# DAILY

# 50C17 V HI-MATIC NEW DAILY EURO 5b+ (F1C 3.01)





Engineering Profile I 02 Dec 2014



8PEB4LEC

ZF 8HP

#### 50C17 V HI-MATIC MARKET: 1100 MOD: 50C17A8 V FDP: A50V List of linked VCB **VCB** Code Wb **Drive Gearbox Tetto** ZF 8HP 3520 LHD 8PEB4CE1 1545 (HI) 8PEB4CE2 ZF 8HP 3520 1900 (H2) LHD 8PEB4CEA ZF 8HP 3520 1545 (HI) RHD 3520 8PEB4CEB ZF 8HP 1900 (H2) RHD 8PEB4DE2 ZF 8HP 3520L 1900 (H2) LHD 8PEB4DE3 ZF 8HP 3520L 2100 (H3) LHD 8PEB4DEB ZF 8HP 3520L 1900 (H2) RHD RHD 8PEB4DEC ZF 8HP 3520L 2100 (H3) 8PEB4HE2 ZF 8HP 4100 1900 (H2) LHD 4100 LHD 8PEB4HE3 ZF 8HP 2100 (H3) 8PEB4HEB ZF 8HP 4100 1900 (H2) RHD 4100 2100 (H3) RHD 8PEB4HEC ZF 8HP 8PEB4LE2 ZF 8HP 4100L 1900 (H2) LHD 8PEB4LE3 ZF 8HP 4100L 2100 (H3) LHD 8PEB4LEB ZF 8HP 4100L RHD 1900 (H2)

4100L

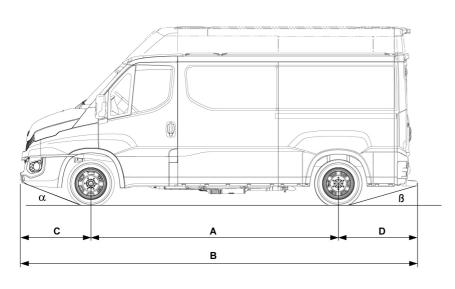
2100 (H3)

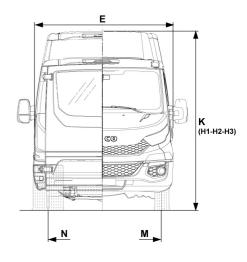
RHD



# 50C17 V HI-MATIC - NEW DAILY EURO 5b+ (FIC 3.0I)

# Weights & dimensions





	3520 HI	3520 H2	3520L H2	3520L H3	4100 H2	4100 H3	4100L H2	4100L H3
Total length (B)	5669	5669	6069	6069	7234	7234	7629	7629
Total length without footstep	5558	5558	5963	5963	7128	7128	7498	7498
Max width (E)	2010	2010	2010	2010	2010	2010	2010	2010
Front overhang (C)	1008	1008	1008	1008	1008	1008	1008	1008
Rear overhang (D)	1141	1141	1541	1541	2126	2126	2521	2521
Rear overhang without footstep	1030	1030	1435	1435	2020	2020	2390	2390
Overall height to top of cab, unladen(K)	2460	2740	2740	2940	2740	2940	2740	2940
Turning diameter kerb to kerb	12744	12744	12744	12744	14564	14564	14564	14564
Turning diameter wall to wall	13366	13366	13366	13366	15190	15190	15190	15190
Front track (M)	1724	1724	1724	1724	1724	1724	1724	1724
Rear track (N)	1542	1542	1542	1542	1542	1542	1542	1542
Volume (m³)	9	10.8	12	13.4	16	18	17.5	19.6
Internal height van (mm)	1545	1900	1900	2100	1900	2100	1900	2100
Internal width van (mm)	1740	1740	1740	1740	1740	1740	1740	1740
Van internal length (mm)	3130	3130	3540	3540	4680	4680	5125	5125
Floor height (unladen)	770	770	780	765	760	760	760	760
Wheelhouses distance (mm)	1032	1032	1032	1032	1032	1032	1032	1032
Approach angle (°)	16.08	16.08	16.08	16.08	16.25	16.25	16.25	16.25



#### 50C17 V HI-MATIC - NEW DAILY EURO 5b+ (FIC 3.0I)

# Weights & dimensions

3520 HI 3520 H2 3520L H2 3520L H3 4100 H2 4100 H3 4100L H2 4100L H3 Departure angle (°) 19.13 19.13 13.83 13.83 7.89 7.89 580184698 580184698 580184698 7 8 9 Left hand drive vehicle 5801846983 5801846984 5801846985 5801846986 drawing Rear door(s) height (mm) Side door(s) width (mm) Side door(s) height (mm) Total vehicle kerb weight Kerbweight - F.A. Kerbweight - R.A. G.V.W. Plated weight on front Plated weight on rear axle Max body & payload 

# (mm) Notes:

Rear door(s) width

For "Van internal length" is considered the "Load compartment length".

The "Overall height to top of cab, unladen (K)" is the maximum height referred to a vehicle with a QUAD-TOR suspension. The "Total vehicle kerbweight" considers the minimum kerbweight with minimum optionals.

The "Side door(s) width" considers the maximum width up to 780mm height.



# **Model Components**

# FCP - MT - 4,5-5T - 4,5 - 5 Ton

# Weights (in general)

GVW (kg) 5200 (4600 - 5200) GCW (kg) 8700 (8100 - 8700)

Notes:

The weights are indicated more precisely in the section: "Weights and dimensions".

The values of GVW / GCW can vary according to the markets and the homologations.

# FCP - CA - 4X2 - 4x2

# Configuration

Axle Configuration 4 X 2

# FCP - VE - FURGONE - Van

# **Version**

Version VAN



# **Model Components**

#### Remarks:

Anti-corrosion protection includes full cataphoretic dipping with galvanized boxed sections and strategic use of zinc plated panels in vulnerable areas. Protective under seal for all under body cabin area, wheel housing and engine area.

#### Interior equipment

Storage compartments with bottle holder, pool cup for mobile phone, arm rests on the doors, shelves in overhead console, shelves at floor level below seats, interior lights, 2 spotlights, 4 loud-speakers, gearshift lever on dashboard.

# Passenger's seat:

Fixed, 2 seats bench with drawer under seat.

#### Floor:

Covered with rubber mats.

#### Central console:

Storage compartments, glove box compartments on the top of the dashboard, central panel, adjustable air vents, ash-trays, lighter, heating control, cooled compartment (with opt. air conditioning).

### Exterior equipment:

Close proximity mirror on passenger's side, steps on both sides, front bumper, mudguard, fog lights.

Handles on both sides, handle on A-pillar (with opt), rear underrun protection, rear lights crossbar. New battery position under driver step.

In cab equipment (it can vary according to the markets / homologations; for a complete list of Daily options please contact local Iveco distributor):

## Indicator lamps, on cluster:

- Parking brake
- Brakes failure
- Directions indicators
- Generic failureSeat belts not fastened
- Fog lights
- High beams
- Wing lightsExternal lights failure
- Rear fog light(s)
- Open doors
- Fuel gauge
- Tachograph failureCoolant temperature
- EOBD
- Engine preheating Water in fuel filter
- Clogged air filter
- Clogged fuel filter

(Left) direction - Wing / Highbeam / Lowerbeam - Headlamp flash - Horn - Front fog lights (right).

New Daily 2014 is equipped with DRL (Daytime Running Lights).

For more security "side light / parking light" switch on automatically at every Key ON, so that the vehicle is more visible by daytime, too. The driver cannot byany means switch them off.

Windscreen wiper with intermittent wipe.

Steering wheel with secure and comfortable grip (ø 390 mm / inclination 42°).

# FCP - DR - SX - LH drive

## Drive

Left

# FCP - DR - DX - RH drive

# **Drive**

Right

# FTP - EN - FICFL411H - Engine FIC 170hp Euro5+ LD VGT

## **Engine**

Manufacturer	FPT
Position	FRONT



# **Model Components**

LONGITUDINAL Arrangement Cycle DIESEL TC+AFTERCOOLER Aspiration type Unijet common rail - 16 valves Injection type 4 Stroke / 2 Stroke cycle No. of cylinders IN-LINE Cylinders layout 95.8 Bore (mm) Stroke (mm) 104 Total displacement cm<sup>3</sup> 2998 **EGR** Exhaust gas treatment

# **Engine - Miscellaneous**

(Torque, generic ref. only. See: "EP")

Injection system HIGH PRESSURE / COMMON RAIL

Cold starting type THERMOSTARTER

430

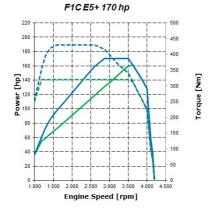
# Cooling

Cooling system water
Fan type electromagnetic

# Air intake

Filter type DRY

# FCP - EP - 170 EU5 - ENGINE FIC 170CY EURO 5 LD



# **Engine**

Power kW	125
Power Hp	170
Rpm at Max Power	3500
Torque Nm	430
Rpm I/min (min)	800
rpm (min. "Max Torque" eng. speed)	1600
Type of turbocharging	VGT

# FTP - GB - ZF 8HP - Automatic 8-speed ZF Gearbox

# **Gearbox**

Gearbox Type	AUTOMATIC
Installation	ENGINE FLANGED
Box material	ALUMINIUM
Dry weight Kg	81
Max input torque Nm	470
No. of gears (forward)	8
No. of reverse gears	1
Gear ratios	
Gear ratio: 1st gear	4.71
Gear ratio: 2nd gear	3.14



Model Components		
Gear ratio: 3rd gear	2.1	
Gear ratio: 4th gear	1.67	
Gear ratio: 5th gear	1.29	
Gear ratio: 6th gear	I	
Gear ratio: 7th gear	.84	
Gear ratio: 8th gear	.67	
Gear ratio: rev. 1st	3.3	
Gear Ratio: Last Gear	.67	

With a torque up to 470 Nm and thanks to the electronic control of gear changing, Hi-Matic is perfect for high performance engines up to 205 HP.

Electronic control allows to select between two modes of use, specific to the type of journey:

ECO: setting during which smooth shifting at low speeds is performed to emphasize comfort and minimize energy consumption.

POWER: the transmission performs faster gear changes at higher speeds, ensuring a precise engagement of gear ratios for performing drive.

# FTP - RA - 450511 - Iveco S.R. rear axle

## Other features

Axle weight without susp. and tyres (Kg)  Reduction type	I54.4 single
Brakes	single

Brakes according to standards EC
Brake type Disc

# FTP - FS - AMA021N - Torsion bar 21 q

# Suspensions

Springs material	STEEL
Front Ayla Suspension Type	Independent with torsion har

## Shock absorbers

Shock absorbers type	HYDRAULIC TELESCOPIC
Shock absorbers no. (front)	2

Features of the brakes (front wheels):

35C - 50C : 2 calipers, diameter 2x48 mm - disc: diameter 290 mm, thickness: 28 mm

# FTP - RS - PMA037N - Leaf springs 37 q.

# Suspensions

Springs material STEEL

Shock absorbers

Shock absorbers type HYDRAULIC TELESCOPIC

Note

Models 35C../ 70C.. chassis cab, crew cab are equipped with single acting semielliptic springs.

 $Models\ 35C.../\ 70C...\ vans, combi, chassis\ cowl\ ara\ equipped\ with\ dual-leaf\ parabolic\ \ springs.$ 

Models 29L.. / 35S.. chassis cab, vans, combi, crew cab, chassis cowl (only 35S) are equipped with single leaf parabolic springs.

# FTP - FR - AB05560RI - Chassis 174 x 66 x 4

# Chassis (mm)

Frame section	PARALLEL
---------------	----------

# Chassis / W.B.

Section shape	"C"
Wheelbase mm	3300
Side members material	STEEL



# **Model Components**

# FCS - M0000 - 04488 - SYSTEM ESP 9

## **Braking system**

**Features** 

Braking system:

Dual circuit configuration; cross split on 29L - 35S / independent from 35C up to 70C. Hydraulically operated with vacuum servo assistance.

Full disc brakes with floating calipers with auto wear adjustment.

Mechanically controlled parking brake: 29L / 35S / 35C (brake calipers) 40C / 45 / 50C / 60C / 65C / 70C (drum)

Brake fluid level indicator-front / rear pad wear indicator.

Asbestos free pads.

EASY interface.

#### Notes:

On Daily 2014 the ESP 9 system is standard for all the range. It is the latest evolution among the Electronic vehicle stability controls and is an advanced system for active and preventive safety in all weather and road conditions. Prevents the loss of vehicle control caused by:

High speed Wrong evaluation of the road lay-out

Sudden vehicle skid

Trying to avoid an obstacle

Sudden vehicle steering

ESP9 includes ABS (Antilock Braking System), EBD (Electronic Brake force Distribution), ASR (Anti Slip Regulator), MSR (Motor Schleppmoment Regelung that acts on engine speed to reduce the braking torque in release), Hill Holder (Assited uphill departure), HBA (Hydraulic Brake Assist), LAC (Load Adaptive Control), TSM (Trailer sway mitigation. It detects the presence of a trailer and adapts the electronic stability control strategy in order not to negatively influence the dynamics of the vehicle-trailer system), RMI (Roll Movement Intervention. It mitigates dangerous roll-over situations during highly dynamic driving like e.g. evasive manoeuvre), ROM (Roll Over Mitigation. It mitigates dangerous roll-over situations during almost stationary manoeuvres like circular driving with steadily increasing steering wheel angle) with steadily increasing steering wheel angle).

# FTP - BD - FN3115S - Van HI - 3520 - Sx

# Loading compartment

Side door(s) No.	1
Side door(s) type	Sliding
Rear doors No.	2
Rear doors type	Side hung

# **Cabin**

Type of cabin	Semi-forward
Structure material	Steel
No. of places	3
No. of seats	2
Cabin doors no.	2

# FTP - BD - FN3119S - Van H2 -3520 - Sx

# Loading compartment

Side door(s) No.	I
Side door(s) type	Sliding
Rear doors No.	2
Rear doors type	Side hung

# Cabin

Type of cabin	Semi-forward
Structure material	steel plate
No. of places	3
No. of seats	2
Windscreen according to standards	EEC
Cabin doors no.	2
Wind-up window type	full electrical

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# **Model Components**

# FTP - BD - FN352IS - Van H3 - wheelbase 3520L - Sx

# **Loading compartment**

Side door(s) No.	I
Side door(s) type	Sliding
Rear doors No.	2
Rear doors type	Side hung

# Cabin

Cabiii	
Type of cabin	Semi-forward
Structure material	steel plate
No. of places	3
No. of seats	2
Windscreen according to standards	EEC
Cabin doors no.	2
Wind-up window type	full electrical

# FTP - BD - FN4719S - Van H2 - wheelbase 4100 Sx

# Loading compartment

Side door(s) No.	I.
Side door(s) type	Sliding
Rear doors No.	2
Rear doors type	Side hung

## Cabin

Cabiii	
Type of cabin	Semi-forward
Structure material	steel plate
No. of places	3
No. of seats	2
Windscreen according to standards	EEC
Cabin doors no.	2
Wind-up window type	full electrical

# FTP - BD - FN4721S - Van H3 - wheelbase 4100 - Sx

# **Loading compartment**

Side door(s) No.	I
Side door(s) type	Sliding
Rear doors No.	2
Rear doors type	Side hung

# Cabin

Cubiii	
Type of cabin	Semi-forward
Structure material	steel plate
No. of places	3
No. of seats	2
Windscreen according to standards	EEC
Wind-up window type	full electrical

# FCS - D7000 - 02307 - STEEL WHEELS

# Wheels

Rim type	DISC
Rim material	STEEL

# FCS - 10000 - 20661 - 195/75R16 IC 110/108 2120/4000

# **Tyres**

1,1.65		
Rolling circumference m.	2.132	
Dinamic Radius m	.339	
Rolling resistance Coefficient	.007	

# FCS - D0000 - 00003 - REAR AXLE RATIO 4.44

# **Rear Axle Ratios**

Rear axle ratio 4.44



# **Model Components**

# FCS - D0000 - 06010 - REAR AXLE RATIO 3.60

**Rear Axle Ratios** 

Rear axle ratio 3.615

FCS - D0000 - 06006 - 3.15 REAR AXLE RATIO

**Rear Axle Ratios** 

Rear axle ratio 3.15

FCS - D0000 - 07136 - 5.111 REAR AXLE RATIO

**Rear Axle Ratios** 

Rear axle ratio 5.111

FCS - MPN00 - 00567 - 110 AH BATTERIES

**Electrics** 

Batteries capacity V/Ah  $\,$  12 V / 110 Ah  $\,$ 



# **Calculations**

Tyres: 20661 - 195/75R16 IC 110/108 Rear Axle Ratio: 3 - R. AXLE RATIO 4.44

Efficiency: 0.93 No Transfer Box

VCB Code		Rati	ios	Speed				1	deability					
8PEB4CE1	ZF 8HP		450511	Km/h	Km/h Total Weights (solo vehicle) (Kg)					Total Weights (vehicle+trailer) (Kg				
					5200					8700				
	I°	4.71		21.41	54.18					29.38				
	L.	.67	4.44	150.5	4.99					2.7				
8PEB4CE2	ZF 8HP 450511			Km/h	Total Weights (solo vehicle) (Kg)					Total Weights (vehicle+trailer) (Kg				r) (Kg)
					5200					8700				
	I°	4.71		21.41	54.17					29.38				
	L.	.67	4.44	150.5	4.84					2.61				
8PEB4DE3	ZF 8	HP	450511	Km/h	Tota	l Weigh	ts (solo v	vehicle)	(Kg)	Total Weights (vehicle+trailer) (			r) (Kg)	
					5200					8700				
	I°	4.71		21.41	54.17					29.38				
	L.	.67	4.44	150.5	4.71					2.53				

Tyres: 20661 - 195/75R16 IC 110/108 Rear Axle Ratio: 6006 - 3.15 REAR AXLE RATIO

Efficiency: 0.93 No Transfer Box

VCB Code		Rati	ios	Speed				у						
8PEB4CE1	ZF 8	HP	450511	Km/h	Total Weights (solo vehicle) (Kg)					Total Weights (vehicle+trailer) (Kg)				
					5200					8700				
	I°	4.71	2.15	30.18	35.63					20.18				
	L.	.67	3.15	160	1.81					.8				
8PEB4CE2	ZF 8HP 450511			Km/h	Total Weights (solo vehicle) (Kg)					Total Weights (vehicle+trailer) (Kg)				
					5200					8700				
	I°	4.71	2.15	30.18	35.62					20.17				
	L.	.67	3.15	160	1.5					.62				
8PEB4DE3	ZF 8	HP	450511	Km/h	Tota	l Weigh	ts (solo	vehicle)	(Kg)	Total	Weights	s (vehicle	e+traile	r) (Kg)
					5200					8700				
	۱°	4.71	2.5	30.18	35.61					20.17				
	L.	.67	3.15	160	1.25					.47				

Tyres: 20661 - 195/75R16 IC 110/108 Rear Axle Ratio: 6010 - R. AXLE RATIO 3.60

Efficiency: 0.93 No Transfer Box

VCB Code	Ratios			Speed	Max Gradeability									
8PEB4CE1	ZF 8HP		450511	Km/h	Tota	Total Weights (solo vehicle) (Kg)				Total Weights (vehicle+trailer) (Kg)				
					5200					8700				
	I°	4.71	2.415	26.3	41.89					23.43				
	L.	.67	3.615	160	3.11					1.57				
8PEB4CE2	ZF 8HP		450511	Km/h	Total Weights (solo vehicle) (Kg)				Total Weights (vehicle+trailer) (Kg)					
					5200					8700				
	l°	4.71	2.415	26.3	41.88					23.43				
	L.	.67	3.615	160	2.87					1.43				
8PEB4DE3	ZF 8HP		450511	Km/h	Tota	l Weigh	ts (solo vehicle) (Kg)			Total Weights (vehicle+trailer) (Kg)				
					5200					8700			1	
	l°	4.71	2.415	26.3	41.88					23.42				
	L.	.67	3.615	160	2.68					1.32				



**Calculations** 

Tyres: 20661 - 195/75R16 IC 110/108 Rear Axle Ratio: 7136 - 5.111 R. AXLE RATIO

Efficiency: 0.93 No Transfer Box

VCB Code	Ratios			Speed	Max Gradeability									
8PEB4CE1	ZF 8HP		450511	450511 Km/h			Total Weights (solo vehicle) (Kg)				Total Weights (vehicle+trailer) (Kg)			
					5200				8700					
	I°	4.71		18.6	65.77				34.44					
	L.	.67	5.111	130.75	6.33				3.5					
8PEB4CE2	ZF 8HP		450511	Km/h	Total Weights (solo vehicle) (Kg)				Total Weights (vehicle+trailer) (Kg)					
					5200				8700					
	۱°	4.71		18.6	65.77				34.44					
	L.	.67	5.111	130.75	6.21				3.43					
8PEB4DE3	ZF 8HP		450511	Km/h	Total Weights (solo vehicle) (Kg)				Total Weights (vehicle+trailer) (Kg)					
					5200				8700					
	I°	4.71		18.6	65.76				34.44					
	L.	.67	5.111	130.75	6.12				3.37					