

I.C. ENGINE

Type		PERKINS 854E-E34TA JR51746
Fuel		Diesel
Number of cylinders		4 in line
Suction		Supercharged
Injection system		Direct
Ignition sequence		1.3.4.2
Capacity	cm ³	3400
Bore and stroke	mm	99 x 110
Compression ratio		17:1
Nominal speed laden	rpm	2200
Idling speed slow unladen	rpm	850
Max. speed unladen	rpm	2350
Power ISO/TR 3046	cv - kW	102 - 75
Power SAE J 1995	cv - kW	102 - 75
Maximum torque ISO/TR 3046	Nm	420 to 1400 rpm
Gravimetric efficiency ISO 5011	%	99,9
Type of cooling		By water
Fan		Puller

TRANSMISSION

Gear box		DANA
- Type		Mechanical
- Forward/reverse selector		Electro-hydraulic
- Torque converter		DANA
- Number of forward speeds		4
- Number of reverse speeds		4
Angle gear box		-
Front axle		DANA
- Differential		Without locking
Rear axle		DANA
- Differential		Without locking
Drive wheels		4RM Permanent
- Switch for 2/4 drive wheels		No
Front tyres		ALLIANCE
- Size		440/80-24 A325 168A8 ATG
- Pressure	bar	4,5
Rear tyres		ALLIANCE
- Size		440/80-24 A325 168A8 ATG
- Pressure	bar	4,5

ELECTRIC CIRCUIT

Battery	STANDARD	12 V - 110 Ah - 900 A EN
	OPTION	12 V - 180 Ah - 900 A EN
Alternator		12 V - 100 A
- Type		ISKRA AAK-EF
Starter		12 V - 3,2 kW
- Type		ISKRA AZE

BRAKE CIRCUIT

Service brake		Hydraulic power brake
- Type of brake		Multidisk brake immersed in oil
- Type of control		Foot-operated for the front and rear axles
Parking brake		Low pressure brake
- Type of brake		Disk on gear-box output
- Type of control		Electro-hydraulic

SOUND AND VIBRATION

Sound pressure level in the driver's cab LpA (according to standard NF EN 12053)	dB(A)	82 (cab closed) ; 00 (cab open)
Sound pressure (according to directive 2009/76)	dB(A)	00 (cab closed) ; 00 (cab open)
Sound pressure level ensured in the LwA environment (according to directive 2000/14/EC modified by directive 2005/88/EC)	dB(A)	105 (measured) ; 106 (ensured)
Sound level in motion (according to directive 2009/63)	dB(A)	
Average weighted acceleration on driver's body (according to standard NF EN 13059)	m/s ²	1,0
The average weighted acceleration transmitted to the driver's hand/ arm system (according to standard ISO 5349-2)	m/s ²	< 2,5
Standard seat vibration	m/s ²	00 (lightweight operator) ; 00 (heavyweight operator)

HYDRAULIC CIRCUIT			
Hydraulic pump		Gear pump with flow divider on 2nd casing	
- Type		1st casing	2nd casing
- Capacity	cm ³	45	27
- Max. rating capacity unladen	l/mn	106	64
- Flow rate at 1600 rpm	l/mn	72	44
Filtration			
- Return	µm	16	16
- Suction	µm	135	135
Maximum service pressure		270	
- Telescoping circuit	bar	270 / 270	
- Lifting circuit	bar	210 / 265	
- Tilt circuit	bar	280 / 200	
- Stabilizers Circuit	bar	270	
- Tilting corrector circuit OPTION	bar	270	
- Attachment circuit OPTION	bar	270	
- Steering circuit	bar	140	

HYDRAULIC MOVEMENTS			
Longitudinal stability limiter and warning device		Electronic	
Lifting motions (boom retracted)			
- Unladen lifting	s - m/mn	17,3 - 23,2	
- Laden lifting	s - m/mn	17,3 - 23,2	
- Unladen lowering	s - m/mn	12,7 - 31,7	
- Laden lowering	s - m/mn	12,6 - 31,9	
Telescoping motions (boom raised)			
- Unladen extending	s - m/mn	16,1 - 40,7	
- Laden extending	s - m/mn	16,5 - 41,7	
- Unladen retracting	s - m/mn	15,6 - 43	
- Laden retracting	s - m/mn	15 - 44,8	
Tilting movements			
- Unladen digging	s - °/s	5 - 25,2	
- Forward tilting unladen	s - °/s	4 - 31,5	

SPECIFICATIONS AND WEIGHTS			
Speed of movement for lift truck in standard configuration on flat ground (except particular conditions)			
Front unladen	1	km/h	5,4
	2	km/h	8,5
	3	km/h	16
	4	km/h	27,1
Rear unladen	1	km/h	5,4
	2	km/h	8,5
	3	km/h	16
	4	km/h	27,1
Standard attachment		TFF 45 MT1040	
- Weight with forks	kg	228	
- Weight of forks (each one)	kg	71	
Rated capacity with standard attachment	kg	4000	
Tipping load at maximum reach on stabilisers	kg	1105	
Distance from the centre of gravity from the load to the lug of the forks	mm	500	
Standard lifting height	mm	17550	
Lift truck weight without attachment	kg	11340	
Lift truck weight with standard attachment			
- Unladen	kg	11710	
- At rated load	kg	15710	
Weight per axle with standard attachment (transport position)			
- Front unladen	kg	5510	
- Rear unladen	kg	6200	
- Front rated load	kg	12940	
- Rear rated load	kg	2770	
Weight per axle with standard attachment (boom extended)			
- Front rated load	kg	11510	
- Rear rated load	kg	600	
Contact pressure on the ground for the whole surface of each stabilizer at maximum load when tilting	kg/cm ²	5,49	
Drag strain on the coupling hook			
- Unladen (sliding)	daN	7820	
- At rated load (transmission setting)	daN	10250	
Pull strain with open carrier (according to standard ISO 8313)	daN	7900	

FRONT AND REAR TIRES

MT 1435 100P ST3B Série 1		PRESSURE (bar)	TYRE LOAD (kg)			
			FRONT UNLADEN	FRONT LADEN	REAR UNLADEN	REAR LADEN
ALLIANCE	400/80-24 A325 162A8 ATG	5	2750	5900	2100	700
DUNLOP	440/80-24 T37 158B TUBELESS	4,5				
GALAXY	15.5-25 16PR GIRAFFE L2	5,2				
MICHELIN	400/80-24 162A8 TUBELESS	5				
MITAS	15.5-25 12PR EM-20 TUBELESS	4,6				

MT 1440 ST3B MT 1440 100P ST3B Série 2		PRESSURE (bar)	TYRE LOAD (kg)			
			FRONT UNLADEN	FRONT LADEN	REAR UNLADEN	REAR LADEN
ALLIANCE	400/80-24 A325 162A8 ATG	5	2650	6350	2750	1100
DUNLOP	440/80-24 T37 158B TUBELESS	4,5				
GALAXY	15.5-25 16PR GIRAFFE L2	5,2				
MICHELIN	400/80-24 162A8 TUBELESS	5				
MITAS	15.5-25 12PR EM-20 TUBELESS	4,6				

MT 1840 ST3B		PRESSURE (bar)	TYRE LOAD (kg)			
MT 1840 100P ST3B Série 2			FRONT UNLADEN	FRONT LADEN	REAR UNLADEN	REAR LADEN
ALLIANCE	440/80-24 A325 168A8 ATG	4,5	2750	6450	3050	1400
DUNLOP	440/80-24 T37 158B TUBELESS	4,5				
GALAXY	15.5-25 16PR GIRAFFE L2	5,2				
MICHELIN	440/80-24 168A8 TUBELESS	4,5				
MITAS	15.5-25 12PR EM-20 TUBELESS	4,6				

		PRESSURE (bar)	LOAD (kg)	PRESSURE ON THE CONTACT SURFACE (kg/cm ²)		AREA OF THE CONTACT SURFACE (cm ²)	
				HARD SOIL	LOOSE SOIL	HARD SOIL	LOOSE SOIL
ALLIANCE	400/80-24 A325 162A8 ATG	5	700				
			1100				
			2100				
			2650				
			2750				
			5900				
			6350				
	440/80-24 A325 168A8 ATG	4,5	1400				
			2750				
			3050				
			6450				
DUNLOP	440/80-24 T37 158B TUBELESS	4,5	700	5,83	1,63	120	430
			1100	6,61	1,83	165	596
			1400	7,07	1,96	195	704
			2100	8,03	2,23	261	939
			2650	8,69	2,40	305	1105
			2750	8,73	2,42	315	1135
			3050	8,97	2,50	340	1220
			5900	12,51	3,44	471	1716
			6350	12,89	3,55	493	1788
			6450	12,97	3,58	498	1803
GALAXY	15.5-25 16PR GIRAFFE L2	5,2	700				
			1100				
			1400				
			2100				
			2650				
			2750				
			3050				
			5900				
			6350				
			6450				
MICHELIN	400/80-24 162A8 TUBELESS	5	700	6,10	0,43	122	1428
			1100	6,90	0,70	159	1548
			2100	8,52	1,11	240	1847
			2650	9,38	1,30	282	2000
			2750	9,53	1,30	289	2007
			5900	12,36	1,93	472	2981
			6350	12,73	2,03	498	3115
	440/80-24 168A8 TUBELESS	4,5	1400	7,13	0,85	193	1650
			2750	9,10	1,33	302	2064
			3050	9,40	1,40	323	2156
			6450	12,30	2,00	526	3200
MITAS	15.5-25 12PR EM-20 TUBELESS	4,6	700				
			1100				
			1400				
			2100				
			2650				
			2750				
			3050				
			5900				
			6350				
			6450				

DIMENSIONS AND LOAD CHART MT 1840 100P ST3B Série 2

A	mm	1200
B	mm	3070
C	mm	2044
C1	mm	1929
D	mm	6274
D1	mm	6159
D2	mm	4894
E	mm	7474
F	mm	1960
F1	mm	1960
G	mm	437
G1	mm	420
G2	mm	433
G3	mm	302
I	mm	1160
J	mm	892
K	mm	1040
L	mm	50
N	mm	1908
O	mm	125
P2	°	37
P3	°	34
R	mm	3779
S	mm	8788
T	mm	4307
U1	mm	2505
U2	mm	2693
V	mm	5592
V1	mm	1285
V2	mm	4009
W	mm	2420
W1	mm	3793
W2	mm	1134
W3	mm	2422
Y	°	12
Z	°	114



