

# SCANIA

SPECIFICATION

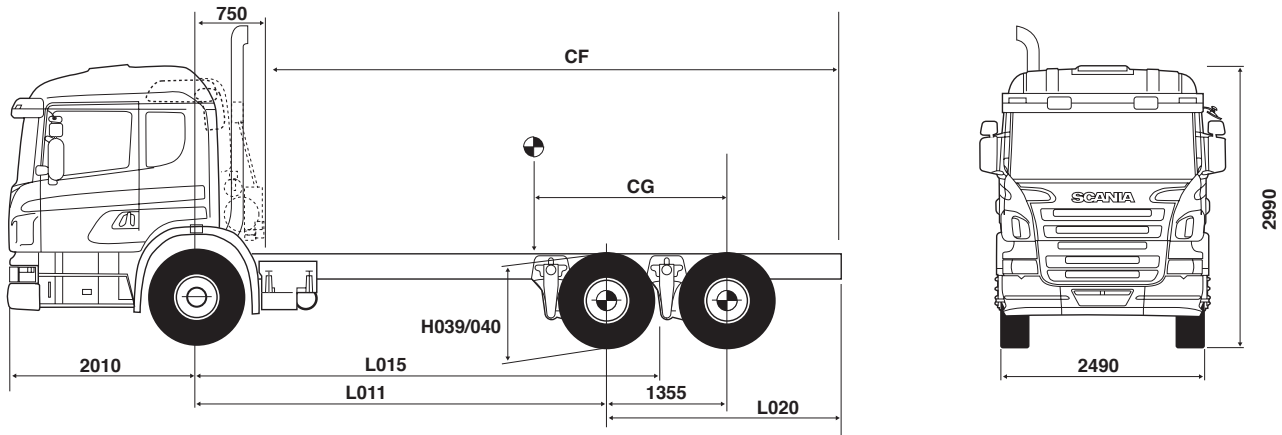
**P-, G- and R-series**

## P 280 LB6x4MNB

27000Kg GVW

THREE AXLE REFUSE CHASSIS  
(DOUBLE DRIVE)

# P



### DIMENSIONS (mm)

L011	3900	4100	4300	4500	4700	4900	5100
L015	4578	4778	4978	5178	5378	5578	5778
CF	5750	5950	6150	6350	6550	6750	6950
L020	2600	2600	2600	2600	2600	2600	2600
L020 Max	4000	4200	4200	4400	4600	4800	5000
CG Max	1341	1347	1393	1419	1445	1470	1496
CG Min	1082	1096	1110	1125	1139	1152	1166

H039 unladen	H040 laden	Chassis Height
1000 mm	970 mm	Normal (N)

CG dimension for body and payload calculated for standard model at standard GB plated weights. Height dimensions measured to top of frame at rear bogie centreline. Rear overhang (L020) can be specified in 10 mm steps up to maximum – check legality.

### PLATED WEIGHTS – AWR

		Front Axle	Rear Bogie	GVW Axle	GTW
Design Gross	Kg	8000	19000	27000	30500
Legal Max in GB	Kg	8000	19000	26000	29500

Plated weights dependent on statutory tyre limitations.

### CHASSIS/CAB WEIGHTS

(Tolerance +/- 2.5%)

Axle distance	Front	Rear Bogie	Total (kg)
3900	5241	2894	8135
4100	5250	2900	8150
4300	5259	2906	8165
4500	5268	2912	8180
4700	5277	2918	8195
4900	5286	2924	8210
5100	5295	2930	8225

Chassis cab weight includes 20 litres of fuel, oil and water. Driver not included. See overleaf for option weights.

## P 280 LB6x4MNB

SL5451103  
September 09

## ENGINE (EURO 5)

Scania '9 litre' vertical five cylinder in-line turbocharged intercooled direct injection diesel with Scania XPI.

**'280'**

<b>Type:</b>	<b>DC9-38</b>
<b>Swept Volume:</b>	9.3 litres
<b>Bore:</b>	130 mm
<b>Stroke:</b>	140 mm
<b>Compression Ratio:</b>	17:1
<b>*Max. Power:</b>	206kW (280 h.p.) at 1900 rev/min
<b>*Max. Torque:</b>	1400 Nm (1033 lbf.ft) between 1000 and 1350 rev/min
<b>Engine Management System:</b>	EMS incorporating Cruise Control and speed limiter
<b>Emission Control:</b>	Scania EGR
<b>Cooling:</b>	Water cooled with rubber mounted 2 row radiator and electronically regulated fan
<b>Coolant Capacity:</b>	42 litres
<b>Oil Capacity:</b>	31 litres
<b>Air Cleaner:</b>	Dry replaceable paper element
<b>Engine driven PTO provision:</b>	ED120

### Options:-

**(1)** Details as above except for the following:-

**'320'**

<b>Type:</b>	<b>DC9-37</b>
<b>*Max. Power:</b>	235kW (320 h.p.) at 1900 rev/min
<b>*Max. Torque:</b>	1600 Nm (1180 lbf.ft) between 1100 and 1200 rev/min

**(2)** Details as above but engines fitted with Diesel Particulate Filters and EEV certified:- '280' DC9-29, '320' DC9-32

\*With fan at max. slip

## GEARBOX

<b>Type:</b>	Scania GA867 – (Allison 4000) with 1 o'clock P.T.O. output. Automatic 6 speed electronically controlled.
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## REAR AXLES

<b>Type:</b>	<b>Both:</b> Scania ADA1300
<b>Capacity:</b>	26000 Kg

Pressed steel housing with magnetic oil drain plugs.

## REAR AXLE GEAR

<b>Type:</b>	Scania RB662 – first axle Scania R660 – second axle
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Single reduction hypoid in both axles. Crown wheels and pinions matched during manufacture. Pneumatically operated inter-axle and cross axle differential locks.

## FRONT AXLE

<b>Type:</b>	Scania AMA860 – I section rigid beam
<b>Capacity:</b>	8000Kg

## STEERING

<b>Type:</b>	Recirculating ball. Hydraulically assisted power steering.				
<b>Steering wheel:</b>	Diameter 450mm. Lock to lock 4.9 turns				
<b>Turning circle:</b>	Kerb to kerb				
3.9m A/D	17.5m	4.1m A/D	18.3m	4.3m A/D	19.0m
4.5m A/D	19.8m	4.7m A/D	20.5m	4.9m A/D	21.3m
5.1m A/D	22.0m				

## SUSPENSION

<b>Type Front:</b>	Two bag air with axle located by tie rods. Front anti-roll bar.
<b>Type Rear:</b> <b>(2 bag)</b>	Quarter elliptic with air bellows on both axles. Chassis height may be raised or lowered to assist loading. Double acting telescopic shock absorbers are fitted to all axles.

## WHEELS & TYRES

<b>Front:</b>	9.00 x 22.5 ten stud spigot mounted disc wheels fitted with 315/80R22.5 radial tubeless tyres.
<b>Drive 1:</b>	8.25 ten stud spigot mounted disc wheels fitted with 295/80R22.5 radial tubeless tyres (4).
<b>Drive 2:</b>	8.25 ten stud spigot mounted disc wheels fitted with 295/80R22.5 radial tubeless tyres (4).

### Options:-

- (1)** 11.75 x 22.5 wheels with 385/65R22.5 or 385/55R22.5 tyres - steered axles only.
- (2)** Aluminium wheels - machined or polished surface finish.
- (3)** Wheel embellishers - steered axle only.

## FRAME

<b>Type:</b>	F950-50
	Flat top constant depth 'U' channel with riveted crossmembers
<b>Sidemember Dimensions:</b>	F950 – 270 x 90 x 9.5mm
	Pre-drilled for bodywork mounting brackets.
	Width over parallel section of frame = 770mm
<b>Bumper:</b>	Aerodynamic incorporating FUP

## BRAKE SYSTEM

<b>Type:</b>	Ventilated disc brakes on all axles. Dual circuit, full air, EC brake system incorporating Category 1 ABS and Traction Control. Electronic signalling with pneumatic back-up. Pad wear indicator. Brake pipes manufactured from either rust protected steel or high impact synthetics
<b>Service Circuit:</b>	Actuates all truck brakes
<b>Secondary Circuit:</b>	First position of park brake lever actuates spring brakes.
<b>Parking Brake:</b>	Actuates spring chambers on front and first drive axles.
<b>Exhaust Brake:</b>	Air actuated operated by foot switch
<b>Brake Antifreeze Protection:</b>	Air dryer
<b>Brake Wear Adjusters:</b>	Automatic
<b>Options:-</b>	
<b>(1)</b>	Gearbox integral retarder

## BRAKE DIMENSIONS

<b>Pad lining area:</b>	2 x 190cm <sup>2</sup> on all axles
<b>Swept area of each disc:</b>	2 x 940cm <sup>2</sup>

## ELECTRICAL SYSTEM

<b>Type:</b>	24V neg (-ve) earth	<b>Alternator:</b>	100A
<b>Batteries:</b>	Twin 140Ah		
Rear H.I. lamps, Reversing lights, Battery connection - 200A			

### Options:-

- (1)** 180Ah batteries, **(2)** 225Ah batteries,  
**(3)** Bodywork electrical preparation – see separate document.

## FUEL TANK

1 x 300 litre steel RHS

**Options:-** (Minimum axle distance and suspension type in brackets)

	<b>RH Side</b>	<b>LH Side</b>	<b>RH Side</b>	<b>LH Side</b>
<b>Steel - G</b>	150	150	200	200 (4300)
	200		300	300 (4300)
	300	300 (4300)	350	
	450 (4300)	450 (4300)	400	400
			500	
			600 (4300)	
			700 (4300)	

Tank sizes can be supplied in LH + RH combinations of the above but steel and aluminium cannot be mixed. Sides viewed from rear.

## GENERAL EQUIPMENT

Front tow pin.

Vertical exhaust outlet.

## INSTRUMENTS & CONTROLS

Two man, one day, EC digital tachograph, rev-counter and gauges for coolant temperature and fuel. Central display for vehicle information and warning messages. Six speed wipers with four jet integral screen wash. Halogen headlamps adjustable from cab for correction of beam height. Warning lights for all major systems grouped within easy vision.

Instrument panel of modular design with switches and controls grouped according to usage. All instruments are back-lit and non-reflective. Impact absorbing, adjustable steering wheel with column lock.

## CAB

**CP19E** – Municipal Cab

Four man, easy access walk-through safety cab. Individual driver and passenger seats plus two man bench seat. 3 point set belts for all seats. Electrically operated driver and passenger windows. Rear wall storage modules plus wet weather clothes hanging facility.

## P.T.O. OPTIONS

**EG210:** 1.08:1 Propshaft output

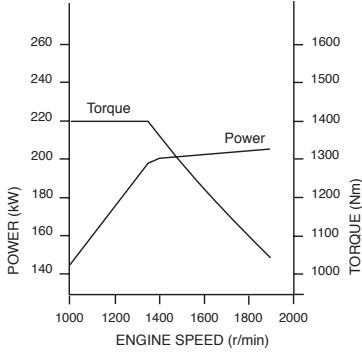
## WEIGHTS FOR OPTIONAL EQUIPMENT IN KILOGRAMS (Front – Rear – Total)

Axle Distance	39	41	43	45	47	49	51
385/55 tyres/ 11.75 rims	+30 +0 +30	+30 +0 +30	+30 +0 +30	+30 +0 +30	+30 +0 +30	+30 +0 +30	+30 +0 +30
385/65 tyres/ 11.75 rims	+38 +0 +38	+38 +0 +38	+38 +0 +38	+38 +0 +38	+38 +0 +38	+38 +0 +38	+38 +0 +38
Aluminium Wheels							
8.25x22.5	-24 -96 -120	-24 -96 -120	-24 -96 -120	-24 -96 -120	-24 -96 -120	-24 -96 -120	-24 -96 -120
9.00x22.5	-30 -120 -150	-30 -120 -150	-30 -120 -150	-30 -120 -150	-30 -120 -150	-30 -120 -150	-30 -120 -150
11.75x22.5	-44 0 -44	-44 0 -44	-44 0 -44	-44 0 -44	-44 0 -44	-44 0 -44	-44 0 -44
Retarder	+22 +8 +30	+23 +7 +30	+24 +6 +30	+24 +6 +30	+24 +6 +30	+24 +6 +30	+24 +6 +30
180 Ah batteries	+14 +3 +17	+14 +3 +17	+14 +3 +17	+14 +3 +17	+14 +3 +17	+14 +3 +17	+14 +3 +17
225 Ah batteries	+46 +10 +56	+46 +10 +56	+46 +10 +56	+46 +10 +56	+46 +10 +56	+46 +10 +56	+46 +10 +56
Std tank-full	+131 +93 +224	+135 +89 +224	+138 +86 +224	+142 +82 +224	+145 +79 +224	+148 +76 +224	+150 +74 +224
*1x450l G	+71 +100 +171	+75 +96 +171	+79 +92 +171	+83 +88 +171	+86 +85 +171	+89 +82 +171	+92 +79 +171
EG Series PTOs	+26 +4 +30	+26 +4 +30	+26 +4 +30	+26 +4 +30	+26 +4 +30	+26 +4 +30	+26 +4 +30

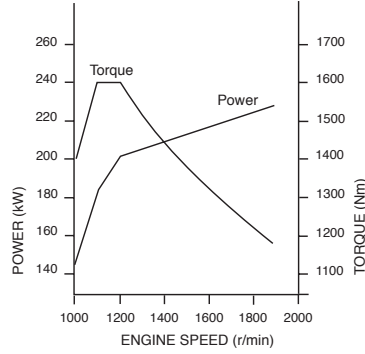
\* Additional to standard tank full of fuel.

### ENGINE PERFORMANCE

'280' DC9-38/29

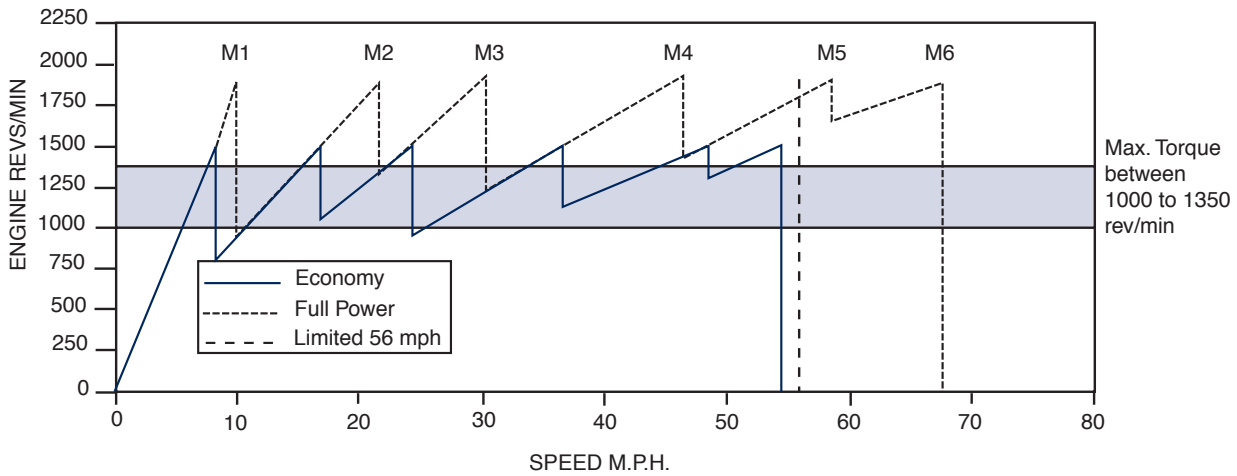


'320' DC9-37/32



Net engine performance to 80/1269\*1999/99EC

### GEAR STEP DIAGRAM



### SPEED/GRADEABILITY

Gradeability may be limited by tyre adhesion.

Axle gear/ Ratio	Optimum Cruising Speed M.P.H.	Gradeability - steady climb - in percent	
		DC9-38 26T	DC9-37 26T
RB 660 4.88	42 - 55	30.0	32.4

Calculations assume standard specifications. Performance achieved in operation will depend on conditions, bodywork, gear ratios and tyre specification.

The specifications contained in this publication are intended as a general guide, and not as representations as to the product described, nor as binding in detail.

