

BUW-B Series

Horizontal Box-Type with
Scroll Compressor





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BUW-B SERIES

Horizontal Box-Type Unit with Scroll Compressor





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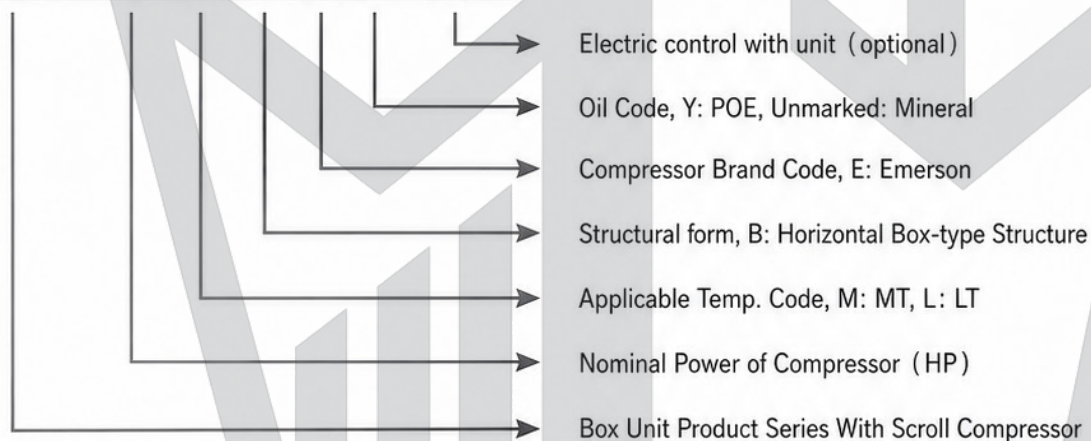
1. PRODUCT DESCRIPTION

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

- 1 Products adopt horizontal box-type structure, high wind circle 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 and ZSI series with DTC spray & ZFI series with EVI scroll compressor 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 It can meet the requirements of R22, R404A, R507A, R448A, R449A and other refrigerants.

2. MODEL DESCRIPTION

BUW 15 M B E Y - E



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3. PERFORMANCE DATA SHEET**3.1 Medium Temp. Unit****3.1.1 Refrigerant R22**

Model	BUW02MBE	BUW03MBE	BUW04MBE	BUW05MBE	BUW06MBE	BUW08MBE
Power Supply	3P / 380V / 50Hz					
Apply Temp.	-5°C~5°C					
Comp. Model	ZB15KQ	ZB21KQ	ZB29KQ	ZB38KQ	ZB45KQ	ZB58KQ
Max. I (A)	6.0	8.0	11.0	13.5	16.1	23.0
Voltage (V)	3P / 380V / 50Hz					
Current (A)	0.52	0.52	0.52	1.1	1.1	1.1
Power (W)	220	220	220	220×2	220×2	220×2
Rev. (r/min)	1380	1380	1380	1380	1380	1380
Suction Line (mm)	Φ16	Φ16	Φ19	Φ19	Φ19	Φ28
Liquid Line (mm)	Φ9.5	Φ9.5	Φ12.7	Φ12.7	Φ12.7	Φ16
L (mm)	820	820	820	1320	1320	1320
W (mm)	655	655	655	655	655	655
H (mm)	845	845	845	1095	1095	1095
Install A×B (mm)	335×615	335×615	335×615	635×615	635×615	635×615
Outline Drawing	A	A	A	B	B	B

Remarks: 1. Design condition: ambient Temp. 32°C; 2. 1P/220V/50Hz power supply is available for 2HP and 3HP models.
Please specify when ordering.

3.1.2 Refrigerant R22

Model	BUW10MBE	BUW12MBE	BUW15MBE	BUW20MBE	BUW22MBE	BUW25MBE
Power Supply	3P / 380V / 50Hz					
Apply Temp.	-5°C~5°C					
Comp. Model	ZB76KQ	ZB88KQ	ZB114KQ	ZB130KQ	ZB150KQ	ZB190KQ
Max. I (A)	26.9	31.0	38.0	33.1	38.0	48.3
Voltage (V)	3P / 380V / 50Hz					
Current (A)	1.75	1.75	2.2	2.2	3.5	3.5
Power (W)	937	937	548×2	548×2	937×2	937×2
Rev. (r/min)	1380	1380	1380	1380	1380	1380
Suction Line (mm)	Φ35	Φ35	Φ35	Φ42	Φ42	Φ42
Liquid Line (mm)	Φ16	Φ16	Φ19	Φ22	Φ22	Φ22
L (mm)	1620	1620	1620	1920	1920	2220
W (mm)	805	805	805	905	905	905
H (mm)	1200	1200	1200	1315	1315	1315
Install A×B (mm)	700×765	700×765	700×765	1000×865	1000×865	1000×865
Outline Drawing	B	B	B	B	B	B

Remarks: 1. Design condition: ambient Temp. 32°C; 2. 1P/220V/50Hz power supply is available for 2HP and 3HP models.
Please specify when ordering.



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3.1.2 Refrigerant R404A/R507A (Continued)

3.1.2.1 Refrigerant R404A/R507A :

Model		BUW02MBEY	BUW03MBEY	BUW04MBEY	BUW05MBEY	BUW06MBEY	BUW08MBEY
Power Supply		3P / 380V / 50Hz					
Apply Temp.		-10°C ~ 5°C					
Compressor	Model	ZB15KQE	ZB21KQE	ZB29KQE	ZB38KQE	ZB45KQE	ZB58KQE
	Max. Current (A)	6.0	8.0	11.0	13.5	16.1	23.0
Fan	Voltage (V)	3P / 380V / 50Hz					
	Current (A)	0.52	0.52	0.52	1.1	1.1	1.1
	Power (W)	220	220	220	220×2	220×2	220×2
	Rev. (r/min)	1380	1380	1380	1380	1380	1380
Suction Line (mm)		φ16	φ16	φ19	φ19	φ19	φ28
Liquid Line (mm)		φ9.5	φ9.5	φ12.7	φ12.7	φ12.7	φ16
Size	L (mm)	820	820	820	1320	1320	1320
	W (mm)	655	655	655	655	655	655
	H (mm)	845	845	845	1095	1095	1095
Install Ax B (mm)		335×615	335×615	335×615	635×615	635×615	635×615
Outline Drawing		A	A	A	B	B	B

i Remarks: 1. Design condition : ambient Temp. 32°C; 2. 1P/220V/50Hz power supply is available for 2HP and 3HP models.
Please specify when ordering.

3.1.2.2 Refrigerant R404A/R507A :

Model		BUW10MBEY	BUW13MBEY	BUW15MBEY	BUW20MBEY	BUW22MBEY	BUW25MBEY
Power Supply		3P / 380V / 50Hz					
Apply Temp.		-10°C ~ 5°C					
Compressor	Model	ZB76KQE	ZB95KQE	ZB114KQE	ZB130KQE	ZB150KQE	ZB190KQE
	Max. Current (A)	26.9	31.0	38.0	33.1	38.0	48.3
Fan	Voltage (V)	3P / 380V / 50Hz					
	Current (A)	1.75	2.2	2.2	2.2	3.5	3.5
	Power (W)	937	548×2	548×2	548×2	937×2	937×2
	Rev. (r/min)	1380	1380	1380	1380	1380	1380
Suction Line (mm)		φ35	φ35	φ35	φ42	φ42	φ42
Liquid Line (mm)		φ16	φ16	φ19	φ22	φ22	φ22
Size	L (mm)	1620	1620	1620	1920	1920	2220
	W (mm)	805	805	805	905	905	905
	H (mm)	1200	1200	1200	1315	1315	1315
Install Ax B (mm)		700×765	700×765	700×765	1000×865	1000×865	1000×865
Outline Drawing		B	B	B	B	B	B

i Remarks: 1. Design condition : ambient Temp. 32°C; 2. 1P/220V/50Hz power supply is available for 2HP and 3HP models.
Please specify when ordering.



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3.2 Low Temp. Unit**3.2.1 Refrigerant R22 with Spray**

Model		BUW02LBE	BUW03LBE	BUW05LBE	BUW06LBE	BUW07LBE
Power Supply		3P / 380V / 50Hz				
Apply Temp.		-15°C ~ -23°C				
Comp.	Comp. Model	ZSI06KQ	ZSI09KQ	ZSI15KQ	ZSI18KQ	ZSI21KQ
	Max. I (A)	5.2	6.2	10.1	11.2	13.6
Fan	Voltage (V)	3P / 380V / 50Hz				
	Current (A)	0.52	0.52	0.52	0.52	0.52
	Power (W)	220	220	220	220	220
	Rev. (r/min)	1380	1380	1380	1380	1380
	Suction Line (mm)	φ16	φ16	φ19	φ19	φ19
Size	Liquid Line (mm)	φ9.5	φ9.5	φ12.7	φ12.7	φ12.7
	L (mm)	820	820	820	820	820
	W (mm)	655	655	655	655	655
	H (mm)	845	845	845	845	845
Install A×B (mm)		335×615	335×615	335×615	335×615	335×615
Outline Drawing		A	A	A	A	A

Design condition: ambient Temp. 32°C.

3.2.2 Refrigerant R404A / R507A with DTC Spray

Model		BUW02LB EY	BUW03LB EY	BUW05LB EY	BUW06LB EY	BUW07LB EY
Power Supply		3P / 380V / 50Hz				
Apply Temp.		-15°C ~ -23°C				
Comp.	Comp. Model	ZSI06KQE	ZSI09KQE	ZSI15KQE	ZSI18KQE	ZSI21KQE
	Max. I (A)	5.7	6.7	11.9	13.2	14.6
Fan	Voltage (V)	3P / 380V / 50Hz				
	Current (A)	0.52	0.52	0.52	0.52	0.52
	Power (W)	220	220	220	220	220
	Rev. (r/min)	1380	1380	1380	1380	1380
	Suction Line (mm)	φ16	φ16	φ19	φ19	φ19
Size	Liquid Line (mm)	φ9.5	φ9.5	φ12.7	φ12.7	φ12.7
	L (mm)	820	820	820	820	820
	W (mm)	655	655	655	655	655
	H (mm)	845	845	845	845	845
Install A×B (mm)		335×615	335×615	335×615	335×615	335×615
Outline Drawing		A	A	A	A	A

Design condition: ambient Temp. 32°C.

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Horizontal Box-Type Unit with Scroll Compressor

» 3.2.3 Refrigerant R22 / R404A / R507A with EVI

Model	BUW06JBey	BUW10JBey	BUW13JBey	BUW15JBey	BUW18JBey
Power Supply	3P / 380V / 50Hz				
Apply Temp.	-15°C ~ -30°C				
Comp. Model	ZFI26KQE	ZFI39KQE	ZFI50KQE	ZFI59KQE	ZFI68KQE
Max. I (A)	13.0	18.1	25.0	29.0	30.0
Voltage (V)	3P / 380V / 50Hz				
Current (A)	1.1	1.1	1.1	1.48	2.2
Power (W)	220×2	220×2	220×2	937	548×2
Rev. (r/min)	1380	1380	1380	1380	1380
Suction Line (mm)	φ19	φ22	φ35	φ35	φ35
Liquid Line (mm)	φ12.7	φ16	φ16	φ19	φ19
L (mm)	1320	1320	1620	1620	1620
W (mm)	655	655	805	805	805
H (mm)	1095	1095	1200	1200	1200
Install A×B (mm)	635×615	635×615	700×765	700×765	700×765
Outline Drawing	B	B	B	B	B

Design condition: ambient Temp. 32°C.

» 4. Cooling Capacity Data**4.1 Medium Temp. (W)**

Model	Refrigerant	Ambient Temperature (°C)	Evaporating Temperature (°C)				
			0	-5	-10	-15	-20
BUW02MBE	R22	25	5000	4240	3570	-	-
		32	4680	4000	3370	-	-
		42	4170	3550	2980	-	-
BUW02MBEY	R404A / R507A	25	4980	4260	3640	3070	2540
		32	4410	3820	3270	2700	2220
		42	3480	2980	2520	2100	1690
BUW03MBE	R22	25	7270	6170	5200	-	-
		32	6810	5820	4900	-	-
		42	6060	5160	4330	-	-
BUW03MBEY	R404A / R507A	25	7390	6320	5400	4580	3810
		32	6650	5750	4930	4110	3430
		42	5430	4660	3970	3360	2810
BUW04MBE	R22	25	9760	8290	6980	-	-
		32	9140	7810	6580	-	-
		42	8140	6930	5820	-	-
BUW04MBEY	R404A / R507A	25	10050	8570	7330	6220	5170
		32	9020	7800	6690	5580	4650
		42	7370	6320	5390	4560	3810
BUW05MBE	R22	25	12150	10300	8680	-	-
		32	11350	9710	8170	-	-
		42	10100	8610	7230	-	-
BUW05MBEY	R404A / R507A	25	12650	10800	9250	7840	6520
		32	11350	9840	8440	7040	5870
		42	9290	7970	6800	5750	4810
BUW06MBE	R22	25	14650	12450	10550	-	-
		32	13750	11750	9950	-	-
		42	12250	10400	8700	-	-



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4. Cooling Capacity Data

4.1 Medium Temp. Units (W) — Continued

Model	Refrigerant	Ambient Temperature (°C)	Evaporating Temperature (°C)				
			0	-5	-10	-15	-20
BUW06MBEY	R404A / R507A	25	14800	12650	10850	9180	7640
		32	13300	11500	9880	8240	6870
		42	10900	9340	7960	6730	5630
BUW08MBE	R22	25	19300	16250	13450	-	-
		32	17950	15100	12500	-	-
		42	-	13200	10800	-	-
BUW08MBEY	R404A / R507A	25	19800	17050	14400	12000	9850
		32	17750	15300	13050	10750	8760
		42	-	12600	10750	8740	6840
BUW10MBE	R22	25	26200	22000	18400	-	-
		32	24200	20600	17350	-	-
		42	22100	18500	15500	-	-
BUW10MBEY	R404A / R507A	25	26300	22700	19200	16050	13300
		32	23600	20400	17450	14500	12000
		42	19950	16900	14550	12000	9770
BUW12MBE	R22	25	29600	25300	21100	-	-
		32	26700	23500	19750	-	-
		42	-	20800	17500	-	-
BUW13MBEY	R404A / R507A	25	32300	27900	23700	19500	16500
		32	28800	25000	21400	17750	14500
		42	24200	20400	17400	14100	-
BUW15MBE	R22	25	37900	32100	26700	-	-
		32	35000	29500	24500	-	-
		42	30900	25400	-	-	-
BUW15MBEY	R404A / R507A	25	38700	33300	28200	23600	19400
		32	34600	29800	25400	20900	17000
		42	29000	24200	20500	16550	-
BUW20MBE	R22	25	41700	35100	29100	-	-
		32	39200	33000	27300	-	-
		42	-	28600	23000	-	-
BUW20MBEY	R404A / R507A	25	41200	35000	29700	24900	20600
		32	37500	32300	27400	22700	18600
		42	-	26800	22700	18900	-
BUW22MBE	R22	25	49000	41600	35200	-	-
		32	46300	39400	33200	-	-
		42	42000	34700	28500	-	-
BUW22MBEY	R404A / R507A	25	50000	42700	36500	30900	25800
		32	45400	39100	33500	28000	23400
		42	38900	32500	27800	-	-
BUW25MBE	R22	25	60800	51100	42900	-	-
		32	57000	48200	40400	-	-
		42	-	42500	35200	-	-
BUW25MBEY	R404A / R507A	25	62500	53400	45700	38700	32300
		32	56800	49000	42000	35100	29300
		42	-	40700	34700	-	-

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

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Horizontal Box-Type Unit with Scroll Compressor

4.2 Low temp. units With DTC Spray

Model	Refrigerant	Ambient Temperature (°C)	Evaporating Temperature (°C)		
			-20	-25	-30
BUW02LBE	R22	25	2380	1960	1620
		32	2220	1830	1520
		42	1950	1600	1330
BUW02LBEY	R404A R507A	25	2350	1930	1590
		32	2070	1700	1400
		42	1630	1330	1080
BUW03LBE	R22	25	3150	2550	2020
		32	2950	2400	1900
		42	2600	2130	1700
BUW03LBEY	R404A R507A	25	3350	2800	2300
		32	2900	2420	1980
		42	2250	1840	1470
BUW05LBE	R22	25	6040	5060	4210
		32	5540	4650	3880
		42	4880	4080	3400
BUW05LBEY	R404A R507A	25	5820	4770	3780
		32	5310	4360	3440
		42	4410	3680	2930
BUW06LBE	R22	25	7150	6000	5000
		32	6570	5480	4700
		42	5980	4980	4170
BUW06LBEY	R404A R507A	25	7120	6000	4900
		32	6200	5180	4440
		42	5250	4400	3640
BUW07LBE	R22	25	7940	6590	5560
		32	7540	6270	5280
		42	6770	5620	4720
BUW07LBEY	R404A R507A	25	8060	6670	5500
		32	7220	6000	4960
		42	5880	4920	4080

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

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Horizontal Box-Type Unit with Scroll Compressor

4.3 Low temp. units With EVI

Model	Refrigerant	Ambient Temperature (°C)	Evaporating Temperature (°C)				
			-20	-25	-30	-35	-40
BUW06JBEY	R22	25	9050	7520	6140	4960	4020
		32	8920	7440	6080	4910	3970
		42	8450	7130	5850	4720	3800
	R404A / R507A	25	10300	8720	7410	6110	5020
		32	9950	8450	7190	5990	4970
		42	9400	8050	6890	5820	4930
BUW10JBEY	R22	25	13200	11200	9510	8010	6510
		32	12750	10800	9150	7710	6250
		42	11750	10000	8470	7040	5630
	R404A / R507A	25	14950	12750	10900	8960	7280
		32	14300	12250	10500	8650	7100
		42	13350	11000	9910	8290	6930
BUW13JBEY	R22	25	15750	13350	11300	9530	7900
		32	15250	12900	10850	9140	7540
		42	14050	11950	10000	8340	6750
	R404A / R507A	25	17600	14900	12600	10500	9010
		32	17000	14400	12200	10150	8720
		42	16000	13600	11450	9500	8090
BUW15JBEY	R22	25	18750	15850	13450	11350	9290
		32	18100	15300	12950	10900	8920
		42	16700	14200	12000	9980	8010
	R404A / R507A	25	21400	18100	15300	12750	10950
		32	20700	17500	14800	12300	10600
		42	19450	16550	13950	11550	9830
BUW18JBEY	R22	25	22300	18850	15950	13500	11150
		32	21500	18200	15350	12950	10650
		42	19850	16900	14200	11880	9540
	R404A / R507A	25	24200	20500	17300	14400	12350
		32	23400	19750	16750	13900	11950
		42	22000	18700	15750	13000	11100

Remark: 1. Cooling capacity is based on superheat of 10K; 2. For low-temperature units with EVI, a subcooling of about 35K needs to be considered when selecting an expansion valve.



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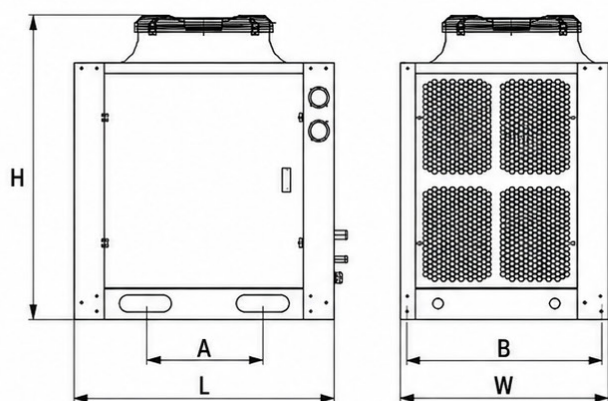


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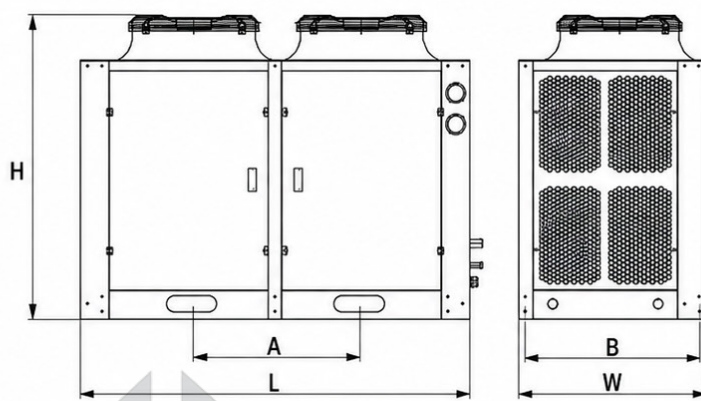
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5. Dimension Drawing



Drawing A



Drawing B

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6. Standard Configuration and Optional Configuration**6.1 Medium Temp. Unit**

Parts	BUW-B Model of Unit												
	02M	03M	04M	05M	06M	08M	10M	12M	13M	15M	20M	22M	25M
Compressor	●	●	●	●	●	●	●	●	●	●	●	●	●
Oil Heater	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Discharge Vibration Damper	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Oil Separator	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Condenser	●	●	●	●	●	●	●	●	●	●	●	●	●
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. Unit

Parts	BUW-B Model of Unit									
	With DTC Spray					With EVI				
	02L	03L	05L	06L	07L	06L	10L	12L	15L	18L
Compressor	●	●	●	●	●	●	●	●	●	●
Oil Heater	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Discharge Vibration Damper	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Oil Separator	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Condenser	●	●	●	●	●	●	●	●	●	●
AC Motor	●	●	●	●	●	●	●	●	●	●
Receiver	●	●	●	●	●	●	●	●	●	●
Liquid Filter	●	●	●	●	●	●	●	●	●	●
Sight Glass	●	●	●	●	●	●	●	●	●	●
Solenoid Valve	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
DTC Spray	●	●	●	●	●	/	/	/	/	/
EVI	/	/	/	/	/	●	●	●	●	●
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.