



TECHNICAL DESCRIPTION



AT440S47TZ/P ON - ARTIC 6x4

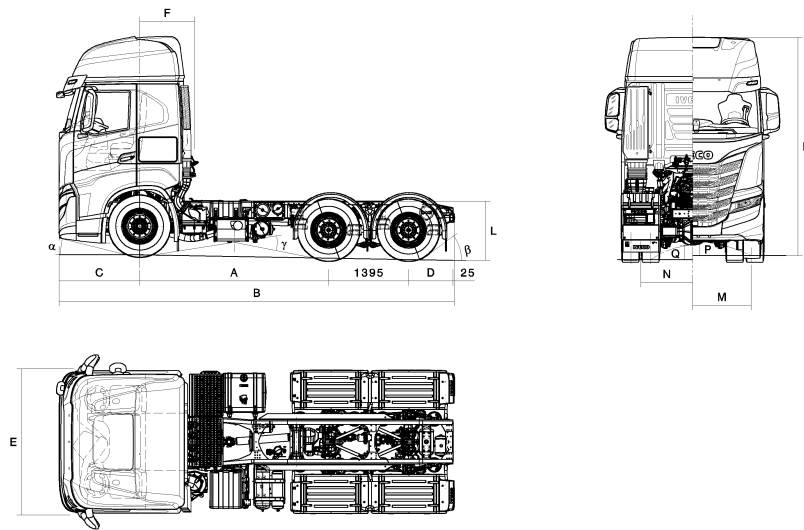
IVECO

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LIST OF LINKED VCB

VCB code	Gearbox	Wheelbase	Cabin	Drive
BT3DB1B2	I6S 2220 TD	3300	AT-SX	LH
BT3DB1BB	I6S 2220 TD	3300	AT-DX	RH
BT3DB1D2	I2TX 2420 TD	3300	AT-SX	LH
BT3DB1DB	I2TX 2420 TD	3300	AT-DX	RH
BT3DB2B2	I6S 2220 TD	3500	AT-SX	LH
BT3DB2BB	I6S 2220 TD	3500	AT-DX	RH
BT3DB2D2	I2TX 2420 TD	3500	AT-SX	LH
BT3DB2DB	I2TX 2420 TD	3500	AT-DX	RH

DIMENSIONS & WEIGHTS



DIMENSIONS (mm)

Wheelbase (A)	3300	1395	3500	1395
Max length (B)	6909	7134		
Max width over wings (cab) (E)	2550	2550		
Front axle to back of cab - including filter (F)	940	940		
Frame height at end of frame, unladen (L)	1047	1047		
Frame height at front axle, unladen	1006	1004		
Frame height at rear axle, unladen	1036	1036		
Front overhang (C)	1410	1410		
Rear overhang (D)	778	778		
Minimum ground clearance (front) (P)	244	244		
Minimum ground clearance (rear) (Q)	250	250		
Overall height to top of cab, unladen (K)	3026	3024		
Turning diameter kerb to kerb	15900	16500		
Turning diameter wall to wall	17500	18100		
Front track (M)	2044	2044		
Rear track (N)	1820	1820		
Approach angle α (°)	14	14		
Departure angle β (°)	39	39		
Ramp angle γ (°)	20	21		
Side members thickness	7.7	7.7		
Side members max height	304.4	304.4		
Side members flange width	80	80		
Frame width at rear	771.4	771.4		

WEIGHTS (KG)

Wheelbase	3300 1395	3500 1395
Total vehicle kerb weight	8518	8544
Kerbweight on Front Axles	5006	5077
Kerbweight on Rear Axles	3512	3467
G.V.W. (EC)	26000	26000
G.V.W. (Design)	28000	28000
Plated weight on front axle (EC)	7500	7500
Plated weight on front axle (Design)	7500	7500
Plated weight on rear axle(s) (EC)	19000	19000
Plated weight on rear axle(s) (Design)	21000	21000
Max body & payload (Design)	19482	19456

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).

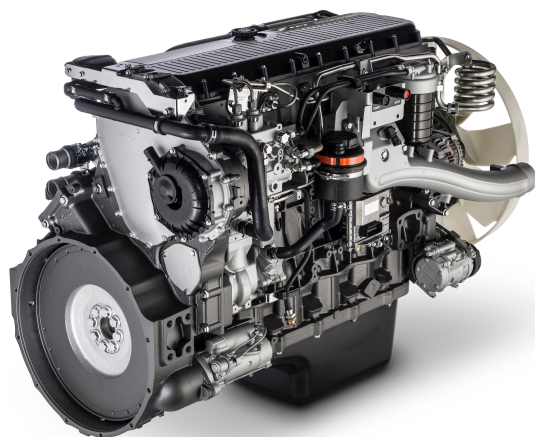
The height of the side member includes the thickness as well.

Wheelbase	Type	Drawing
3300 1395	Left hand drive	5802968206
3500 1395	Left hand drive	5802968207

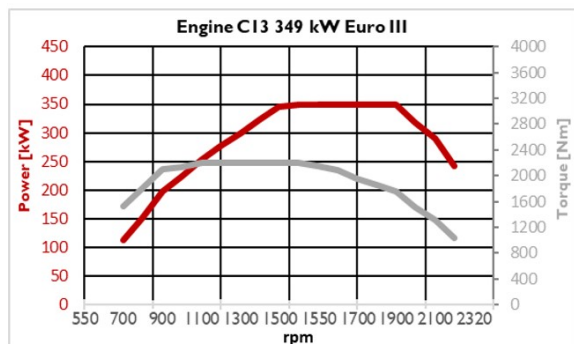
MODEL COMPONENTS

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 cm ³	12.882
Exhaust gas treatment	syencer
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	2ème	3 ^a	4	5ème	6ème	7 ^a	8	9	10de	11de	12	13	14	15	16	rev. 1st	2de A		
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	03007	03010	08999	14521 *	72253
Ratio	4.125	3.4	3.78	3.09	2.83

*: Standard axle ratio

TYRES & WHEELS

Code	Tyres	Front	Rear	Load index	Rolling circumference m
20231	Standard	315/80R22,5	315/80R22,5	156/150	3.28
20852	Optional	385/55R22,5	315/70R22,5	158/	3.09
20885	Optional	385/65R22,5	315/80R22,5	164/	3.28
20146	Optional	315/80R22,5	315/80R22,5	156/150	3.28
20795	Optional	315/80R22,5	315/80R22,5	156/150	3.28
20079	Optional	13R22,5	13R22,5	156/150	3.428
20790	Optional	315/80R22,5	315/80R22,5	156/150	3.28
20519	Optional	295/80R22,5	295/80R22,5	154/148	3.184
20549	Optional	315/80R22,5	315/80R22,5	156/150	3.28
20504	Optional	315/70R22,5	315/70R22,5	156/150	3.09
20867	Optional	385/65R22,5	315/80R22,5	160/157	3.28
20900	Optional	385/55R22,5	315/70R22,5	158/	3.09
20503	Optional	295/80R22,5	295/80R22,5	154/148	3.184
20866	Optional	385/65R22,5	315/80R22,5	160/157	3.28
20294	Optional	315/70R22,5	315/70R22,5	156/150	3.09
20081	Optional	13R22,5	13R22,5	156/150	3.428

AXLES

Position	Description	Steering Axle
Front	5890/D ON - Axle drop: 142 mm	○
Rear	MT23-150/D - Tandem single red. disc brakes	

Only for 4 axles vehicles (8x2x6 version): 2x5890/D ON on front axle

MT23-150/D - Rear tandem - Single reduction axles - Max technical load: 23000 kg

MODEL COMPONENTS

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 %

Tyre: 2023 I - 315/80R22.5 TYRES - Regional	Efficiency: 0.93	No transfer box
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Gearbox model I2TX 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		B	
							26000		40000	
							1°	12°	1°	12°
2.83	16.69	1.00	7.92	132.21	1150	1294	100.00	3.18	52.64	1.85
3.09	16.69	1.00	7.25	121.08	1256	1413	100.00	3.67	59.15	2.17
3.4	16.69	1.00	6.59	110.04	1382	1555	100.00	4.23	67.73	2.54
3.78	16.69	1.00	5.93	98.98	1537	1729	100.00	4.89	79.89	2.97
4.125	16.69	1.00	5.43	90.70	1677	1887	100.00	5.48	93.17	3.35

Gearbox model I6S 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		B	
							26000		40000	
							1°	16°	1°	16°
2.83	16.41	1.00	8.06	132.21	1150	1294	100.00	3.18	51.50	1.85
3.09	16.41	1.00	7.38	121.08	1256	1413	100.00	3.67	57.81	2.17
3.4	16.41	1.00	6.71	110.04	1382	1555	100.00	4.23	66.08	2.54
3.78	16.41	1.00	6.03	98.98	1537	1729	100.00	4.89	77.71	2.97
4.125	16.41	1.00	5.53	90.70	1677	1887	100.00	5.48	90.29	3.35

SUSPENSIONS

Front parabolic suspension : 2 leaf ON (7500-8000 Kg)

3 leaf Off (8500-9000 Kg)

Rear air suspension : 8 Bellows (19000-21000-23000 Kg)

Stroke Upper / lower : 125 mm / - 65 mm.

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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