# DAILY

# 35C13 HI-MATIC NEW DAILY EURO 5b+ (FIA 2.31)





Engineering Profile I 28 Nov 2014



8CBB1BE1

8CBB1BEA

8CBB1EE1

8CBB1EEA

8CBB1HE1 8CBB1HEA ZF 8HP

ZF 8HP

ZF 8HP

ZF 8HP

ZF 8HP

ZF 8HP

35CI3 HI-MATIC A35C MARKET: 1100 MOD: 35Cl3A8 FDP: List of linked VCB **VCB** Code **Gearbox** Wb Cabin **Drive** ZF 8HP 3000 LHD 8CBATAET LSTS 8CBATAEA ZF 8HP 3000 LSTD RHD LHD 8CBAIBEI ZF 8HP 3450 LSTS 3450 LSTD 8CBA I BEA ZF 8HP RHD 8CBATEET ZF 8HP 3750 LSTS LHD 8CBA I EEA ZF 8HP 3750 LSTD RHD 8CBATHET ZF 8HP 4100 LSTS LHD ZF 8HP 4100 LSTD RHD 8CBATHEA 8CBBIAEI ZF 8HP 3000 LSTS LHD 3000 LSTD RHD 8CBBIAEA ZF 8HP

3450

3450

3750

3750

4100

4100

LSTS

LSTD

LSTS

LSTD

LSTS

LSTD

LHD

RHD

LHD

RHD

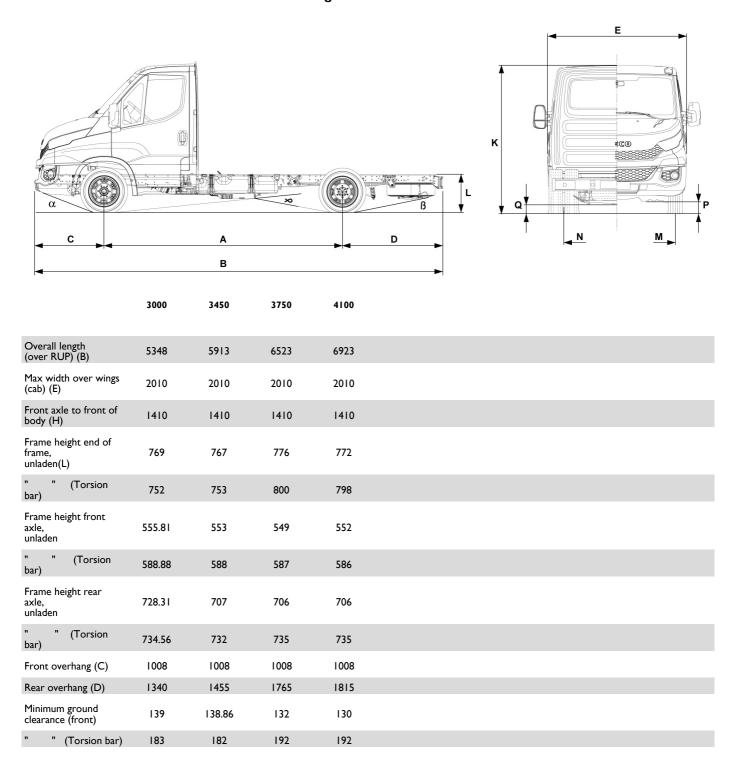
LHD

RHD



# 35C13 HI-MATIC - NEW DAILY EURO 5b+ (FIA 2.3I)

## Weights & dimensions





# 35C13 HI-MATIC - NEW DAILY EURO 5b+ (FIA 2.3I)

			W	eights & d
	3000	3450	3750	4100
Minimum ground			ie:	
clearance (rear)	150	167.19	171	169
" (Torsion bar)	150	167	172	160
Overall height to top of cab,unladen(K)	2275	2263	2257	2251
" " (Torsion bar)	2294	2284	2278	2273
Turning diameter kerb to kerb	10546	11876	12764	13800
" " (Torsion bar)	11116	12526	13466	14564
Turning diameter wall to wall	11200	12536	13428	14466
" " (Torsion bar)	11730	13146	14090	15190
Front track (M)	1740	1740	1740	1740
Front track (M) (Torsion bar)	1724	1724	1724	1724
Rear track (N)	1542	1542	1542	1542
Rear track (N) (Torsion bar)	1542	1542	1542	1542
Approach angle (°)	16	16.4	16.6	16.7
Approach angle (°) (Torsion bar)	18.1	18.4	18.6	18.7
Departure angle (°)	13.4	10.9	8.6	8.3
Departure angle (°) (Torsion bar)	13.2	10.7	8.5	8.2
Ramp angle (°)	22	19	17.5	15.9
Ramp angle (°) (Torsion bar)	24.5	21.2	19.4	17.7
Left hand drive vehicle drawing	5801824129	5801824144	5801824156	5801824166
Total vehicle kerb weight	1878	1906	1919	1932
Total vehicle kerbweight (Torsion bar)	1911	1939	1952	1966
Kerbweight - F.A.	1334	1358	1368	1381
Kerbweight - F.A. (Torsion bar)	1361	1386	1396	1410



# 35C13 HI-MATIC - NEW DAILY EURO 5b+ (FIA 2.3I)

# Weights & dimensions

	3000	3450	3750	4100
Kerbweight - R.A.	544	548	551	551
Kerbweight - R.A. (Torsion bar)	550	553	556	556
G.V.W. (EC)	3500	3500	3500	3500
Plated weight on F.A. (EC)	1900	1900	1900	1900
Plated weight on F.A. (EC) (torsion bar)	2100	2100	2100	2100
Plated weight on rear axle (EC)	2600	2600	2600	2600
Trailer weight (inertia brake)	3500	3500	3500	3500
Max body & Payload (EC)	1622	1594	1581	1568
Max body & Payload (EC) (Torsion bar)	1589	1561	1548	1534
Side members thickness	4	4	4	4
Side members max height	182	182	182	182
Flange width	70	70	70	70
Frame width at rear	860	860	860	860

#### Note:

The "Total vehicle kerb weight" considers the minimum kerb weight with minimum optionals.



## **Model Components**

# FCP - MT - 3,5 TON - 3,5 ton twin wheels

## Weights (in general)

GVW (kg) 3500 GCW (kg) 7000

Notes:

The weights are indicated more preciseley 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 - CABINAT - Rigid

#### **Version**

Version CHASSIS CAB

#### FCP - DR - SX - LH drive

#### **Drive**

Left

## FCP - DR - DX - RH drive

#### **Drive**

Right

# FTP - EN - FIAFL4IIB - FIA Engine I26hp Euro5+ LD WG

#### **Engine**

Manufacturer	FPT
Position	FRONT
Arrangement	LONGITUDINAL
Cycle	DIESEL
Aspiration type	TC+AFTERCOOLER
Injection type	Unijet common rail - 16 valves
4 Stroke / 2 Stroke cycle	4
No. of cylinders	4
Cylinders layout	IN-LINE
Bore (mm)	88
Stroke (mm)	94
Total displacement cm <sup>3</sup>	2287
Exhaust gas treatment	EGR
(Torque, generic ref. only. See: "EP")	320

## **Engine - Miscellaneous**

Injection system HIGH PRESSURE / COMMON RAIL
Cold starting type THERMOSTARTER

#### Cooling

Cooling system water
Fan type electromagnetic

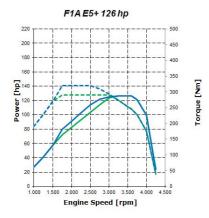
## Air intake

Filter type DRY



## **Model Components**

## FCP - EP - 126 EU5 - ENGINE FIA 126CV EURO 5 LD



#### **Engine**

Power kW	93
Power Hp	126
Rpm at Max Power	3600
Torque Nm	320
Rpm I/min (min)	800
rpm (min. "Max Torque" eng. speed)	1800
Type of turbocharging	with waste gate valve

# 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: Ist gear	4.71
Gear ratio: 2nd gear	3.14
Gear ratio: 3rd gear	2.1
Gear ratio: 4th gear	1.67
Gear ratio: 5th gear	1.29
Gear ratio: 6th gear	1
Gear ratio: 7th gear	.84
Gear ratio: 8th gear	.67
Gear ratio: rev. Ist	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 - NDA RG - NDA Twin Wheels (ex 450311)

#### Other features

Axle Type	RIGID
Axle weight without susp. and tyres (Kg)	136
Max Load (class) Kg	2600
Reduction type	single

#### **Brakes**

Brakes according to standards EC



# **Model Components**

Brake type Disc

# FTP - FS - AMA021N - Torsion bar 21 q

Suspensions

Springs material STEEL

Front Axle Suspension Type Independent with torsion bar

**Shock absorbers** 

Shock absorbers type HYDRAULIC TELESCOPIC

Shock absorbers no. (front)

Features of the brakes (front wheels):

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

# FTP - FS - AMB019N - Leaf Spring 19 q

Suspensions

Springs material STEEL

Front Axle Suspension Type Independent wheels, transversal leaf

Shock absorbers

Shock absorbers type HYDRAULIC TELESCOPIC

Shock absorbers no. (front)

Features of the brakes (front wheels):

35S / 35C : 2 calipers, diameter 2x48 mm - disc: diameter 300 mm, thickness: 28 mm

# FTP - RS - PMA031N - Leaf springs 31 q.

Suspensions

Lifting actuation ELECTRO-AIR

Shock absorbers

Shock absorbers type HYDRAULIC TELESCOPIC

Shock absorbers no. (rear)

Notes:

For models 29L / 35S: vans ,combi ,chassis cowl , chassis cab , crew cab are equipped with parabolic springs.

For models 35C / 40C / 45C / 50C / 65C: vans ,combi,chassis cowl are equipped with parabolic springs.

For models " " " : chassis cab ,crew cab are equipped with semielliptic springs.

#### FTP - FR - AB05605RI - Chassis 174 x 66 x 4

Chassis (mm)

Frame section PARALLEL

Chassis / W.B.

Section shape "C"

Wheelbase mm 3450

Side members material STEEL

# FTP - FR - AB06215R1 - Chassis 174 x 66 x 4

Chassis (mm)

Frame section PARALLEL

Chassis / W.B.

Section shape "C"

Wheelbase mm 3750

Side members material STEEL



#### **Model Components**

# FTP - FR - AB06615R1 - Chassis 174 x 66 x 4

Chassis (mm)

Frame section **PARALLEL** 

Chassis / W.B.

"C" Section shape Wheelbase 4100 Side members material STEEL

#### FTP - FR - AB05040RI - Chassis 174 x 66 x 4

#### Chassis (mm)

Frame section **PARALLEL** 

#### 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. evasivé manoeuvre), ROM (Roll Over Mitigation. It mitigates dangerous roll-over situations during almost stationary manoeuvres like circular driving with steadily increasing steering wheel angle).

## FTP - CL - LSTS - Light Cab LH

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Manufacturer	IVECO
Cab type	SEMI-ADVANCED FIRM
Material	STEEL PLATE
Steps no.	I
Roof	
Roof type	LOW
Dimensions	
Front Area	3.8
Air Penetration Coefficient	.7
Doors	
Front doors no.	2
Front doors type	WINDOW SASH
Front doors opening angle	64°
Window operation	MANUAL ON RIGHT - MANUAL ON LEFT



# **Model Components**

RADE	VIOW	mirro	MC
iveai	AICM	1111111	" 3

2 Rear view mirr no MANUAL Mirrors control

Heating

Fan speed no.

MANUAL Heating control

Windscreen wiper

No. of windscreen wiper speeds 3 2

No. of windscreen wipers

**Seats** No. of places 3

No. of seats 2

Driver seat adjustme IN HEIGHT, LENGTH AND BACK INCLINATION

Passenger seat type TWO SEATS BENCH

**Miscellaneous** 

Safety belts points

2 Sun visors no.

Ceiling no.

Lighter

CB pre-wiring

Chassis cab

Doorway lever Glove compartment

Cab floor COVERED WITH SYNTHETIC MATERIAL

Monolithic execution

Plastic covering



#### **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 filterClogged 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 by any means switch them off.

Windscreen wiper with intermittent wipe.

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

## FTP - CL - LSTD - Light Cab RH

#### Cab

Version	SHORT CAB
Cab type	SEMI-ADVANCED FIRM
Material	STEEL PLATE
Steps no.	1
Roof	
Roof type	LOW

# **Dimensions**

Front Area	3.8	
Air Penetration Coefficient	.7	



#### **Model Components**

**Doors** 

2 Front doors no.

WINDOW SASH Front doors type

Front doors opening angle 64°

MANUAL ON RIGHT - MANUAL ON LEFT Window operation

Rear view mirrors

Rear view mirr no 2

Mirrors control **MANUAL** 

Heating

4 Fan speed no.

MANUAL Heating control

Windscreen

Windscreen type STRENGTHENED - LAMINATED, ATHERMIC

EEC Windscreen according to standards

Windscreen wiper

3 No. of windscreen wiper speeds

2 No. of windscreen wipers

**Seats** 

3 No. of places

No. of seats

IN HEIGHT, LENGTH AND BACK INCLINATION Driver seat adjustme

Passenger seat type TWO SEATS BENCH

Miscellaneous

Safety belts points

2 Sun visors no.

1 Ceiling no.

Lighter

CB pre-wiring

#### Windows

Side rear windows

#### Chassis cab

Doorway lever

Glove compartment

Cab floor COVERED WITH SYNTHETIC MATERIAL

Remarks:

Storage compartments with bottle holder, defrost system for door windows, arm rests on the doors.

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. Steel bumper and side mouldings.

Passenger's seat: Fixed, 2 seats bench

Floor:

Covered with rubber mats

Interior equipment:

Storage compartments, central panel, adjustable air vents, ash-trays, lighter, heating control, cooled compartment (with opt. air conditioning)

Close proximity mirror on passenger's side, steps on both sides, front bumper, mudguard, fog lights Handles on both sides, handle on A-pillar, rear underrun protection, spare wheel, rear lights crossbar

# FCS - D7000 - 02307 - STEEL WHEELS

#### Wheels

Rim type	DISC
Rim material	STEEL



#### **Model Components**

## FCS - 10000 - 20103 - TYRES 195/75R16 FAST ON ROAD

#### **Tyres**

Tyre dimensions	195/75 R 16C
Speed index	N = 140 KM/H
Rolling radius m	.337
Rolling circumference m.	2.115
Dinamic Radius m	.337
Rolling resistance Coefficient	.009

# FCS - 10000 - 20046 - 195/75R16 TYRES (ON ROAD/TRACTION)

#### **Tyres**

Tyre dimensions	195/75 R 16C
Speed index	N = 140 KM/H
Rolling radius m	.337
Rolling circumference m.	2.115
Dinamic Radius m	.337
Rolling resistance Coefficient	.009

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

#### **Tyres**

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

# FCS - D0000 - 06010 - REAR AXLE RATIO 3.60

#### **Rear Axle Ratios**

Rear axle ratio 3.615

# FCS - D0000 - 08171 - 5.14 REAR AXLE RATIO

#### **Rear Axle Ratios**

Rear axle ratio 5.14

## FCS - D0000 - 06056 - 4.22:1 REAR AXLE RATIO

#### **Rear Axle Ratios**

Rear axle ratio 4.22

## FCS - D0000 - 06006 - 3.15 REAR AXLE RATIO

# **Rear Axle Ratios**

Rear axle ratio 3.15

# FCS - D0000 - 07134 - 3.308 REAR AXLE RATIO

#### **Rear Axle Ratios**

Rear axle ratio 3.308

# FCS - D0000 - 02001 - 2.93 REAR AXLE RATIO

#### **Rear Axle Ratios**

Rear axle ratio 2.93

## FCS - MPN00 - 00567 - 110 AH BATTERIES

## **Electrics**

Batteries capacity V/Ah 12 V / 110 Ah



## **Calculations**

Tyres: 20103 - 195/75R16 TYRES Rear Axle Ratio: 3 - R. AXLE RATIO 4.44

Efficiency: 0.93 No Transfer Box

VCB Code		Rati	Max Gradeability											
8CBAIAEI	ZF 8HP NDA RO			Km/h	Total Weights (solo vehicle) (Kg)					Total Weights (vehicle+trailer) (				·) (Kg)
					3500					7000				
	I°	4.71	4.44	21.85	62.24					26.89				
	L.	.67		153.57	4.55					1.82				

Tyres: 20103 - 195/75R16 TYRES Rear Axle Ratio: 6010 - R. AXLE RATIO 3.60

Efficiency: 0.93 No Transfer Box

VCB Code		Rati	os	Speed	Max Gradeability									
8CBAIAEI	ZF 8	HP	NDA RG	Km/h	Tota	l Weigh	ts (solo	vehicle)	(Kg)	Total Weights (vehicle+trailer)				·) (Kg)
					3500					7000				
	I°	4.71	3.615	26.83	47.39					21.44				
	L.	.67		160	2.01					.55				

Tyres: 20103 - 195/75R16 TYRES Rear Axle Ratio: 6056 - 4.22 REAR AXLE RATIO

Efficiency: 0.93 No Transfer Box

VCB Code		Rati	os	Speed	Max Gradeability									
8CBAIAEI	ZF 8HP NDA RG			Km/h	Tota	l Weigh	ts (solo	vehicle)	(Kg)	Total Weights (vehicle+trailer) (K				
					3500					7000				
	I°	4.71	4.22	22.98	58					25.42				<u> </u>
	L.	.67	4.22	160	3.94					1.52				

Tyres: 20103 - 195/75R16 TYRES Rear Axle Ratio: 8171 - 5.14 REAR AXLE RATIO

Efficiency: 0.93 No Transfer Box

VCB Code	Ratios Speed					Max Gradeability								
8CBAIAEI	ZF 8I	HP	NDA RG	Km/h	Total Weights (solo vehicle) (Kg)						Total Weights (vehicle+trailer) (			
					3500					7000				
	I°	4.71	5.14	18.87	77.65					31.7				
	L.	.67		132.66	6.33					2.71				