



## **Technical description**

### **Chassis**

DCF330-12LB

Wheelbase : L3 4750

### **Mast**

Dupl std 280-330

Lifting height H4=4500

Closed height H3=4270

### **Carriage**

Sidesh/forkp,rollertype W=3400

280-330 +/-400, c/c 2050

Forkshaft system 280-330

### **Forks**

300\*110\*2400 280 - 330

### **Drivetrain**

Volvo TAD760+Dana17000

(180kW) DCF280-330

### **Cabin**

Fully equipped

Noise Red.Kit according to Directive 2000/14/EC

Tinted screens

### **Colour**

Chassis RAL3000 Kalmar Red

Cabine RAL7037 Kalmar Grey

Lifting equipment RAL7022 Kalmar Black

### **Documentatoin**

Spare parts manual

Technical manual

Workshop manual : This manual is in addition to the service manual for some repairs and deeper technical measures.

# Kalmar DCF280-520

## Lift trucks 28 – 52 tonnes

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Standard and Optional equipment



# Standard equipment

## Norms and law regulations

- According to directive EN 1551 (ISO3691)
- According to directive ASME B56.1a-2001

## Chassis

- Lifting eyes front/rear
- Towing pin (incasted)

## Cabin

### Structure

- Sliding window on left and right side
- Emergency exit (sticker inside of cabin door)
- Door with air damper and lock left side
- Door with chain right side (only emergency exit)
- Instep handle

### Comfort

- Operators seat Be-Ge 9200 M incl safety belt (lap type)
- Fixed steering column
- Arm rest right side
- Inside rear-view mirror right side
- Interior light with fade away
- Background button light
- Steering wheel knob
- Adjustable control console

### Controls

- Levers (hydraulic servo)
- Electric accelerator pedal (hanging)
- Double brake pedal incl. transmission disconnection (de clutch)
- Electric switch for parking brake located on control console
- Override button for hydraulic functions
- Only first gear activated
- Only second gear activated
- Automatic gear shifting

### Climate

- ECH, electronic controlled heater
- Fresh air and recirculation filter
- Clear screens
- Wipers/washers on front, rear and roof pane
- Interval wipers on front, rear and roof pane

### Information systems

- Graphic display with automatic fault analyses  
Real-time clock
- Warning buzzer for not activated hand brake, leaving seat

- (KID , Kalmar Information display) including:
  - actual gear
  - engine rpm
  - travelling speed
  - fuel bar
  - hydraulic oil temperature
  - transmission oil temperature
  - engine oil pressure
  - engine coolant temperature

### Popup menu

- Warning/Information indicator light for:
  - Charging
  - Flashing indicator
  - High beam
  - Parking brake
  - Low fuel level
  - Failure indicator
  - Low brake pressure
  - Safety system disconnected
  - High engine coolant temperature
  - Low engine coolant level
  - Hydraulic oil temperature
  - Low engine oil pressure
  - High transmission oil temperature
- Hour gauge, analog

## Steering system

- Double acting steering cylinder

## Drive train

- Automatic gear shifting
- Forward/reverse gear prevention
- Front axle: AxleTech, WDB (DCF280-420)  
Kessler (DCF450-520)
- Rear axle: Kalmar
- Limp home function

## Hydraulics

- Return filter hydraulic oil (10 micron)
- Fixed pumps for hydraulic function
- Visual level glass hydraulic tank
- Environmental air filter hydraulic tank
- Cooling for hydraulic system

## Body

- Steps with anti slip protection
- Rear view mirrors on each side

## Electrical system

- Electrical system 24 V
- Main power switch
- 2 working lights on mast
- 2 head lights on front fenders
- 2 position lights on each side
- Tail lights, brake lights, reverse lights
- Blinkers front and rear
- Rotating beacon
- Automatic disconnection working lights at idle (TIME FACTOR)

## Wheels

- 16.00×25 (std DCF280-330)
- 18.00×25 (std DCF370-420)
- 18.00×33 (std DCF450-520)
- Wheel nut protection

## Colour

- Cab: Grey RAL 7037
- Chassis: Flame red RAL 3000
- Attachment: Black dark RAL 7021
- Mast and carriage: Black dark RAL 7021

## Documentation and decals

- Standard documentation
  - Operators manual
  - Maintenance manual
  - Spare part catalogue
- Load chart diagram in cab
- Warning decals
- Information decals
- Fuse diagram



# Optional equipment

## Chassis

- DCF280-12 (L3=4500)
- DCE280-12LB (L3=4500)
- DCF300-12 (L3=4500)
- DCF300-12LB (L3=4500)
- DCF330-12 (L3=4750)
- DCF330-12LB (L3=4750)
- DCF370-12 (L3=5000)
- DCF370-12CS (L3=5000)
- DCF420-12 (L3=5500)
- DCF420-12CS (L3=5500)
- DCF450-12 (L3=5500)
- DCF450-12CS (L3=5500)
- DCF500-12 (L3=6000)
- DCF520-12 (L3=6000)

## Cabin

### Structure

- Globertrotter, internal height = 1720 mm, ledge mounted screens (only in combination with LB models)
- Welded bars at the corners with ledgemounted screens
- Front pane, laminated glass/AS2
- Long handle in front of door
- Prepared for toplift frame, el-servo is needed
- Container lighting mounted on cab roof/tilt suspension 4x70W
- Container lighting mounted on cab roof/tilt suspension 4x70W xenon
- Centre placed cab
- Hydraulic movable cab, sideways, el-servo is needed
- Grid protection over roof pane

### Comfort

- Bege aircushioned incl 3 point safety belt and heating
- Isringhausen aircushioned incl 3 point safety belt and heating
- Rotatable drivers seat, 180 degr. el-hydr.servo incl.
- Heating in standard seat
- Head rest, bege
- Armrest left side, bege
- Extra seat
- Adjustable steering column
- Extra rear view mirror internal
- Bracket for terminal and monitor, right side
- Writing pad with reading lamp

### Controls

- Joystick
- Lever steering
- Mini steering

### Climate

- ECC (Electronic climate control)
- Micro filter in addition to std filter

- Tinted screens
- Sun visor frontscreen
- Sun visor roof pane
- Sun visor rear pane
- AC switched off when door is open

### Additional

- Radio with CD, 24V
- 24/12V transducer communication radio
- Electric air pressure horn
- Vehicle data output

## Mast and carriage

### Masts

- Duplex standard mast
  - Duplex freelift mast\*
  - Triplex freelift mast\*
- \*Includes el-hydraulic servo

## Carriages

- Sideshift/forkpositioning rollertype
- Forkshaft system
- Simultaneous forkpositioning

## Forks

- Roller type forks
- Hook mounted forks

## Drive train

- DCF280-330: Volvo TAD 760VE (180kW) + Dana 17000
- DCF280-330: Cummins QSB6,7 (194kW) + Dana 17000
- DCF370-420: Volvo TAD 952VE (252kW) + Dana 32000
- DCF370-520: Volvo TAD 1250VE (260 kW) + Dana 32000
- DCF370-520: Cummins QSM11 (261 kW) + Dana 17000
- Automatic engine and ignition stop at idle
- Precleaner incl raised air intake
- Muffler and exhaustpipe in stainless steel

## Hydraulics

- Separate system for wet disc brakes and working hydraulics.
- Hydraulic accumulator for lift
- 1 extra hydr. function incl hoses and quick release couplings

## Body

- Anti-slip protection, fenders, and tanks.
- Mud flaps
- Removable counterweight

## Electrical system

- Scale, indication in display
- Extra headlight on mast, 70 watt, 2 pc
- Extra headlight, 70 watt/2 pc on fenders
- All std working lights replaced by xenon
- Extra headlight on mast, 70 watt, 2 pc, Xenon

- Extra headlight, 70 watt/2 pc on fenders, Xenon
- Diagnostic driving information on the display.
- Drivers identification code 8 codes
- Speed limitation
- Service interval indication in display
- Buzzer when reversing
- US units on the display
- LED lights replace rear, brake, parking and indicator lamps
- Speed limitation at X H4
- Speed limitation at X load

## Wheels

- Spare wheel

## Colour

- Other colour than std, chassis
- Other colour than std, cab
- Reinforced anti-corrosion protection

## Documentation and decals

- Extra set of documentation
- Workshop manual
- Cummins trouble shooting and repair kit
- Volvo trouble shooting and repair kit
- Extra set of documentation on CD
- Loadchart lbs//inch inside cab and sign "no riders"

## Additional equipment

- Tool kit
- Central greasing base machine
- Fire extinguisher 6 kg, powder
- Engine heater incl. cab heater
- Engine/ hydraulic oil heater incl. cab heater
- Engine heater incl cab heater US std
- Engine/hydraulic oil heater incl cab heater US std
- Filter-kit 2000 hours
- Heat protection kit incl hoses, mudguards and front shield

## Attachment

- Toplift frame: 20' ISO cont swivelling ±3
- 40' ISO cont swivelling ±3
- 20-40' ISO cont swivelling ±3
- Inverted forks for fork shaft system
- Coil ram
- Tire manipulator Cap: 13,6 t
- Hook on type mounting
- Tire manipulator Cap: 13,6 t
- Integrated mounting

## Training

- Working eco driving (contact Kalmar training center for information)