



北京索德电气工业有限公司

Beijing SWORD Electric Industrial Co.,Ltd.

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DYNAMIC
SWORD
ELECTRIC®



您的伙伴

YOUR PARTNER

OUR VISION

我们的愿景

成为中国驱动控制与智能制造领域创新的典范

Become China innovation model in drive control and intelligent manufacturing industry.

OUR MISSION

我们的使命

- 创新与质量, 一直坚持、从未却步
- 帮助行业发现新的方向, 帮助客户做出正确的选择
- Innovation and quality, our permanent pursuit, never flinch.
- Assist the industry explores new directions, help customers make right choice.



公司简介

About SWORD

北京索德电气工业有限公司成立于1999年,是一家专业从事电气传动控制系统、电机研发和生产的国家级高新技术企业,具有国家军工二级保密资格证书。

索德电气专注于高端驱动&运动控制与系统电机的研发、制造,业务涉及船舶、电梯、新能源汽车、机器人、军品、智能制造、物联网、企业信息化等领域。产品主要包括高/中/低压变频器、船舶电力推进系统、船舶轴带发电系统、一体化电梯控制器、新能源汽车驱动控制器、移动电源发电系统、电梯物联网、企业综合信息化管理平台等。

Beijing SWORD Electric Industrial Co., Ltd founded in 1999 is a national level High & New Technology Enterprise specialized in R&D and production of Electrical Drive Control Systems and Motors, with Secondary Confidential Qualification Certificate of National Military Industry. SWORD focuses on researching, developing and manufacturing high-end Drive & Control Systems and Motors. Major businesses cover industries of vessels, elevators, new energy automobiles, robots, military products, intelligent manufacturing, IOT, enterprise informatization management, etc. Main products include mid-to-high/medium/low voltage Inverter, Marine Power Generation Propulsion System, Marine Shaft Power Generation System, Integrated Elevator Controller, New Energy Vehicle Drive Controller, Mobile Power Generation System, Elevator IOT, Enterprise Integrated Information Management Platform, etc.

COMPANY HISTORY

公司里程碑



PROFESSIONAL ENTERPRISE MANAGEMENT

专业化的企业管理

智能化生产管理

Intelligent Production Management

公司通过自主研发与技术引进相结合,实现车间生产自动化、管理应用智能化,建立了集SMT组装、THT组装、ICT测试、模块组装、FT测试、整机组装、自动化测试、机器人包装、自动化物流于一体的自动化线。通过信息化系统平台与生产设备联通,实现了工单全周期管理、流程控制、物料可追溯、质量数据在线统计分析、设备数据实时采集及生产过程透明化。

Through independent research, development and technology introduction, we have realized robotized workshop production and intelligent management application, established integrating robotized production line including SMT assembly, THT assembly, ICT testing, Module assembly, FT testing, the whole machine assembly, automatic testing, robotic packing, robotized logistics. Via combining production equipments with information system platform, we have realized work-orders full cycle management, process control, material traceability, quality data online statistical analysis, equipments data real-time collection and production process transparency.



严谨的质量控制

IStrict Quality Control

1 体系

建立了ISO9001质量管理体系、汽车行业专用IATF16949=2016质量管理体系以及军工行业GJB9001C-2017质量管理体系。

We have established ISO9001 Quality Management System, the special ISO/TS16949 Quality Management System of the automobile industry and GJB9001C-2017 Quality Management System of the military industry.

2 开发

制定了严格的产品开发过程管控体系,建立完善的测试流程,对开发各阶段交付样品质量进行把控。

We have formulated strict process control system for production development, established complete test procedure, strictly control the quality of samples delivered at each developing stage.

3 供应

建立产品供应过程质量管理体系,包含供应商管控、IQC、FQC、IPQC、OQC等检验环节,配备自动化检测设备,层层把关生产产品质量,最终交付给客户满意的产品。

We have established quality management system for product supplying process including the control of suppliers, IQC, FQC, IPQC, OQC, etc; equipped with automatic detection devices; Quality control of product manufacture goes through the whole production process to be sure finally deliver pretty satisfied products to our customers.

4 认证

通过了CE认证、中国船级社产品认证(CCS)
国家二级保密资格证书、武器装备质量体系认证证书、装备承制单位资格证书等齐全的军工资质

Passed CE certification and CCS certification.
We obtained complete military qualification, such as the National level ii certificate of confidentiality, the Weapon equipment quality system certificate, as well as Equipment qualification certificate.

大数据企业管理体系

Big Data Enterprise Management System



通过企业层级管理与产品生命周期管理相融合,建立以ERP、PLM、MES、OA、APS、CRM、SRM等信息处理系统为中心,以各类自动化设备、终端为数据源和控制对象,构建企业级信息系统的统一化集成平台。

实现人、机、信息系统间的互联互通,在数据高度共享和融合的基础上,利用互联网+打通线上和线下,实现信息的纵横联合,有效推进公司部门间以及合作企业间的网络化协同办公,实现数字化、可视化智能管理与生产,构建绿色节能、具有可持续发展潜能的全维数字化、智能化企业运转模式。

Through independent research, development and technology introduction, we have realized robotized workshop production and intelligent management application, established integrating robotized production line including SMT assembly, THT assembly, ICT testing, Module assembly, FT testing, the whole machine assembly, automatic testing, robotic packing, robotized logistics. Via combining production equipments with information system platform,

We have realized work-orders full cycle management, process control, material traceability, quality data online statistical analysis, equipments data real-time collection and production process transparency.



专业的研发实验平台

Professional R&D Experiment Platform



通过对研发流程进行管控、研发项目平台化管理以及研发绩效、薪酬考核,激发公司研发团队的激情与高效运作。

同时公司配备齐套、先进的实验测试设备,保障产品研发过程可控、研发质量可控。

Through R&D process control, projects platformization administration and performance salary assessment, the enthusiasm and high efficient operation of R&D team are motivated.

Simultaneously, we have equipped a set of advanced experimental testing equipments to ensure product developing process and quality can be completely controlled.

**高效运作
质量可控**

The enthusiasm and high efficient operation of R&D team are motivated.

PRODUCT AND BUSINESS

产品及业务



军用
Military

产品方向
Product Positioning



民用
Civilian



北京研发中心
Beijing R&D Centre



电动车辆国家工程实验室
National Engineering Laboratory for Electric Vehicles



研发平台
R&D Platform



业务领域

Scope of Business

主要产品

Major Products



电梯控制
elevator control



船舶驱动控制
vessel drive control



机器人伺服驱动控制
robot servo drive control



物联网领域
IOT



新能源汽车驱动控制
new energy vehicle drive control



移动电源发电控制
mobile power eneration control



智能制造
intelligent manufacture

电梯一体化控制器

Integrated Elevator Controller

新能源汽车驱动控制器

New Energy Vehicle Drive Controller

船舶电力推进及轴带发电系统

Marine Electric Propulsion System & Shaft Power Generation System

移动电源变速恒频恒压发电系统

Variable-speed Constant-frequency-and-voltage generating system of Mobile Power Pack

智能制造综合信息化平台

Integrated Information Platform of Intelligent Manufacture

电梯物联网

Elevator IOT

其他

ETC

MAJOR PRODUCTS

主要产品

电梯控制系列

Elevator Control Series



S600电梯一体化控制器

S600 Integrated Elevator Controller

S600

多种功能 先进算法 噪音小 自动切换开环运行 手机蓝牙调试

Multi-function advanced algorithm low noise
Automatically switch over open-loop operation
Mobilephone bluetooth debugging

S600系列产品是公司自主研发的第四代一体化电梯专用控制器。

集电机驱动控制与逻辑控制为一体，

使电梯控制更简单、运行更安全、乘坐更舒适、性价比更高。

该系列产品性能卓越，拥有一百多种功能和多种安装方式，可满足客户各种工况需求。

具有先进的矢量控制算法及独特的抑制抖动算法，彻底解决全速运行时的抖动问题；应用在别墅梯场合噪音小，性能卓越；同步曳引机编码器掉线闭环自动切换开环运行，就近平层停车，彻底解决关人、伤人的安全隐患等；支持直接停靠及手机蓝牙调试功能等。

S600 Integrated Elevator Controller: S600 series is the fourth generation of integrated elevator controller which is researched & developed independently by SWORD. It integrates the motor driving and logical control technology, makes the elevator much easier to control, safer to operate, more comfortable to take and higher cost-performance ratio. S600 series has excellent performances with over one hundred functions and variety of installation modes, which are great convenient for most clients. S600 series has advanced vector control algorithm and unique shaking-restraint algorithm completely solve the problem of vibration when the elevator is operating at full speed; Possesses excellent performance with much lower noises for Villa elevator; Close-loop shifts into open-loop automatically while the encoder of synchronous motor is offline and brake the car at the nearest floor, thoroughly solve hidden dangers such as lock or hurt passengers, etc.; Supports car stop directly without creeping and Bluetooth debugging of mobile phone, etc.

S660

全并行处理方式 26路电梯按钮输入输出 支持同步机闭环控制

Full parallel processing method
26 road elevator button i/o
Support close-loop control of synchronous motor

适用于低楼层、异步电机、电气系统成本控制严苛的工况。

该产品实现全并行信号处理方式，无需扩展满足10层全集选应用；

显示输出方式为二进制编码、BCD编码、七段码、格雷码；

26路电梯按钮输入输出，24路开关量输入，22路继电器输出，

支持同步机闭环控制，异步机闭环控制和异步机开环控制；

采用以距离控制为原则的直接停靠技术，速度曲线平滑，运行效率高；支持直接停靠及手机蓝牙调试等功能。

S660 Integrated Elevator Controller for Parallel Communication: Application to low floors, asynchronous motor and situation of strict cost restriction on electric system. S660 adopts full parallel signal operation mode and satisfies 10 floors full collective application dispensing with extension board; Output types of display are binary, BCD code, 7-Segment, Gray code; 26 road elevator button I/O, 24 road digital input, 22 road relay output, strong functions of signal reception, control and output; Supports close-loop control for synchronous motor and close & open-loop control for asynchronous motor; Adopts directly stop technology based on distance control, smooth curve of velocity with high operation efficiency; Supports car stop directly without creeping and Bluetooth debugging of mobile phone, etc.



S660电梯并行一体化控制器

S660 Integrated Elevator Controller for Parallel Communication

S610



S610电梯专用变频器

S610 Inverter Specialized for Elevators

高性能矢量控制电梯专用驱动控制器。
支持同步机闭环控制，
异步机闭环控制和异步机开环控制；
无称重启动自动补偿，调试简单；
独特的抑制抖动算法，
彻底解决全速运行时的抖动问题；
编码器断线快速检测，防止电梯飞车；
支持UPS运行，可实现在停电后自动救援；
支持直接停靠及手机蓝牙调试等功能。

Drive Controller specialized for elevators with high performance vector control. Supports close-loop control for synchronous motor and close & open-loop control for asynchronous motor; Smooth starting without weighing compensation, easy debugging; Unique shaking-restraint algorithm completely solve the problem of vibration when the elevator is operating at full speed; Swiftly detect disconnection of encoder prevent elevator out of control; Supports UPS operation, enable to self-rescue once power off; Supports car stop directly without creeping and Bluetooth debugging of mobile phone, etc.

S300



S300一体化扶梯控制器

S300 Integrated Escalator Controller

S300 Integrated Escalator Controller: S300 is the integrated controller specialized for escalator. S300 integrates the motor driving and logical control technology, with highly integrated escalator control system, realizes the perfect combine of driving and logic control. It possesses variety of control modes such as full variable frequency control, VFC with three bypasses, star angle control, etc.; Supports VF control of asynchronous motor, open-loop vector control (SVC); Every switch of safety circuit can be detected independently and error location can be quickly found; Supports remote monitoring, error announce by voice, Bluetooth debugging of mobile phone, etc.

S300一体化扶梯专用控制器
该产品集电机驱动、控制逻辑等各项功能于一身，
高度整合了扶梯控制系统，
实现了驱动与逻辑控制的完美结合。
具有全变频控制、三种旁路变频控制、
星角控制等多种控制方式；
支持异步电机VF控制、开环矢量控制（SVC）；
实现独立检测每个安全回路开关，
快速定位安全回路故障发生点；
支持远程监控、语音报故障、
手机蓝牙调试等功能。

新能源汽车驱动控制系列

New Energy Automobile Drive Control Series

S200 门机专用控制器

Special controller for door machine



高性能矢量控制门机驱动控制器

支持闭环矢量控制、开环磁通矢量控制;实现距离控制与速度控制一体,自动优化运行曲线;
先进的限位功能,保证门机运行平稳精确;具有多种关门受阻保护功能。

该产品系列还包含D1“二合一”门机(集轿顶板与变频器于一体)、D10“三合一”门机(集轿顶板、变频器与轿顶插件板于一体),
高集成度设计,节省成本并提高系统可靠性,现场安装更便捷、工时更节约。

S200 Special controller for door machine: Door driving Controller with high performance vector control. Supports close-loop vector control, open-loop flux vector control; Realizes distance control and velocity control together and automatically optimizes operating curve; Advanced position-limit functions ensure door motor run steady and precisely; Possesses diversity of protection functions of door closing interruptv.

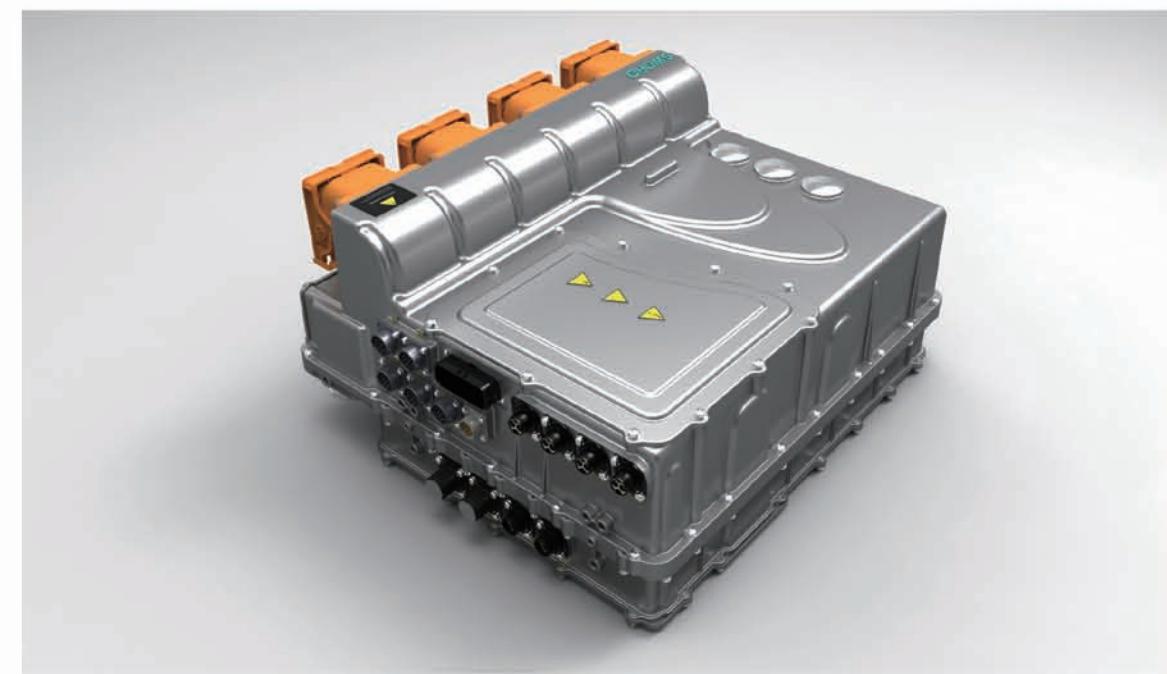
This series also include D1 "2-in-1" Door Controller (integrated Car Top Board and Door Inverter), D10 "3-in-1" Door Controller (integrated Car Top Board, Door Inverter and Car Top Plugin Board). With high integrated design, save costs, improve the system reliability, much more convenient for field installation and save labor hours.

GP3 系列“六合一”商用车驱动控制器

GP3 Series of "6-in-1" Commercial Vehicle Drive Controller

集“主电机驱动+助力转向油泵+打气泵+DC-DC+绝缘检测仪+高压配电箱”
于一身的模块化“六合一”动力总成产品。
该产品彻底解决了传统分散驱动的弊病,
完美实现了新能源客车的高功率密度需求。
同时它还集成了多达4把新能源客车充电枪的快充配电,
可以在不增加装备仓容积的情况下,实现整车快速充电。
与相同功率传统分散驱动控制器比较体积减小40%,
重量减少30%,方便解决整车EMC问题,
大幅减少安装接线工作量,降低线缆及人工成本。
该系列还具有“五合一”商用车驱动控制器以及单机驱动控制器。

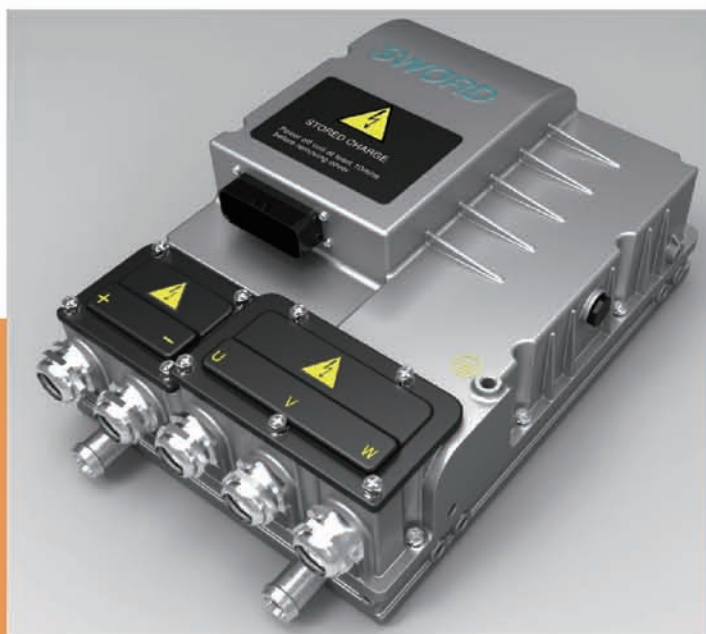
The modularized 6-in-1 "powertrain product with Integration of "Main Motor Drive + Booster Steering Oil Pump + Air Pump + DC-DC + Insulation Detector + High Voltage Power Distribution Box", thoroughly solves problems from traditional decentralized drive and perfectly realizes the high power density demand of new energy passenger automobile. Simultaneously, it integrates the fast charging distribution of up to 4 charging guns to realize quickly charge the whole vehicle without increasing the volume of the equipment. Compared with the same power traditional decentralized drive controller, it reduces the volume by 40% and reduces the weight by 30%, conveniently solves the EMC problem of the whole vehicle, greatly reduces the installation wiring workload, and reduces the cost of cables and labors. This series also include a "five-in-one" Commercial Vehicle Drive Controller and a Single-Drive Controller.



GP2

Series of
Passenger Vehicle
Drive Controller

系列乘用车驱动控制器



10

余项特殊安全功能设计

16

项专有技术

乘用车专用驱动控制器具有高功率密度、高安全性、高可靠性、高性能的特点。

该产品拥有“编码器故障快速处理策略”等十余项特殊安全功能设计，

大幅提升电动汽车安全等级；此外在智能化、可靠性及舒适度方面，还有十六项专有技术全面提升整车驾驶性能。

This series is characterized by high power density, high security, high reliability and high performance. The product has more than 10 special safety design functions, such as "the strategy of quickly coping with failure of encoder", which greatly improves the safety level of electric vehicles. Additionally, 16 proprietary technologies in aspects of intelligentization, reliability and comfortability fully improve driving performance.

GP4

系列“双向逆变”一体化驱动控制器

Series of "bidirectional invert" integrated drive controller

在吸收前二代产品优点的基础上，创新设计将汽车驱动控制、车载交流快速充电机、交流发电站功能集于一身，不再需要直流充电桩，直接用市政交流电充电。同时充电方式灵活多变，还可实现车对车以及对车外负载设备进行供电。

Absorbing advantages of two generations of the products before, this series set the innovative design of vehicle driving motor, vehicle-mounted AC charger, AC power station control function at a suit, no longer need DC charging pile, only municipal AC charging is available. Simultaneously, the charging mode is flexible, which can be used to charge the vehicle and external load equipments.



船舶辅助用电设备专用驱动控制器

Drive Controller specialized for Marine Auxiliary Power Consumption Devices

专门用于船舶风机、水泵、电梯（提升机）、锚机、舵机、侧推、压缩机（制冷设备、空调）等辅助设备控制，防护等级IP55、IP54

TSpecially design for the control of auxiliary equipments such as fan, water pump, elevator (hoist), windlass, steering engine, side push, compressor (refrigeration equipment, air conditioned, etc. Protection grade IP55, IP54



船舶驱动控制系列

Marine Drive Control Series

船舶电力推进系统

Marine Electric propulsion System

3000KW

CCS认证

ZY 认证

高性能共直流母线舰船电力推进驱动控制系统，
用于船舶主推进系统控制及管理。
目前该产品已实现的最大功率为3000KW，获得CCS、ZY认证。

The vessel electric n drive control system with the high performance
common DC bus is applied to the control and management of ship's major propulsion system.
Presently, the maximum power enabled by this product is 3000kw
and have obtained CCS and ZY certificates.



船舶轴带发电系统

Marine Shaft Power Generation System

1000KW

CCS认证

ZY 认证

该轴带发电系统可实现变速情况下恒压、恒频发电，可适用于定距桨船舶。
具有永磁同步、无刷同步以及无刷双馈三个系列技术方案，
以满足各种船舶速度变化范围不同、安装空间需求不同以及成本要求不同，
所带来的需求变化。

最大功率为1000KW，获得CCS、ZY认证。

Marine Shaft Power Generation System: Marine Shaft Power Generation System can generate at variable-speed, constant-voltage and constant-frequency, and can be applied to Fixed Pitch Propeller Ships. With PMSM Shaft, Brushless PM Shaft and Brushless Double-Fed Shaft, three series of technology solutions, to meet the diversity of demands, such as various ship speed ranges, diverse installing space requirements, different cost requirements, etc. Presently, the maximum power enabled by this product is 1000kw and have obtained CCS and ZY certificates.



车载发电控制系列：

Vehicle Power Generation Control Series:



行车发电系统

Driving Power Generation System

索德行车自发电系统是将发动机所连接的发电机电源，经过电源变换系统处理后，不受发动机转速变化发出恒频恒压的电能。该系统不需要配置发动机电子调速器，在发动机低速与高速区间、驻车与行车工况下均可正常供电。

The automatic power generation system of SWORD is via the transformation system to process the generator power connected by the engine, without effect of engine rotate speed, to get constant-frequency-and-voltage electric energy. The system which does not need to equip the electronic governor can supply normal power in the condition of the engine low and high speed scope, vehicle parking or driving.

该系统具有如下优点

Major Features

高安全性：

High Security

通过功能安全设计思想，从软件架构到硬件电路以及散热结构综合计算最优控制策略，达成安全性指标。

According to the idea of functional safety designing, through all-round calculating the optimal control strategy from software architecture to hardware circuit and heat dissipation structure to achieve safety standards.

高可靠性：

High Reliability

可适应高原、高低温、山地、高盐雾、高湿度等极端恶劣环境。

Can adapt to the extreme conditions such as with highland, high/low temperature, mountainous, high salt fog, high humidity, etc.

低噪音：

Low Noise

由于车辆底盘只有发电机，取消了液压机构，减少了底盘噪音源。

Because only the generator is in the chassis and the hydraulic mechanism has been removed, the chassis noise is reduced.

维护保养方便：

Convenient Maintenance

具备智能故障诊断功能，可以准确地定位故障，快速处理故障；并且取消了液压机构，减少了系统维护工作量。

With intelligent fault detection function, it can accurately locate the fault and quickly handle the fault. With elimination of the hydraulic mechanism, the system maintenance workload is reduced.

远程联网：

Remote Network Connection

通过无线网络（地面或卫星）与保障中心实时交互数据信息，实现与保障中心的远程互动。

Via wireless network (ground or satellite) to real-timely exchange data information with the guarantee centre to realize the remote interaction.

集中组网供电：

Centralized
Networking Power Supply

应用公司独有的集中并网技术，可以方便地将多台车辆自发电系统集中并网，满足大载荷情况下用电需求。

Unique centralized grid-connected technology of SWORD makes it convenient to set up the centralized network from automatic power systems of multiple vehicles and meets the demand of electricity under heavy load.

适配车型广：

Wide matched vehicle models

可适配各类型军车以及移动电源车，不需进行发动机电子调速改造。

Match various types of military vehicles and mobile power vehicles and don't need electronic speed adjustment of the engine.

电压等级选择性广：

Wide Selectivity of Voltage levels

发电机输出电压等级200V/400V/690V可任意选。

Generator output voltage levels 200V/400V/690V are optional.

保护功能齐全：

Perfect Protective Functions

由于采用先进电力电子技术，过压，欠压，过载，短路，过温等保护精准、响应速度快，大大优于传统液压调速方式。

Due to the adoption of advanced power electronics technology, the protection for overvoltage, undervoltage, overload, short circuit, overtemperature, etc. is accurate and response speed is faster which is much better than the traditional hydraulic speed regulating mode.

INDUSTRIAL ROBOT DRIVE CONTROL SERIES

工业机器人驱动控制系列

一体化伺服驱动及控制器

Integrated Servo Drive Controller

该产品集伺服驱动与控制器一体化设计,实现了系统前馈与反馈双控制,大幅度的提升机器人的控制精度与效率,可同时控制至多6个工业机器人电机,适用于中高端工业机器人。

由于驱控一体技术采用并行总线,伺服驱动与控制一体化设计,运动控制芯片实时与伺服驱动芯片进行数据交换,保证电流环的运算共同产生。同时伺服驱动芯片也会提前获得运动控制的规划信息,从而实现系统的前馈与反馈双控制,进而大幅度的提升机器人的控制性能与效率。该产品真正实现高速、高精的控制特性,可以达成各种常规控制系统无法实现的控制性能。



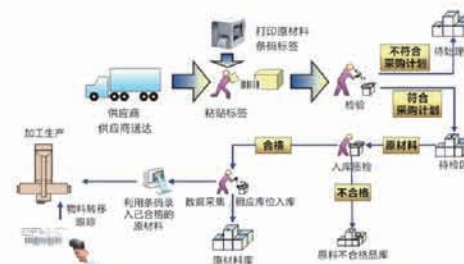
Integrated design with servo drive and controller, implement double-control of the system feedforward and feedback, greatly improve control precision and efficiency of the robot, can control up to six industrial robot motors simultaneously, apply to mid-to-high-end industrial robots.

Due to the integration technology of drive-control adopts parallel bus, integration design with servo drive and control, data exchange between motion control chip and servo drive chip is real-time and ensure the operation of current loop co-occur. Simultaneously, the servo drive chip will obtain the planning information of motion control chip in advance, so as to realize double-control of the system feedforward and feedback, and greatly improve the control performance and efficiency of the robot. The control characteristics of high velocity and precision can be really achieved by this product. Control performances that various conventional control systems can't realize, can be achieved by this product.



电机

驱动器



智能制造信息化系统系列

Intelligent Manufacturing Information System Series:

自主研发O'GEN信息化综合管理平台,集ERP、PLM、MES、SRM、CRM、OA、APS、售后管理系统及远程服务系统于一体,成功突破了系统间、系统与设备间、设备与设备间互联互通以及数据采集的关键技术瓶颈,实现了系统融合、高度集成、数据共享。

Independent research and develop o'gen information integrated management platform, integrate erp, plm, mes, srm, crm, oa, sap, after-sale management system and the remote service system, successfully break through the key technical bottleneck of connectivity and data collection in system-system, system-equipment, equipment-equipment, realize system fusion, high integration and data sharing.

物联网应用系列

IOT APPLICATION SERIES

电梯物联网：

IOT of Elevator

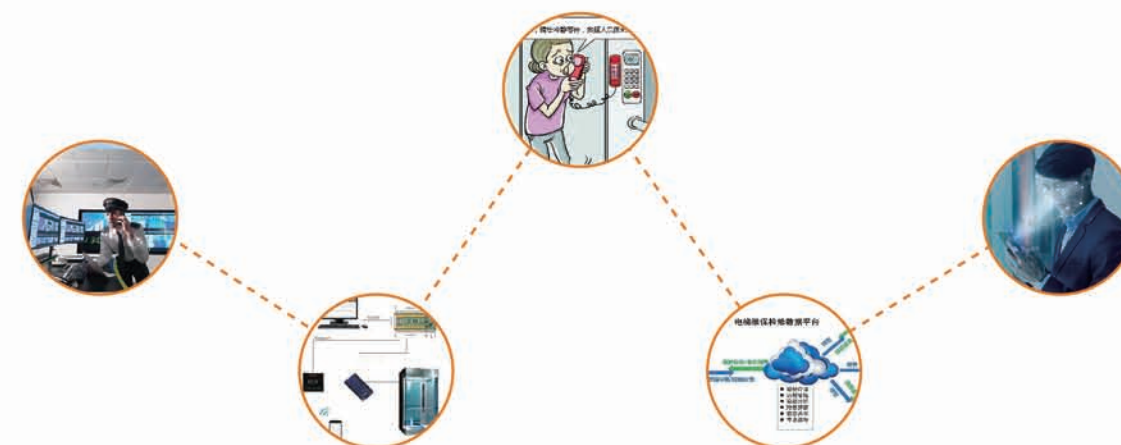
集远程监控、维保管理、远程协助、售后服务管理、手机APP于一体。

It integrates remote monitoring, maintenance management, remote assistance, after-sales service management, and mobile phone APP.

具有如下功能：

Main Functions:

- 1 通过手机APP、WEB远程监视电梯运行参数，实时掌握电梯运行状态。
The elevator operating state can be mastered in real time through mobile APP or Web remotely monitoring elevator operating parameters.
- 2 电梯运行故障实时短信、APP消息通知报警，及时处理异常状况。
Operation faults of the elevator can be real-timely informed via text and APP messages, abnormalities will be coped with in time.
- 3 电梯困人自动拨打电话，远程安抚被困人员，并通知救援。
Automatically dial the phone once have passengers are trapped in the elevator, remotely placate strapped passengers and inform to rescue.
- 4 电梯维保定时自动提醒、手动派发紧急工单，通过手机APP记录维保数据。
Periodically automatic remind about elevator maintenance, manually distribute emergent work order, record maintenance information via mobile phone APP.
- 5 服务完成后客户签字拍照评价维保质量，有效促进服务提升。
Customer signs and takes photos to evaluate maintenance quality after finishing data and service to promote service enhancement.
- 6 售后配件、服务申请，及时通知厂家发货、派人，并可对数据进行记录、统计分析。
After-sale parts/service application, timely inform the manufacturer of delivery, dispatching, also the data can be recorded and statistically analyzed.
- 7 维保服务、售后服务数据统计分析，挖掘自身的短板，指明改进的方向，为用户决策提供数据支持。
Statistically analyze the data of maintenance and after-sales service, excavate own shortcoming, give the improvement direction, provide data support for user's decision-making.
- 8 现场人员通过手机APP远程邀请技术专家协助解决现场问题，极大缩短解决现场问题的时间，提升效率。
The on-site worker remotely invites technical experts through mobile phone APP to help solve the problem of the site, greatly shorten problem solving time and improve the efficiency.
- 9 现场人、WEB、手机APP一体操作，方便移动办公。
The integration operation of web and mobile phone App is pretty convenient for mobile office.

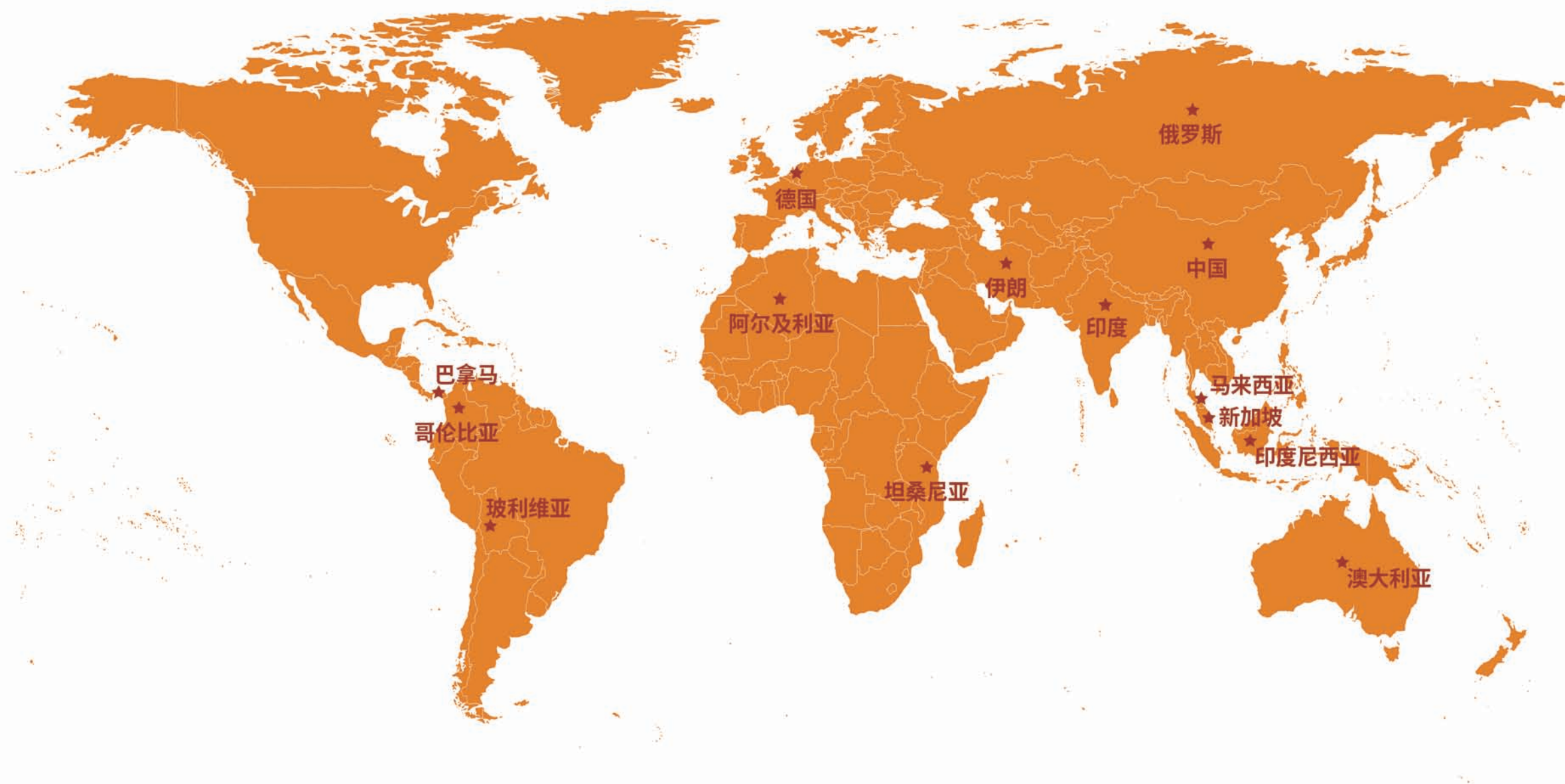


BUSINESS PARTNER & SERVICE NETWORK

合作伙伴及服务网络

索德营销、服务及伙伴网络遍及欧洲、亚洲、南美洲、非洲等地区，
以及中国大陆的300多个核心城市和地区。

Our products have been exported to all over the world, and enjoy a great impact and market share in Europe, Asia, South America and Africa. We also established long-term business relationship with customers from mainland of 300 regions and cities.



CORPORATE CULTURE

索德文化



SOCIAL HONOR

社会荣誉



索德电气拥有CCS认证,

拥有两项世界首创、国际领先认证

获得了发明专利、实用新型专利、外观专利共40余项

SWORD Electric has obtained CCS certification, and with 2 world leading, original technology innovations certification and other 40 patent for invention, patent for utility models, design patent, etc.

