×2
Rev. (r/min)	910	910	910	910	910
Suction Line (mm)	φ16	φ16	φ19	φ19	φ19
Liquid Line (mm)	φ9.5	φ9.5	φ12.7	φ12.7	φ12.7
L (mm)	1040	1040	1040	1040	1040
W (mm)	520	520	520	520	520
H (mm)	700	700	1100	1100	1100
Install A × B (mm)	550 × 440	550 × 440	550 × 440	550 × 440	550 × 440
Outline Drawing	A	A	B	B	B

Remarks: 1P / 220V / 50Hz power supply is available for 2HP and 3HP models. Please specify when ordering.



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4. COOLING CAPACITY DATA OF UNIT

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4.1 MEDIUM TEMP. UNITS (W)

Compact Box-Type Unit with Scroll Compressor

Model	Refrigerant	Ambient Temperature (°C)	Evaporating Temperature (°C)				
			0	-5	-10	-15	-20
BUW02MAE	R22	25	5000	4240	3570	-	-
		32	4680	4000	3370	-	-
		42	-	3550	2980	-	-
BUW02MAEY	R404A R507A	25	4980	4260	3640	3070	2540
		32	4410	3820	3270	2700	2220
		42	-	2980	2520	2100	1690
BUW03MAE	R22	25	7270	6170	5200	-	-
		32	6810	5820	4900	-	-
		42	-	5160	4330	-	-
BUW03MAEY	R404A R507A	25	7390	6320	5400	4580	3810
		32	6650	5750	4930	4110	3430
		42	-	4660	3970	3360	2810
BUW04MAE	R22	25	9760	8290	6980	-	-
		32	9140	7810	6580	-	-
		42	-	6930	5820	-	-
BUW04MAEY	R404A R507A	25	10050	8570	7330	6220	5170
		32	9020	7800	6690	5580	4650
		42	-	6320	5390	4560	3810
BUW05MAE	R22	25	12150	10300	8680	-	-
		32	11350	9710	8170	-	-
		42	-	8610	7230	-	-
BUW05MAEY	R404A R507A	25	12650	10800	9250	7840	6520
		32	11350	9840	8440	7040	5870
		42	-	7970	6800	5750	4810
BUW06MAE	R22	25	14650	12450	10550	-	-
		32	13750	11750	9950	-	-
		42	-	10400	8700	-	-
BUW06MAEY	R404A R507A	25	14800	12650	10850	9180	7640
		32	13300	11500	9880	8240	6870
		42	-	9340	7960	6730	5630
BUW08MAE	R22	25	19300	16250	13450	-	-
		32	17950	15100	12500	-	-
		42	-	13200	10800	-	-
BUW08MAEY	R404A R507A	25	19800	17050	14400	12000	9850
		32	17750	15300	13050	10750	8760
		42	-	12600	10750	8740	6840
BUW10MAE	R22	25	25800	22000	18400	-	-
		32	24200	20600	17350	-	-
		42	-	18500	15500	-	-
BUW10MAEY	R404A R507A	25	26300	22700	19200	16050	13300
		32	23600	20400	17450	14500	12000
		42	-	16900	14550	12000	9770



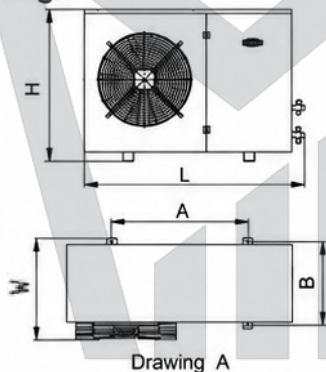
Note: The refrigeration capacity is based on superheat of 10K and supercool of 0K.

**BUW-A SERIES**

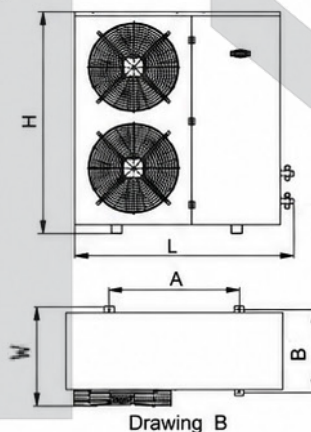
Compact Box-Type Unit with Scroll Compressor

4.2 Low Temp. Units (W)

Model	Compressor Model	Ambient (°C)	Evaporating Temperature (°C)		
			-20	-25	-30
BUW02LAE	R22	25	2380	1960	1620
		32	2220	1830	1520
		42	1950	1600	1330
BUW02LAEY	R404A R507A	25	2350	1930	1590
		32	2070	1700	1400
		42	1630	1330	1080
BUW03LAE	R22	25	3150	2550	2020
		32	2950	2400	1900
		42	2600	2130	1700
BUW03LAEY	R404A R507A	25	3350	2800	2300
		32	2900	2420	1980
		42	2250	1840	1470
BUW05LAE	R22	25	6040	5060	4210
		32	5540	4650	3880
		42	4880	4080	3400
BUW05LAEY	R404A R507A	25	5820	4770	3780
		32	5310	4360	3440
		42	4410	3680	2930
BUW06LAE	R22	25	7150	6020	5040
		32	6570	5480	4720
		42	5900	4900	4170
BUW06LAEY	R404A R507A	25	7120	6000	4900
		32	6200	5180	4440
		42	5250	4400	3640
BUW07LAE	R22	25	7940	6590	5560
		32	7540	6270	5280
		42	6770	5620	4720
BUW07LAEY	R404A R507A	25	8060	6670	5500
		32	7220	6000	4960
		42	5880	4920	4080

Note: The refrigeration capacity is based on superheat of 10K and supercool of 0K.**5. Dimension Drawing:**

Drawing A



Drawing B

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6. STANDARD CONFIGURATION AND OPTIONAL CONFIGURATION**6.1 Medium Temp. Units**

Parts	BUW-A Model of Unit						
	-02M	-03M	-04M	-05M	-06M	-08M	-10M
Compressor	●	●	●	●	●	●	●
Oil Heater	▲	▲	▲	▲	▲	▲	▲
Oil Separator	▲	▲	▲	▲	▲	▲	▲
Condenser	●	●	●	●	●	●	●
6-pole AC Motor	●	●	●	●	●	●	●
Receiver	●	●	●	●	●	●	●
Liquid Filter	●	●	●	●	●	●	●
Sight Glass	●	●	●	●	●	●	●
Solenoid Valve	▲	▲	▲	▲	▲	▲	▲
HP Switch	●	●	●	●	●	●	●
LP Switch	●	●	●	●	●	●	●
HP / LP Gauge	▲	▲	▲	▲	▲	▲	▲
Accumulator	▲	▲	▲	▲	▲	▲	▲
Liquid Line Valve	●	●	●	●	●	●	●
Suction Line Valve	●	●	●	●	●	●	●
Electric Control for Unit	▲	▲	▲	▲	▲	▲	▲

Remarks: ● Standard Configuration; ▲ Optional, additional cost required.

6.2 Low Temp. Units

Parts	BUW-A Model of Unit				
	-02L	-03L	-05L	-06L	-07L
Compressor	●	●	●	●	●
Oil Heater	▲	▲	▲	▲	▲
Oil Separator	▲	▲	▲	▲	▲
Condenser	●	●	●	●	●
6-pole AC Motor	●	●	●	●	●
Receiver	●	●	●	●	●
Liquid Filter	●	●	●	●	●
Sight Glass	●	●	●	●	●
Solenoid Valve	▲	▲	▲	▲	▲
DTC Valve	●	●	●	●	●
HP Switch	●	●	●	●	●
LP Switch	●	●	●	●	●
HP / LP Gauge	▲	▲	▲	▲	▲
Accumulator	▲	▲	▲	▲	▲
Liquid Line Valve	●	●	●	●	●
Suction Line Valve	●	●	●	●	●
Electric Control for Unit	▲	▲	▲	▲	▲

Remarks: ● Standard Configuration; ▲ Optional, additional cost required.