

Explosion Proof Ex-M Best Buy Series Split Unit Air Conditioners



Key Benefits

- ATEX Zone 2 or 22 certified
- Designed for ambient temperatures up to +50°C
- Quick and efficient heating and cooling
- Salt spray (fog) tested according to ASTM B117-18
- Includes technical cooling function
- Partnered with OEM Samsung Climate Solutions
- Competitive pricing
- 5 years warranty included on parts

Ex II 3G Ex h ic nAC IIB(+H2) T4 Gc (indoor unit)

Ex II 3G Ex h nAC IIB(+H2) T3 Gc (outdoor unit)



Best buy for explosion proof climate control in demanding areas

The Ex-M Best Buy explosion proof air conditioner series are a unique ATEX climate control solution. The superior performance and competitive pricing of the OEM Samsung Commercial Air Conditioner Series enables Ex-Machinery Explosion Proof Equipment B.V. to introduce this Ex-M Best Buy series to the ATEX market.

Applications

Designed for ATEX Zone 2 (3G) and ATEX Zone 22 (3D) classified areas, this unit is suited for the oil & gas, chemical, and food & beverage industries, including:

- Battery rooms
- Operator shelters
- Production facilities
- Storage facilities

Unique Options

- **3 Configurations:**
 1. Indoor unit for ATEX zone 2, with outdoor unit for safe area
 2. Indoor unit for safe area, with outdoor unit for ATEX zone
 3. Both the indoor and outdoor units for ATEX zone 2
- **Marine Upgrade:** corrosion protection coating on fins, coils and/or outdoor casing. AISI 316 fasteners
- **R410a Retrofit:** R32 refrigerant replaced with R410a, including re-labeling
- **50Hz/60Hz upgrade,** including re-labeling
- **Connection to BMS or Industrial DCS**

Explosion Safety Specifications (ATEX)

EU Directive	2014/34/EU (ATEX114)
ATEX marking gas (indoor unit)	II 3G Ex h ic nAC IIB (+H2) T4 Gc
ATEX marking gas (outdoor unit)	II 3G Ex h nAC IIB (+H2) T3 Gc
ATEX marking dust (indoor unit)	II 3D Ex tc h IIB T140°C Dc
ATEX marking dust (outdoor unit)	II 3D Ex tc h IIB (+H2) T150°C Dc
Applied standards	EN 60079-0, EN 60079-11, EN 60079-15, EN 60079-31, EN 60079-36, EN 80079-37



Explosion Proof Ex-M Best Buy Series Split Unit Air Conditioners



SUPERIOR AIR CONDITIONING FOR CHALLENGING ENVIRONMENTS

- Battery rooms
- Operator shelters
- Production facilities
- Storage facilities
- Refineries
- Chemical plants
- Offshore platforms
- Control rooms
- Pharmaceutical facilities
- Paint and coating shops
- Fuel storage areas
- Gas compressor stations
- Petrochemical plants
- Food and beverage facilities



CONFIGURATIONS TAILORED TO YOUR UNIQUE NEEDS

1. Both indoor and outdoor unit for zone 2



2. Indoor unit for safe area, outdoor unit for zone 2



3. Indoor unit for zone 2, outdoor unit for safe area



OPTIONAL SPARE PARTS

- Indoor/Outdoor PCB's
- Fan Motors
- Compressor
- Remote control



Gido van Tienhoven
– Founder &
Technical Director

ABOUT EX-MACHINERY

Ex-Machinery delivers the best explosion proof HVAC systems, tailored to meet your needs in hazardous areas. With 20 years of ATEX expertise, we combine exceptional quality, customer-focused service, and reliable solutions to ensure safety in gas and dust-prone zones. Founded by Gido van Tienhoven, a passionate engineer and entrepreneur dedicated to preventing explosion hazards, our team is committed to providing expert advice and fast, efficient service. Contact us today for the best ATEX HVAC solutions and get your quotation within 24 hours.

WORLDWIDE SHIPMENT



WE PROVIDE THE BEST ATEX COOLING SOLUTIONS, COMBINING AFFORDABILITY, RELIABILITY, AND CUSTOMIZED CONFIGURATIONS WITH EXCEPTIONAL AFTERCARE AND SERVICE TO 50+ COUNTRIES

CONTACT US TODAY AT info@ex-machinery.nl



Explosion Proof

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Split Unit Air Conditioners



Indoor units: Wall Mount

Available wall mount units

Non-ATEX/standard	BB26W	BB35W	BB52W	BB71W
ATEX Zone 2	Ex-M BB26W	Ex-M BB35W	Ex-M BB52W	Ex-M BB71W
Compatible outdoor unit	(Ex-M) BB26O	(Ex-M) BB35O	(Ex-M) BB52O	(Ex-M) BB71O
Set	BB26	BB35	BB52	BB71

Wall mount dimensions

HxWxD (mm)	820x299x215	1055x299x215	
Shipping HxWxD (mm)	880x290x375	1115x290x375	
Unit weight (kg)	9.1	11.7	12.7
Shipping weight (kg)	10.7	13.7	14.7

Technical specifications

Performance				
Cooling Capacity (kW)	2.6	3.5	5.0	7.1
Cooling Capacity (BTU)	8,870	11,940	17,060	24,230
Heating Capacity (kW)	3.3	4.0	6.0	8.0
Heating Capacity (BTU)	11,260	13,650	20,470	27,300
Power Supply (Ø, #, V, Hz)	1,2,220-240,50			
Refrigerant	R32 (R410A optional)			
Heat Exchanger				
Type	Fin and Tube			
Material - Fin	Al			
Material - Tube	Cu			
Fin Treatment	Green Hydrophile			
Fan				
Type	Crossflow Fan			
Quantity	1			
Air Flow Rate - Cooling (H/M/L)	10.3 / 8.4 / 7.0 m³/min	12.2 / 9.8 / 7.9 m³/min	16.7 / 13.9 / 11.8 m³/min	17.8 / 15.2 / 13.2 m³/min
Air Flow Rate - Cooling (H/M/L)	172 / 140 / 117 L/s	203 / 163 / 132 L/s	278 / 232 / 197 L/s	297 / 253 / 220 L/s
Air Flow Rate - Heating (H/M/L)	11.2 / 9.3 / 7.9 m³/min	12.2 / 9.8 / 7.9 m³/min	16.7 / 13.9 / 11.8 m³/min	17.8 / 15.2 / 13.2 m³/min
Air Flow Rate - Heating (H/M/L)	187 / 155 / 132 L/s	203 / 163 / 132 L/s	278 / 232 / 197 L/s	318 / 275 / 242 L/s
Fan Motor				
Type	BLDC			
Output (W x n)	27			
Drain				
Drain Pipe - Diameter	ID18mm Hose			
Sound				
Sound Pressure Level (H/M/L/Silent)	36 / 30 / 24 / 21 dB(A)	40 / 34 / 28 / 23 dB(A)	42 / 37 / 32 / 25 dB(A)	44 / 39 / 35 / 30 dB(A)
Sound Power Level	56 dB(A)	59 dB(A)	60 dB(A)	61 dB(A)
Casing				
Material	PS-HI			
Control System				
Infrared Remote Control	AR-EH03E			
Wired Remote Control	MWR-WE13N, MWR-WG00*N			
Additional Accessories				
Air Filter	Removable / Washable			

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Split Unit Air Conditioners



Indoor units: Ceiling Suspended

Available ceiling suspended units

Non-ATEX/standard	BB52S	BB71S	BB100S	BB120S	BB140S
ATEX Zone 2	Ex-M BB52S	Ex-M BB71S	Ex-M BB100S	Ex-M BB120S	Ex-M BB140S
Compatible outdoor unit	(Ex-M) BB52O	(Ex-M) BB71O	(Ex-M) BB100O	(Ex-M) BB120O	(Ex-M) BB140O
Set	Ex-M BB52	Ex-M BB71	Ex-M BB100	Ex-M BB120	Ex-M BB140

Ceiling suspended dimensions

HxWxD (mm)	1,000x200x650	1,650x235x675
Shipping HxWxD (mm)	1,074x294x726	1,739x321x758
Unit weight (kg)	20.0	42.0 41.5
Shipping weight (kg)	25.0	48.0

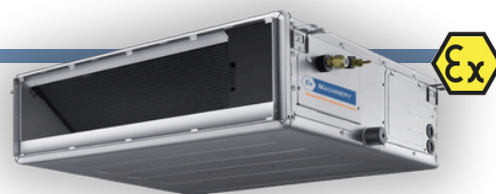
Technical specifications

Performance					
Cooling Capacity (kW)	5.00	7.10	10.0	12.0	13.4
Cooling Capacity (BTU)	17,060	24,230	34,120	41,000	45,720
Heating Capacity (kW)	6.00	8.00	11.2	13.2	15.5
Heating Capacity (BTU)	20,470	27,300	38,210	47,000	52,900
Power Supply (Ø, #, V, Hz)	1,2,220-240,50				
Refrigerant	R32 (R410A optional)				
Heat Exchanger					
Type	F&T				
Material - Fin	Al				
Material - Tube	Cu				
Fin Treatment	Green Hydrophile				
Fan					
Type	Sirocco				
Quantity	2		4		
Air Flow Rate (m³/min)	11.3	14.1	23.0	24.0	27.0
Air Flow Rate (L/s)	188.3	235	383	400	450
Fan Motor					
Type	BLDC				
Output (W x n)	40		244 x 1		
Drain					
Drain Pipe - Diameter	ID18mm Hose		VP-25(ØD3Z, ID25)		
Sound					
Sound Pressure Level (dB(A))	39	44	38	41	42
Sound Power Level (dB(A))	60	64	60	62	64
Casing					
Material	ABS		GI Steel Plate		
Control System					
Infrared Remote Control	AR-EH03E				
Wired Remote Control	MWR-WE13N, MWR-WG00*N				
Additional Accessories					
Air Filter	Removable/Washable				
Virus Doctor	N/A		Option		

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Split Unit Air Conditioners



Indoor units: Ducted

Available ducted units

Non-ATEX/Standard	BB35D	BB52D	BB71D	BB100D	BB120D	BB140D	BB200D	BB250D
ATEX Zone 2	Ex-M BB35D	Ex-M BB52D	Ex-M BB71D	Ex-M BB100D	Ex-M BB120D	Ex-M BB140D	Ex-M BB200D	Ex-M BB250D
Compatible outdoor unit	(Ex-M) BB35O	(Ex-M) BB52O	(Ex-M) BB71O	(Ex-M) BB100O	(Ex-M) BB120O	(Ex-M) BB140O	(Ex-M) BB200O	(Ex-M) BB250O
Set	Ex-M BB35	Ex-M BB52	Ex-M BB71	Ex-M BB100	Ex-M BB120	Ex-M BB140	Ex-M BB200	Ex-M BB250

Ducted unit dimensions

HxWxD (mm)	850 x 250 x 700	1,200 x 250 x 700	1,300 x 300 x 700	1,350 x 450 x 910
Shipping HxWxD (mm)	1,064 x 320 x 784	1,429 x 320 x 779	1,529 x 320 x 779	1,612 x 519 x 984
Unit weight (kg)	26.5	34.0	38.5	82.5
Shipping weight (kg)	30.5	39.0	45.0	92.0

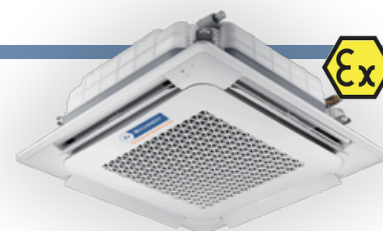
Technical specifications

Performance	Technical specifications							
Cooling Capacity (kW)	3.5	5.0	6.8	10.0	12.0	13.4	20.0	25.0
Cooling Capacity (BTU)	11,940	17,060	23,200	34,120	41,000	45,720	68,200	85,300
Heating Capacity (kW)	4.0	6.0	8.0	11.2	13.2	15.5	23.0	27.0
Heating Capacity (BTU)	13,650	20,470	27,300	38,210	45,040	52,900	78,500	92,100
Power Supply (Ø, #, V, Hz)	1,2,220-240,50							
Refrigerant	R32 (R410A optional)						R410A	
Heat Exchanger								
Type	F&T							
Material - Fin	Al							
Material - Tube	Cu							
Fin Treatment	Green Hydrophile							
Fan								
Type	Sirocco							
Quantity	2			3				
Air Flow Rate (m³/min)	9.2	12.0	14.0	25.0	28.0	28.0	62.0	64.0
Air Flow Rate (L/s)	153.3	200	233.3	417	467	467	1,000	1,066.7
Fan Motor								
Type	BLDC						Sirocco Fan	
Output (W x n)	153 x 1				244 x 1		630 x 2	
Drain								
Drain Pipe - Diameter	VP-25(OD32, ID25)							
Sound								
Sound Pressure Level (dB(A))	25	26	27	32	34		40	42
Sound Power Level (dB(A))	52	55	56	58	62		70	72
Casing								
Material	GI Steel Plate							
Control System								
Infrared Remote Control	AR-EH03E							
Wired Remote Control	MWR-WE13N, MWR-WG00*N							
Additional Accessories								
Air Filter	Removable / Washable						-	
Virus Doctor	Option							
Drain Pump							MDP-G075SP	

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Split Unit Air Conditioners



Indoor units: Cassette

Available cassette units

Non-ATEX/Standard	BB52C	BB71C	BB100C	BB120C	BB140C
ATEX Zone 2	Ex-M BB52C	Ex-M BB71C	Ex-M BB100C	Ex-M BB120C	Ex-M BB140C
Compatible outdoor unit	(Ex-M) BB52O	(Ex-M) BB71O	(Ex-M) BB100O	(Ex-M) BB120O	(Ex-M) BB140O
Set	Ex-M BB52	Ex-M BB71	Ex-M BB100	Ex-M BB120	Ex-M BB140

Cassette unit dimensions

Cassette unit dimensions			
HxWxD (mm)	840 x 204 x 840	840 x 288 x 840	
Shipping HxWxD (mm)	898 x 275 x 898	898 x 357 x 898	
Unit weight (kg)	14.5	18.0	20.0
Shipping weight (kg)	18.5	22.0	24.0

Technical specifications

Performance					
Cooling Capacity (kW)	5.00	7.10	10.00	12.00	13.40
Cooling Capacity (BTU)	17,060	24,230	34,120	41,000	45,720
Heating Capacity (kW)	6.00	8.00	11.20	13.20	15.50
Heating Capacity (BTU)	20,470	27,300	38,210	45,040	52,900
Power Supply (Ø, #, V, Hz)	1,2,220-240,50				
Refrigerant	R32 (R410A optional)				
Heat Exchanger					
Type	F&T				
Material - Fin	Al				
Material - Tube	Cu				
Fin Treatment	Green Hydrophile				
Fan					
Type	Turbo				
Quantity	1				
Air Flow Rate - Cooling (m³/min)	14.0	16.5	25.0	26.0	27.0
Air Flow Rate - Cooling (L/s)	233.3	275	417	433	450
Air Flow Rate - Heating (m³/min)	14.0	16.5	25.0	26.0	27.0
Air Flow Rate - Heating (L/s)	233.3	275	417	433	450
Fan Motor					
Type	BLDC				
Output (W x n)	65		97 x 1		
Drain					
Drain Pipe - Diameter	VP-25(OD32, ID25)				
Sound					
Sound Pressure Level (dB(A))	33 / 31 / 29	36 / 33 / 29	44 / 39 / 35	45 / 41 / 37	47 / 43 / 39
Sound Power Level (dB(A))	49	53	61	61	63
Casing					
Material	Polypropylene				
Control System					
Infrared Remote Control	AR-EH03E				
Wired Remote Control	MWR-WE13N, MWR-WG00*N				
Additional Accessories					
Air Filter	Removable / Washable				
Virus Doctor	Option				

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Split Unit Air Conditioners



Outdoor units: 2.6 - 7.1 kW

Available outdoor units

Non-ATEX/standard	BB26O	BB35O	BB52O	BB71O
ATEX Zone 2	Ex-M BB26O	Ex-M BB35O	Ex-M BB52O	Ex-M BB71O

Outdoor unit dimensions

HxWxD (mm)	790 x 548 x 285	880 x 638 x 310	880 x 798 x 310
Shipping HxWxD (mm)	913 x 622 x 371	1023 x 742 x 413	1023 x 896 x 413
Unit weight (kg)	32.5	43.0	51.0
Shipping weight (kg)	35.5	46.5	55.0

Technical specifications

Technical Specifications				
Performance				
Cooling Capacity (kW)	2.6	3.5/3.8	5.0	7.1
Cooling Capacity (BTU)	8,870	11,940	17,060	24,230
Heating Capacity (kW)	3.3	4.0	6.0	8.0
Heating Capacity (BTU)	11,260	13,650	20,470	27,300
Power Supply (Ø, #, V, Hz)	1,2,220-240,50			
Heat Exchanger				
Type	Fin & Tube			
Material - Fin	Al			
Material - Tube	Cu			
Fin Treatment	Anti-Corrosion			
Compressor				
Model Name	UB9AK5090FER		UB9TK3150FE4	UB4TN8200FE4
Type	Single BLDC		Twin BLDC	
Output (kW)	0.86		1.51	1.89
Oil Type	POE			
Initial Charge (cc)	320		500	650
Fan				
Type	Propeller			
Discharge Direction	Front			
Quantity (EA)	1			
Air Flow Rate (m³/min)	30		40	51
Air Flow Rate (L/s)	500		667	850
Fan Motor				
Type	BLDC Motor			
Output (W x n)	40 x 1		125 x 1	
Sound				
Sound Pressure Level - Cooling (dB(A))	46	48	48	
Sound Pressure Level - Heating (dB(A))	47	48	51	
Sound Power Level (dB(A))	59	61	62	65
Casing				
Material - Body	EGI Steel Plate			
Operating Temp. Range				
Cooling (°C)	-15 ~ 46		-15 ~ 50	
Heating (°C)	-20 ~ 24			
Refrigerant				
Type	R32 (R410A optional)			
Charge	0.9		1.2	1.7
tCO2e	0.61		0.81	1.15

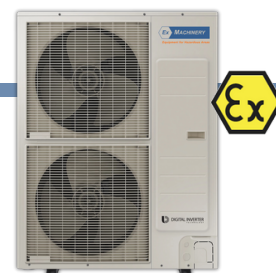
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Split Unit Air Conditioners



Equipment for Hazardous Areas



Outdoor units: 10.0 - 25.0 kW

Available outdoor units

Non-ATEX/Standard	BB100O	BB120O	BB140O	BB200O	BB250O
ATEX Zone 2	Ex-M BB100O	Ex-M BB120O	Ex-M BB140O	Ex-M BB200O	Ex-M BB250O

Outdoor unit dimensions

HxWxD (mm)	940 x 998 x 330		940 x 1,210 x 330	940 x 1,630 x 460	
Shipping HxWxD (mm)	995 x 1,096 x 426		995 x 1,388 x 426	1,020 x 1,820 x 575	
Unit weight (kg)	75.0	81.0	91.5	154.0	
Shipping weight (kg)	80.0	86.0	100.0	167.0	

Technical specifications

Technical Specifications					
Performance					
Cooling Capacity (kW)	10.0	12.0	13.4	20.0	25.0
Cooling Capacity (BTU)	34,120	41,000	47,720	68,200	85,300
Heating Capacity (kW)	11.2	14.0	15.5	23.0	27.0
Heating Capacity (BTU)	38,210	45,040	52,900	78,500	92,100
Power Supply (Ø, #, V, Hz)	1,2,220-240,50 OR 3,4,380-415,50			3,4,380-415,50	
Heat Exchanger					
Type	Fin & Tube				
Material - Fin	Al				
Material - Tube	Cu				
Fin Treatment	Anti-Corrosion				
Compressor					
Model Name	UB8TN8300FUJ	UB5TN5450FJX		DS-GB066FAVB	
Type	Twin BLDC			BLDC Scroll	BLDC Scroll
Output (kW)	2.91	4.25		6.39	
Oil Type	POE			PVE	
Initial Charge (cc)	1,200	1,700			
Fan					
Type	Propeller			Sirocco	
Discharge Direction	Front				
Quantity (EA)	1		2		
Air Flow Rate (m³/min)	72		110	200	
Air Flow Rate (L/s)	1,200		1,833	3,333.33	
Fan Motor					
Type	BLDC Motor				
Output (W x n)	125 x 1		125 x 2		
Sound					
Sound Pressure Level - Cooling (dB(A))	52	54		58	59
Sound Pressure Level - Heating (dB(A))	54	56		60	61
Sound Power Level (dB(A))	69	70		75	77
Casing					
Material - Body	EGI Steel Plate				
Operating Temp. Range					
Cooling (°C)	-15 ~ 50			-20 ~ 50	
Heating (°C)	-20 ~ 24				
Refrigerant					
Type	R32 (R410A optional)			R410A	
Charge	2.7		2.9	6.6	
tCO2e	1.82		1.96		

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Split Unit Air Conditioners



Optional

Refrigerant R410a retrofit
ATEX isolating switch
ATEX zone 2 or 22 converter to connect with 3phase no neutral/400-440V, 50/60 Hz
ATEX zone 2 or 22 converter to connect with 3phase no neutral/400-460V, 50/60 Hz
Infra-red remote control included. ATEX zone 2 or ATEX zone 22 available
Wired remote control (optional): In rugged IP66 casing. Various options depending on required functions as remote alarm, redundant operation, set-point function. Available for ATEX zone 2, ATEX zone 22 or for non-hazardous area.
Offshore corrosion resistance treatment
Communication PCB, for connection to industrial controls
Power split box
Redundant kit