SANY®

Towing hydraulic excavator

SY375E

E-POWER

Quality changes the world

■ www.sanyglobal.com

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Read E-brochure

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Towing hydraulic excavator
SY375E

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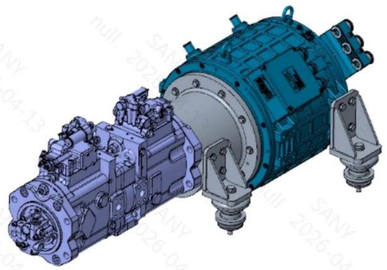
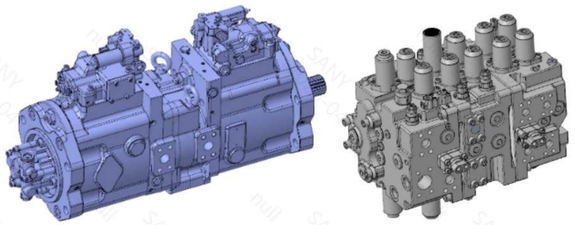
01

Product configuration

SY375E is upgraded on the basis of the SY375H as the mother machine, using high-power water-cooled permanent magnet synchronous motor, equipped with Kawasaki K5V160DTH main pump and Hengli HVME400 hydraulic control multi-way valve, connected to 380VAC power grid through electrical cable, can achieve 7 * 24h operation, can reduce the cost of use by 50 Percent or more.

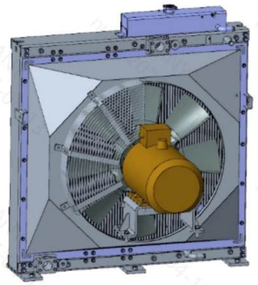


Permanent Magnet Synchronous Motor
The well-known brand permanent magnet synchronous motor with customized configuration has the advantages of high power density, high efficiency, low energy consumption, water cooling and heat dissipation are more reliable, and maintenance-free is more worry-free.
Custom calibration scheme, perfect match with electronic control system and main pump.



Mature 37t Hydraulic System
Kawasaki series electronically controlled large displacement main pump and Hengli hydraulic control multi-function main valve have the advantages of good handling, high reliability, high efficiency and low energy consumption. They are the best combination in the 30t excavator market.

Rectification + All-in-one RIectronic Control System
The use of industry-renowned synchronous motor control system, motor drive, high voltage DC output and low voltage power supply, high system integration.
Water-cooled design, high reliability, to ensure that the host can work 7 * 24h.
Implement monitoring of grid input voltage and system current to ensure that the drive motor works in the high-efficiency area and reduce power consumption.
630A AC leakage protection cabinet to ensure safe production.



Motor Driven Cooling System
It is driven by an independent motor, which is more reliable than traditional electronic fans.
The fan speed is controlled according to the temperature of hydraulic oil and coolant, which effectively reduces the energy consumption of the cooling system.

02

Core Product Advantages

➢ Selling points

Worry-free working time

- State Grid Power Supply
- 24hcontinuous work

Worry-free repairing

◆:Leakage detection
◆Lightning protection capacity：Class I, Maximum discharge current 100KA
◆Easy to operate

◆MCU、DCDC、PDU: Integrated Design
◆Protection class IP67
◆Vibration level 6G

Worry-free maintenance

- Maintenance items are reduced half
- Displayer prompt maintenance content

Maintenance parts	SY375H	SY375E
Diesel rough filter	√	×
Fuel filter element	√	×
Fuel filter element	√	×
Air filter safety filter	√	×
Air filter main filter	√	×
Oil filter	√	×
Motor oil	√	×
Hydraulic oil	√	√
Oil suction filter	√	√
Return oil filter	√	√
Pilot filter element	√	√
Gear oil	√	√
Coolant	√	√

Worry-free after-salses

■ **Service Guarantee ： 12123**
（Reply to customers in 1 quarter of an hour, reach the main service area in 2 hours, provide commonly used maintenance parts within 1 day, solve customer complaints within 2 days, and solve customer major failures within 3 days）

Parts	Quality assurance policy
Complete-built unit quality assurance	12months/3000h
heavy parts quality assurance	21months/5000h
Motor, electronic control	60months/10000h

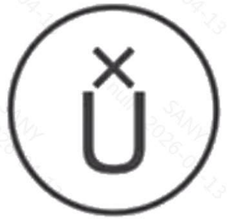
Leakage protection

Short-circuit protection

Break protection

Overvoltage protection

Under voltage protection



Overcurrent protection

Surge protection

➢ Selling points

Car grade design concept, the most complete product spectrum in the industry.

High Safety: the industry's first AC and DC integrated leakage protector, the highest level of lightning protection design;

High Reliability: 2000H reliability test of core components; 31 performance tests were completed for the whole vehicle, and 3000 hours of reliability excavation test for the whole vehicle;

High Quality: electrical motor and motor controller 5 years or 10,000 hours quality assurance.

1 High Safety

Leakage Detection

The first company in the market to configure AC and DC integrated leakage protection circuit breaker , real-time monitoring

Ground protection

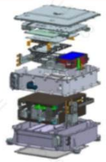
The vehicle protection grounding system is connected with the ground wire of the distribution cabinet to prevent electric shock and ensure personal safety.

Lightning protection capability

Class I highest grade lightning protection Maximum discharge current (8/20us) 100KA

2 High Reliability

Integrated Design



MCU、DCDC、PDU: Integrated Design
Protection class IP67
Vibration level 6G

2000h bench verification

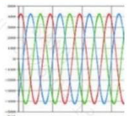
Core components completed 2,000h motor system bench test verification

Vehicle test verification

31 items of vehicle functional performance test qualified • Completed 3000 hours of excavation test qualified

3 High Quality

Stepless Speed Regulation

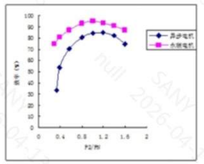


Complete-built unit multi-gear stepless speed regulation 0-2500rpm Contrast asynchronous motor constant speed 1450rpm

Long quality assurance

The most demanding verification synchronizer quality assurance 5 years or 10,000 hours Contrast asynchronous quality assurance within 2 years

High efficiency power system



Integrated system efficiency: 96% Market Reformed Machine System Efficiency: 81%

03

Economic analysis

➢ SAVE COST

SY375E 3000h/year can save about

430,000 RMB

Oil and electricity difference	SY375H	SY375E
Energy consumption unit price	7 yuan/liter	0.7 yuan/kWh
Average energy consumption per hour	30L/diesel	100 kWh
Energy cost per hour	210 yuan/h	70 yuan/h
Daily working hours (hours)	10	10
Annual operating days (days)	300	300
Annual energy consumption cost (10,000 yuan)	63	21
Maintenance cost	2	1
Cost savings (10,000 yuan/vehicle/year)	/	43
Increase the cost recovery period (years)	/	< 1

04

Application Scenarios & Cases

SY375E work in a rock mine with Electric roller

SY375E work in a sand mine with Electric roller

SY375E work with 175mm breaker

SY375E work in a sand mine with Electric roller

SY375E mixing and feeding

SY375E work in a dock with extended arm

SY375E work in a dock with extended arm

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SY375E work in a dock with extended arm

IMIP Load to trucks

thanks

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