

BATTERY BULL ELECTRIC FULLY AUTOMATED

Single, Double & Triple Models

The BBE-FA is a flexible and effective system to support battery change requirements for broad-scale automated applications. Employing the same high-efficiency, high-performance and low-maintenance AC power core as the rest of our BBE range, the BBE-FA leverages advanced logic programming and sensor-based diagnostics to remove the need for a human operator.

Our proven system meets and/or exceeds all of the toughest AGV industry standards and includes comprehensive self-diagnostic and logging capabilities to reduce downtime through servicing and unscheduled maintenance even further.

BBE-FA 1-3 Level

Features and Benefits

- Full Automation

The BBE-FA is a fully automated system that does not require and operator.

- Programmable

Equipped with fully programmable logic-based AC power systems give the system precise control and responsiveness for faster changes.

- Detailed Self-diagnostics

Logging functions and self-diagnostics allow significant decreases in both downtime and servicing, therefore maximizing production times.

- Control

Complete user compartmewnt and controls allow for manual over-ride and operation if reauired.

- No Hydraulics

Fully electric, the BBE-FA has no hydraulics ensuring no oil leaks, reducing servicing by up to 30%.

- Powered Rollers

Powered lead rollers mean up to 25% faster changes with less wear and tear on key components when compared to comparable systems.

- Electro-magnetic Extraction

Equipped with a powerful and reliable 1,800lb electro-magnetic extraction system backed by a 5-year magnet warranty.

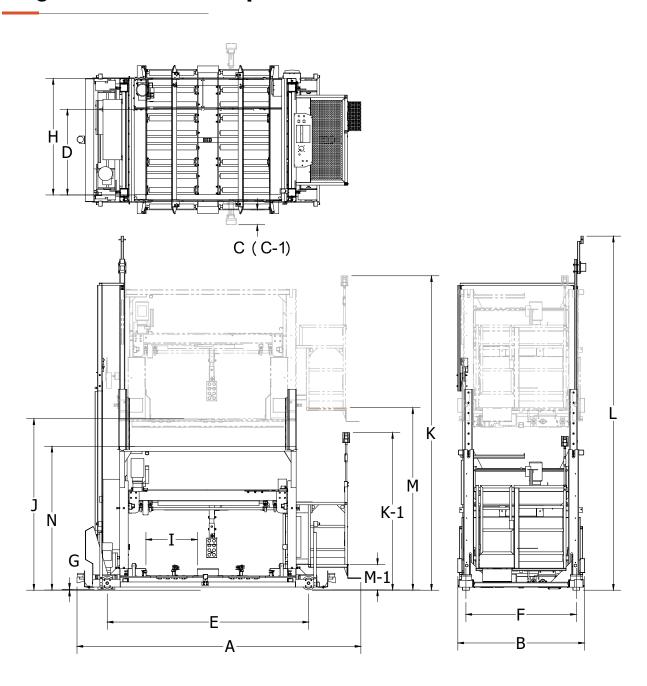
Available Options

OPTIONS
Remote management interfaces for offsite management and control
Integrated battery management system to optomize battery performance and life
Automation level one
Automation level two
Custom powder coating

BBE-FA 1-3 Level

DIMENSIONS

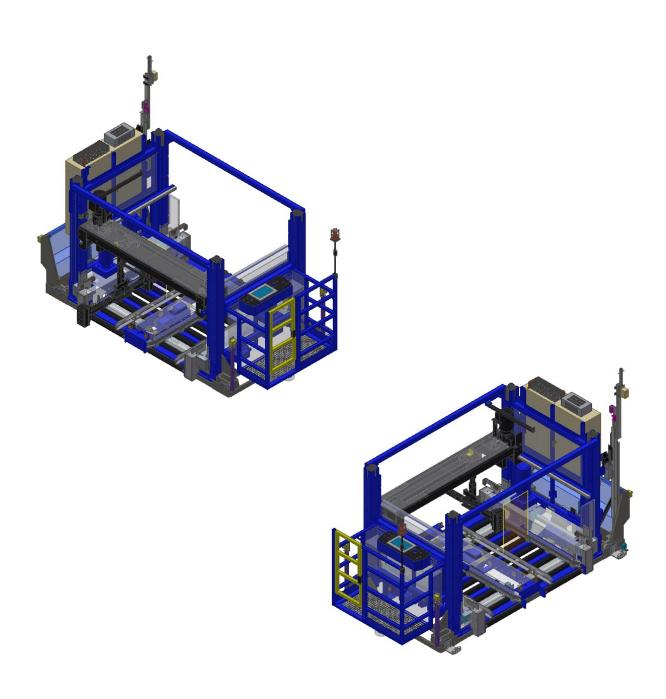
Single and Double & Triple Models



BBE-FA 1-3 Levels

3D RENDERING

Single, Double & Triple Models



BBE-FA 1-3 Levels

GENERAL SPECIFICATIONS

	MODEL NO.	BBE-FA-2-30		BBE-FA-2-36		BBE-FA-2-42		BBE-FA -2-48	
1	Drive system H.P./KW	3 HP	2.25 KW	3 HP	2.25 KW	3 HP	2.25 KW	3 HP	2.25 KW
2	Raise/Lower H.P.	2 x 5 HP	2 x3.75 KW	2 x 5 HP	2 x 3.75 KW	2 x 5 HP	2 x3.75 KW	2 x 5 HP	2 x3.75 KW
3	Raise/Lower speed	0-21 FPM	0-6.4 MPM	0-21 FPM	0-6.4 MPM	0-21 FPM	0-6.4 MPM	0-21 FPM	0-6.4 MPM
4	Travel speed	0-175 FPM	0-53.3 MPM	0-175 FPM	0-53.3 MPM	0-175 FPM	0-53.3 MPM	0-175 FPM	0-53.3 MPM
5	Machine duty cycle	5,500 Hrs		5,500 Hrs		5,500 Hrs		5,500 Hrs	
6-A	Input voltage/frequency/ max current down	415 V / 50 Hz / 23 A		415 V / 50 Hz / 23 A		415 V / 50 Hz / 23 A		415 V / 50 Hz / 23 A	
6-B	Input voltage/frequency/ max current down	460 V / 60 Hz / 20 A		460 V / 60 Hz / 20 A		460 V / 60 Hz / 20 A		460 V / 60 Hz / 20 A	
6-C	Input voltage/frequency/ max current down	575 V / 60 Hz / 17 A		575 V / 60 Hz / 17 A		575 V / 60 Hz / 17 A		575 V / 60 Hz / 17 A	
7	Control Voltage	110 VAC / 24 VDC		110 VAC / 24 VDC		110 VAC / 24 VDC		110 VAC / 24 VDC	
8	Draw Bar Pull Magnet	1800 lb / 817 kg		1800 lb / 817 kg		1800 lb / 817 kg		1800 lb / 817 kg	
9	Magnet Break Off Point 1/4", 3/16", 1/8" 7 mm, 5 mm, 4 mm	1800, 1200, 700 lb 817, 545, 318 kg		1800, 1200, 700 lb 817, 545, 318 kg		1800, 1200, 700 lb 817, 545, 318 kg		1800, 1200, 700 lb 817, 545, 318 kg	
10	Power Unit Type	Electric		Electric		Electric		Electric	
11	Urethane Wheel (DxW)	8" x 4" / 203 x 102 mm		8" x 4" / 203 x 102 mm		8" x 4" / 203 x 102 mm		8" x 4" / 203 x 102 mm	
12	Capacity (Fully Loaded)	10000 lb / 4536 kg		10000 lb / 4536 kg		10000 lb / 4536 kg		10000 lb / 4536 kg	
13	Service Weight (Empty)	7000 lb / 3176 kg		7100 lb / 3221 kg		7300 lb / 3312 kg		7500 lb / 3402 kg	



BBE-FA 1-3 Levels

DIMENSIONAL DATA

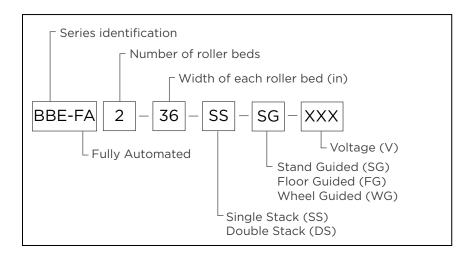
	MODEL NO.	BBH-2-30		BBH-2-36		BBH-2-42		BBH-2-48	
Α	Overall Length	176 in	4470 mm	188 in	4775 mm	200 in	5080 mm	212 in	5385 mm
В	Overall Width (Standard)	80.5 in	2045 mm						
С	Max. Magnet Arm Reach (Standard Arm)	12.25 in	311 mm						
C-1	Max. Magnet Arm Reach (Extension Arm)	Customized to suit							
D	Bridge Travel	53.5 in	1359 mm						
Е	Wheel Base	125 in	3175 mm	137 in	3480 mm	149 in	3785 mm	161 in	4089 mm
F	Centerline of Drive Wheels	64.75 in	1645 mm						
G	Ground Clearance	0.5 in	13 mm						
	Grade Percent	1%	1%	1%	1%	1%	1%	1%	1%
Н	Battery Compartment Size Length	64 in	1626 mm						
I	Battery Compartment Overall Width (Urethane)	30 in	762 mm	36 in	914 mm	42 in	1067 mm	48 in	1219 mm
	Max. Battery Length	60 in	1524 mm						
	Max. Battery Width	28 in	711 mm	34 in	864 mm	40 in	1016 mm	46 in	1168 mm
	Max. Battery Height	37 in	940 mm						
	Min. Battery Length	18 in	457 mm						
	Min. Battery Width	6 in	152 mm						
	Min. Battery Height	20 in	508 mm						
	Min. Over Travel (Front)	94 in	2388 mm	103 in	2616 mm	112 in	2845 mm	121 in	3073 mm
	Min. Over Travel (Rear)	114 in	2896 mm	122 in	3099 mm	132 in	3353 mm	140 in	3556 mm

LEVEL HEIGHT DIMENSIONAL DATA

	MODEL NO.	SINC	GLE	DO	JBLE	TRIPLE		
J	Carriage Roller Bed (Raised)	30 in	762 mm	54 in	1372 mm	100 in	2540 mm	
J-1	Carriage Roller Bed (Lowered)	5.5 in	140 mm	5.5 in	140 mm	5.5 in	140 mm	
K	Overall Height (Raised)	108 in	2743 mm	139 in	3531 mm	184 in	4674 mm	
K-1	Overall Height (Lowered)	89 in	2261 mm	89 in	2261 mm	89 in	2261 mm	
L	Overall Height to Top of Tow Arm	134 in	3404 mm	168 in	4267 mm	208 in	5283 mm	
М	Operator Platform Height (Raised)	36.5 in	927 mm	62.5 in	1588 mm	106.5 in	2705 mm	
M-1	Operator Platform Height (Lowered)	12.5 in	318 mm	12.5 in	318 mm	12.5 in	318 mm	
N	Shipping Height	84 in	2134 mm	84 in	2134 mm	84 in	2134 mm	
	Upper Guide Required? (Yes / No)	No	No		No		No	
	Floor Variance (+ or – in 10 ft.)	0.25 in	6 mm	0.25 in	6 mm	0.25 in	6 mm	

Model/Part Number Breakdown

Example: BBE-FA-2-36-SS-SG-XXX





A BBE-FA machine single level



Automation control terminal for BBE-FA