

Productive & Efficient

AA SERIES

1.5-3.5 TON



AA Series Electric Counterbalance Forklift Truck



UNITED MOTOR WORKS (SIAM) PCL
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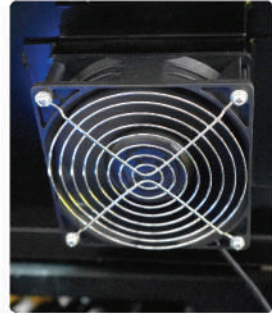


Corporate Brochure

AA SERIES Product Features

Comfort

- The upgraded gear pump reduces the output pressure and ensures the high efficiency of the hydraulic system.
- The output pulse is 4 times lower than the standard gear pump, with the noise reduced by 15dB.



- Optimized the ergonomic design, improve the operating comfort, reduce the driver's fatigue for long working hours.

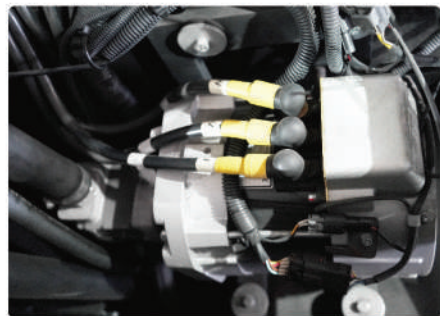


Reliability

- The PM controller can keep the working temperature below 60°C, improving the service life of the motor and controller.
- The protection grade reaches IP65, compared with common AC forklift, the service time can be extended by about 20%.

High efficiency

- Maximum speed for permanent magnet synchronous motor is up to 6500 RPM.
- More suitable for frequent starting and stopping operation conditions, the high efficiency is the main factor to reduce energy consumption.
- High efficiency motor up to 95%



Safety

- Integrated taillight protection cover, no need for disassembly, improves the protection level for lights.



AA SERIES Specification Parameters

| Features | 1.1 | Manufacturer | | HYM | HYM | HYM | HYM | HYM | HYM |
|--------------------|----------------------|---|----------------------|-----------------|-----------------|------------------|------------------|------------------|------------------|
| | 1.2 | Model | | FBA15-YJ | FBA18-YJ | FBA20-YJ | FBA25-YJ | FBA30-YJ | FBA35-YJ |
| | 1.3 | Power source: battery | | Battery | Battery | Battery | Battery | Battery | Battery |
| | 1.4 | Operating mode: seated | | Seated | Seated | Seated | Seated | Seated | Seated |
| | 1.5 | Load rating | Q (kg) | 1500 | 1800 | 2000 | 2500 | 3000 | 3500 |
| | 1.6 | Load center | c (mm) | 500 | 500 | 500 | 500 | 500 | 500 |
| | 1.8 | Front overhang | x (mm) | 410 | 410 | 454 | 454 | 495.5 | 495.5 |
| | 1.9 | Wheelbase | y (mm) | 1380 | 1380 | 1485 | 1485 | 1690 | 1690 |
| Weight | 2.1 | Unloaded vehicle weight | kg | 3125 | 3450 | 4240 | 4390 | 5070 | 5540 |
| | 2.2 | Front/rear axle full load | kg | 4260 / 355 | 4870 / 400 | 5600 / 650 | 6430 / 470 | 7500 / 570 | 8400 / 700 |
| | 2.3 | Front/rear axle empty load | kg | 1590 / 1560 | 1700 / 1760 | 1850 / 2390 | 2130 / 2270 | 2190 / 2890 | 2600 / 2940 |
| Wheels and tires | 3.1 | Tire: inflatable, solid, superplasticity | | L | L | L | L | L | SE |
| | 3.2 | Tire size, front | | 6.00-9 10PR | 6.00-9 10PR | 23x9-10 16PR | 23x9-10 16PR | 23x9-10 16PR | 23x9-10 16PR |
| | 3.3 | Tire size, rear | | 5.00-8 8PR | 5.00-8 8PR | 18x7-8 14PR | 18x7-8 14PR | 18x7-8 14PR | 18x7-8 14PR |
| | 3.5 | Number of wheels, front/rear (X=drive) | | 2x / 2 | 2x / 2 | 2x / 2 | 2x/2 | 2x / 2 | 2x / 2 |
| | 3.6 | Tread, front wheel | b ₁₀ (mm) | 955 | 955 | 1058 | 1058 | 1124 | 1124 |
| | 3.7 | Tread, rear wheel | b ₁₁ (mm) | 920 | 920 | 960 | 960 | 1010 | 1010 |
| | | | | | | | | | |
| Size | 4.1 | Mast tilting angle, front/rear | degrees | 5 / 10 | 5 / 10 | 5 / 10 | 5 / 10 | 5 / 10 | 5 / 10 |
| | 4.2 | Mast retracted height | h ₁ (mm) | 2000 | 2000 | 2015 | 2015 | 2120 | 2120 |
| | 4.3 | Free lift height | h ₂ (mm) | 135 | 135 | 140 | 140 | 165 | 165 |
| | 4.4 | Fork lift height | h ₃ (mm) | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 |
| | 4.5 | Maximum mast extended height | h ₄ (mm) | 3980 | 3980 | 3980 | 3980 | 3980 | 3980 |
| | 4.7 | Height of overhead guard | h ₆ (mm) | 2155 | 2155 | 2152 | 2152 | 2138 | 2138 |
| | 4.8 | Seat height | h ₇ (mm) | 1080 | 1080 | 1080 | 1080 | 1080 | 1080 |
| | 4.12 | Height of traction pin | h ₁₀ (mm) | 290 | 290 | 250 | 250 | 270 | 270 |
| | 4.19 | Overall length of the truck | l ₁ (mm) | 2993 | 2993 | 3356.5 | 3356.5 | 3709 | 3709 |
| | 4.20 | Length to the fork face | l ₂ (mm) | 2073 | 2073 | 2286.5 | 2286.5 | 2639 | 2639 |
| | 4.21 | Overall width of the truck | b ₁ (mm) | 1120 | 1120 | 1285 | 1285 | 1365 | 1365 |
| | 4.22 | Fork size | s/e/l (mm) | 35 / 100 / 920 | 35 / 100 / 920 | 40 / 122 / 1070 | 40 / 122 / 1070 | 50 / 122 / 1070 | 50 / 122 / 1070 |
| | 4.23 | Mounting grade of carriage | | ISO2328 2A | ISO2328 2A | ISO2328 2A | ISO2328 2A | ISO2328 3A | ISO2328 3A |
| | 4.24 | Carriage width | b ₃ (mm) | 1040 | 1040 | 1040 | 1040 | 1100 | 1100 |
| | 4.25 | Outer fork spacing | b ₅ (mm) | 200 / 890 | 200/890 | 1000 | 1000 | 1060 | 1060 |
| | 4.31 | Mast ground clearance, loaded | m ₁ (mm) | 95 | 95 | 65 | 65 | 80 | 80 |
| | 4.32 | Wheelbase center ground clearance | m ₂ (mm) | 105 | 105 | 95 | 95 | 83 | 83 |
| | 4.33 | Aisle width, tray size: 1000mm (length) x1200mm (width) | Ast (mm) | 3541 | 3541 | 3732 | 3732 | 4101 | 4101 |
| | 4.34 | Aisle width, tray size: 1200mm (length) x800mm (width) | Ast (mm) | 3741 | 3741 | 3932 | 3932 | 4301 | 4301 |
| 4.35 | Outer turning radius | Wa (mm) | 1965 | 1965 | 2080 | 2080 | 2405 | 2405 | |
| 4.36 | Inner turning radius | b ₁₃ (mm) | 703 | 703 | 599 | 599 | 815 | 815 | |
| Performance | 5.1 | Driving speed, loaded/unloaded | km/h | 15 / 16 | 15 / 16 | 15 / 16 | 15 / 16 | 15 / 16 | 15 / 16 |
| | 5.2 | Lifting speed, loaded/unloaded | mm/s | 290 / 440 | 290 / 440 | 280 / 400 | 280 / 400 | 280 / 410 | 280 / 410 |
| | 5.3 | Lowering speed, loaded/unloaded | mm/s | 334 / 297 | 334 / 297 | 375 / 372 | 375 / 372 | 461 / 412 | 461 / 412 |
| | 5.6 | Maximum traction force (5 minutes), loaded/unloaded | N | 11550 / 10410 | 11550 / 10410 | 15530 / 14410 | 15530 / 14410 | 19000 / 11000 | 19000 / 11000 |
| | 5.7 | Gradeability (30 minutes), loaded/unloaded | % | 15 | 15 | 15 | 15 | 15 | 15 |
| | 5.9 | Accelerating time (10m), loaded/unloaded | sec | 5.71 / 5.65 | 5.71 / 5.65 | 5.29 / 4.91 | 5.29 / 4.91 | 5.48 / 5.42 | 5.48 / 5.42 |
| 5.10 | Service brake | | Hydraulic | Hydraulic | Hydraulic | Hydraulic | Hydraulic | Hydraulic | |
| Motor | 6.1 | Driving motor, rated output power | kW | 9.5 | 9.5 | 12.5 | 12.5 | 15.5 | 15.5 |
| | 6.2 | Lift motor, rated output power | kW | 11 | 11 | 14 | 14 | 16 | 16 |
| Battery parameters | 6.4 | Volt/Ah (5 hours) | V/Ah | 83.2 / 173 | 83.2 / 173 | 83.2 / 230 | 83.2 / 230 | 80 / 346 | 80 / 346 |
| | 6.5 | Battery weight | kg | 230±10 | 230±10 | 290±10 | 290±10 | 500±10 | 500±10 |
| | 6.5.1 | Battery size | l/w/h (mm) | 980 / 465 / 506 | 985 / 465 / 750 | 1028 / 503 / 490 | 1028 / 503 / 490 | 1028 / 680 / 600 | 1028 / 680 / 600 |

AA SERIES FBA15-18 Electric forklift truck mast

| Model | Maximum Fork Height (mm) | Mast Height | | | | | | Free Lift Height | | Load Distance (mm) | | Mast Tilt (Deg) | |
|------------|--------------------------|-----------------------------|------|----------------------------|------|--------------------|------|----------------------------|--------------------|--------------------|------|-----------------|------|
| | | Overall Lowered Height (mm) | | Extended Height | | | | Without Load Backrest (mm) | Load Backrest (mm) | 1.5t | 1.8t | FWD | Back |
| | | 1.5t | 1.8t | Without Load Backrest (mm) | | Load Backrest (mm) | | | | | | | |
| 2 LFL mast | 3000 | 1990 | 1990 | 3513 | 3513 | 3984 | 3984 | 135 | 135 | 410 | 410 | 5 | 10 |
| | 3300 | 2140 | 2140 | 3813 | 3813 | 4284 | 4284 | 135 | 135 | 410 | 410 | 5 | 10 |
| | 3500 | 2240 | 2240 | 4013 | 4013 | 4484 | 4484 | 135 | 135 | 410 | 410 | 5 | 10 |
| | 3700 | 2340 | 2340 | 4213 | 4213 | 4684 | 4684 | 135 | 135 | 410 | 410 | 5 | 10 |
| | 4000 | 2540 | 2540 | 4513 | 4513 | 4984 | 4984 | 135 | 135 | 410 | 410 | 5 | 10 |
| | 4500 | 2790 | 2790 | 5013 | 5013 | 5484 | 5484 | 135 | 135 | 410 | 410 | 5 | 6 |
| 2 FFL mast | 3000 | 1990 | 1990 | 3513 | 3513 | 3984 | 3984 | 1486 | 1015 | 410 | 410 | 5 | 10 |
| | 3300 | 2140 | 2140 | 3813 | 3813 | 4284 | 4284 | 1636 | 1165 | 410 | 410 | 5 | 10 |
| | 3500 | 2240 | 2240 | 4013 | 4013 | 4484 | 4484 | 1736 | 1265 | 410 | 410 | 5 | 10 |
| | 3700 | 2340 | 2340 | 4213 | 4213 | 4684 | 4684 | 1836 | 1365 | 410 | 410 | 5 | 10 |
| | 4000 | 2540 | 2540 | 4513 | 4513 | 4984 | 4984 | 1936 | 1465 | 410 | 410 | 5 | 6 |
| | 4500 | 2790 | 2790 | 5013 | 5013 | 5484 | 5484 | 2036 | 1565 | 410 | 410 | 5 | 6 |
| 3 FFL mast | 4800 | 2140 | 2140 | 5313 | 5313 | 5784 | 5784 | 1616 | 1145 | 410 | 410 | 5 | 6 |
| | 5000 | 2240 | 2240 | 5513 | 5513 | 5984 | 5984 | 1716 | 1245 | 410 | 410 | 5 | 6 |
| | 5500 | 2405 | 2405 | 6013 | 6013 | 6484 | 6484 | 1886 | 1415 | 410 | 410 | 3 | 6 |
| | 6000 | 2590 | 2590 | 6513 | 6513 | 6984 | 6984 | 2066 | 1595 | 410 | 410 | 3 | 6 |

AA SERIES FBA20-25 Electric forklift truck mast

| Model | Maximum Fork Height (mm) | Mast Height | | | | | | Free Lift Height | | Load Distance (mm) | | Mast Tilt (Deg) | |
|------------|--------------------------|-----------------------------|------|----------------------------|------|--------------------|------|----------------------------|--------------------|--------------------|------|-----------------|------|
| | | Overall Lowered Height (mm) | | Extended Height | | | | Without Load Backrest (mm) | Load Backrest (mm) | 2t | 2.5t | FWD | Back |
| | | 2t | 2.5t | Without Load Backrest (mm) | | Load Backrest (mm) | | | | | | | |
| 2 LFL mast | 3000 | 2030 | 2030 | 3615 | 3615 | 4015 | 4015 | 140 | 140 | 454 | 454 | 5 | 10 |
| | 3300 | 2180 | 2180 | 3915 | 3915 | 4315 | 4315 | 140 | 140 | 454 | 454 | 5 | 10 |
| | 3500 | 2280 | 2280 | 4115 | 4115 | 4515 | 4515 | 140 | 140 | 454 | 454 | 5 | 10 |
| | 3700 | 2380 | 2380 | 4315 | 4315 | 4715 | 4715 | 140 | 140 | 454 | 454 | 5 | 10 |
| | 4000 | 2580 | 2580 | 4615 | 4615 | 5015 | 5015 | 140 | 140 | 454 | 454 | 5 | 10 |
| | 4500 | 2830 | 2830 | 5115 | 5115 | 5515 | 5515 | 140 | 140 | 454 | 454 | 5 | 6 |
| 2 FFL mast | 3000 | 2030 | 2030 | 3615 | 3615 | 4015 | 4015 | 1385 | 985 | 477 | 477 | 5 | 10 |
| | 3300 | 2180 | 2180 | 3915 | 3915 | 4315 | 4315 | 1535 | 1135 | 477 | 477 | 5 | 10 |
| | 3500 | 2280 | 2280 | 4115 | 4115 | 4515 | 4515 | 1635 | 1235 | 477 | 477 | 5 | 10 |
| | 3700 | 2380 | 2380 | 4315 | 4315 | 4715 | 4715 | 1735 | 1335 | 477 | 477 | 5 | 10 |
| | 4000 | 2580 | 2580 | 4615 | 4615 | 5015 | 5015 | 1835 | 1435 | 477 | 477 | 5 | 10 |
| | 4500 | 2830 | 2830 | 5115 | 5115 | 5515 | 5515 | 1935 | 1535 | 477 | 477 | 5 | 6 |
| 3 FFL mast | 4500 | 2090 | 2090 | 5115 | 5115 | 5515 | 5515 | 1440 | 1040 | 490 | 490 | 5 | 6 |
| | 4800 | 2190 | 2190 | 5415 | 5415 | 5815 | 5815 | 1540 | 1140 | 490 | 490 | 5 | 6 |
| | 5000 | 2290 | 2290 | 5615 | 5615 | 6015 | 6015 | 1640 | 1240 | 490 | 490 | 5 | 6 |
| | 5500 | 2455 | 2455 | 6115 | 6115 | 6515 | 6515 | 1800 | 1400 | 490 | 490 | 3 | 6 |
| | 6000 | 2640 | 2640 | 6615 | 6615 | 7015 | 7015 | 1990 | 1590 | 490 | 490 | 3 | 6 |

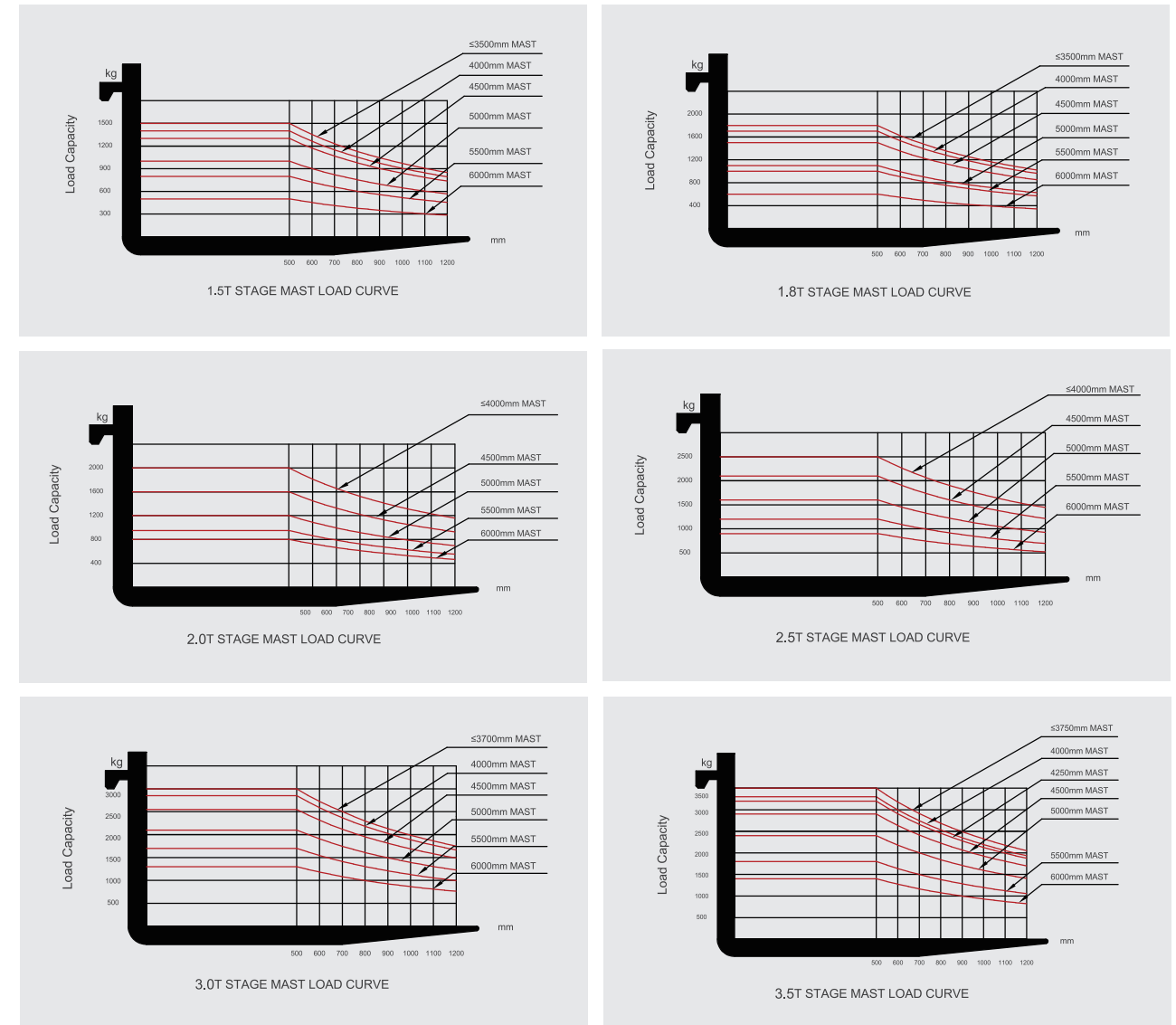
AA SERIES FBA30 Electric forklift truck mast

| Model | Maximum Fork Height (mm) | Mast Height | | | | Free Lift Height | | Load Distance (mm) | Mast Tilt (Deg) | |
|------------|--------------------------|-----------------------------|----------------------------|--------------------|----------------------------|--------------------|-----|--------------------|-----------------|--|
| | | Overall Lowered Height (mm) | Extended Height | | Without Load Backrest (mm) | Load Backrest (mm) | FWD | | Back | |
| | | | Without Load Backrest (mm) | Load Backrest (mm) | | | | | | |
| 2 LFL mast | 3000 | 2045 | 3670 | 4140 | 165 | 165 | 475 | 5 | 10 | |
| | 3300 | 2195 | 3970 | 4440 | 165 | 165 | 475 | 5 | 10 | |
| | 3500 | 2295 | 4170 | 4640 | 165 | 165 | 475 | 5 | 10 | |
| | 3700 | 2395 | 4370 | 4840 | 165 | 165 | 475 | 5 | 10 | |
| | 4000 | 2595 | 4670 | 5140 | 165 | 165 | 475 | 5 | 10 | |
| | 4500 | 2845 | 5170 | 5640 | 165 | 165 | 475 | 5 | 6 | |
| 2 FFL mast | 3000 | 2045 | 3685 | 4140 | 1390 | 935 | 490 | 5 | 10 | |
| | 3300 | 2195 | 3985 | 4440 | 1540 | 1085 | 490 | 5 | 10 | |
| | 3500 | 2295 | 4185 | 4640 | 1640 | 1185 | 490 | 5 | 10 | |
| | 3700 | 2395 | 4385 | 4840 | 1740 | 1285 | 490 | 5 | 10 | |
| 3 FFL mast | 4000 | 1920 | 4725 | 5140 | 1215 | 800 | 500 | 5 | 6 | |
| | 4350 | 2045 | 5075 | 5490 | 1340 | 925 | 500 | 5 | 6 | |
| | 4500 | 2095 | 5225 | 5640 | 1390 | 975 | 500 | 5 | 6 | |
| | 4800 | 2195 | 5525 | 5940 | 1490 | 1075 | 500 | 5 | 6 | |
| | 5000 | 2295 | 5725 | 6140 | 1590 | 1175 | 500 | 5 | 6 | |
| | 5500 | 2460 | 6225 | 6640 | 1745 | 1330 | 500 | 3 | 6 | |
| | 6000 | 2645 | 6725 | 7140 | 1940 | 1525 | 500 | 3 | 6 | |

AA SERIES FBA35 Electric forklift truck mast

| 型号 | Maximum Fork Height (mm) | Mast Height | | | | Free Lift Height | | Load Distance (mm) | Mast Tilt (Deg) | |
|------------|--------------------------|-----------------------------|----------------------------|--------------------|----------------------------|--------------------|-----|--------------------|-----------------|--|
| | | Overall Lowered Height (mm) | Extended Height | | Without Load Backrest (mm) | Load Backrest (mm) | FWD | | Back | |
| | | | Without Load Backrest (mm) | Load Backrest (mm) | | | | | | |
| 2 LFL mast | 3000 | 2120 | 3740 | 4140 | 170 | 170 | 495 | 5 | 10 | |
| | 3300 | 2270 | 4040 | 4440 | 170 | 170 | 495 | 5 | 10 | |
| | 3500 | 2370 | 4240 | 4640 | 170 | 170 | 495 | 5 | 10 | |
| | 3700 | 2470 | 4440 | 4840 | 170 | 170 | 495 | 5 | 6 | |
| | 4000 | 2670 | 4740 | 5140 | 170 | 170 | 495 | 5 | 6 | |
| | 4500 | 2920 | 5240 | 5640 | 170 | 170 | 495 | 5 | 6 | |
| 2 FFL mast | 3000 | 2120 | 3725 | 4140 | 1415 | 1000 | 505 | 5 | 10 | |
| | 3300 | 2270 | 4025 | 4440 | 1565 | 1150 | 505 | 5 | 10 | |
| | 3500 | 2370 | 4225 | 4640 | 1665 | 1250 | 505 | 5 | 10 | |
| 3 FFL mast | 3700 | 2470 | 4425 | 4840 | 1765 | 1350 | 505 | 5 | 6 | |
| | 4000 | 1995 | 4810 | 5140 | 1205 | 875 | 522 | 5 | 6 | |
| | 4350 | 2120 | 5160 | 5490 | 1330 | 1000 | 522 | 5 | 6 | |
| | 4500 | 2170 | 5310 | 5640 | 1380 | 1050 | 522 | 5 | 6 | |
| | 4800 | 2270 | 5610 | 5940 | 1480 | 1150 | 522 | 5 | 6 | |
| | 5000 | 2370 | 5810 | 6140 | 1580 | 1250 | 522 | 5 | 6 | |
| | 5500 | 2535 | 6310 | 6640 | 1735 | 1405 | 522 | 3 | 6 | |
| | 6000 | 2720 | 6810 | 7140 | 1930 | 1600 | 522 | 3 | 6 | |

AA SERIES FBA15-35 Electric forklift truck mast



AA SERIES FBA15-35 Specification

