IVECO S-WAY

TECHNICAL DESCRIPTION

AT440S47T OFF - ARTIC

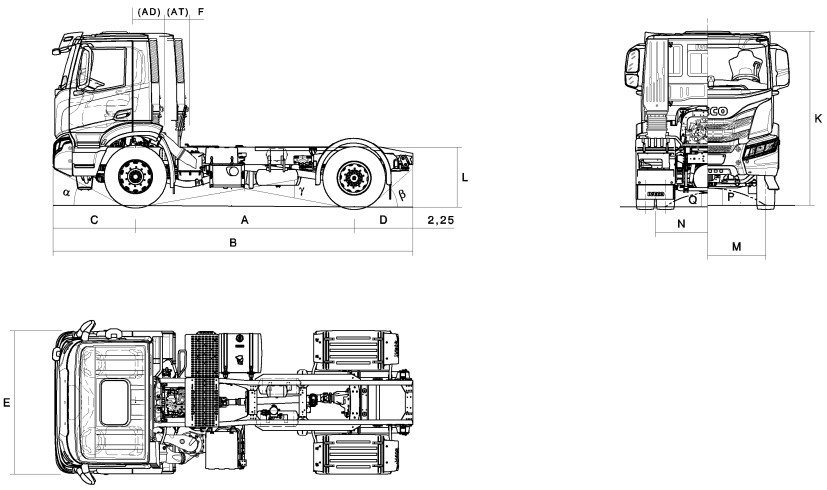
IVECO

Your partner for sustainable transport

LIST OF LINKED VCB

VCB code	Gearbox	Wheelbase	Cabin	Drive
BS3GD3B2	16S 2220 TD	3800	AT-SX	LH
BS3GD3BB	16S 2220 TD	3800	AT-DX	RH
BS3GD3D2	12TX 2420 TD	3800	AT-SX	LH
BS3GD3DB	12TX 2420 TD	3800	AT-DX	RH

DIMENSIONS & WEIGHTS



DIMENSIONS (mm)

Wheelbase (A)	**3800**
Max length (B)	6286
Max width over wings (cab) (E)	2550
Front axle to back of cab - including filter (F)	940
Frame height at end of frame, unladen (L)	1219
Frame height at front axle, unladen	1083
Frame height at rear axle, unladen	1190
Front overhang (C)	1440
Rear overhang (D)	1025
Minimum ground clearance (front) (P)	316
Minimum ground clearance (rear) (Q)	240
Overall height to top of cab, unladen (K)	3103
Turning diameter kerb to kerb	15300
Turning diameter wall to wall	16900
Front track (M)	2044
Rear track (N)	1820
Approach angle α (°)	28
Departure angle β (°)	42
Ramp angle γ (°)	20
Side members thickness	7.7
Side members max height	304.4
Side members flange width	80
Frame width at rear	771.4

WEIGHTS (KG)

Wheelbase	**3800**
Total vehicle kerb weight	6903
Kerbweight on Front Axle	4913
Kerbweight on Rear Axle	1990
G.V.W. (EC)	18000
G.V.W. (Design)	20000
Plated weight on front axle (EC)	7500
Plated weight on front axle (Design)	7500
Plated weight on rear axle(s) (EC)	11500
Plated weight on rear axle(s) (Design)	13000
Max body & payload (Design)	13097

Notes:
Weights are to standard configuration and include: chassis cab (or tractor), driver (75 kg), full fuel tank, Adblue (if present), tools kit and spare wheel (if present).

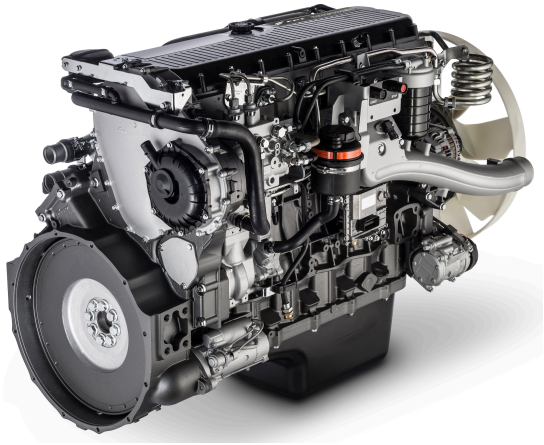
The height of the side member includes the thickness as well.

Wheelbase	**Type**	**Drawing**
3800	Left hand drive	5802982951

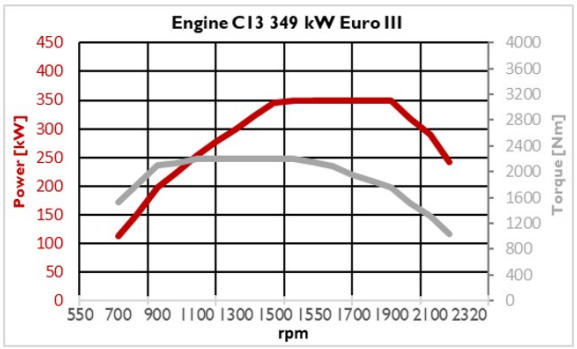
MODEL COMPONENTS

ENGINE

Identification Code	F3HGE611
Manufacturer	FPT Industrial
Commercial name	Cursor 13
Cycle	DIESEL
Injection type	DIRECT
4 Stroke / 2 Stroke cycle	4
No. of cylinders	6
Cylinders layout	IN-LINE
Bore mm	135
Stroke mm	150
Total displacement cm³	12.882
Exhaust gas treatment	sylencer
Weight (without oil / water) Kg	1230
Injection system	Common rail
Cold starting type	THERMOSTARTER
Emissions control	EURO III
Cooling system	water



ENGINE EMISSION EURO III opt. 06044



470 C13 - Cursor 13 - 470 CV - WG

Maximum power: 349 kW (475 HP) @ 1900 rpm

Maximum torque: 224 Kgm (2200 Nm) @ 1100 rpm

The central electronic system controls the following functions:Engine preheating, fuel preheating, turbo, injection control, engine brake, control of engine speed and torque, data exchange OBD with ScanTool, engine diagnostic (onandoff-board), control of blink-code and failure indicator light on dashboard, control of engine idling speed and max. engine speed, data exchange with VCM (vehiclecontrol module), supervision of emission values.

MODEL COMPONENTS

DRIVELINE

GEARBOX

Gearbox model	Gearbox Type	Installation	Box material	Dry weight Kg	Clutch type	Max input torque Nm	No. of forward gears	No. of reverse gears	Shifting
12TX 2420 TD	AUTOMATED	ENGINE FLANGED	ALUMINIUM ALLOY	265 - (w/o retarder)	Automated dry clutch ConAct	2400	12	2	Electro-pneumatically shifted
16S 2220 TD	SYNCRONIZED	ENGINE FLANGED	ALUMINIUM ALLOY	306 - (w/o retarder)	Dry clutch	2200	16	2	Manual shifting Single - H

GEAR RATIOS

Gearbox model	1ste	2de	3ème	4ª	5de	6de	7	8	9ème	10ème	11	12ª	13de	14	15th	16ª	M.A. 1	2ª ret		
12TX 2420 TD	16.69	12.92	9.93	7.67	5.90	4.57	3.66	2.83	2.17	1.68	1.29	1.00					15.54	12.03		
16S 2220 TD	16.41	13.8	11.28	9.49	7.76	6.53	5.43	4.57	3.59	3.02	2.47	2.08	1.7	1.43	1.19	1.00	15.36	12.92		

CLUTCH

Gearbox model	Type	Outer diameter mm	Outer diameter (inches)			
12TX 2420 TD	Single dry plate	430	17			
16S 2220 TD	Single dry plate	430	17			

Notes:
HI-TRONIX Gearbox: with opt. 78515, further two ratios are available for the reverse gears: 3.40 and 2.64 for **TD** versions.
ELECTRO-PNEUMATIC CLUTCH ACTUATION UNIT - " ConAct " : The **ConAct** (Concentric Clutch Actuator) is a concentric electro-pneumatic release cylinder for push-type clutches. A travel sensor reports the clutch's actual position to the control unit.

REAR AXLE RATIO

Option code	00733 *	00734	02004	06054
Ratio	2.85	3.36	3.08	3.7

*: Standard axle ratio

TYRES & WHEELS

Code	Tyres	Front	Rear	Load index	Rolling circumference m
20081	Standard	13R22,5	13R22,5	156/150	3.428
20885	Optional	385/65R22,5	315/80R22,5	164/	3.28
20795	Optional	315/80R22,5	315/80R22,5	156/150	3.28
20079	Optional	13R22,5	13R22,5	156/150	3.428
20231	Optional	315/80R22,5	315/80R22,5	156/150	3.28
20790	Optional	315/80R22,5	315/80R22,5	156/150	3.28
20549	Optional	315/80R22,5	315/80R22,5	156/150	3.28
20867	Optional	385/65R22,5	315/80R22,5	160/157	3.28

AXLES

Position	Description	Steering Axle
Front	5890/D OFF - Axle drop: 72 mm	O
Rear	MS 17X - Arvin Meritor - Single reduction Disc Brakes - Maximum technical load 13.000 Kg	

PERFORMANCE

* Max Speed. Calculated speed on the basis of engine rpm and axle ratios. Real speed limits must take into account the speed index of the tyres: K = 110 km / h L = 120 km / h M = 130 km / h
** Theoretically calculated values, arising from the engine torque without considering the road-friction values and the stability limits of the vehicles. When calculating with more than one tyres or more than one axle ratio, availability of each combination must be checked.
Speed and gradeability values are rounded.
A = Total Weights (solo vehicle) Kg - Max Gradeability %
B = Total Weights (vehicle+trailer) Kg - Max Gradeability %

MODEL COMPONENTS

Tyre: 20081 - 13R22.5 TYRES - Regional / Works **Efficiency: 0.93** **No transfer box**

Gearbox model 12TX 2420 TD

Axle Ratio	Gear Ratio 1°	Gear Ratio 12°	Speed km/h 1°	Speed km/h 12°	RPM at 80 km/h	RPM at 90 km/h	A 18000		B 40000	
							1°	12°	1°	12°
2.85	16.69	1.00	8.22	137.12	1120	1260	100.00	4.53	50.71	1.65
3.08	16.69	1.00	7.60	126.88	1210	1362	100.00	5.15	56.11	1.93
3.36	16.69	1.00	6.97	116.31	1320	1485	100.00	5.88	63.24	2.26
3.7	16.69	1.00	6.33	105.62	1454	1636	100.00	6.73	72.93	2.64

Gearbox model 16S 2220 TD

Axle Ratio	Gear Ratio 1°	Gear Ratio 16°	Speed km/h 1°	Speed km/h 16°	RPM at 80 km/h	RPM at 90 km/h	A 18000		B 40000	
							1°	16°	1°	16°
2.85	16.41	1.00	8.36	137.12	1120	1260	100.00	4.53	49.63	1.65
3.08	16.41	1.00	7.73	126.88	1210	1362	100.00	5.15	54.87	1.93
3.36	16.41	1.00	7.09	116.31	1320	1485	100.00	5.88	61.75	2.26
3.7	16.41	1.00	6.44	105.62	1454	1636	100.00	6.73	71.06	2.64

SUSPENSIONS

Front parabolic suspension : 2 leaf OFF (7500-8000 Kg)
3 leaf OFF (8500-9000 Kg)

Rear parabolic suspension : 3 leaf (13000Kg)

BATTERY

Electrics

Voltage V	24
Alternator power V/A	28 / 90
Starter power kW	5.5
No. of batteries	2
Batteries capacity V/Ah	12 / 220

DISC BRAKES

FRONT AXLE: Ventilated disc : Diameter 432 (mm) / Braking surface : 784 (cm2)

REAR AXLES: Ventilated disc : Diameter 432 (mm) / Braking surface : 784 (cm2)

MISCELLANEOUS

Fuelling:
Fuel tank: 290 litres, aluminium; filter, fuel pump, prefilter, fuel separator.

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