



3-3.5吨G系列内燃牵引车

G SERIES 3-3.5T DIESEL POWERED INTERNAL-COMBUSTION TOW TRACTOR

技术参数 Parameter

参数名称 Parameter	单位Unit	QYCD30-WX1G	QYCD35-WX1G	
1 最大牵引力 Max.drawbar pull	kN	30	35	
2 空载最大行驶速度(前进) Max.Travel speed(without load, forward)	km/h		26	
3 爬坡度(空载) Grade ability (without load)	%	30		
4 最小转弯半径 Min.turning radius	mm	3500		
5 制动距离(20Km/h) Service braking distance (20Km/h)	m	≤5		
6 整车质量(含油水) Total Weight(including oil and coolant)	kg	4870	5370	
7 桥负荷 Axle load	前桥 Front	kg	1470	
	后桥 Rear	kg	3400	
8 发动机 Engine	型号 Model	锡柴4DX23-82GG3U-BLC10-HL10		
	缸径×冲程 Bore×stroke	mm	4-102×118	
	额定功率/转速 Rated output	kW/rpm	60/2200	
	最大扭矩/转速 Max. output	N·m/rpm	320/1400-1700	
9 燃油箱容积 Fuel tank capacity	L	110		
10 外形尺寸 External dimensions	长 Overall length	mm	3325 (不含前牵引座 without front coupler)	
	宽 Overall Width	mm	1500	
	高 Overall height	mm	2220(到驾驶室顶部 with cab)	
11 轴距 Wheel base	mm	1800		
12 轮距 Tread	前轮 Front	mm	1350	
	后轮 Rear	mm	1250	
13 最小离地间隙 Min.underground clearance	mm	140		
14 牵引座中心线离地高度 Center height of drawbar	mm	450		
15 电压/容量 Battery (voltage/capacity)	V/Ah	2-6-QW-80 12V×2 80Ah×2		
16 驱动桥型号 Drive axle		P64F3-00001		
17 变速箱 Transmission case	型号 Model	自制 Homemade		
	变速型式 Type	无级变速 Stepless change speed		
18 制动器 Brake apparatus	行车制动 Service brake	真空助力制动, 作用于前后轮 Vacuum assisted brake acts on four wheels		
	停车制动 Parking brake	机械制动, 作用于后轮 Mechanical type acts on the rear wheels		
19 轮胎 Tyre	前轮 Front	规格 Model	2-6.50-10-10PR	
		气压 Air pressure	kPa	790
	后轮 Rear	规格 Model	2-8.25-15-14PR	
		气压 Air pressure	kPa	830



安徽合力股份有限公司
ANHUI HELI CO., LTD.

地址: 安徽省合肥市经济开发区方兴大道668号
销售热线: (0086) 551-63689674
(0086) 551-63689674
(0086) 551-63689676
免费热线: 4001600761
传真: (0086)551-63689063
邮箱: heli@helichina.com
网址: www.helichina.com

Address: NO.668 Fangxing Street, Economic & Development Zone,
Hefei, P.R. Anhui, China.
Sales hotline: (0086)551-63689674
(0086)551-63689674
(0086)551-63689676

Free hotline: 4001600761
FAX: (0086)551-63689063
E-mail: heli@helichina.com
Web site: www.helichina.com

设计印刷: 李可立印务 180201
Catalog No. 180201

HELI
中国合力 提升未来



3-3.5吨G系列内燃牵引车

G SERIES 3-3.5T DIESEL POWERED INTERNAL-COMBUSTION TOW TRACTOR

» 整车简介 General Introduction

合力G系列3-3.5t内燃牵引车是安徽合力股份有限公司研制的新型柴油液力传动牵引车。整车充分利用了本公司成熟的设计、制造技术，整机由车身系统（含配重）、动力系统、传动系统、变速操纵系统、行车制动系统、油门操纵系统、转向系统、电气系统、前/后悬挂、转向桥、驱动桥、牵引销机构、驾驶室等部分组成。

G series 3-3.5t diesel powered internal-combustion tow tractor with tor-con is a series of new product designed by HELI. The whole tractor adequately adopts the mature design and manufacturing technology of our company. It's composed of bodywork system (including the rear counterweight), power system, transmission system, transmission control system, service brake control system, accelerator control system, steering system, electric system, front suspension ass'y, rear suspension ass'y, steering axle, drive axle, operation stick & pin component, cab and so on.

动力传动系统 Power and transmission system

经过优化设计的传动系统与发动机的动力输出达到最佳匹配。

Superior devised transmission system matched with engine power output perfectly.

制动系统 Brake system

标配真空助力动力四轮制动，制动阀采用双腔双回路技术。真空回路中增加增压真空罐，以实现增加辅助动力源，系统保压和补充泄漏，缓和冲击、吸收压力脉动，保证正常行车状态制动可靠性，提高重载行车安全性。当一路回路失效时，另一条回路依然能够进行制动。

The tractor adopts vacuum assisted four wheel brake system as standard configuration. Dual cavity and dual circuit technology is adopted by brake valve. Assisted power source is added and pressure maintaining, leakage supplement, shock buffering, pressure pulsation absorbing are achieved through vacuum tank in pipeline. Thus brake reliability during normal travelling state is ensured, and tractor travelling safety when heavy loaded is improved. When the first circuit fails, the other circuit can still brake.

转向系统 Steering system

合力自行研发的全液压横置油缸动力转向技术（其中转向油缸U形密封圈为进口件），刚性好，转向轻便、准确。该项技术解决了国内同类产品转向桥刚性不足，轮胎过早磨损、前桥早期报废等问题。

The tractor adopts HELI homemade fully hydraulic transverse cylinder powered steering technology (the U-ring of cylinder is imported part), has good rigidity, has easy and accurate steering and operating feeling, thus effectively avoids the problems such as steering axle rigidity insufficient, tyre early worn out and front axle early discarding in domestic similar products.

弹性悬挂装置 Suspension system

采用专业汽车配件生产厂家生产的前、后板弹簧悬挂装置。且前桥另装有筒式阻尼减振器，使得整机更加具有良好的平稳性。

The tractor adopt leaf spring suspension at front and rear axle which are made by professional auto parts manufacturers. Further more, the shock absorber is assembled on the front axle, which makes the tractor has favorable stability.

驾驶室 Cab

全框架结构的驾驶室具有足够的强度，室内宽敞且视野良好，可以实现全方位的观察。驾驶室的前、后、左、右挡风玻璃均采用安全玻璃，且前玻璃装有两档多速控制雨刮器。配备有减震器、安全扶手及安全带的可调式豪华座椅。

The fully framed cab has enough strength. What is more, the cab is wide and has good view from where omnibearing observing can be achieved.

The front, rear, left and right windscreen of the cab are all safety glass, and the front glass is equipped with two-stage multi-speed control wiper.

Adjustable luxury seat with damper, safe armrest and belt is assembled on the tractor.

操纵牵引销机构 Operation stick & pin component

设置在驾驶室内的操纵牵引销采用自动脱钩及自动导引机构，使得牵引作业方便、效率高。牵引机构的自锁功能有效避免因误操作或行车颠簸导致拖车脱销的隐患，提高行车安全性。

牵引机构可视性好，驾驶员坐在座椅上可以直接观察到牵引座。

The tractor adopts traction pin mechanism with automatic unhook and automatic guide function, the traction pin is assembled in cab, the operation is easy and efficient. Self lock function of traction pin mechanism effectively avoids trailer hook suddenly off caused by vehicle jolt during travelling or mis-operation, improves travelling safety.

Traction pin mechanism has good visuality, driver can observe the traction seat directly from seat.

标准配置 Standard configuration

真空助力双回路四轮制动 Vacuum assisted dual circuit four wheel brake	2kg干粉灭火器 2kg fire extinguisher	倒车镜 Rearview mirror
全液压横置油缸式动力转向 Fully hydraulic transverse cylinder steering	随机备件箱 Spare parts box with tractor	倒车蜂鸣器 Backward buzzer
电液换向 Electro-hydraulic direction changing	高进气 High air intake	充气胎 pneumatic tyre
智能换挡 Intelligent gear shifting	全车LED灯 LED light	双座椅 Double seat
橘红/蓝灰色涂装 Orange/steel gray painting	速度里程表 Speedometer	电风扇 Electric fan
全封闭驾驶室 Fully enclosed cab	标准牵引座 Rear traction seat	
液晶数字仪表盘 LCD digital instrument	后工作灯 Rear working light	

选项配置 Optional configuration

前牵引座 Front traction seat	空调 Air conditioner	实心胎 Solid tyre	隔热防晒棚 Thermal insulation awning
用户自选涂装 Customized painting	暖风机 Warm air blower	倒车语音喇叭 Backward loud speaker	
LED警示灯(闪光/旋转/旋转蜂鸣) LED warning light (flash/revolving/ revolving and buzzing)	双空滤 Double air filter	后窗防护栏 Guard grid of cab rear window	
双层/多层牵引机构 Dual-layer/ multi-layer operation stick & pin component	总电源开关 Power switch	加装行李栏 Luggage fence	