

# IMPORTANT LEGAL AND TECHNICAL INFORMATION FOR THE SELECTION AND CONFIGURATION OF YOUR MOTORHOME

Each motorhome is only approved for a certain maximum weight on the road, which must not be exceeded under any circumstances when driving. When you select and configure your motorhome or van (hereinafter referred to as: "the motorhome"), the technical and legal limits for the weight of the motorhome are therefore extremely important. These play a decisive part in the configuration, particularly when the additional equipment is being selected (equipment packages, special equipment and options).

The technical and legal requirements for the weight of your motorhome are regulated in EU Implementing Regulation No. 2021/535 (until June 2022: EU Implementing Regulation No. 1230/2012). This applies uniformly within the European Union. In order to make it easier for you to select and configure your motorhome in compliance with the legal and technical requirements, the key terms and requirements of this regulation are explained in the following, and you are provided with some information that is extremely important when you are configuring your vehicle and selecting your additional equipment (equipment packages, special equipment and options) from the items that are available from the factory. Please read this information carefully before configuring and ordering your vehicle. Our dealers will provide you with additional assistance in selecting and configuring your motorhome.

## 1. TECHNICALLY PERMISSIBLE GROSS WEIGHT

The technically permissible gross weight describes the layout-based maximum permissible weight specified by the manufacturer that your motorhome is allowed to weigh when loaded (e.g. 3,500 kg, 4,500 kg). This is entered in Part I of the registration certificate. You can find information about the technically permissible gross weight for each layout in the technical data which is shown in our sales documents (e.g. in the price lists).

Illustration in the price list:

c-compactline		
	I 138 DB	I 141 LE
Base vehicle	Fiat Ducato	Fiat Ducato
Transmission	8G automatic torque converter	8G automatic torque converter
Standard chassis	AL-KO low frame 35 light	AL-KO low frame 35 light
Base engine	Diesel 2.2 l (140 HP / 103 kW)	Diesel 2.2 l (140 HP / 103 kW)
Length/width/height (mm) <sup>1) 2) 3)</sup>	6,410 / 2,120 / 2,920	6,650 / 2,120 / 2,920
Wheel base (mm)	3525	3525
Double floor height / Double floor storage compartment (mm)	220 / 460	220 / 460
Headroom in living area (mm)	1980	1980
Rear garage interior height (mm)	1200	1200
Door width / height rear garage at passenger side (mm)	925 x 1,140	1,050 x 1,140
Door width / height, rear garage at passenger side (mm)	680 x 1,140	850 x 1,140
Technically permissible gross vehicle weight (kg) <sup>4)</sup>	3,500 / 4,250*	3,500 / 4,250*
Weight in running order (kg) <sup>5)</sup>	2,955 (2,807 - 3,103)	2,995 (2,845 - 3,145)
Weight of additional equipment in series production specified by the manufacturer (kg) <sup>7)</sup>	183	139
Max. towed load (kg) <sup>10)</sup>	2000	2000
Max. number of seats with 3-point safety belt while driving (standard) <sup>11)</sup>	4	4

The technically permissible gross weight of the vehicle (e.g. 3,500 kg) must not be exceeded under any circumstances while driving. If the vehicle exceeds the technically permissible gross weight while driving, this constitutes an administrative offence which may be punishable with a fine. We therefore urgently advise you to check this before each journey and ensure that you and your vehicle do not exceed the technically permissible gross weight (e.g. 3,500 kg).

## 2. WEIGHT IN RUNNING ORDER

The weight in running order corresponds to the (unladen) weight of the vehicle with standard factory equipment (including lubricants, tools, tyre repair kit and a fuel tank that is 90% full) plus a statutory flatrate weight of 75 kg for the driver.

The weight in running order essentially includes the following items:

- the unladen weight of the vehicle including the body and filling with operating materials such as lubricating grease, oils and coolants; the standard equipment, i.e. all equipment items which are included as standard in the vehicle;
- a fresh water tank that is 100% full when driving (filling when driving in accordance with the manufacturer's specifications. You will find the manufacturer's information about filling in the vehicle in the sales documents (e.g. in the price lists). This is 20 l or 50 l depending on the model series) and an aluminium gas bottle that is 100% full, weighing 16 kg;
- a fuel tank that is 90% full;
- the driver, whose weight is set at a flatrate of 75 kg, regardless of the driver's actual weight.

The weight in running order is therefore the basic configuration of the vehicle model you have selected with standard equipment plus a statutory flatrate weight of 75 kg for the driver. This changes after selecting additional equipment (equipment packages, special equipment, options).

You will find information about the weight in running order for each layout in our sales documents (e.g. in the price lists).

It is important that the value given in our sales documents for the weight in running order is a standard value which is determined during the type approval procedure and checked by the authorities. It is legally permissible and possible for the weight in running order of the vehicle which is delivered to you to differ from the nominal value specified in the sales documents due to production-related tolerances. The legal tolerance is  $\pm 5\%$ . The EU legislator has taken into account the fact that there are certain fluctuations in the weight in running order due to fluctuations in the weight of the supplied parts as well as process and weather-related factors. Please take this into consideration when you are selecting and configuring your motorhome.

Example calculation illustrating these (permissible) production-related weight deviations:

Weight in running order according to sales documents:	2,900 kg
Legal tolerance of $\pm 5\%$ :	145 kg
Legally permissible range of weight in running order:	2,755 to 3,045 kg

The specific range of permissible weight deviations for the weight in running order for each layout can be found in the technical data shown in our sales documents. As a manufacturer, we endeavour to restrict weight fluctuations to the minimum that is unavoidable in terms of production technology. Deviations above and below within the legally permissible tolerance range therefore only occur very rarely. However, in spite of constant technical optimization of the production process, these cannot be completely avoided.

In order to ensure that all of the vehicles which are actually delivered comply with the legally permissible tolerance, the actual weight of the vehicle and compliance with the permissible tolerance of  $\pm 5\%$  is checked by us as the manufacturer by weighing the vehicle upon completion in the production area at the end of the production line. Your dealer will inform you of the actual weight of your vehicle that was measured at the end of the production line. This gives you full transparency about any weight discrepancies that may be present in your vehicle.

### 3. NUMBER OF MAXIMUM PERMITTED SEATS / WEIGHT OF PASSENGERS

The maximum number of permitted seats while driving is determined by us as the manufacturer during the type approval procedure. The weight of the passengers results from the maximum number of permitted seats. The weight of the passengers is a flat rate of 75 kg for each approved seat which we as the manufacturer have provided for the vehicle, regardless of what the passengers actually weigh. This is also a legally prescribed calculation. Since the weight of the driver is already included in the weight in running order, i.e. 75 kg (see section 2.), this is not taken into consideration in the weight of the passengers. In a motorhome with four approved seats, the weight of the passengers is  $3 \times 75 \text{ kg} = 225 \text{ kg}$ .

The maximum permissible number of seats specified in the sales documents refers to the respective vehicle weight in a standard set-up without additional equipment (for additional equipment, see Section 4), and specifies the maximum possible number of persons who can be seated while driving. However, the number of seats depends on the weight and axle load. It can therefore be reduced installing additional equipment (by selecting equipment packages, special equipment and options, for example) and/or can only be achieved by increasing the permissible gross weight and/or deselecting additional equipment, depending on the model.

### 4. ACTUAL WEIGHT AND ADDITIONAL EQUIPMENT

The weight in running order (see section 2.) and the weight of the factory-installed additional equipment (equipment packages, special equipment, options) in a specific vehicle are collectively referred to as the actual weight of the vehicle.

You can find information about the actual weight of your vehicle after it has been handed over in section 13.2 of the Certificate of Conformity (CoC), which will be given to you by your dealer when the handover takes place.

Please note that the actual weight which is specified in the Certificate of Conformity (CoC) is also a standard value. Since the weight in running order – as part of the actual weight – has a legally permissible tolerance of  $\pm 5\%$  (see section 2), the actual weight can deviate from the specified nominal value accordingly.

According to the legal definition, the so-called additional equipment includes all optional equipment parts that are not included in the standard equipment and is fitted to the vehicle by the manufacturer (i.e. ex works) and can be ordered by the customer (e.g. awning, bicycle or motorcycle rack, satellite system, solar system, oven etc.). Information about the individual or package weights of the equipment packages, special equipment and options which can be ordered can be found in our sales documents. Other accessories that are retrofitted after delivery of the vehicle from the factory by the dealer or by you personally are not included in the special equipment in this sense.

## 5. MANUFACTURER'S SPECIFIED MAXIMUM WEIGHT FOR ADDITIONAL EQUIPMENT AND PAYLOAD

Since the installation of additional equipment is also subject to legal and technical limits, we determine the value of the maximum weight for additional equipment for each layout and vehicle which can be fitted to the vehicle in addition to the standard equipment (e.g. by selecting equipment packages and/or special equipment). This value must not be exceeded when you are selecting and configuring your vehicle.

The specification of the weight of additional equipment defined by the manufacturer can be found in our sales documents (e.g. in the price lists).

C-compactline		
	I 138 DB	I 141 LE
Base vehicle	Fiat Ducato	Fiat Ducato
Transmission	8G automatic torque converter	8G automatic torque converter
Standard chassis	AL-KO low frame 35 light	AL-KO low frame 35 light
Base engine	Diesel 2.2 i (140 HP / 103 kW)	Diesel 2.2 i (140 HP / 103 kW)
Length/width/height (mm) <sup>1) 2) 3)</sup>	6,410 / 2,120 / 2,920	6,650 / 2,120 / 2,920
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Technically permissible gross vehicle weight (kg) <sup>3)</sup>	3,500 / 4,250*	3,500 / 4,250*
Weight in running order (kg) <sup>5)</sup>	2,955 (2,807 - 3,103)	2,995 (2,845 - 3,145)
Weight of additional equipment in series production specified by the manufacturer (kg) <sup>7)</sup>	183	139
Max. towed load (kg) <sup>8)</sup>	2000	2000
Max. number of seats with 3-point safety belt while driving (standard) <sup>9)</sup>	4	4

The maximum weight for additional equipment specified by the manufacturer is intended to ensure that the legally prescribed minimum payload is also actually available for the vehicle payload after delivery of a vehicle by the manufacturer. This means that only a certain amount of additional equipment can be ordered and installed in the factory, in order to leave a sufficient weight allowance available for luggage and other accessories (the so-called payload) without exceeding the technically permissible gross weight.

The payload is calculated by subtracting the weight in running order (nominal value as per the sales documents, see section 2), the weight of passengers (see section 3) and the manufacturer's specified maximum weight for additional equipment from the technically permissible gross weight (see section 1).

For motorhomes, the European legislation prescribes a fixed minimum payload, which must remain for luggage or other accessories which are not installed in the factory. This minimum payload is calculated as follows:

$$\text{Minimum payload in kg} \geq 10 * (n + L)$$

Whereby the following applies: „n“ = maximum number of passengers plus the driver and „L“ = total length of vehicle in metres (including decimal places).

For a motorhome with a length of 7 m and 4 approved seats (including the driver), the minimum payload is  $10 \text{ kg} * (4 + 7) = 110 \text{ kg}$ , for example.

When you are configuring your motorhome, please note that the payload must not fall below the minimum.

To ensure that the minimum payload is adhered to, there is a maximum combination of additional equipment which can be ordered for each vehicle model. In the above-mentioned example with a minimum payload of 110 kg, the gross weight of the additional equipment for a vehicle with four approved seats (including the driver) and a weight in running order of 2900 kg should be a maximum of 265 kg:

3,500 kg	Technically permissible gross vehicle weight
- 2,900 kg	Weight in running order
- 3 x 75 kg	Weight of passengers
- 110 kg	Minimum payload
= 265 kg	Additional equipment

Please note that this calculation is based on the standard value for the weight in running order determined during the type approval process, without taking account of the permissible weight deviations for the weight in running order (see section 2.). If the maximum permissible value for the additional equipment of (in this example) 265 kg is almost or completely exhausted, an upward weight deviation in the mass in running order may therefore result in the minimum payload of 110 kg being theoretically maintained using the standard value of the weight in running order, but in reality there is no corresponding payload option.

Here is another sample calculation for a vehicle with four approved seats, whose actual weight in running order is 1% above the nominal value:

3,500 kg	Technically permissible gross vehicle weight
- 2,929 kg	Actual weight in running order of the vehicle (+ 1% on comparison to compared to the 2,900 kg specified in the sales documents)
- 3 x 75 kg	Weight of passengers
- 265 kg	Weight of additional equipment
= 81 kg	Actual payload (< minimum payload of 110 kg); in this example, the minimum payload is therefore undershot by 29 kg

In order to avoid such a shortfall in the minimum payload, the manufacturer reduces the orderable weight of the additional equipment based on the layout. Limiting the additional equipment is intended to ensure that the minimum payload, i.e. the legally prescribed weight available for luggage and other accessories, is actually achieved for the payload in the vehicles delivered by the manufacturer.

As, due to production reasons, the actual weight of the specific vehicle is only determined when it is weighed at the end of the production line, it cannot be completely ruled out that in rare exceptional cases a situation may arise, whereby the minimum payload is not guaranteed at the end of the production line despite this limitation of additional equipment. In order to guarantee the minimum payload in these cases, the manufacturer will check with you and your dealer before delivery of the vehicle whether, for example, the vehicle is overloaded, the number of permitted seats is reduced or additional equipment is removed to reduce the weight, so that you receive a vehicle that has the legal minimum payload. The weight of additional equipment offered by the manufacturer can be found in our sales documents (e.g. in the price lists).

Illustration in the price list:

Article no.		£ incl. 20 % VAT	kg
<b>Fiat Ducato chassis</b>			
310062	180 HP / 132 kW engine, Euro 6e, f35 light, 8-speed automatic torque converter	Standard	-
310072	180 HP / 132 kW engine, Euro VIe, f40 heavy, 8-speed automatic torque converter	2,115	-
310610	Fuel tank 60 l instead of 90 l (only in conjunction with f35 light)	0	46
311810	Reinforced front axle springs for optimal ride comfort <sup>57)</sup>	545	-23
311815	AL-KO "ACS" High Performance front axle spring strut <sup>57)</sup>	1.310	-
331620	Fog lights	310	-
311614	BI-LED headlights (dipped and high beam)	1.000	1
311400	Removable tow bar	1.670	3
311300	Wind-down rear steadies to prevent swaying when stationary	390	38

The extra weight of additional equipment (all items of equipment not included in the standard delivery scope) increases the actual weight of the vehicle (= weight in running order plus the selected additional equipment) and reduces the payload. The stated value shows the extra weight compared to the standard equipment of the respective layout. The total weight of the selected additional equipment (equipment packages, special equipment and options) must not exceed the maximum weight of the additional equipment specified by the manufacturer.

## 6. THE EFFECTS OF WEIGHT IN RUNNING ORDER TOLERANCES ON THE PAYLOAD

Regardless of the minimum payload, you should also note that unavoidable production-related fluctuations in the weight in running order have an effect on the remaining payload:

If you order our example vehicle (see section 5.) with additional equipment with a gross weight of 150 kg, the calculated payload is 225 kg based on the default value for the weight in running order. Due to the tolerances, the payload that is actually available may deviate from this value and may be higher or lower. If the weight in running order of your vehicle is about 1% higher than the weight specified in the sales documents, the possible payload is reduced from 225 kg to 196 kg:

3,500 kg	Technically permissible gross vehicle weight
- 2,929 kg	Actual weight in running order of the vehicle (+ 1% on comparison to compared to the 2,900 kg specified in the sales documents)
- 3 x 75 kg	Weight of passengers
- 150 kg	Ordered additional equipment for the specifically configured vehicle
= 196 kg	Actual payload

In order to ensure that the calculated payload is actually achieved, you should therefore factor in the possible and permissible tolerances for the weight in running order when selecting and configuring your vehicle as a precaution. We strongly recommend weighing the loaded motorhome on a non-automatic weighbridge before every journey and, taking account of the individual weight of the passengers, determining whether the technically permissible gross vehicle weight and technically permissible gross axle weights are adhered to.



You can find more information online!