

TRAKKER

TECHNICAL DESCRIPTION M.Y. 2013 EXTRA EUROPE EURO 3



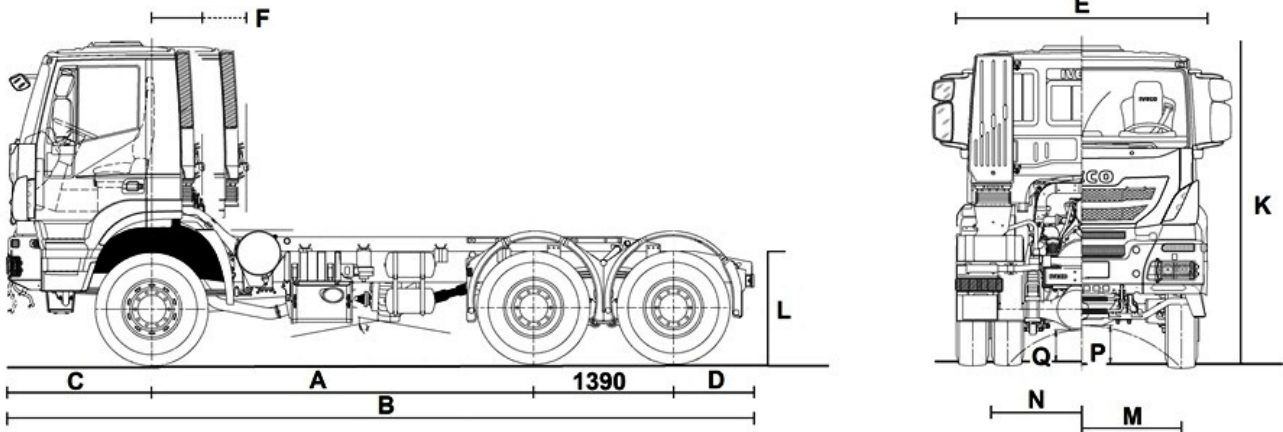
AD720T42WT H - ARTIC WORLD 6x6

IVECO

LIST OF LINKED VCB

VCB code	Gearbox	Wheelbase	Cabin	Drive
V2BC21B3	I6S 2220 TO	3500	AD-MY SX	LH
V2BC21D3	I6AS 2630 TO	3500	AD-MY SX	LH
V2BC23B3	I6S 2220 TO	3820	AD-MY SX	LH
V2BC23D3	I6AS 2630 TO	3820	AD-MY SX	LH

DIMENSIONS & WEIGHTS



DIMENSIONS (MM)

Wheelbase (A) 3500 1390 3820 1390

Max length (B) 7159 7159

Max width over wings (cab) (E) 2550 2550

Front axle to back of cab (F) 500 500

Frame height at end of frame, unladen (L) 1155 1155

Frame height at front axle, unladen 1161 1161

Frame height at rear axle, unladen 1155 1155

Front overhang (C) 1440 1440

Rear overhang (D) 780 780

Minimum ground clearance (front) (P) 380 380

Minimum ground clearance (rear) (Q) 310 310

Overall height to top of cab, unladen (K) 3235 3235

Turning diameter kerb to kerb 17900 18700

Turning diameter wall to wall 19100 19900

Front track (M) 1981 1981

Rear track (N) 1827 1827

Side members thickness 10 10

Side members max height 309 309

Side members flange width 80 80

Frame width at rear 776 776

WEIGHTS (KG)

Wheelbase	3500 1390	3820 1390
Total vehicle kerb weight	10280	10420
Kerbweight on Front Axle	5240	5290
Kerbweight on Rear Axles	5040	5130
G.V.W. (Design)	33000	33000
Plated weight on axle 1 (Design)	8000	8000
Plated weight on axle 2 (Design)	13000	13000
Plated weight on axle 3 (Design)	13000	13000
Max body & payload (Design)	22720	22580

Notes :

Weights are to standard configuration and include: chassis cab (or the 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.

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

Wheelbase	Type	Drawing
3500 1390	Left hand drive	41841340
3820 1390	Left hand drive	41841341

MODEL COMPONENTS

ENGINE

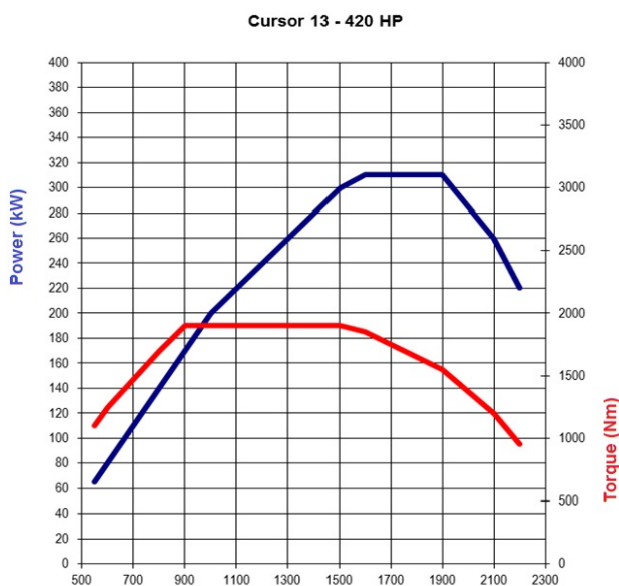
Commercial name	CURSOR 13 - F3B
Position	FRONT
Cycle	DIESEL
Aspiration type	TC+INTERCOOLER
Injection type	UNIT INJECTOR
4 Stroke / 2 Stroke cycle	4
No. of cylinders	6
Cylinders layout	IN-LINE
Bore mm	135
Stroke mm	150
Total displacement cm ³	12880
Weight (without oil / water) Kg	1117
Oil capacity (Kg)	31
Bearings	7
Injection governor type	EDC
Cold starting type	THERMOSTARTER
Hydraulic steering pump	YES
Emissions control	EURO3
Cooling system	water
Fan type	electromagnetic
Air intake	WITH SNORKEL
Snorkel position	BEHIND THE CAB ON THE LEFT
Filter type	DRY

DRIVELINE

420 E3 - CURSOR13 420 CV E3 (E4 DERIV)

Maximum power: 309 kW (420 HP) @ 1900 rpm

Maximum torque: 224 Kgm (1900 Nm) @ 900 rpm



Power loss: 0 per cent up to 1500 m of altitude

The central electronic system controls the following functions:

. Engine preheating, fuel preheating, Waste Gate, injection control, engine brake, control of engine speed and torque, data exchange OBD with ScanTool, engine diagnostic (on- and off-board), control of blink-code and failure indicator light on dashboard, control of engine idling speed and max. engine speed, data exchange with VCM (vehicle control module), supervision of emission values.

MODEL COMPONENTS

GEARBOX

Gearbox model	Gearbox Type	Installation	Box material	Total ratio speed	Dry weight Kg	Clutch type	Max input torque Nm	No. of forward gears	No. of reverse gears
16AS 2630 TO	AUTOMATED	ENGINE FLANGED	ALUMINIUM ALLOY	17.01	268	Electrical-air (semiautom.)	2600	16	2
16S 2220 TO	SYNCRONIZED	ENGINE FLANGED	ALUMINIUM ALLOY		306 - (w/o retarder)	Dry clutch	2200	16	2

GEAR RATIOS

Gearbox model	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	rev. 1st	rev. 2nd		
16AS 2630 TO	14.12	11.68	9.54	7.89	6.52	5.39	4.57	3.78	3.09	2.56	2.09	1.73	1.43	1.18	1	.83	13.07	10.81		
16S 2220 TO	13.8	11.54	9.49	7.93	6.53	5.46	4.57	3.82	3.02	2.53	2.08	1.74	1.43	1.2	1.00	.84	12.92	10.8		

CLUTCH

Gearbox model	Type	Outer diameter mm	Outer diameter (inches)			
16AS 2630 TO	Single dry plate	430	17			
16S 2220 TO	Single dry plate	430	17			

REAR AXLE RATIO

Option code	05003	06017	06019 *	06021 *	06032	06034	06036
Ratio	6.096	4.227	4.67	5.01	3.792	5.56	6.57

*: Standard axle ratio

TYRES & WHEELS

Code	Tyres	Front	Rear	Dynamic Radius m	Rolling resistance Coefficient	Load index	Speed index	Mounting system	Rolling circumference m
20079	Standard	13R22,5	13R22,5	.543	.0072	156/150	K = 110 KM/H		3.41
20115	Optional	395/85R20	395/85R20	.573	.007	168			3.599
20764	Optional	12,00R24	12,00R24	.595	.005	156/153	G = 90 KM/H		3.737
20885	Optional	385/65R22,5	315/80R22,5	.522	.006	156/150	K = 110 KM/H		3.278
20168	Optional	14,00R20	14,00R20	.607	.009			single	3.812
20795	Optional	315/80R22,5	315/80R22,5	.522	.006	156/150	L = 120 KM/H		3.278
20430	Optional	14,00R20	14,00R20	.607	.009				3.812
20780	Optional	14,00R20	14,00R20	.601	.009	160/157	G = 90 KM/H		3.776
20790	Optional	315/80R22,5	315/80R22,5	.522	.006	156/150	L = 120 KM/H		3.282
20846	Optional	315/80R22,5	315/80R22,5	.522	.006	156/150	L = 120 KM/H		3.282
20216	Optional	12,00R20	12,00R20	.545	.005	154/149	K = 110 KM/H		3.422
20081	Optional	13R22,5	13R22,5	.54	.007	156/150	G = 90 KM/H		3.428

AXLES

Position	Description
Front	5985/2D - Drive a. H.R. (Drum br. D.D.)
Rear	453291/2D - Tandem H.R. (Drum brake 2D)

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: 20079 - TYRES 13R22.5 - 156/- MIXED USE - G/J											Efficiency: 0.88		Off road slow	
Gearbox model 16AS 2630 TO														
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					
							1°	16°	1°	16°				
3.792	14.12	0.83	4.54	77.20	1230	1384								

MODEL COMPONENTS

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	
							1°	16°	1°	16°
4.227	14.12	0.83	4.07	69.25	1371	1542				
4.67	14.12	0.83	3.68	62.68	1515	1704				
5.01	14.12	0.83	3.43	58.43	1625	1828				
5.56	14.12	0.83	3.09	52.65	1803	2029				
6.096	14.12	0.83	2.82	48.02	1977	2225				
6.57	14.12	0.83	2.62	44.55	2131	2397				

Gearbox model 16S 2220 TO

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	
							1°	16°	1°	16°
3.792	13.8	0.84	4.64	76.28	1245	1400				
4.227	13.8	0.84	4.17	68.43	1388	1561				
4.67	13.8	0.84	3.77	61.94	1533	1725				
5.01	13.8	0.84	3.51	57.73	1645	1850				
5.56	13.8	0.84	3.17	52.02	1825	2053				
6.096	13.8	0.84	2.89	47.45	2001	2251				
6.57	13.8	0.84	2.68	44.02	2157	2426				

CABIN

Remarks:

Athermic windows.

Doors with fabric and plastic covering, storage compartments, bottle-holder, defrost system for door windows, arm rests;
Corrosion protection, underseal and cavity sealing with wax.

No. of places: 1 (with medium roof) - 2 (with low roof)

Driver's seat:

Head rest, seat belts, fabric covering.

Passenger's seat (AT low roof only):

Fixed, 2 way adjustable (longitudinal +adjustable back), head rest, seat belts, fabric covering.

Roof panel:

Prearrangement for revolving roof lamp (opt. 2477) (AT low roof only).

Roof hatch (electrical control) with athermic glass (AT medium roof only).

Exterior equipment:

External storage box (on side wall) opened from inside, front bumper with steps, mudguard, front grille, front towing hook (removable), side spoilers as splash protection, mudflaps, external engine starter (when cab is tilted) including safety device, rear cab lighting (tractors only).

Floor:

Removable mats.

Interior equipment:

Adjustable steering column (pneumatic control), storage compartments, shelves in overhead console, shelves at floor level, interior lights, 2 spotlights (steps lighting), sun visor, flexible spotlight on side wall, curtains.

Interior equipment - prearrangement for:

Tachograph, loud-speaker, aerial, passenger seat (AT / medium roof), rack, additional air heater.

Central console:

can holders, small storage compartment, central panel, adjustable air vents, 2 ash-trays, lighter / 24 V, heating control / manually adjusted air conditioning system, compressed air socket for removing dust, 12 V socket, parking brake lever, holder for mobile telephone.

MODEL COMPONENTS

FRAMES

Wheelbase	3500	3820
Front crossmembers	BOLTED	BOLTED
Middle crossmember	RIVETED	RIVETED
Rear crossmember	BOLTED	BOLTED
Frame section	DOUBLE	DOUBLE
Section shape	"C"	"C"
Side members material	STEEL	STEEL

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 / 170

DISC BRAKES

Brake system:

Service brake: air - No. of circuits: 2 - Air dryer - ABS / EBL (Electronic brake limitation) - Auxiliary brake / Engine brake: decompression engine brake - Emergency brake: combined with parking brake - Parking brake: mechanical with spring cylinder - Parking brake axle(s): rear axle(s) - Air compressor: single cylinder - Air compressor displacement cm³ 352 - Number of air tanks: 4 x 20 - Total tank capacity (l): 80

Brakes type with drum on front axle:

Drum diameter (mm): 410 - linings width (mm): 180 - brake cylinder diameter (sqin): 2 x 14 / 2 x 14 - friction area (cm²) 2884

Brakes type with drum on rear axle:

Drum diameter (mm): 410 - linings width (mm): 200 - brake cylinder diameter (sqin): 2 x 14 / 2 x 14 - friction area (cm²) 3220

MISCELLANEOUS

Fuelling:

Fuel tank: 300 litres, steel, filter, fuel pump, prefilter, fuel separator.

Steering:

Recirculating balls - power assisted.
Steering wheel diameter: 510 mm.
Steering wheel adjustment: height and inclination.
Steering wheel lock.

Engine compartment:

Sound-proof.

TRANSFER BOX

Type

Model	TC 2200
OFF ROAD Low Ratio	1.6
ON ROAD Normal Ratio	1



IVECO