

3,000-4,000 lb Capacity 3-Wheel Electric Forklift Trucks



The N-Generation AC 3-wheel electric forklift trucks are designed to exceed your expectations for speed, efficiency and reliability in warehouse, shipping and other applications that require fast travel speed and exceptional maneuverability. They are equipped with an innovative AC Control System that incorporates the latest in MOSFET and heat dissipation technology, assuring maximum performance while reducing overall battery consumption. For greater value and reliability, these forklift trucks feature brushless AC induction motors. Individual thermal protection systems guard against overheating of the pump motor, drive motor and control panel. Choose from 3 capacities: 3,000 lb, 3,500 lb and 4,000 lb.



Specifications

CHARACTERISTICS				FB16NT			
1	Capacity	at rated load center	lb	kg	3,000	1,600	
2		at load center – distance	in	mm	24	500	
3	Power	diesel, gasoline, LP gas, electric,			electric		
4	Tire type	cushion, pneumatic			cushion		
5	Wheels (x = driven)	number front / rear			2x / 2		
DIMENSIONS							
10	Lift	maximum fork height with rated load	in	mm	188	4,790	
11	Lift with standard two-stage mast	maximum fork height	in	mm	130	3,300	
12		free fork height	in	mm	4.5	115	
13	Forks	thickness x length x width	in	mm	1.4 x 42 x 3.9	35 x 1,070 x 100	
	Fork spacing	out-to-out minimum / maximum	in	mm	9.4 / 36.0	240 / 918	
14	Tilt	forward / backward	deg		6 / 7		
15	Overall dimensions	length to fork face	in	mm	74.5	1,893	
16		width	standard	in	mm	42.0	1,070
			w/ wide stance drive wheels	in	mm	N/A	
17		height	with lowered mast			83.0	2,105
18			seat height to SIP	in	mm	41.3	1,048
19			to top of overhead guard	in	mm	80.5	2,040
20	with extended mast		in	mm	179.0	4,550	
21	Minimum outside turning radius		in	mm	59.5	1,515	
22	Load moment constant		in	mm	14.8	376	
23	Minimum aisle – 90° stack – zero clearance + load length		in	mm	74.5	1,893	
PERFORMANCE							
24	Speeds	travel loaded / empty	36V	mph	km/h	9.4 / 10.6	15.1 / 17.0
			48V	mph	km/h	10.6 / 10.6	17.0 / 17.0
lift speed loaded / empty		36V	fpm	m/s	79.0 / 110	0.40 / 0.56	
		48V	fpm	m/s	98.0 / 118	0.50 / 0.60	
26	lowering speed loaded / empty	36V	fpm	m/s	102 / 98.0	0.52 / 0.50	
			48V	fpm	m/s	102 / 98.0	0.52 / 0.50
28		Gradeability	loaded at 1 mph (1.6 km)	36V	%	13	
				48V	%	27	
	maximum empty		36V	%	30		
			48V	%	35		
WEIGHT							
29	Empty	w/ minimum weight battery	lb	kg	6,800	3,090	
30	Axle load	with rated load	front	lb	kg	9,200	4,175
			rear	lb	kg	1,140	515
		without load	front	lb	kg	3,300	1,500
			rear	lb	kg	3,500	1,590
CHASSIS							
31	Tire size	front, standard cushion tires	in	mm	18.0 x 7.0 x 12½	457 x 178 x 308	
		rear cushion tires	in	mm	15.0 x 5.0 x 11¼	381 x 127 x 286	
32	Wheel base		in	mm	51.5	1,305	
33	Tread width	front, standard cushion tires	in	mm	35.0	894	
		rear cushion tires	in	mm	6.7	170	
35	Ground clearance	at lowest point at mast	in	mm	2.9	75.0	
		at center of wheel base	in	mm	3.9	100	
37	Brakes	service	type		foot-operated, hydraulic		
		parking	type		hand-operated, mechanical		
POWERTRAIN							
39	Battery	type			lead-acid		
40		maximum capacity at 6 hr. discharge rate	36V	Ah	kWh	950	34.2
41			48V	Ah	kWh	770	37.0
42		weight, minimum	lb	kg	1,910	865	
43	Motors	traction output (60 min. rating)	HP	kW	6.7	5.0	
		lift output (15% rating) x2	HP	kW	18.7	14.0	
45	Controls	drive	type		AC transistor		
46		hydraulic	std / opt		AC transistor		
47	Relief pressure	for attachments	psi	bar	2,250	155	
48	Noise level	mean value at operator's ear	dB(A)		69.2		

FB18NT		FB20NT	
3,500	1,800	4,000	2,000
24	500	24	500
electric		electric	
cushion		cushion	
2x / 2		2x / 2	
188	4,790	171	4,350
130	3,300	130	3,300
4.5	115	4.7	120
1.4 x 42 x 3.9	35 x 1,070 x 100	1.6 x 42 x 3.9	40 x 1,070 x 100
9.4 / 36.0	240 / 918	9.4 / 36.0	240 / 893
6 / 7		6 / 7	
78.5	1,996	80.2	2,037
42.0	1,070	42.0	1,070
N/A		N/A	
83.0	2,105	83.0	2,105
41.3	1,048	41.3	1,048
80.5	2,040	80.5	2,040
179.0	4,550	179.0	4,550
64.0	1,620	65.0	1,645
14.8	376	15.4	392
78.5	1,996	80.0	2,037
8.9 / 10.6	14.4 / 17.0	8.5 / 10.6	13.7 / 17.0
10.6 / 10.6	17.0 / 17.0	10.6 / 10.6	17.0 / 17.0
69.0 / 110	0.35 / 0.56	67.0 / 110	0.34 / 0.56
87.0 / 118	0.44 / 0.60	79.0 / 118	0.4 / 0.6
102 / 98.0	0.52 / 0.50	102 / 98.0	0.52 / 0.50
102 / 98.0	0.52 / 0.50	102 / 98.0	0.52 / 0.50
12		11	
25		23	
28		26	
35		35	
7,250	3,290	7,750	3,520
9,900	4,500	10,700	4,870
1,300	590	1,430	650
3,500	1,590	3,550	1,610
3,750	1,700	4,200	1,910
18.0 x 7.0 x 12 $\frac{1}{8}$	457 x 178 x 308	18.0 x 7.0 x 12 $\frac{1}{8}$	457 x 178 x 308
15.0 x 5.0 x 11 $\frac{1}{4}$	381 x 127 x 286	15.0 x 5.0 x 11 $\frac{1}{4}$	381 x 127 x 286
55.5	1,410	55.5	1,410
35.0	894	35.0	894
6.7	170	6.7	170
2.9	75.0	2.9	75.0
3.9	100	3.9	100
foot-operated, hydraulic		foot-operated, hydraulic	
hand-operated, mechanical		hand-operated, mechanical	
lead-acid		lead-acid	
950	34.2	950	34.2
770	37.0	770	37.0
2,200	1,000	2,200	1,000
6.7	5.0	6.7	5.0
18.7	14.0	18.7	14.0
AC transistor		AC transistor	
AC transistor		AC transistor	
2,250	155	2,250	155
69.2		68.5	

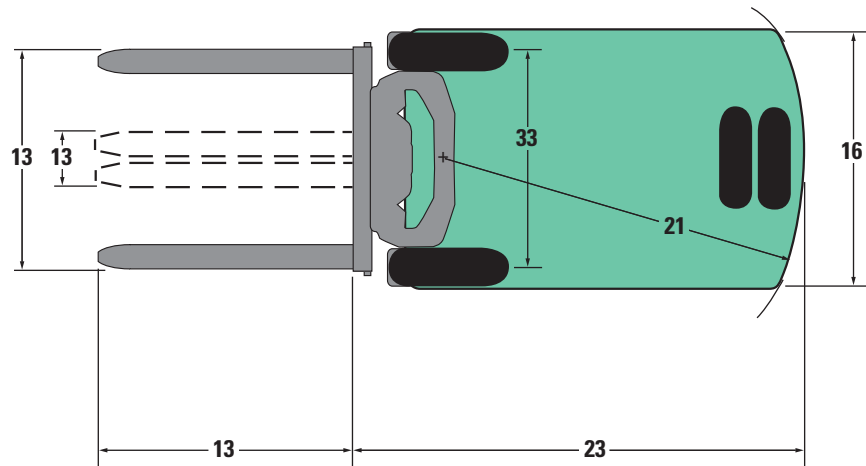
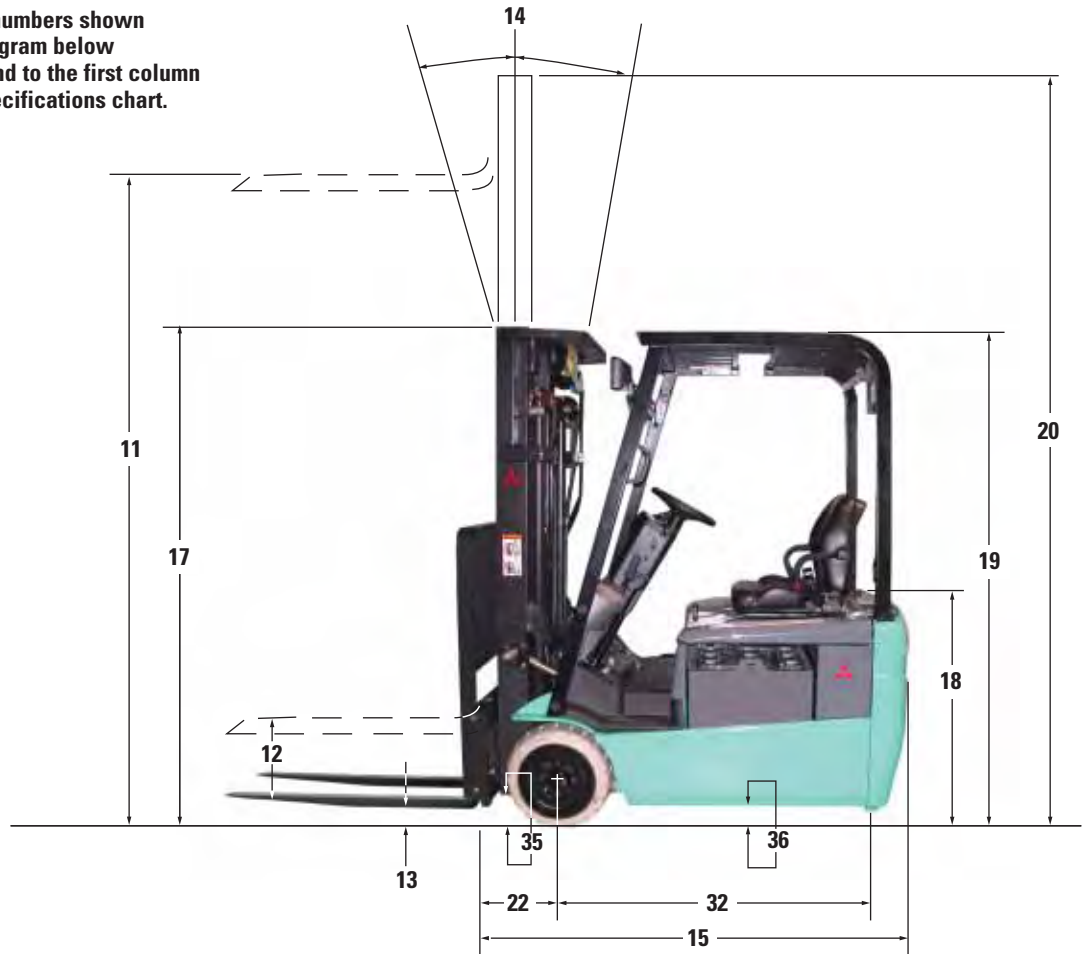
SAFETY STANDARDS

These trucks meet American National Standards Institute/ Industrial Truck Standards Development Foundation, ANSI/ITSDF B56.1. UL-Classified by Underwriters Laboratories, Inc., as to fire and electric shock hazard only; Type E, EE (optional), Industrial Trucks. Users should be aware of, and adhere to, applicable codes and regulations regarding operator training, use, operation and maintenance of powered industrial trucks, including:

- ANSI/ITSDF B56.1.
- NFPA 505, fire safety standard for powered industrial trucks -type designations, areas of use, maintenance and operation.
- Occupational Safety and Health Administration (OSHA) regulations that may apply.

Specifications, equipment, technical data, photos and illustrations based on information at time of printing and subject to change without notice. Some products may be shown with optional equipment.

Call-out numbers shown in the diagram below correspond to the first column of the specifications chart.



BATTERY COMPARTMENT INFORMATION*

MODEL	STANDARD BATTERY COMPARTMENT							
			FB15NT		FB18NT		FB20NT	
Length	in	mm	20.90	530	24.90	634	24.90	634
Width	in	mm	40.00	1,016	40.00	1,016	40.00	1,016
Height	in	mm	24.80	630	24.80	630	24.80	630
Roller Height from Ground	in	mm	8.0	203	8.0	203	8.0	203
Minimum Battery Weight	lbs	kg	1,910	870	2,200	1,000	2,200	1,000

* Deduct 0.5 in (13.0 mm) from each dimension for maximum battery size.

Standard Features

- 36/48V Mitsubishi PM-1000 MOSFET transistor AC traction and hydraulic control system
- AC induction dual drive motors
- AC induction hydraulic motor
- Five pre-programmed performance modes
- Display panel includes:
 - Five digit hour meter for vehicle, drive motor and pump motor
 - Fault indicator
 - Programmable service indicator
 - Park brake audible and visual warning
 - Brake fluid level indicator
 - Pump motor brush wear indicator
 - Seat belt audible and visual warning
 - Speedometer
 - Real-time clock
 - Battery discharge indicator
- Integrated Presence System (IPS)
- Over temperature protection for control system, drive motor and hydraulic motor
- High strength mast and carriage designs
- Tilt steering column
- Cowl mounted hydraulic levers
- Contoured vinyl seat with operator return restraint system
- Electronic back-up alarm

Comfort And Convenience

A contoured vinyl seat includes a cinch resistant comfort-stretch seat belt for comfortable reverse operation. Fore/aft adjustment of the seat and the tilt steering column accommodates both large and small operators, while a rubber

floor mat provides good traction when entering and leaving the vehicle.

Control System

The 36/48V Mitsubishi PM-1000 AC control system utilizes the latest in thermal management technology eliminating the need for fans. This provides protection for the drive motor, hydraulic motor and control components, reducing power in the event of an engine overheating.

Drive And Hydraulics

AC induction drive motors deliver faster acceleration, higher top speeds and quicker deceleration while reducing battery consumption. Independent control of the two drive motors improves overall traction characteristics and maneuverability of the truck. Transistor hydraulic control is also standard, improving energy efficiency, lowering noise levels and reducing the likelihood of heat build-up during demanding applications such as the use of lift truck attachments. The AC induction hydraulic motor provides quick lifting and lowering speeds to maximize productivity.

Mast Design

The design of the mast emphasizes both visibility and strength. Narrow mast channels and well positioned cylinders, chain and hose routings provide exceptional visibility. Strength is maintained with deep channel webs that allow the use of larger mast rollers than most competitive designs enhancing the rigidity of

the mast for improved handling of heavy loads at higher lifting heights.

Diagnostics And Service

A user-friendly diagnostic package allows troubleshooting via laptop computer. Whether accessed via the display panel or laptop computer, access to 32 fault codes allows pinpoint troubleshooting, reducing downtime. With 500 hour service intervals, planned maintenance is reduced by as much as one-half versus many competitors, reducing lifetime ownership costs up to \$2000.

Custom Performance

From the warehouse to the loading dock, performance can be matched to meet your requirements. Travel speed, lift speed, acceleration and regenerative braking are easily customized through the application control system. A wide range of optional equipment is available through your local Mitsubishi forklift truck dealer to meet specific application requirements.



See For Yourself

- These trucks are 100 percent AC powered. AC motors are brushless, reducing maintenance and long-term cost of ownership.
- Take special notice of the overall performance of these forklift trucks. They feature industry leading travel speeds, acceleration and lift and lower speeds and contribute to the increased productivity of the truck.
- Customizable features such as five pre-programmable performance modes offers operators greater flexibility in their daily material handling requirements. Operators will be pleased to hear that travel speed, acceleration rate, regenerative braking and auto regenerative braking are all adjustable.
- A standard safety feature on this forklift is the exclusive Integrated Presence System (IPS) which temporarily disengages the drive and hydraulic functions should the operator leave the normal operating position.
- For ease of service these trucks are equipped with the Mitsubishi PM-1000 AC control system which is modular in design. This allows technicians quick access to individual control system components for quick, efficient servicing.



Ready. Reliable. Right On The Money.

Manufactured with superior quality and exceptional value, Mitsubishi forklift trucks are supported by an extensive dealer and field support network. Dealer locations exist throughout North and South America, offering flexible financing options and product support.

Value And Support For The Long Haul

Our programs deliver value just like our forklifts. One example is our parts program, designed to be your single source for quality replacement parts — no matter what forklift brand you own. Another is the Master Protection® program which offers extended powertrain warranties for your Mitsubishi forklifts. Your Mitsubishi forklift truck dealer offers an extensive line of products and services including Master Maintenance® programs, which tailor service and maintenance to your specific applications. Your Mitsubishi forklift truck dealer can provide options and additional visual and audible warning devices aimed at your specific applications and requirements. Operator training programs are also available to help reduce the potential for product damage and personal injury.

**3-Wheel Electric Cushion Tire
3,000-4,000 lb Capacity**

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MEHM0031-01

01/07



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