

North America Only

FORKLIFT TRUCKS Environmentally - Friendly

20/25/30/32BC-7 AC





20/25/30/32BC-7/AC





High Technology ZAPI Controller Eliminates Almost All Noise

The efficient, 8Khz(high frequency) ZAPI controller provides smooth operation and protection for low & high voltage, overheating and fault recording.

Features · Regeneration : Direction change, Deceleration, Braking

- The new AC motors offers a of 10% greater efficiency than traditional DC motors Various performance models are available to maximize efficiency and equipped to work in all types of operations
- · Enhanced Efficiency
 - H (High) Mode, N (Normal) Mode, E (Economic) Mode
- · Turtle Mode : 10km/h



Superior Power & Optimal Performance

Efficient, smooth running and ergonomically designed

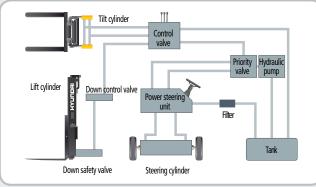
AC control series are built to meet you needs.



Fork Safety Features

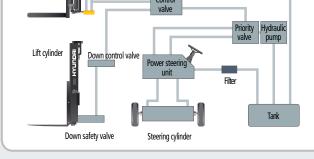
When the forks are being lowered, a down-control valve maintains the controlled speed.

The down-safety valve prevents forks from dropping down in case of sudden damage of hydraulic line.



State-of-the-Art Hydraulic System

The latest large-capacity hydraulic system reacts quickly during operation, and a low noise control valve increases both efficiency and durability.



Anti-Rollback System, Faster Travel Speed & Gradeability

ZAPI's anti-rollback system provides safe ramp operation plus exceptional ramp start capabilities.

The powerful high-output motors provide greater acceleration, better gradeability and faster travel speed on any tough terrain or slope.



Travel Speed (MAX)

Model	mph
20BC-7	11.2
25BC-7	11.2
30BC-7	11.2
32BC-7	11.2

Gradeability (MAX)

Model	%
20BC-7	20
25BC-7	19
30BC-7	18
32BC-7	17



Increased Mast tilting Angle

Utilizing the mast tilting angle of 6 degrees forward and 8 degrees backward, the operator can rapidly perform loading and unloading jobs safely.



Clean and Reliable Brakes

The adoption of DUO-SERVO type drum brake improves braking performance. A self-adjusting function maintains proper brake adjustment to compensate for lining



Fully Hydrostatic Power Steering

A hydraulic steering system ensures smooth & precise steering which prevents kick-back.



OPSS (Operator Presence Sensing System)

Control of mast tilting, lifting and lowering is not possible through operation of the appropriate control when the operator is not in the seat



Adjustable Steering Wheel
Steering wheel can be adjusted by a lever
on the right-hand side for the most
comfortable operator position.



Easy Control Direction LeverFinger tip control of forward and reverse lever allows the operator to remain in control of equipment.



Multi-Functional Switch Integrated multi-functional switch lever enables the driver to operate lights and horn conveniently.



Prompt Response of Operating Control Levers Only minimal operator's effort is required for precise, safe and productive control.



High visibility for Safe OperationThe operator is able to work with increased safety and accuracy due to a wider



Perfect Compartment Fit For Any OperatorAn ergonomically designed operator's compartment enables the driver to select the most comfortable working position for increased productivity.



Optimum Pedal Position & Non-slip Mat

Based on human engineering, the accelerator and brake pedals are optimally positioned for convenience while operating the equipment.

Easily Adjustable Suspension Seat

An attractive and adjustable seat, based on a human design, provides greater comfort, safety and durability.

Options : Arm rest, Hip restraint



Comfortable Operation

A design based on human engineering relieves fatigue and increases operator's efficiency.





Self - Diagnostic LCD Monitor

The LCD monitor has a back-light system to provide a clear view of the system's operation in all environments. The monitor provides information about operation error, system fault, battery level, hour meter and selected performance mode. Other various functions

include items such as self diagnostics and password activation. These features are can be accessed without the need of a laptop or handset.

Keyboard Buttons / Performance Mode

Operator can select performance mode easily according to working condition.

Console Box & Cup Holder

Additional storage spaces are located inside the operating space for operator's convenience.



High Durability & Simple Arrangement

An ideal arrangement of component parts ensures easy access and convenience for maintenance.





Strong Overhead Guard

The safety overhead guard exceeds EEC and ANSI regulations and protects the operator during hazardous work.



Parking Brake

Ratchet type parking brake requires less effort from the operator to set.



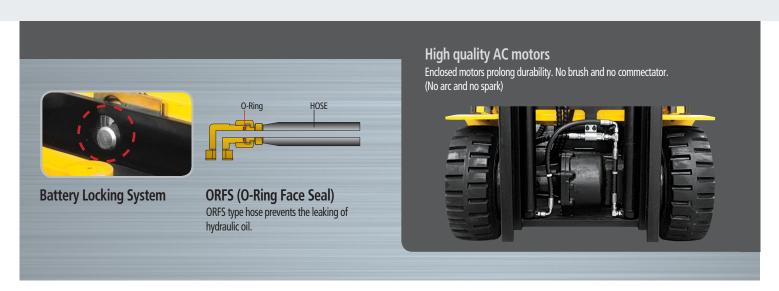
Hand Grip & Large Footboard

Wide "open" step and large hand grip offer convenience and safety when entering and exiting the truck.



Rear Safety Lamp

Rear combination lamps with turn signal lamps, tail lamp and brake lights are positioned for high visibility to ensure safety.



Easy Maintenance & Serviceability

Battery change is easy with a swing-up compartment and a slotted overhead guard. Opening and closing of the battery cover is made easy with a gas-spring assisted cylinder.



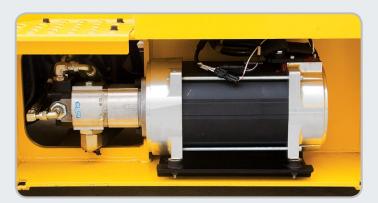
A concentrated Fuse Box for Easy Inspection



Oil Tank Port

Easy Battery Replacement

Battery change is easy with swing-up compartment and slotted overhead guard. Opening and closing of battery cover is made easy with a gas-spring assist cylinder.



Hydraulic Motor



Battery Disconnect Lever / Switch



Easy to Check Brake Oil Level





High Visibility Headlights & Rear Work Light



DC-DC Converter
DC-DC converter exceeds UL & CE
requirements to prevent short circuit,
overload and reverse polarity

Mast Specification (20/25/30BC-7)

Mast Type		Overall Height (Lowered) (in)	Maximum Fork Height (in)	Free Lift (in) With Backrest Without Backrest		Tilt Angle (deg) Fwd / Bwd	Load Capacity without side shift at 24in LC (lb)			Load Capacity with side shift at 24in LC (lb)			Truck Weight (Unloaded) (lb)			
		20/25/30BC-7	20/25/30BC-7	20/25/30BC-7	20/25BC-7	30BC-7	20/25/30BC-7	20BC-7	25BC-7	30BC-7	20BC-7	25BC-7	30BC-7	20BC-7	25BC-7	30BC-7
	V209	60.2	82.3	4.5	4.5	4.5	10 / 6	4,000	5,000	6,000	4,000	5,000	6,000	8,843	9,582	10,681
	V300	78.1	118.1	4.5	4.5	4.5	6/8	4,000	5,000	6,000	4,000	5,000	6,000	8,963	9,701	10,818
2	*V330	84.0	129.9	4.5	4.5	4.5	6/8	4,000	5,000	6,000	4,000	5,000	6,000	9,006	9,744	10,865
2	V350	87.9	137.8	4.5	4.5	4.5	6/8	4,000	5,000	6,000	4,000	5,000	6,000	9,043	9,782	10,905
Stage	V370	93.9	145.7	4.5	4.5	4.5	6/8	4,000	5,000	6,000	4,000	5,000	6,000	9,092	9,830	10,957
limited	V400	99.8	157.4	4.5	4.5	4.5	6/8	4,000	5,000	6,000	4,000	5,000	5,900	9,140	9,878	11,009
free lift	V430	105.7	169.3	4.5	4.5	4.5	6/8	4,000	5,000	6,000	4,000	4,900	5,800	9,241	9,980	11,114
шт	V450	111.6	177.2	4.5	4.5	4.5	6/5	4,000	5,000	6,000	3,950	4,835	5,700	9,302	10,041	11,179
	V470	115.5	185.0	4.5	4.5	4.5	6/5	4,000	4,940	5,950	3,840	4,780	5,650	9,334	10,072	10,687
	V500	121.4	196.9	4.5	4.5	4.5	6/5	4,000	4,850	5,865	3,800	4,690	5,565	9,382	10,121	11,213
	TF370 / TS370	70.3	145.7	23.8	46.3	43.8	6/5	4,000	5,000	6,000	4,000	4,840	5,700	9,293	10,032	11,177
3	TF400 / TS400	74.2	157.4	27.8	50.3	47.8	6/5	4,000	4,960	5,975	4,000	4,800	5,675	9,339	10,077	11,225
3 /	TF430 / TS430	78.2	169.3	31.7	54.2	51.7	6/5	4,000	4,870	5,840	4,000	4,710	5,540	9,386	10,125	11,324
Stage	TF450 / TS450	82.1	177.2	35.6	58.1	55.7	6/5	4,000	4,805	5,775	3,940	4,645	5,475	9,434	10,173	11,335
full	TF470 / TS470	84.1	185.0	37.6	60.1	57.6	6/5	4,000	4,740	5,710	3,830	4,580	5,410	9,463	10,202	11,366
free lift	TF500 / TS500	87.9	196.9	41.5	64.1	61.6	6/5	3,900	4,650	5,600	3,740	4,490	5,300	9,515	10,254	11,420
Ш	TF550 / TS550	95.9	216.5	49.4	71.9	69.4	6/5	3,770	4,495	5,425	3,610	4,335	5,125	9,604	10,342	11,518
	TF600 / TS600	103.7	236.2	57.3	79.8	77.3	6/5	2,690	3,275	3,970	2,530	3,115	3,670	9,770	10,508	11,696

^{*} TS-Mast : 3-Stage Dual Full Free Lift Mast

Mast Specification (32BC-7)

Mast Type		Overall Height Maximum		Fre	e Lift	Tilt Angle (deg)	Load Capacity without	Load Capacity with	Truck Weight	
		(Lowered) (in)	Fork Height (in)	With Backrest (in)	Without Backrest (in)	Fwd / Bwd	side shift at 24in LC (lb)	side shift at 24in LC (lb)	(Unloaded) (lb)	
		32BC-7	32BC-7	32BC-7	32BC-7	32BC-7	32BC-7	32BC-7	32BC-7	
	V290	78.1	114.2	4.5	4.5	6/8	6,500	6,500	11,196	
	*V320	84.0	126.0	4.5	4.5	6/8	6,500	6,500	11,243	
2	V340	87.9	133.9	4.5	4.5	6/8	6,500	6,500	11,284	
1	V360	93.9	145.7	4.5	4.5	6/8	6,500 6,5		11,336	
Stage	V390	99.8	157.5	4.5	4.5	6/8	6,500	6,400	11,387	
limited free	V420	105.7	169.3	4.5	4.5	6/8	6,500	6,300	11,492	
lift	V440	111.6	177.2	4.5	4.5	6/5	6,480	6,180	11,557	
	V460	115.5	185.0	4.5	4.5	6/5	6,395	6,095	11,591	
	V490	121.4	196.9	4.5	4.5	6/5	6,305	6,005	11,643	
	TF370 / TS370	72.2	145.7	25.8	45.8	6/5	6,500	6,200	11,606	
	TF400 / TS400	76.2	157.4	29.7	49.8	6/5	6,350	6,050	11,654	
3	TF430 / TS430	80.1	169.3	33.7	53.7	6/5	6,240	5,940	11,709	
s I	TF450 / TS450	84.1	177.2	37.6	57.6	6/5	6,150	5,850	11,763	
Stage full	TF470 / TS470	86.0	185.0	39.6	59.6	6/5	6,085	5,785	11,795	
	TF500 / TS500	90.0	196.9	43.5	63.5	6/5	5,950	5,650	11,849	
free lift	TF550 / TS550	97.8	216.5	51.4	71.4	6/5	6 / 5 5,775		11,947	
	TF600 / TS600	105.7	236.2	59.3	79.3	6/5	4,255	4,255 3,955		

^{*} TS-Mast : 3-Stage Dual Full Free Lift Mast

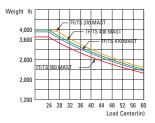
^{*} Standard

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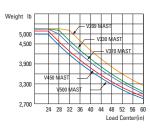
Load Capacity

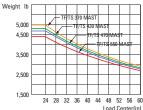
20BC-7

Weight It 4,000 3,800 24 28 32 36 40 44 48 52 56 60 Load Center(in)

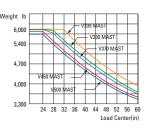


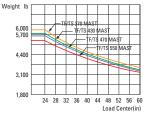
25BC-7



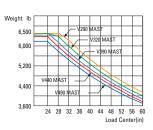


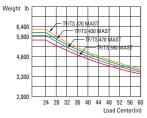
30BC-7





32BC-7





Various Attachments



Side Shift



Hinged Fork





Rotating Fork



Push Pull



Rotating Roll Clamp



Load Stabilizer



Carton Clamp



Pallet Invert



Drum Clamp



Bale Clamp



Load Extender



Fork Positioner

Optional Items

- 3-Stage Full Free Lift, 3-Stage Dual Full Free Lift 4-Stage Full Free Lift
- Fork(in)
 - 35.4 / 39.3 / 41.3 / 47.2 / 53.1 / 59.0 / 64.9 / 70.8
- Overshoe(in) 59.0 / 66.9 / 70.8

- Side Shift
- Integral Side Shift
- Tire

Smooth Rubber Type Non-Marking (Lug or Smooth Type)

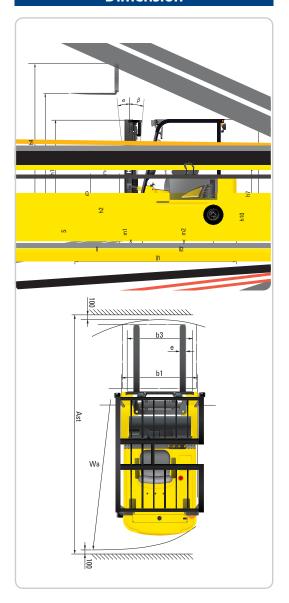
- Cold Storage
- Dual Voltage (36/48 V)

SBR

(Side Battery Removing)

- UL EE
- Finger Tip Control
- Strobe Light (Amber, Red, Blue)

Dimension



Specification Identification Manufacturer 1.1 Manufacturer's type designation 20RC-7 25RC-7 30RC-7 32RC-7 1.3 Drive: electric(battery or mains), diesel, petrol, fuel gas, manual Electric Electric Electric Electric 1.4 Type of operation: hand, pedestrian, standing, seated, order-picker Saatad hatea? Seated Seated 1.5 Load capacity / rated load 4,000 5,000 6,000 6,500 1 6 Load center distance c (in) 24 24 24 24 Load distance, center of drive axle to fork 18 18 18 18 1.8 x (in) 1.9 Wheelhase y (in) 50.1 50.1 55.1 55.1 Weights 2.1 Service weight (lb) 8,878 9,617 10,737 11,116 2.2 Axle loading, loaded front / rear (lb) 11,093 / 1,785 12,691 / 1,926 14,654 / 2,083 15,472 / 2,144 3,828 / 5,050 4,190 / 6,547 4,136 / 6,980 2.3 Axle loading, unloaded front / rear (lb) 3,609 / 6,008 Wheels, Chassis 3. 1 Tires: solid rubber(V), superelastic(SE), pneumatic(P), polyurethane(PE) ٧ 21 x 7 x 15 21 x 8 x 15 21 x 8 x 15 3. 2 Tires size, front(db x width) 21 x 7 x 15 3.3 Tires size, rear(cb x width) 16 x 6 x10.5 16 x 6 x10.5 16 x 6 x10.5 16 x 6 x10.5 Wheels, number front rear(x = driven wheels) 3.5 2 x / 2 2 x / 2 2 x / 2 2 x / 2 3.6 Track width, front 35 35 36 36 Track width, rear 35.8 35.8 35.8 35.8 3.7 **Basic Dimensions** Mast / fork carriage tilt forward / backward 6/8 6/8 6/8 6/8 4.1 Lowered mast height h1 (in) 4.3 Free lift 45 45 45 45 h2 (in) 129.9 129.9 129.9 h3 (in) 126 4.5 Extended mast height h4 (in) 176.6 1766 176.6 172 6 Overhead load guard (cab) height 88 88 4. 7 h5 (in) 88 88 Seat height / Standing height 4 8 47 47 47 47 h7 (in) 4. 12 Coupling height h10 (in) 10.8 10.8 10.8 4. 19 Overall length 125 3 127 6 133 1 1344 11 (in) 4. 20 Length to face of forks 12 (in) 83.9 86.3 91.8 93.1 Overall width 43.8 43.8 44 44 4 21 b1 (in) 4. 22 Fork dimensions s / e / l (in) 1.77 x 3.94 x 41.3 1.77 x 3.94 x 41.3 1.77 x 4.8 x 41.3 1.77 x 4.8 x 41.3 Fork carriage ISO 2328, class / type A, B 4 23 II / A II / A III / A III / A 4. 24 Fork - carriage width b3 (in) 40.2 40.2 40.2 40.2 3.54 3.54 4 31 Ground clearance loaded under mast m1 (in) 3 54 3 54 4. 32 Ground clearance, centre of wheelbase m2 (in) 4 21 4.21 4.21 4.21 Aisle width for pallets 1,000 x 1,200 crossways 138.6 4 33 1396 145 5 146.6 Ast (in) 4.34 Aisle width for pallets 800 x 1,200 length ways Ast (in) 130.7 131.7 137.6 138.8 74.2 81.3 4. 35 Turning radius Wa (in) Performance Data Travel speed, loaded / unloaded (48V) 10.6 / 11.2 10.6 / 11.2 10.6 / 11.2 10.6 / 11.2 5. 1 mph 8/9 8/9 8/9 8/9 mph 5. 2 Lift speed, loaded / unloaded (48V) 82.6 / 120 80.7 / 120 67 / 98.4 65 / 98.4 fpm 55 / 86 6 55 / 86 6 55 / 86.6 55 / 86 6 5. 3 Lowering speed, loaded / unloaded 98.4 / 88.6 98.4 / 88.6 98.4 / 88.6 98.4 / 88.6 fpm 5.5 Drawbar pull, loaded / unloaded S2 60 min N 5.6 Max. drawbar pull, loaded / unloaded S2 5 min 12,124 / 12,203 11,987 / 12,112 11,822 / 11,992 11,776 / 11,958 N 5.7 Gradient performance, loaded / unloaded S2 30 min 5.8 Max. gradient performance, loaded / unloaded S2 5 min 20 / 20 17/19 15/18 14/17 5.9 Acceleration time, loaded / unloaded 5. 10 Service brake Hvd. E - Motor Drive motor rating S2 60 min (48V) kW 14.2 14.2 14.2 14.2 6. 1 kW 6. 2 Pump motor rating at S3 - 15 % (48V) kW 18 18 18 18 kW Ah 740 6. 4 Battery voltage, nominal capacity K5 (48V) 740 845 845 Ah lb



Battery weight (min)

Type of drive control

6.6

Battery compartment dimensions L/W/H

6100 Atlantic Blvd, Norcross GA 30071 TEL (877) 509 2254 FAX (678) 823 7778 PLEASE CONTACT

2.490

39.76 / 30.55 / 23.62

AC

2.490

39.76 / 30.55 / 23.62

AC

3.000

39.76 / 34.49 / 23.62

AC

3.000

39.76 / 34.49 / 23.62

AC